# **SPECIAL PROVISIONS**

# FOR

# SOUTH AIRPORT WAY SEPARATED BIKEWAY PROJECT

Project No. WT18008

Prepared for City of Stockton

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Dated: January 12, 2023

The special provisions contained herein have been prepared by or under the direction of the following Registered Persons.



REGISTERED CIVIL ENGINEER

1-12-2023 DATE

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# SPECIAL PROVISIONS FOR SOUTH AIRPORT WAY SEPARATED BIKEWAY PROJECT PROJECT NO. PW1808

# **DIVISION I - GENERAL PROVISIONS**

#### 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 Plans, and the latest Editions of the State of California, Department of Transportation Standard Specifications and Standard Plans, California MUTCD, as referenced therein, and in accordance with the following Special Provisions. To the extent the California Department of Transportation Standard Standard Specifications implement the STATE CONTRACT ACT, (or certain provisions of the Public Contracts code which are inapplicable to charter cities) they shall not be applicable.

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 (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

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. 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 1-1.03 "Definitions", of the Standard Specifications and Section 1-1.07 "Definitions", of the Caltrans Specifications.

#### 1-1.03 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:

City or Owner	City of Stockton
Standard Specifications	City of Stockton 2016 Standard Specifications
Caltrans Specifications	State of California, Dept. of Transportation, 2018 Standard Plans and Specifications
CA MUTCD	California Manual on Uniform Traffic Control Devices (CA MUTCD), 2014 Edition Revision 5 (March 27, 2020)

**Working Day**: Defined as any eight (8) hour day, except as follows: Saturdays, Sundays, and holidays listed below and as shown on the City of Stockton Workday Calendar; Days on which the Contractor is prevented by inclement weather or conditions resulting immediately therefrom which would be adverse to the current controlling operation or operations, as determined by the Engineer.

# SECTION 2 – BIDDING AND BID PROTESTS

# 2-1.01 GENERAL

The bidder's attention is directed to the "Notice to Bidder's" for the date, time and location of the mandatory pre-bid meeting, if applicable. Refer to the City of Stockton's Bid Flash webpage: <u>http://www.stocktongov.com/services/business/bidflash/default.html</u>

Refer to the Instructions to Bidders and Section 2, "Bidding" of the Standard Specification.

In case of Bid protests, attention is directed to the provisions in Section 2-1.51, "Bid Protests" of the Standard Specifications. The party filing the protest must have submitted a bid for the work. A subcontractor of a bidder may not submit a bid protest.

A copy of bid protests are to be sent to the following address:

City of Stockton City Attorney, 425 North El Dorado Street, Second Floor, Stockton, CA 95202

# SECTION 3 - CONTRACT AWARD AND EXECUTION

#### 3-1.01 CONTRACT AWARD

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Standard Specifications and these special provisions for the requirements and conditions concerning award and execution of contract.

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed.

#### 3-1.02 CONTRACT BONDS

Contract Bonds shall conform to the requirements set forth in Section 3-1.05, "Contract Bonds", of the Standard Specifications, except for the second paragraph which shall be replaced with the following:

"The Faithful Performance bond will be retained by the City of Stockton for twelve (12) months following recordation of the Notice of Completion (or partial completion) to guarantee correction of failure attributed to workmanship and materials. Upon recordation of the Notice of Completion (or partial completion), the amount of the Faithful Performance bond may be reduced to ten percent (10%) of the actual cost of the constructed improvements".

#### 3-1.03 CONTRACT EXECUTION

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds, to the Agency so that it is received within 10 days, not including Saturdays, Sundays and legal holidays, 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:

City of Stockton Public Works Department Attn: Mohammad Sadiq 22 E. Weber Avenue, Room 301 Stockton, CA 95202

#### SECTION 4 - SCOPE OF WORK

Attention is directed to the provisions in Section 4, "Scope of Work" of the Caltrans Specifications, Standard Specification, 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 10-1.01, "Order of Work", of these Special Provisions.

The Contractor shall diligently prosecute all work items to completion.

Full compensation for any additional costs occasioned by compliance with the provisions in this section shall be considered as included in the prices paid for the various contract items of work, and no additional work compensation will be allowed therefore.

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. For work to be completed, contractors are advised to visit and review the job site prior to the submission of their bid. Bids not presented on the City forms shall be cause for considering the bid as nonresponsive.

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 City Engineer in determining such competence and capability.

It shall be understood that the Contractor shall be required to perform and complete the proposed work in a thorough and diligent manner, and to furnish and provide in connection therewith all necessary labor, tools, implements, equipment, materials and supplies. The Contractor is responsible to take all necessary precautions and use best practices in the industry to perform all work require completing the project.

# 4-1.01 EXTRA WORK

Section 4-1.05, "Changes and Extra Work" of the Caltrans Specifications is amended by adding the following between the second and third paragraphs:

"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."

#### 4-1.02 CLEANUP

The Contractor's attention is directed to Sections 4-1.13, "Cleanup," of the Caltrans Specifications.

The Contractor shall conduct and cause all working forces at the site to maintain the site in a neat orderly manner throughout the construction operations. The work shall be conducted in a manner that will control the dust. When ordered to provide dust control, the Contractor shall use water to reduce the dusty conditions all to the satisfaction of the Engineer. During construction, the Contractor shall remove all rubbish and debris as it is generated. Upon completion of the work, the Contractor shall remove all equipment, debris, and shall leave the site in a neat, clean condition all to the satisfaction of the Engineer.

#### 4-1.06 DIFFERING SITE CONITIONS

The Contractor's attention is directed to 23 CFR 635.109, "Standardized Changed Condition Clauses" of the Federal Highway Administration and Standard Specification Section 4-1.06, "Differing Site Conditions."

# SECTION 5 - CONTROL OF WORK

# 5-1.01 PERMITS

The Contractor's attention is directed to Sections 5-1.20B, "Permits, Licenses, Agreements, and Certifications," of the Caltrans Specifications.

The following is a list of the required permits and/or licenses, if applicable; including, but not limited to:

- Contractor's License, a valid California Class A Contractor License.
- Business License. Contractor shall possess prior to the execution of the contract and maintain throughout the duration of the contract, a valid City of Stockton business license.
- City of Stockton Encroachment Permit (no fee)
- 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. More information can be found at the following web site: <u>http://www.valleyair.org</u>.
- Construction Water The Contractor is responsible for obtaining a permit and paying all fees for water from City of Stockton or California Water Service, as applicable, for construction water obtained from a fire hydrant. This permit and locations of hydrant meters shall be approved by the City of Stockton Fire Department.

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.

# 5-1.02 SUBMITTALS

The following is a list of anticipated submittals for the project. 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:

- Shop Drawings
- Portland Cement Concrete Mix Design (sidewalk and site furnishings foundations)
- Material Submittals
- Product Submittals
- Emergency Contacts/Authorized Representatives
- Manufacturer's Instructions/Field Reports
- Traffic Control Plan (includes Pedestrian Detour Plan)
- Project Schedule (CPM)

- City of Stockton Construction and Demolition Debris Recycling Report
- List of submittals
- DAS-140

The Contractor shall transmit each submittal to the Engineer for review and approval with the submittal form approved by the Engineer.

All submittals shall be submitted within 30 calendar days from the date of the fully executed contract, otherwise project working day will commence with of without issuance of the notice to proceed

Submittals shall be sequentially numbered on the submittal form. Resubmittals shall be identified with the original number and a sequential resubmittal suffix letter (i.e., x=original, x-a, x-b, etc. = resubmittals)

Any incomplete submittals will be returned for resubmittal. When revised for resubmission, identify all changes made since previous submission.

The City of Stockton will require a submittal processing time of 15 working days following submission.

Except as may otherwise be indicated herein, the Engineer will return prints of each submittal to the Contractor with 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 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.

# 5-1.03 RECORDS

The Contractor's attention is directed to Sections 5-1.27, "Records," of the Caltrans Specifications.

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 Department, 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 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.

# 5-1.04 JOB SITE APPEARANCE

# Replace Section 5-1.31, "Job Site Appearance" of the Caltrans Specifications with the following:

The Contractor shall maintain a clean and neat appearance at the work site and staging areas. Debris developed during construction shall be disposed of concurrently with its generation. The Contractor shall pay to the City of Stockton the sum of Two Hundred Fifty Dollars (\$250) for every calendar day where debris has remained on the job site overnight.

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 and no additional compensation will be allowed therefore.

# 5-1.05 RIGHTS IN LAND AND STAGING AREA

# Replace Section 5-1.32, "Areas for Use" of the Caltrans Specifications with the following:

"All work, equipment parking, or any other activity associated with the project shall be confined to the project limits within the street or easement rights-ofway. The Contractor's use of any other property exclusively in connection with this project shall be by a written agreement between the property owner and the Contractor. A certified copy of any such agreement shall be furnished to the Engineer prior to the use of such property by the Contractor."

The street and easement right-of-way shall be used only for activities 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 material storage or other purposes that are not necessary to perform the required work.

The Contractor shall secure at his own expense any area required for plant sites, storage of equipment or materials, or for other purposes. Contractor shall be responsible for all security measures necessary for protection of materials and equipment.

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

# 5-1.06 PROPERTY PRESERVATION/EXISTING FACILITIES

The Contractor's attention is directed to Sections 5-1.36, "Property and Facility Preservation," and Section 15, "Existing Facilities," of the Caltrans Specifications.

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 are not limited to, conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases, natural gas in pipelines six (6) inches or greater in diameter, or pipelines operating at pressures greater than 415 KPa (60 psi) (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.

Immediately upon encountering unknown existing facilities, the Contractor shall notify the Engineer in writing of the situation and request coverage of the work as extra work. Failure to do so may result in forfeiture of any rights to receive extra work compensation under Section 8-1.07, "Delays," of the Caltrans Specifications. Should the Contractor stop work, no compensation will be made for any "down time" prior to written notifications being received by the Engineer or his representative.

Delays due to encountering unexpected facilities shall be determined and compensated in accordance with the provisions of Section 8-1.07, "Delays," of the Caltrans Specifications, and as herein modified.

Payment for complying with the provisions of this section shall be included in the various items of work, and no additional compensation will be allowed therefore.

# 5-1.07 REQUEST FOR INFORMATION

The Contractor's attention is directed to Sections 5-1.42, "Requests for Information" of the Caltrans Specifications.

Contractor shall submit a request for information upon recognition of any event or question of fact arising under the contract. The Engineer shall respond to the request for information within 5 working days.

Payment for complying with the provisions of this section shall be included in the various items of work, and no additional compensation will be allowed therefore.

# 5-1.08 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 herein 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 of 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.

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/she shall have no right to additional compensation for any claim that may be based on any act or failure by the Engineer or any event, thing or occurrence for which no written notice of potential claim was filed.

# 5-1.09 INSPECTIONS

All work under this contract shall be under the control and inspection of the City Engineer or his/her appointed representative. The Contractor shall notify the City of Stockton Public Works Department three (3) working days in advance of any construction. Contractor shall pay for overtime for inspection during City holidays, weekends and non-business hours.

# 5-1.10 CONSTRUCTION SURVEY

Refer to Section 5-1.26, "Construction Surveys", of the Standard Specifications.

The Contractor shall be responsible for all construction survey stakes necessary to construct the project in accordance to the lines, grades, sections, stage construction/traffic handling, and pavement delineation plan described in the plans and specifications.

Contractor shall be responsible referencing all existing monumentation within the limits of the project prior to removal of any existing monuments. Monument referencing shall be reviewed and approved by the engineer prior to commencing of the work.

The Contractor shall employ a Land Surveyor registered in the State of California or an appropriately registered Civil Engineer to perform such survey work. All stakes and marks set by the Contractor's Land Surveyor or Civil Engineer shall be carefully preserved by the Contractor. In case such stakes and marks are destroyed or damaged, they will be promptly replaced, at the direction of the Engineer at no additional cost to the City. Copies of all field notes and cut sheets shall be provided to the City at no additional cost to the City.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in establishing the lines and grades, as specified in these Special

Provisions, shall be included in the contract lump sum price paid for "Construction Staking" per Sections 9-1.02, "Payments" of these Special Provisions, and no additional compensation will be made therefor.

# 5-1.11 PRE-CONSTRUCTION SURVEY

Attention is directed to Section 5-1.36D, "Survey Monuments" of the Caltrans Specifications and these Special Provisions. The Contractor shall perform a pre-construction survey of all existing structures, pavements, and other aboveground facilities within the project limits prior to beginning any work, noting their condition by means of photographs and video tapes supplemented by written documentation, where applicable.

Color photographs shall be taken with a digital camera at locations that are appropriate to show pre-existing conditions. Each photograph shall show the date and time the photograph was taken and clearly labeled showing the location, viewing direction, and any special features noted. Digital files of each photograph and a copy of videotapes shall be submitted to the Engineer.

# 5-1.12 CONSTRUCTION STAKING

Section 5-1.26, "Construction Surveys", of the Standard Specifications is deleted and replaced with the following:

- 1. The Contractor shall be responsible for all construction survey stakes necessary to construct the project in accordance to the lines, grades, sections, stage construction/traffic handling, and traffic signalization, pavement delineation plan described in the plans and specifications.
- 2. Contractor shall be responsible referencing all existing monumentation within the limits of the project prior to removal of any existing monuments. Monument referencing shall be reviewed and approved by the engineer prior to commencing of the work.
- 3. The Contractor shall employ a Land Surveyor registered in the State of California or an appropriately registered Civil Engineer to perform such survey work. All stakes and marks set by the Contractor's Land Surveyor or Civil Engineer shall be carefully preserved by the Contractor. In case such stakes and marks are destroyed or damaged, they will be promptly replaced, at the direction of the Engineer at no additional cost to the City. Copies of all field notes and cut sheets shall be provided to the City at no additional cost to the City.

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.

# 5-1.13 MONUMENT PRESERVATION

The Contractor shall preserve and perpetuate existing monuments, property pins, chiseled cross, etc. affected by the work included in this project in accordance with the most current edition of the Professional Land Surveyors Act (Business and Professions Code §§ 8700-8805), Sections 8771.

The Contractor shall perform a survey to preserve any existing survey monuments such as chiseled cross, survey iron pipe, 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.

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. Contractor is responsible to provide monument frame and cover as necessary per County requirements. A new corner record and/or record of survey shall be filed with the San Joaquin County Surveyor's office; copies shall be submitted to the Engineer.

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 RECORD DRAWINGS

The Contractor shall maintain a complete set of drawings 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 revision, 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.

# 5-1.15 SUBCONTRACTING

The Contractor's attention is directed to Sections 5-1.13A, "Subcontracting-General" of the Standard Specifications.

# 5-1.16 SURFACE RESTORATION

Surface restoration shall consist of restoring all areas within the limits of work to their original existing condition prior to construction.

The Contractor shall restore all areas (paved and unpaved) per City of Stockton standards and specifications where appropriate, including grind and overlay as described on the plans, such as

driveways, sidewalks, curb and gutter, roadway surfaces, ditches, landscaped areas, etc., and all other improvements disturbed or damaged by his operations.

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.

# 5-1.17 COOPERATION

Should construction be under way by other forces or by other contractors within or adjacent to the limits of the work specified or should work of any other nature be under way by other forces within or adjacent to those limits, the Contractor shall cooperate with all the other contractors or other forces to the end that any delay or hindrance to their work will be avoided. The right is reserved to perform other or additional work at or near the site (including material sources) at any time, by the use of other forces. When 2 or more contractors are employed on related or adjacent work, or obtain materials from the same material source, as provided in Section 6, "Control of Materials" of the Caltrans Specifications, each shall conduct their operations in such a manner as not to cause any unnecessary delay or hindrance to the other. Each contractor shall be responsible to the other for all damage to work, to persons or property caused to the other by their operations, and for loss caused the other due to unnecessary delays or failure to finish the work within the time specified for completion.

The Contractor shall protect from damage any utility facilities that are to remain in place, be installed, relocated, adjusted, or otherwise rearranged.

The Contractor should note that the following utility companies and other agencies maintain facilities within the project area and may have forces in the project area or adjacent thereto:

- PG&E
- AT&T and other phone companies
- City of Stockton Municipal Utilities Department
- Comcast Cable Company
- California Water Service Company

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. A minimum of forty-eight (48) hours or two (2) working days prior to beginning construction, the Contractor shall notify Underground Services Alert (USA), telephone (800) 227-2600, to have existing facilities marked in the field.

Installation and/or relocation of the aforementioned utilities and other agencies' facilities will require coordination with the Contractor's operations. The Contractor shall make necessary

arrangements with the utility company and other agencies through the Engineer, and shall submit a schedule of work, verified by a representative of the utility company or other agency, to the Engineer. The Contractor shall notify the Engineer in writing one (1) month and again one (1) week prior to preparing the site for the utility relocation work or work to be done by other agencies.

The Contractor shall take care to avoid working in any area of the project, which may conflict with the work underway by the utility companies. The Contractor's construction schedule shall be prepared to avoid utility work.

The Contractor shall cooperate completely with all utility companies having facilities within the project area.

Attention is directed to the possible existence of underground facilities not known to the City or in a location different from that which is shown on the plans or in these Special Provisions. The Contractor shall take steps to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities or interfere with their service.

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

# SECTION 6 - CONTROL OF MATERIALS

Attention is directed to the provisions in Section 6, "Control of Materials," of the Standard Specifications, and these Special Provisions.

# 6-1-01 BLANK

# 6-1-02 FURNISHED MATERIALS

There are no City Furnished Materials for this project.

# 6-1-03 BLANK

*6-1.04 QUALITY ASSURANCE PROGRAM* Refer to Instruction to Bidders.

# 6-1.05 TESTING

Testing of materials and work shall conform to the provisions in Section 6, "Control of Materials" of the Caltrans Specifications and these special provisions. Whenever the provisions of Section 6 of the Caltrans Standard Specifications refer to tests or testing, it shall mean tests to assure the quality and to determine the acceptability of the materials and work. Contractor's attention is directed to the City's Quality Assurance Program in Instructions to Bidder Package.

The Engineer will deduct the costs for testing of materials and work found to be unacceptable, as determined by the tests performed by the Department and the costs for testing of material sources identified by the Contractor which are not used for the work, from moneys due or to become due to the Contractor. The amount deducted will be determined by the engineer.

# 6-1.06 PRE-QUALIFIED AND TESTED SIGNING AND DELINEATION MATERIAL

The California Department of Transportation maintains the list of Prequalified and Tested signing and delineation materials and products. Approval of pre-qualified and tested products and materials shall not preclude the Engineer from sampling and testing any of the signing and delineation materials or products at any time.

None of the listed signing and delineation materials and products shall be used in the work unless such material or product is listed on the California Department of Transportation's List of Approved Traffic Products. A Certificate of Compliance shall be furnished as specified in Section 6, "Control of Materials", of the Caltrans Specifications for signing and delineation materials and products. Said certificate shall also certify that the signing and delineation material or product conforms to the pre-qualified testing and approval of the California Department of Transportation, Division of Traffic Operations, and was manufactured in accordance with the approved quality control program.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the Standard Specifications.

Materials and products will be considered for addition to said approved pre-qualified and tested list if the manufacturer of the material or product submits to the Division of Traffic Operations of the California Department of Transportation a sample of the material or product. The sample shall be sufficient to permit performance of all required tests. Approval of such materials or products will be dependent upon a determination as to compliance with the Specifications and any test the California Department of Transportation may elect to perform. The list of approved pre-qualified and tested signing and delineation materials and products can be found at the California Department of Transportation Web Site:

https://dot.ca.gov/-/media/dot-media/programs/engineering/documents/signing-anddelineation-materials-a11y.pdf

# SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

# 7-1.01 PUBLIC CONVENIENCE

Contractor's attention is directed to the Section 12-1.02 "Traffic Control Plans and Maintaining Traffic" of these Special Provisions.

The Contractor shall notify San Joaquin Regional Transit District (SJRTD) (dispatcher 209-948-0642) a minimum of five (5) working days prior beginning Work. Contractor shall coordinate with SJRTD if any bus stops and bus routes are affected.

The Contractor shall inform the City Fire Department, City Police Department, City Traffic Department, Municipal Utilities Department (MUD), Stockton Unified School District, and all affected utilities no later than three (3) working days before work is to begin. The Contractor shall provide the City with the name and telephone number (business, home, and mobile) of three (3) representatives available at all times during the duration of the contract. Said names and telephone numbers shall be provided to the City of Stockton Public Works, Fire and Police Departments.

The Contractor shall circulate printed form letters, approved by the Engineer, explaining the project to be constructed and the length of time inconvenience will be caused by the project and deliver same to the residents and businesses to be affected at least three (3) working days before work is to commence. In addition, the Contractor shall provide temporary "No Parking" signs posted three (3) working days in advance of the work. Such signs shall be placed no further than fifty (50) feet apart. The additional "No-Parking" signs shall be removed on completion of the work and the opening of the street to traffic. The Contractor is responsible for the removal of any vehicles obstructing his operations.

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.

# 7-1.02 PUBLIC SAFETY

The Contractor's attention is directed to Section 12-1.02, "Traffic Control Plans and Maintaining Traffic" of these Special Provisions. Nothing in the specifications voids the Contractor's public safety responsibilities.

All safety devices, their maintenance, and use shall conform to the latest requirements of OSHA and shall conform to the applicable provisions of Part 6 "Temporary Traffic Control", of the latest "California Manual on Uniform Traffic Control Devices (CA MUTCD)" and the latest "Work Area Traffic Control Handbook (WATCH)". It shall be the complete responsibility of the Contractor to protect persons from injury and to avoid property damage. Adequate barricades, construction signs, flashers, and other such safety devices, as required, shall be placed and maintained during the progress of the construction work, until the project is completed. Whenever required, flagmen shall be provided to control traffic.

The Contractor shall provide for the proper routing of vehicles, bicyclists, and pedestrians in a manner that will hold congestion and delay of such traffic to practicable minimum by furnishing, installing, and maintaining all necessary temporary signs, barricades, and other devices and facilities, as approved by the City Traffic Engineer. As the work progresses, the Contractor shall relocate, subject to the City Traffic Engineer's approval, such devices and facilities as necessary to maintain proper routing. The Contractor shall maintain Americans with Disabilities Act (ADA) compliance through the work site (or approved alternate route) at all times during all phases of construction. The Contractor shall notify the City Traffic Engineer via the inspector a minimum of three (3) working days prior to the relocation of any traffic control devices. Full compensation for furnishing, installing, maintaining, moving, and removing of all necessary traffic control devices including, but not limited to, signing, striping, barricades, arrow boards, Portable Changeable Message Sign (PCMS) , and flagging shall be included in the contract prices for "Traffic Control" and no additional compensation will be allowed therefore. Section 12-1.03, "Flagging Cost," of the Caltrans Specifications is deleted.

# 7-1.03 LEAD COMPLIANCE PLAN

Attention is directed to Section 7-1.02K(6)(j)(ii) "Lead Compliance Plan, of the Caltrans Specifications.

A lead compliance plan for worker health and safety must be prepared by a Certified Industrial Hygienist (CIH) and must be submitted and implemented prior to the start of construction activities. This plan is needed in order to comply with California Occupational Safety and Health Administration (Cal OSHA) regulations addressing aerially deposited lead for projects involving soil disturbance, and to minimize worker exposure to lead chromate or lead while handling paint and thermoplastic residue.

Allow 7 days for the Engineer's review. Obtain authorization for the plan before starting any activity that presents the potential for lead exposure.

The plan shall include items listed in 8 CA of Regs § 1532.1(e)(2)(B). Obtain authorization for the plan before starting any activity that presents the potential for lead exposure. Contractor shall provide a safety training program to employees who have no prior training, including City employees. The safety training program shall comply with 8 CA Code of Regs § 1532.1 and the provided lead compliance plan. Contractor shall submit copies of air monitoring or job site inspection reports made by or under the direction of the CIH under 8 CA Code of Regs § 1532.1 within 10 days after the date of monitoring or inspection.

Supply personal protective equipment, training, and washing facilities required by your lead compliance plan for five City employees.

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.

# SECTION 8 - PROSECUTION AND PROGRESS

#### 8-1.01 ORDER OF WORK

The order of work shall conform to the Contractor's approved project schedule described in Section 8-1.02, "Schedule" of these Special Provisions.

Contractor's attention is directed to the Public Safety, Public Convenience, and Maintaining Traffic sections of these Special Provisions. Nothing in this section shall be construed as to relieve the Contractor of the responsibility to stage the work in a manner that complies with the requirements of these sections.

# All permits and approvals as may be required for this project shall be secured or ordered immediately after award of the contract or their acquisition timing determined, such that the same is not a cause for delay. The cost of the permits shall be included in the total bid costs.

Minor deviations from these requirements may be allowed by the Engineer, if in the opinion of the Engineer, the prosecution of the contract will be better served and the work expedited. Any Contractor request for such deviations shall not be adopted without the Engineer's prior written approval.

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

# 8-1.02 SCHEDULE

Attention is directed to Section 8-1.02, "Schedule" of the Caltrans Specifications. The Contractor shall submit a schedule of construction to the City Engineer within five (5) working days following the Notice to Proceed.

The Contractor's 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.

# 8-1.03 PRE-CONSTRUCTION CONFERENCE

The City of Stockton Public Works Department will schedule a pre-construction meeting with the Contractor following award of the contract and prior to commencing work (Mohammad Sadiq 209-937-8299). This meeting will be held in the City of Stockton, Public Works Department. 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.

# 8-1.04 POST CONSTRUCTION CONFERENCE

The Contractor shall attend a post-construction meeting that will be arranged by the Public Works Department (Mohammad Sadiq 209-937-8299) after completion of work and prior to acceptance and final payment. The project engineer and the project Inspector will also 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. This meeting will be held in the City of Stockton, Public Works Department.

At this meeting, the Contractor will also submit a marked-up set of record drawings/as-built plans at no additional cost to the City.

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.

# 8-1.05 TIME OF COMPLETION

Attention is directed to the provisions in Section 8-1.05, "Time," of the Caltrans Specifications and this section of 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 one hundred** (100) working days. The days to finish the punch list, provided by the City, are included in the Original Working Days.

Should the Contractor choose to work on a Saturday, Sunday, or on a City 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. The approximate cost is \$100 per hour. Should such work be undertaken at the request of the City, reimbursement will not be required.

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.

# 8-1.06 LIQUIDATED DAMAGES

Attention is directed to the provisions in Section 8-1.10, "Liquidated Damages," of the Caltrans Specifications and these Special Provisions. Liquidated damages shall not be less than \$4,000 per day.

The Contractor shall pay liquidated damages to the City of Stockton as set forth in Section 8-1.10, "Liquidated Damages," of the Caltrans Specifications.

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 9 - PAYMENT**

#### 9-1.01 GENERAL

Attention is directed to Section 9, "Measurement and Payment," of the Standard Specifications, Section 9, "Payment," of the Caltrans Specifications, and these Special Provisions. All measurements and payments for this work shall conform to all applicable provisions in Section 9 of the Caltrans Specifications.

Salvaged materials or equipment will be returned to the City at the Owner's discretion at a location to be determined by the Owner. Unless otherwise noted, all materials designated to be removed shall become the property of the Contractor and shall be disposed in accordance with local, state, and federal laws and ordinances. Contractor shall maintain the site in a neat and orderly condition.

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.

#### 9-1.02 SCHEDULE OF VALUES

Submit a schedule of values within <u>15</u> days after Contract approval. Value schedules for each lump sum bid item shall be prepared and submitted to the Engineer as set forth in Section 9-1, "Lump Sum Contracts", of the Standard Specifications and Section 9-1.16B, "Schedule of Values," of the Caltrans Specifications. Unless otherwise approved by the Engineer, materials on hand, but not incorporated into the work, shall not be included for measurement or for purposes of payment.

#### 9-1.03 PAYMENTS

Attention is directed to Sections 9-1.16, "Progress Payments," and 9-1.17, "Payment After Contract Acceptance," of the Caltrans Specifications, and Sections 9-1.16C, "Materials on Hand," and 9-1.17D, "Final Payment and Claims," of the Standard Specifications. No partial payment will be made for any materials that are furnished on hand, but not yet installed or incorporated in the work.

Full compensation for all labor, equipment, tools, materials, services, travel, and incidentals and for doing all the work and all other items required to complete the work in conformity with the Contract Documents will be included in the prices paid for the various contract items of work and no additional work compensation will be allowed therefore. No other compensation will be made except for the items listed in the Bid Proposal. Work for which no separate payment has been provided will be considered as a subsidiary obligation of the Contract.

Schedule of Measurement and Payment:

1. Mobilization, Demobilization, Bonds, Permits and Insurance on all work: By lump sum. Includes preparatory work and operations, including but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the project; for the marshaling of equipment; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site, including obtaining and paying fees for the bonds, insurance policies, and permits required by the Contract Documents for this Project.

- **2.** Erosion Control: By lump sum. Full compensation for furnishing, installing, maintaining, and removing all components of the required erosion control devices as specified in the plans and these Special Provisions, and as directed by the Engineer.
- **3. Temporary Traffic Control:** By lump sum. Includes furnishing all labor, preparing traffic control plans, including all flagging costs and temporary traffic signals, materials, signs, arrow boards, CMS, tools, equipment, and incidentals, and for doing all the work involved in lane closures, including placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system as specified in the Caltrans Specifications and these Special Provisions and as directed by the Engineer, shall be included in the contract "Traffic Control", and no additionally compensation will be allowed therefore.
- **4. Construction Staking**: By lump sum. The Contractor shall provide construction staking as needed to accurately construct the project improvements. Any additional staking needed for construction not included in this specification section shall be the responsibility of the Contractor and shall be included in the Bid Item List as a lump sum cost.
- **5.** Construction Area Signs: By lump sum. Includes providing, installing, maintaining and removing all construction area signs as indicated on the plans and described in these Special Provisions.
- 6. Clearing and Grubbing: By lump sum. includes the removal and disposal of all the existing materials as shown on the plans, as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer
- **7.** AC and Concrete Sawcut: By the linear foot. Includes saw cutting existing asphalt concrete pavement as indicated on the plans and described in these Special Provisions.
- 8. Remove Existing AC: By the square foot. Includes providing all labor, materials, tools equipment, and incidentals to remove all AC as indicated on the plans and these Special Provisions.
- **9. Remove Existing Concrete:** By the square foot. Includes providing all labor, materials, tools equipment, and incidentals to remove all concrete including, but limited to curb, gutter and walk as indicated on the plans and these Special Provisions.

- **10. Remove Existing Guardrail:** By the linear foot. Includes furnishing all labor, materials, tools, equipment, and incidentals, including excavation, removing rail, rail post, and any concrete footings, filling and compacting void left from rail post removal, and doing all the work involved in removing and disposing loading and removing waste materials from the site, complete in place, as indicated on the plans and described in these Special Provisions.
- **11. Remove Existing Pavement Striping**: By the linear foot. Includes grinding existing pavement striping, cleaning pavement surface, loading and removing waste materials from the site as indicated on the plans and in these Special Provisions.
- **12. Remove Existing Pavement Markings**: By the square foot. Includes grinding existing pavement markings, cleaning pavement surface, loading and removing waste materials from the site as indicated on the plans and in these Special Provisions.
- **13. Remove Existing Barricade**: By the unit. Includes excavating, removing concrete footing, removing posts and barricade, backfilling, compacting, loading and removing waste materials from the site as indicated on the plans and in these Special Provisions.
- **14. Remove Existing Bollard**: By the unit. Includes excavating, removing concrete footing, removing bollard, backfilling, compacting, loading and removing waste materials from the site as indicated on the plans and in these Special Provisions.
- **15. Construct Vertical Curb and Gutter**: By the linear foot. Includes excavating, suppling and installing aggregate base, supplying concrete to the site, forming, reinforcing, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **16. Construct Concrete Walk**: By the square foot. Includes providing all labor, materials, tools equipment, and incidentals for the excavating and grading of the new curb, gutter and sidewalk, includes cutting, removing and sealing roots encountered during this operation and proper disposal of all waste materials generated by the work. Also includes supplying concrete to the site, compaction, forming, reinforcing, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **17. Install Truncated Domes on Existing Concrete:** By the square foot. Includes furnishing all labor, tools, equipment and incidentals to install truncated domes to existing concrete as indicated on the drawings and described in these Special Provisions.
- **18. Construct Commercial Driveway Ramp**: By the unit. Includes supplying concrete to the site, excavating, forming, reinforcing, placing concrete, placing truncated domes, removing forms, curing, finishing, loading and removing waste materials from the site, and

constructing the facilities as indicated on the plans and described in these Special Provisions.

- **19. Construct Modified Commercial Driveway Beginning at Sta. 71+56.87 Right**: By the unit. Includes supplying concrete to the site, forming, reinforcing, placing concrete, placing truncated domes, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **20. Construct Modified Commercial Driveway Beginning at Sta. 72+76.96 Right**: By the unit. Includes supplying concrete to the site, forming, reinforcing, placing concrete, placing truncated domes, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **21. Construct Modified Commercial Driveway Beginning at Sta. 72+74.22 Left**: By the unit. Includes supplying concrete to the site, forming, reinforcing, placing concrete, placing truncated domes, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **22. Construct 30' Commercial Driveway**: By the unit. Includes supplying concrete to the site, forming, reinforcing, placing concrete, placing truncated domes, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **23. Construct 12.5' Commercial Driveway**: By the unit. Includes supplying concrete to the site, forming, reinforcing, placing concrete, placing truncated domes, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **24. Construct Retaining Curb**: By the linear foot. Includes excavating, suppling and installing aggregate base, supplying concrete to the site, forming, reinforcing, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the plans and described in these Special Provisions.
- **25. Install AC Deep Lift:** By the square foot. Includes furnishing all labor, materials, tools equipment, and incidentals including grading and subgrade compacting, suppling and placing, tack coating, prime coating, asphalt concrete, and compacting as required and constructing to the elevations, thickness and locations as indicated on the plans and described in these Special Provisions.

- **26. Install Midwest Guardrail System, Type 16A:** By the linear foot. Includes furnishing all labor, materials, tools, equipment, and incidentals for providing and installation of guardrail, posts and appurtenances, including excavation, concrete, and for doing all the work involved in furnishing and installing bollards, complete in place, and constructing to the elevations, thickness and locations as indicated on the plans and described in these Special Provisions.
- **27.** Install Guardrail Terminal System, Type MSKT: By the unit. Includes furnishing all labor, materials, tools, equipment, and incidentals for providing and installation of terminal system, posts and appurtenances, including excavation, concrete, and for doing all the work involved in furnishing and installing bollards, complete in place, and constructing to the elevations, thickness and locations as indicated on the plans and described in these Special Provisions.
- **28.** Install Traffic Regulatory and Warning Signs: By the unit. Includes furnishing all labor, materials, tools, equipment, and incidentals for installation of signs, including excavation, sign, post concrete, and for doing all the work involved in furnishing and installing signs, complete in place, and constructing to the elevations, thickness and locations as indicated on the plans and described in these Special Provisions.
- **29. Install Blue Reflector Hydrant Markers:** By the unit. Includes furnishing all labor, materials, tools, equipment, and incidentals for installation of markers, including preparations, and for doing all the work involved in furnishing and installing markers, complete in place, at locations as indicated on the plans and described in these Special Provisions.
- **30.** Adjust Utility Covers and Frames to Grade: By the unit. Includes furnishing all labor, materials, tools, equipment, and incidentals to adjust covers and frames, including excavation, concrete, and for doing all the work involved in adjusting covers and frames, complete in place, and constructing to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **31. Place Thermoplastic Pavement Markings:** By the square foot. Includes cleaning surface, providing and placing the markings at the locations as indicated on the plans and described in these Special Provisions.
- **32.** Place 6" White Longitudinal Stripe (Buffer Zone): By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **33.** Place 4" White Diagonal Stripe (Buffer Zone): By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.

- **34.** Place 2'X6" White Dashed Stripe (Bike Lane Line): By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **35.** Place Green Bike Pavement Markings (Bike Lane Line): By the square foot. Includes cleaning surface, providing and placing the markings at the locations as indicated on the plans and described in these Special Provisions.
- **36.** Place **12**" White Cross Walk Stripe: By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **37. Place 24" White Limit Line Stripe:** By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **38.** Place Detail **39 Stripe:** By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **39.** Place Detail 27B Stripe: By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **40.** Place Detail 8 Stripe: By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **41. Place Detail 38 Stripe:** By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **42. Place Detail 27M Stripe:** By the linear foot. Includes cleaning surface, providing and placing the striping at the locations as indicated on the plans and described in these Special Provisions.
- **43. Install 36-inch Channelizers:** By the unit. Includes furnishing all labor, materials, tools, equipment, and incidentals for installation of channelizers, including surface preparation, adhesive, and for doing all the work involved in furnishing and installing channelizers, complete in place, and constructing to the elevations, and locations as indicated on the plans and described in these Special Provisions.

- **44. Signal Modification (Dr Martin Luther King Jr. Blvd.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **45. Signal Modification (Second St.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **46. Signal Modification (Eighth St.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **47. Signal Modification (Tenth St.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **48. Signal Modification (Ralph St.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **49. Signal Modification (Zephyr St.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **50. Signal Modification (Industrial Dr.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.
- **51. Signal Modification (Sperry Rd./Arch Airport Rd.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing

equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.

**52. Signal Modification (Performance Dr.)**: By lump sum. Includes trenching, hand trimming, excavation, bedding fill, backfilling, compacting, conduits, conductors, installing equipment, detector loops, pullboxes, fittings, mobilization, and constructing the facilities to the elevations and locations as indicated on the plans and described in these Special Provisions.

# 9-1.04 QUANTITIES

The following estimate of the quantities of work to be done and materials to be furnished are **approximate only**, and are intended as a basis for the comparison of bids. The City does not expressly or by implications 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 without increase or decrease in the unit price bid or to omit portions of the work that may be deemed necessary or expedient by the Engineer.

Base Bid					
ltem No.	Description	Unit	Estimated Quantity		
1	Mobilization, Demobilization, Permits and Insurance on all work	LS	1		
2	Erosion Control	LS	1		
3	Temporary Traffic Control	LS	1		
4	Construction Staking	LS	1		
5	Construction Area Signs	LS	1		
6	Clearing and Grubbing	LS	1		
7	AC and Concrete Sawcut	LF	1,450		
8	Remove Existing AC	SF	7,605		
9	Remove Existing Concrete	SF	1,525		
10	Remove Existing Guardrail	LF	50		
11	Remove Existing Pavement Striping	LF	27,391		
12	Remove Existing Pavement Markings	SF	453		
13	Remove Existing Barricade	EA	1		
14	Remove Existing Bollard	EA	3		
15	Construct Vertical Curb and Gutter	LF	737		
16	Construct Concrete Walk	SF	5,612		
17	Install Truncated Domes on Existing Concrete	SF	44		
18	Construct Commercial Driveway Ramp	EA	3		
19	Construct Modified Commercial Driveway Beginning @ Sta. 71+56.87 Right	EA	1		
20	Construct Modified Commercial Driveway beginning @ Sta. 72+76.96 Right	EA	1		
21	Construct Modified Commercial Driveway Beginning @ Sta. 72+74.22 Left	EA	1		
22	Construct 30' Standard Commercial Driveway	EA	2		

Base Bid				
Item			Estimated	
No.	Description	Unit	Quantity	
23	Construct 12.5' Standard Commercial Driveway	EA	1	
24	Construct retaining Curb	LF	53	
25	Install AC Deep Lift	SF	3,114	
26	Install Midwest Guardrail, Type 16A	LF	125	
27	Install Guardrail Terminal System, Type MSKT	EA	4	
28	Install Traffic Regulatory and Warning Signs	EA	78	
29	Install Blue Reflector Hydrant Markers	EA	28	
30	Adjust utility Cover and Frames to Grade	EA	6	
31	Place Thermoplastic Markings	SF	1,563	
32	Place 6" White Longitudinal Stripe (Buffer Zone)	LF	55,017	
33	Place 4" White Diagonal Stripe (Buffer Zone)	LF	6,405	
34	Place 2'x6" White Dashed Stripe (Bike Lane Line)	LF	2,820	
35	Place Green Bike Pavement Markings (Bike Lane Line)	SF	9,610	
36	Place 12" White Cross Walk Stripe	LF	4,634	
37	Place 24" White Limit Line Stripe	LF	1,231	
38	Place Detail 39 Stripe	LF	6,550	
39	Place Detail 27B Stripe	LF	6,479	
40	Place Detail 8 Stripe	LF	3,695	
41	Place Detail 38 Stripe	LF	196	
42	Place Detail 27M Stripe	LF	325	
43	Install 36-inch Channelizer	EA	616	
44	Signal Modification (Dr. Martin Luther King Jr. Blvd.)	LS	1	
45	Signal Modification (Second St.)	LS	1	
46	Signal Modification (Eighth St.)	LS	1	
47	Signal Modification (Tenth St.)	LS	1	
48	Signal Modification (Ralph St.)	LS	1	
49	Signal Modification (Zephyr St.)	LS	1	
50	Signal Modification (Industrial Dr.)	LS	1	
51	Signal Modification (Sperry Rd./Arch Airport Rd.))	LS	1	
52	Signal Modification (Performance Dr.)	LS	1	

Each bidder shall bid each item on the Base Bid Schedule. Failure to bid an item shall be just cause for considering the bid as non-responsive. The basis of contract award will be the lowest responsible bidder of the sum of the Base Bid. The City reserves the right to include or delete any Schedule or portion thereof, or to reject all bids.

Official bid documents, including plans and specifications, are available on the City of Stockton website at: http://www.stocktongov.com/services/business/bidflash/default.html

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

# 9-1.05 INCREASE OR DECREASE 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 Specifications shall not apply.

Any such changes will be set forth in a contract change order, which will specify, in addition to 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. City Council approval may be necessary depending on the amount of the change order.

# 9-1.06 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization," of the Caltrans Standard Specifications and these Special Provisions. Full compensation for any costs required to comply with the provisions in this section shall be considered to be included in the Bid Item No. 1, "Mobilization" price paid for on the contract items of work and no additional compensation will be allowed therefore.

## 9-1.07 STOP NOTICE

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

At its option, the Department of Public Works may at any time retain from the amounts due to the Contractor sufficient amount to cover claims which are filed pursuant to Section 3179 *et seq of the Code of Civil Procedures*.

# **DIVISION II - GENERAL CONSTRUCTION**

#### **SECTION 10 - GENERAL**

# 10-1.01 GENERAL Replace Section 10-1 of Caltrans Standard Specifications with:

All work shall conform to these Special Provisions, the project plans, the City of Stockton Standard Specifications and Standard Drawings, and the State of California Department of Transportation Caltrans Standard Specifications (2018 edition).

#### 10-1.02 JOBSITE SAFETY

- A. Extra attention must be given to safety equipment and procedures on the job site.
- B. All personal protective equipment must be worn at all times by all personnel (i.e. OSHA approved gloves, safety glasses, hard hats, face shields, hearing protection, safety vests).
- C. Proper traffic control, including OSHA approved arrow boards, cones, flags, high flyers and trained flaggers.
- D. Non-employees of the contractor will not be allowed at job site.
- E. At all times, including non-working hours, the Contractor shall be solely and completely responsible for conditions of the job site including safety of persons and property, and for all necessary independent engineering reviews of the conditions. The engineer's job site review is not intended to include review of the adequacy of the contractor's safety measures.
- F. Contractor shall be responsible for any damage or injuries resulting from Contractor's operation and/or materials and equipment stored in the staging areas. The City is not responsible for securing the Contractor's equipment and work sites.
- G. Open trenches shall be covered with steel plates during non-working hours.
- H. Equipment lock-out and tag-out verification: The Contractor shall comply with U.S. Department of Labor (OSHA) and the California Occupational Safety and Health Act (CalOSHA) regulations for the mechanical and electrical isolation of all equipment. Contractor shall be responsible for providing the qualified personnel to test and verify that the equipment and system, including other equipment not associated with his work but is considered part of the operational system, are mechanically and electrically isolated.
- I. 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.

*10-1.03 MONUMENTS* Refer to Section 5-1.11 Monument Preservation.

## SECTION 12 - TEMPORARY TRAFFIC CONTROL

# 12-1.01 TEMPORARY TRAFFIC CONTROL Replace Section 12-1.03 of Caltrans Specifications with:

All costs associated with furnishing flaggers and flagging equipment shall be borne by the contractor.

#### Replace Section12-4.01 of Caltrans Specifications with:

Do not perform work that would require a full roadway closure at any location. A minimum of 1 paved traffic lane not less than 10-feet wide for two-lane streets and 11-feet wide on four-lane streets must be open for use by traffic in each direction of travel. If two lanes cannot be maintained, Contractor shall provide minimum of 2 flaggers to control two-way traffic.

## Add to Section 12-4.02 of Caltrans Specifications:

The full width of the travelled way must be open to traffic when there are no active construction activities in the travelled way or within 6 feet of the travelled way and on:

- 1. Fridays after 3:00 PM
- 2. Saturdays
- 3. Sundays
- 4. Designated City Holidays.

A traffic control system shall consist of closing traffic lanes in accordance with the provisions of the Caltrans Specifications, Sections 7-1.03, "Public Convenience," 7-1.04, "Public Safety," Section 12, "Temporary Traffic Control," and Section 12-3.06, "Construction Area Signs, and 8-1.01, "Order of Work" in these Special Provisions.

Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in these sections.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take the measures that may be necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the Caltrans Specifications and these Special Provisions.

Traffic shall be controlled with stationary type lane closures. The Contractor's attention is directed to the provisions in Sections 84-1.03B, "Protection from Damage," and 85, "Pavement Markers," of the Caltrans Specifications. If any component in the traffic control system is displaced or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the component to its original condition or replace the component and shall restore the component to its original location.

When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way shall be removed from the traveled way and shoulder. The Contractor will be responsible for storing all components of the traffic control system when not in use.

Each vehicle used to place, maintain, and remove components of a traffic control system shall be equipped with a Type II flashing arrow sign, which shall be in operation when the vehicle is being used for placing, maintaining, or removing the components. Vehicles equipped with Type II flashing arrow signs not involved in placing, maintaining, or removing the components when operated within a stationary type lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion. The flashing arrow sign shown on the plans shall not be used on the vehicles which are doing the placing, maintaining, and removing of components of a traffic control system, and shall be in place before a lane closure requiring its use is completed.

Attention is directed to Part 6, "Temporary Traffic Control," of the CA MUTCD.

Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in Part 6 of CA MUTCD.

The adjustment provisions in Section 4-1.05, "Changes and Extra Work," of the Caltrans Standard Specifications shall not apply to the item of traffic control system. Adjustments in compensation for traffic control system will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary. The adjustment will be made on a force account basis as provided in Section 9-1.04, "Force Account," of the Caltrans Specifications for increased work and estimated on the same basis in the case of decreased work.

Traffic control system required by work which is classed as extra work, as provided in Section 4-1.05," Changes and Extra Work," of the Caltrans Specifications, will be paid for as a part of the extra work.

## 12-1.02 TRAFFIC CONTROL PLANS AND MAINTAINING TRAFFIC

The Contractor shall furnish, and maintain in good working order, twenty-four (24) hours a day, including covering or removing signs during non-construction hours, all barricades, arrow boards, CMS, detours signs, and flashers, and provide flaggers as necessary to protect pedestrians and vehicular traffic.

The Contractor shall provide adequate and continuous ingress and egress for all adjacent properties, except for the limited period of time it is necessary to perform work at a specific property. The Contractor shall diligently prosecute all work directly impacting businesses to completion. The Contractor shall coordinate limited closures with tenants or owners, as required by these Special Provisions, and as directed by the Engineer.

Prior to starting work, the Contractor shall submit to the City a detailed "Temporary Traffic Control Plan" for review and approval. The "Temporary Traffic Control Plan" shall be submitted no later than two weeks prior to work which requires implementation of any component of the "Temporary Traffic Control Plan." The plan shall be approved by the Engineer prior to its implementation by the Contractor.

The Temporary Traffic Control Plan shall include, but not be limited to, detailed requirements for the following:

- Traffic control devices, including signs and markings.
- Construction detour routes, phasing and/or staging of both the roadway and sidewalk areas.
- Employee, Customer, and Business/Delivery access to adjacent property.
- Emergency vehicles access.
- Bus, refuse collection, and mail delivery access.
- Any parking zones to be removed on a temporary basis.
- Any temporary "No Parking" zones.
- Pedestrian and bicyclist access.

The Temporary Traffic Control Plan shall consider the impacts of changes in traffic volumes and capacities related to the construction activities, and their impact on vehicular and bicycle traffic and pedestrian operations, on roadway pavements, including provisions to restore construction damaged pavements.

Payment for furnishing temporary traffic control plans and maintaining traffic, for which specific bid items are not provided, shall be included in the contract prices paid for Bid Item No. 3, "Temporary Traffic Control" on the Bid Schedule, and no additional compensation will be allowed therefore.

# Replace Section 12-5 of Caltrans Standards Specifications with:

## Traffic Lane and Sidewalk Closures

Lanes and sidewalks may be closed only as indicated in this section, "Temporary Traffic Control Plans and Maintaining Traffic," of these Special Provisions. Except for work required under Sections 7-1.03, "Public Convenience" and 7-1.04, "Public Safety" of Caltrans Specifications, work that interferes with public traffic shall be performed only as indicated. Traffic lane and sidewalk closures shall conform to the following requirements:

Lane closure, a maximum of one lane in each direction of travel and not more than twelve (12) feet wide, shall be permitted only between the hours of 9 a.m. and 3:30 p.m. Any other lane closure shall be approved by the Engineer.

Standard working hours shall be 9 a.m. to 5 p.m. All work shall be performed during standard working hours. Work hour extensions will require the approval of the City Engineer.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulders, including any section closed to public traffic.

Adequate ingress and egress shall be maintained throughout the project limits for fire, police, and other emergency vehicles. The Contractor shall provide adequate ingress and egress for residences, property owners, and abutting business owners to their respective properties except when performing work at their specific locations.

Whenever Contractor's vehicles or equipment are parked within six (6) feet of a traffic lane, the area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the traffic lane at twenty-five (25) foot intervals to a point not less than twenty-five (25) feet past the last vehicle or piece of equipment. A minimum of nine (9) cones or portable delineators shall be used for the taper. A W20-1 (Road Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where directed by the Engineer.

Except as otherwise allowed by the Engineer, "long term" and temporary closures shall be removed and the full width of the traveled way shall be open for use by public traffic when construction operations are not actively in progress during the working period or successive working periods.

The Contractor shall provide for pedestrian and wheelchair access to at least one (1) intersection corner within each block and the abutting sidewalk facilities along each block, at all times. Simultaneous closure of both intersection corners to pedestrian traffic within the same block is not allowed.

The Contractor shall maintain at least one (1) north/south crosswalk and one (1) east/west crosswalk open to pedestrian and wheelchair access, where it exists, at each intersection at all times.

Attention is directed to Part 6 of the CA MUTCD. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in Part 6 of CA MUTCD.

Full compensation for furnishing, installing, moving, removing, and all the necessary traffic control devices including, but not limited to, the necessary signs, striping, barricades, and flagging shall be included in the contract prices paid for the "Temporary Traffic Control" and no additional compensation will be allowed therefore.

#### **Maintaining Pedestrian Access**

Means of passage of pedestrian traffic around the work area shall be provided at all times. Path of travel shall comply with Americans with Disabilities Act (ADA) regulations.

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.

At least one (1) continuous ADA accessible 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 be 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.

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 providing and maintaining pedestrian access, and for maintaining pedestrian traffic as specified in the plans and these Special Provisions, and as directed by the Engineer, shall be included in the contract prices for "Temporary Traffic Control" and no additional compensation will be allowed therefore.

## SECTION 13 - WATER POLLUTION CONTROL

## 13-1.01 WATER POLLUTION CONTROL

Water pollution control shall conform to the requirements in Section 13, "Water Pollution Control," of the Caltrans Specifications, these Special Provisions, and as directed by the Engineer.

The Contractor shall develop and implement a Water Pollution Control Program (WPCP), which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters. The Contractor shall inspect and maintain all BMPs.

The Contractor shall conform to the dewatering requirements as set forth in Section 13, "Water Pollution Control," of the Caltrans Specifications, these Special Provisions and as directed by the Engineer.

Full compensation for furnishing, installing, maintaining all BMPs and preparing a WPCP shall be included in the contract price for "Water Pollution Control" and no additional compensation will be allowed therefore.

Full compensation for furnishing, designing, installing, maintaining a dewatering system shall be included in the contract price for "Dewatering" and no additional compensation will be allowed therefore.

#### SECTION 14 - ENVIRONMENTAL STEWARDSHIP

## 14-1.01 DUST CONTROL

Dust control shall conform to any requirements set forth in the San Joaquin Valley Air Pollution Control District Construction Notification Form, the provisions in Section 10-5, "Dust Control" of the Caltrans Specifications, and these Special Provisions. Section 10-5 of the Caltrans Specifications shall be amended to include the following sentences:

"Use of water except for recycled, reclaimed, or other non-potable water for the purpose of dust control or other construction uses unless for health or safety purposes is prohibited. 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 10-6, "Watering," of the Caltrans Specifications and these Special Provisions.

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.

## 14-1.02 HAZARDOUS WASTE AND CONTAINMENT

Hazardous waste containment and handling shall conform to the requirements of Section 14-11 "Hazardous Waste and Containment," of the Caltrans Specifications, these Special Provisions, and as directed by the Engineer.

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 Engineer 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 of 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 in Section 8-1.07, "Delays," of the Caltrans Specifications.

# 14-1.03 NOISE CONTROL REQUIREMENTS

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.

Replace the 2nd paragraph of section 14-8.02A of Caltrans Standard Specifications with:

Do not exceed 54 dBA at 50 feet from the job site activities from 7:00 p.m. to 7:00 a.m.

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, generators, 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 provisions 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.

# 14-1.04 FIRE PREVENTION

Contractor shall ensure that any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws. Contractor shall ensure that during construction, areas where spark producing equipment will be used, area shall be cleared of dried vegetation or other materials that could serve as fuel for combustion. To the extent feasible, the contractor shall keep these areas clear of combustible materials to maintain a firebreak.

Contactor shall ensure that fueling will take place on approved spill guards.

All vehicles are required to carry fire extinguishers and shovels.

Smoking is permitted only in enclosed vehicles.

Payment for complying with the provisions of this section shall be included in the various items of work, and no additional compensation will be allowed therefore.

## SECTION 15 – EXISTING FACILITIES

Existing Facilities shall conform to the requirements in Section 15, "Existing Facilities," of the Caltrans Specifications, these Special Provisions, and as directed by the Engineer.

# 15-1.01 AC PAVEMENT REMOVAL

Asphalt concrete pavement and aggregate base shall be removed by saw-cutting and excavation or cold planning to the lines, depths, and dimensions indicated on the plans and/or as directed by the Engineer.

Full compensation for conforming to the provisions 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.

# 15-1.02 CONCRETE REMOVAL Replace section 15-1.03B of Caltrans Standard Specifications with:

Existing concrete sidewalk, gutter, curb and gutter, curb ramps, and other concrete surfacing, where shown on the plans to be removed, shall be removed and disposed of. Saw cut concrete ramps, walks, curbs, and gutters to be removed at the nearest joint or score line, at the locations indicated on the plans, and as designated by the Engineer.

Payment for removal of existing facilities for which specific bid items are not provided, shall be considered as included in the contract prices paid for various items of work, and no additional compensation will be provided therefore.

# 15-1.03 SURFACE RESTORATION

Surface restoration shall consist of restoring all areas within the limits of work to their original existing condition prior to construction or to the condition shown on the plans or specified in the Specifications.

The Contractor shall restore all paved areas, such as driveways, curb and gutter, roadway surfaces, ditches, concrete, etc., landscaped areas, and all other improvements disturbed or damaged by his operations; including concrete damaged as part of the work.

Payment for the restoration of damaged areas, for which specific bid items are not provided, shall be included in the prices paid for various items of work and no additional compensation will be allowed therefore.

## 15-1.04 ADJUSTING UTILTIY COVERS AND FRAMES

Attention is directed to Section 15-5.03B, "Frames, Covers, Grates, and Manholes", of the Caltrans Specifications.

Existing maintenance hole frames and covers, lamp holes, monitoring wells, fire hydrant and water valve boxes that are owned by the City shall be lowered prior to the cold planning operation and adjusted to the finish pavement grade of new pavement. All existing survey monument and traffic detector handhole shall be removed and replaced. Contractor shall tie down location of existing DH's and survey monuments.

These existing facilities shall be lowered a minimum dimension of 13" from existing finished grade. This dimension shall be verified by the Contractor. 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. Contractor must comply with City Standards for the adjustment of existing utilities.

The concrete used shall comply with provisions of Caltrans Specifications section 90-2, 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.

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 in the field by the Engineer.

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 and incorporate outside utility companies time frames for utility adjustments within the baseline schedule of the project. Vault that can't be adjusted by the owner of the utility, contractor shall work around these vaults by other method and equipment.

On 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.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in adjusting utility covers and frames, shall be considered as included in the contract prices for "Adjust utility Covers and Frames to Grade" and no additional compensation will be allowed therefore.

# 15-1.05 ROADSIDE SIGNS

Unless otherwise shown on the plans, the Contractor shall maintain existing roadside signs in place. The Contractor shall replace or repair all signs damaged by his operations and under this contract by using new material. Such material shall be a replacement of the original in regards to type of sign, posts, and construction. Relocation of the existing signs shall be done the same day the sign is removed from its original location.

Any signs specified to be permanently removed shall be salvaged to the City and delivered to the City corporation yard.

At the Contractor's option, existing signs may be temporarily removed or covered in order to facilitate the Contractor's construction of other improvements included under this contract. Any sign which is removed or damaged by the Contractor's shall be reinstalled at its original location using new unistrut posts in conformance with the Standard Specifications. Existing steel pipe sign posts shall be salvaged as directed by the Engineer. Each roadside sign shall be reinstalled on the same day that the sign is removed.

Full compensation for conforming to the provisions 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.

# DIVISION III – EARTHWORK AND LANDSCAPE

## SECTION 16 - CLEARING AND GRUBBING

Clearing and Grubbing shall conform to the requirements of Section 16, "Clearing and Grubbing", of the Caltrans Specifications and these Special Provisions.

All materials removed shall be off hauled and disposed of by the Contractor.

Attention is directed to Section 19-1.03D, "Buried Man-Made Objects", of the Caltrans Specifications.

Existing underground structures, trash, debris, loose fill, tree roots, tree remains, organic surficial soil, and other rubbish shall be removed or otherwise disposed of so as to leave the areas that have been disturbed with a neat and finished appearance, free from debris. Depressions left from any removals shall be properly filled and compacted in accordance with these Special Provisions, and as directed by the Engineer.

The methods for removal of subsurface irrigation and utility lines will depend on the depth and location of the line in relation to planned improvement. Unless otherwise specified, remove the pipe and compact the soil in the trench according to the applicable portions of these Special Provisions.

Where loose, uncompacted fill occurs at the surface of the site, the materials shall be excavated to expose firm natural ground or previously compacted fill. The exposed surface shall then be prepared to receive fill in accordance with the applicable portions of these Special Provisions.

Nothing herein shall be construed as relieving the Contractor of his responsibility for final cleanup within the project limits.

Full compensation for clearing and grubbing shall be considered included in the contract lump sum price paid for "Clearing and Grubbing" and no additional compensation will be allowed. All the work involved in clearing and grubbing, shall include the removal and disposal of all the existing materials as shown on the plans, as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer. Where it is required the contractor shall test the materials, according to Federal and State guidelines and regulations, before disposal.

# SECTION 19 - EARTHWORK

## 19-1.01 ROADWAY EXCAVATION

Roadway excavation shall conform to the requirements of Section 19, "Earthwork", of the Standard Specifications, Caltrans Specifications, and these Special Provisions. Wherever relative compaction is specified, it shall be determined by ASTM D1557.

Surplus excavated material shall become the property of the Contractor and shall be disposed of outside the highway right-of-way in accordance with the provisions in Section 19-2.03B, "Surplus Material", of the Caltrans Specifications. All excavated material shall be loaded for off-haul from the site as it is generated.

Material will not be allowed to accumulate within the right-of-way.

## **Contaminated Soil**

Identify contaminated soil from spills or leaks by noticing discoloration, odors, or differences in soil properties. Soil with evidence of contamination must be sampled and tested by a laboratory certified by Environmental Laboratory Accreditation Program (ELAP).

If levels of contamination are found to be hazardous, handle and dispose of the soil as hazardous waste.

Prevent the flow of water, including ground water, from mixing with contaminated soil by using one or a combination of the following measures:

- 1. Berms
- 2. Cofferdams
- 3. Grout curtains
- 4. Freeze walls
- 5. Concrete seal course

If water mixes with contaminated soil and becomes contaminated, sample and test the water using a laboratory certified by ELAP. If levels of contamination are found to be hazardous, handle and dispose of the water as hazardous waste. Contractor shall obtain a State Identification Number from the Engineer for hazardous material disposal.

Upon completion of underground facilities and backfilling of the trenches in each portion of the work, the subgrade shall be prepared by compacting to a relative compaction of not less than ninety-five (95) percent for a minimum depth of zero point five (0.5) feet below the grading plane (sub-grade plane) for a total width of the area to be paved.

All Portland cement concrete flatwork shall be saw-cut to full depth prior to removal. All monolithic Portland cement concrete shall be saw-cut a minimum of 8 inches deep prior to removal.

Existing asphalt concrete sections along concrete curb and gutters shall be neatly saw cut to full depth of existing asphalt pavement and removed neatly. The top six inches of the sub-grade shall be compacted to 90% of the maximum density at near optimum moisture content.

# Replace the 2nd, 3rd, and 4th paragraphs of section 19-2.03B of Caltrans Standard Specifications with:

Dispose of surplus material.

## Replace section 19-2.04 of Caltrans Standard Specifications with:

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in excavation, shall be considered as included in the contract prices for "Excavate for New Curb, Gutter and/or Walk" and no additional compensation will be allowed therefore.

SECTION 21 – EROSION CONTROL

Attention is directed to the provisions in Section 21, "Erosion Control", of the Caltrans Specifications.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in erosion control, including the maintenance period, shall be considered as included in the contract prices for "Erosion Control" and no additional compensation will be allowed therefore.

# DIVISION IV – SUBBASES AND BASES

#### SECTION 26 – AGGREGATE BASES

#### 26-1.01 AGGREGATE BASE

Unless otherwise indicated in these Special Provisions or indicated on the plans, aggregate base shall conform to the requirements of Section 26, "Aggregate Bases", of the Caltrans Specifications for Class 2 aggregate base.

Aggregate base shall be placed in lifts no greater than eight (8) inches in loose thickness and in a manner that avoids segregation, moisture conditioned as necessary, and compacted to at least ninety-five percent (95%) relative compaction.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in construction of the various depths of aggregate base, complete in place, will be considered as included in the contract prices paid for various items of work requiring aggregate base, and other items of work, and no additional compensation will be allowed therefore.

# DIVISION V – SURFACING AND PAVEMENT

#### SECTION 37 – BITUMINOUS SEALS

#### 37–101 PRIME COAT

Liquid asphalt conforming to the provisions of Section 92, "Asphalt Binder" of the Caltrans Standard Specifications

Prior to placing asphalt concrete apply prime coat to the compacted aggregate base surfaces as set forth in Section 37, "Bituminous Seals", of the Caltrans Standard Specifications.

Payment for supplying and applying prime coat shall be included in the various items of work, and no additional compensation will be allowed therefore.

#### 37–102 TACK COAT

Asphaltic Emulsion conforming to the provisions of Section 94, "Asphaltic Emulsions" of the Caltrans Standard Specifications

Prior to placing asphalt concrete apply tack coat to vertical surfaces as set forth in Section 37, "Bituminous Seals", of the Caltrans Standard Specifications.

Payment for supplying and applying tack coat shall be included in the various items of work, and no additional compensation will be allowed therefore.

#### SECTION 39 – HOT MIX ASPHALT

Asphalt concrete shall be in accordance with the provisions of Section 39-2, "Hot Mix Asphalt", of the Standard Specifications, Caltrans Specifications and these Special Provisions.

Asphalt concrete for base and surface course paving shall be 1/2-inch HMA Type A aggregate. Asphalt concrete shall have a viscosity grade of PG\_64-16 as specified by Caltrans Standard Specification Section 92.

Spreading equipment shall conform to the applicable provisions of Section 39-2.01C(2) "Spreading, and Compacting" of the Caltrans Specifications. Nominal thickness of top layer/overlay shall be a minimum of one and one half (1-1/2) inches.

Compaction of the asphalt concrete shall conform to the applicable provisions of Section 39-3, "Method Construction Process" of the Caltrans Specifications. Contractor shall use two minimum 10 ton vibratory rollers.

Alternate compacting equipment or substitution of a vibratory roller for a pneumatic-tired roller will not be permitted or approved.

If requested by the Engineer, the Contractor shall provide a ski on the paving machine.

If poor quality paving joints show deterioration or open areas that allow water through the paving within one (1) year of paving, the Contractor will be required to fog seal for the full joint length for a minimum six (6) foot wide pass. All costs for seal will be at no additional cost to the City of Stockton.

Asphalt concrete shall not be placed adjacent to the curb and gutter until the area behind the curb and gutter is fully backfilled and compacted. It shall be the Contractor's responsibility, based on weather predictions, to schedule his paving operations to avoid paving in the rain or fog. If the day's operations are canceled because of predicted rain or fog, a non-working day will be allowed regardless of actual working conditions. The Engineer will determine whether the day's operation shall be canceled due to predicted rain or fog.

Asphalt concrete shall not be placed on any surface, which contains ponded water or excessive moisture in the opinion of the City Engineer.

If paving operations are in progress and rain or fog forces a shutdown, loaded trucks in transit shall return to the plant, and no compensation will be allowed therefore.

The Contractor shall furnish and use canvas tarpaulins to cover all loads of asphalt from the time that the mixture is loaded until it is discharged from the delivery vehicle, unless otherwise directed in writing by the Engineer.

The area to which paint binder has been applied shall be closed to public traffic. Care shall be taken to avoid tracking binder material onto existing pavement surfaces beyond the limits of construction.

No traffic shall be allowed on to the area to which paint binder has been applied with the exception of vehicles unloading asphalt concrete. All vehicles involved with the Contractor's operations shall turn around within the road right-of-way. Driveways and other private property shall not be used without prior written consent of the involved property owner, a dated copy of which shall be delivered to the Engineer prior to the use thereof.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, supplying and placing asphalt binder, tack coat, supplying, preparing, placing and compacting asphalt concrete shall be included in the contract prices for "Install AC Deep Lift" and no additional compensation will be allowed therefore.

# DIVISION VI – STRUCTURES

#### SECTION 52 - REINFORCEMENT

#### 2-1.01 REINFORCEMENT

Reinforcing steel reinforcement shall conform to the provisions in Section 52, "Reinforcement", of the Caltrans Specifications. All rebar shall be Grade 60.

Full compensation for furnishing and installing bar reinforcing steel and mesh reinforcement shall be considered as included in the contract price paid for the various contract items requiring bar reinforcing or mesh reinforcement, and no additional compensation will be allowed therefore.

# DIVISION VIII - MISCELLANEOUS CONSTRUCTION SECTION 73 – CONCRETE CURBS AND SIDEWALKS

## 73-1.01 CONCRETE CURBS, SIDEWALKS, DRIVEWAYS AND ADA CURB RAMPS

Concrete curb, gutter, sidewalk, curb returns, including wheelchair ramps, grooving, driveways, and flat work, shall be in accordance with the provisions of Sections 73, "Concrete Curbs and Sidewalks", and 90, "Concrete", of the Caltrans Standard Specifications, these Special Provisions, and as shown on the plans.

Portland cement concrete shall conform to Section 90-2, "Minor Concrete," of the Caltrans Specifications and shall contain not less than 505 pounds of cementitious material per cubic yard for all uses. Certification of the concrete shall be received from the vendor and delivered to the City Inspector at the time the concrete is poured.

The Contractor shall sawcut all existing concrete curb, gutter and sidewalks, driveways, and other concrete improvements that will be matched with new improvements at the locations indicated on the plans and where directed by the Engineer.

Expansion joints shall be constructed wherever required by the Standard Specifications, at the locations indicated on the plans, and where directed by the Engineer. Expansion joints shall be filled with 3/8"-thick premolded expansion joint filler conforming to ASTM D-1751.

Concrete shall be cured using the curing compound method for curb, sidewalks, and gutters. The curing compound shall be the clear or translucent type conforming to the specifications of AASHTO Designation: M148, Type 1, except that the loss of water in the water retention test shall not exceed 0.040 gram per square centimeter or surface. The curing compound shall contain a fugitive dye and shall be applied at the approximate rate of one (1) gallon per one hundred fifty (150) square feet of area. The curing compound shall be applied in a manner that will provide a complete coating of all exposed faces of the concrete surface. Alternate curing methods shall be submitted to the Engineer for approval before use.

Reinforcing steel, where required, shall conform to Section 52, "Reinforcement", of the Caltrans Specifications and these Special Provisions. All rebar shall be Grade 60.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for concrete sidewalks, driveways and ramps, including all grading necessary for installation of concrete sidewalk or concrete ramps, to finished grade, disposal of all excess material, all sawcuts, reinforcements where required, grading under concrete, providing and grading aggregate base subbase, backfill, compaction, watering, expansion joint filler, concrete and curing compound, and for doing all the work involved in furnishing and placing concrete sidewalks, or ramps, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the prices paid for the contract items of work involved, and no additional work compensation

will be allowed therefor. Where sidewalk, or driveway is adjacent to curb or curb and gutter, the six (6) inch dimension from face of curb to back of curb shall not be counted.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for concrete curb and gutter, including all aggregate subbase, reinforcement, sawcuttings, backfill, compaction, watering, expansion joint filler, reinforcing steel, concrete, and concrete curing compound, and for doing all the work involved in furnishing and placing concrete curb and gutter, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the prices paid for the various contract of work involved, and no additional work compensation will be allowed therefor.

Broken pieces of concrete shall be immediately removed from the job site and disposed. No portions of broken concrete shall remain on the job site overnight. Contractor shall pay to the City of Stockton the sum of Two Hundred Fifty Dollars (\$250) for every calendar day where debris has remained on the job site overnight.

# 73-1.02 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 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.

Full compensation for furnishing and installing detectable warning surface shall be considered as included in the contract price paid for the various contract items requiring new concrete ramps and or new concrete driveways as indicated on the plans, and no additional compensation will be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing truncated domes on existing concrete, complete in place, will be considered as included in the contract unit price paid for "Install Truncated Domes on Existing Concrete", and no additional compensation shall be allowed therefore

## SECTION 75 – MISCELLANEOUS METALS

## 75-1.01 MISCELLANEOUS IRON AND STEEL

This work shall consist of furnishing and installing metal frames and covers or frames and grates for use in minor structures and shall conform to the provisions in Section 75, "Miscellaneous Metal", of the Standard Specifications.

Full compensation for furnishing and installing miscellaneous iron and steel, including metal frames and covers or frames and grates, shall be considered as included in the contract prices paid for the various contract items, and no additional compensation will be allowed therefore.

# SECTION 77 – LOCAL INFRASTRUCTURE

# 77-1 SIGNAL AND LIGHTING SYSTEMS

Furnishing and installing traffic signals shall conform to Sections 86, "Electrical Work," and 87, "Electrical Systems," of the Caltrans Specifications, Section 86, "Electrical System" of the Standard Specifications, California MUTCD, and these Special Provisions.

# 77-1.01 SCOPE

- a. Work covered under this division shall include furnishing all labor, material, tools, equipment, and incidentals and doing all work involved which is required for the complete installation of the electrical work.
- b. Work or equipment not specified or shown on the Plans which is necessary for the proper operation of the work in this area shall be provided and installed at no additional cost to the City.

# 77-1.02 REGULATIONS AND CODE

Regulations and Code shall conform to Section 86-1.01D(1) of the Caltrans Specifications. Nothing in these plans or specifications shall be construed to permit work not conforming to the most stringent of applicable codes.

All individuals who perform work as electricians (kind of work apply to electrical connections 100 volt-amperes or more; Commercial and Industrial wiring, underground conduit installation, finish work and fixtures, and fire life safety), for contractors licensed as class A and C-10 electrical contractors, shall be certified according to Labor Code Sections 3099 and 3099.2. Additionally, the contractor's representative in charge on-site shall possess an IMSA certificate.

77-1.03 CERTIFICATE OF COMPLIANCE, WARRANTIES, GUARANTEES AND INSTRUCTION SHEETS Certificate of Compliance, Warranties, guarantees and instruction sheets shall conform to Sections 86-1.01C(6), 86-1.01C(8), and 87-2.01C of the Caltrans Specifications and these Special Provisions.

All equipment furnished shall be guaranteed to the City by the manufacturers for a period of not less than one- (1) year following the date of acceptance of the project. If any part (or parts) is found to be defective in materials or workmanship within the one year period and it is determined by the Engineer or by an authorized manufacturer's representative that said part (or parts) cannot be repaired on the site, the manufacturer shall provide a replacement part (or parts) of equal kind and/or type during the repair period and shall be responsible for the removal, handling, repair or replacement, and reinstallation of the part (or parts) until such time as the traffic signal equipment is functioning as specified and as intended herein; the repair period shall in no event exceed seventy-two (72) hours, including acquisition of parts.

The one- (1) year guarantee on the repaired or replaced parts shall again commence with the date of acceptance of the project.

# 77-1.04 DESCRIPTION

Traffic signal work is to be performed at the locations shown on the Plans. Work or equipment not specified or shown on the Plans which 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-requested change, from approved Plans and Specifications, shall be made in writing to the City. No changes shall be made in the field without written approval of requested changes by the City.

The contractor is responsible to take all necessary precautions and use best practices in the industry to perform all work require to complete the project.

# 77-1.05 MATERIALS GENERAL

Attention is directed to Section 6 of standard specification, except as provided under "City-furnished Materials" of these Special Provisions, the Contractor shall furnish and install all other materials required to complete the work under this contract.

# 77-1.06 EQUIPMENT LIST AND DRAWINGS

Equipment list and drawings shall conform to the provisions in Section 86-1.01C(1) of the latest Caltrans Specifications, and these Special Provisions.

All equipment and materials that the Contractor proposes to install shall conform to these specifications and contract plans. A list of substitute equipment and/or materials along with a written descriptive summary, describing the functions of the components, which the Contractor proposes to install, shall be submitted along with his bid proposal. The list shall be complete as to the name of manufacturer, size and identifying number of each item. The list shall be supplemented by such other data as may be required. In all cases, the judgment of the Engineer shall be final as to whether substitute equipment and/or material recommended by the Contractor conform to the intent of these specifications.

THE CONTRACTOR SHALL FURNISH FINAL AS-BUILT DRAWINGS AS PART OF THIS PROJECT AT NO ADDITIONAL COST TO THE CITY.

# 77-1.07 CONDUCTORS AND WIRING

Conductors and wiring shall conform to the provisions in Sections 86-1.02F, 86-1.02I, 87-1.03F, 87-1.03H, 87-1.03I, and 87-1.03N of the Caltrans Specifications and these Special Provisions.

The Contractor shall install individual conductors type THW Polyvinyl Chloride (600 volt). Signal wires, Street Light wires, and White Neutral wires shall be 14 AWG, 10AWG, 12AWG, respectively. Signal cable shall not be used. Inert lubricant shall be used in placing conductors in the conduit.

All conductors that are to be spliced together shall be twisted a minimum of 5-turns and soldered. Then, the joint shall be held by mechanical means before insulating in accordance with Method "B."

When new conductors are to be added or existing conductors are to be removed from existing conduit, all conductors shall be removed; the conduit shall be cleaned as provided in Caltrans Specifications, Section 87-1.03F, "Conductors and Cable Installations"; and both old and new conductors as shown on the plans, shall be pulled into the conduit as a unit.

All field wiring terminating in the traffic signal controller cabinet or service cabinet shall be fastened to the termination panels with one piece copper solderless/crimpless wire lugs. Solderless/crimpless lug shall have offset shank and have a maximum wire size capacity of 6.

# 77-1.08 FUSED SPLICE CONNECTORS

Fused splice connectors as specified in Sections 86-1.02N "Fused Splice Connectors" and 87-1.03N "Fused Splice Connectors," of the Caltrans Specifications shall be required. Fused splice connectors shall be installed in the base of the poles, next to the inspection plate. No pigtail is allowed on the fuse holders.

# 77-1.09 BONDING AND GROUNDING

Bonding and grounding shall conform to the provisions in Sections 86-1.02F(2)(c)(i), 86-1.02O, 87-1.03F(3)(c)(i), 87-1.03J, and 87-1.03O of the Caltrans Specification and these Special Provisions.

Grounding jumper shall be attached by a 3/16 inch or larger brass bolt in the signal standard or controller pedestal and shall be run to the conduit, ground rod or bonding wire in adjacent pull box. Grounding Rod shall be 5/8" in diameter and 8 foot in length.

In addition, because of past conflict monitor electronic problems associated with grounding, the Contractor shall be required to install a total of four (4) conductors between the service pedestal and the controller cabinet. These conductors shall be installed as followed;

Green Conductor - No. 8 stranded conductor from Ground Bus #2 in controller cabinet to ground bus in service pedestal.

White Conductor - No. 8 stranded conductor from Ground Bus #1 terminal in the controller cabinet to the neutral bus in the service pedestal.

Black Conductor - No. 8 stranded conductor from the power terminal in the controller cabinet (312B) to service breaker.

Bare Copper Conductor - No. 10 solid conductor from Ground Bus #2 in controller cabinet to conduit grounding bushing in pull box.

Grounding jumper shall be visible after cap has been poured on foundation.

# 77.1.10 Multi Sensor Video Detection System (MSVDS)

# General

The Multi Sensor Video Detection System (MSVDS) shall consist of two different technologies, video imaging and radar. The system shall detect and track vehicles at distances over 500 feet. In a low-visibility condition, the system shall be capable to switch automatically to either radar detection mode or constant call mode. The MSVDS shall fuse vehicle information from the two sensors to provide highly accurate and precise detection for simultaneous stop bar presence detection, advanced detection, and special or advanced applications. Provide sufficient number of cameras to process vehicle presence, advanced, and all system detection zones as shown on the project plans. All equipment, cables, and hardware must be from the same manufacturer. The MSVDS shall match City's existing system and be compatible with City's existing cloud data collection software. No rewiring to the City of Stockton standard P controller cabinet is allowed. The MSVDS shall meet the "Buy America" requirements.

# 77.1.10.01 System Hardware

The MSVDS shall consist of up to two hybrid video camera/radar sensors for main streets, two standard video cameras for side streets, a shelf mounted form factor Central Control Unit (CCU) with up to four detection processors capable of processing from up to four sensors, video surge suppressors, a 7-inch monitor, a keyboard, system software, and a pointing device. At locations where there is a TS1 traffic signal cabinet a SDLC Hub is required.

With use of software the system shall discriminately detects the presence of individual vehicles and bicycles in a single or multiple lane using only the video image and sends vehicle and bicycles calls out to the controller via separate outputs. The system software shall also utilize artificial intelligence and deep learning to automatically count and detect pedestrian movement in the crosswalk, count turning movement counts and learn the background to count and distinguish left, through and right turn movements. The system software shall be able to work simultaneously with City's existing cloud based ATSPM and the City's cloud-based DATA fusion live System. A minimum of 32 video detection zones and 32 radar detection zones per sensor shall be available.

In addition to creating vehicle and bicycle zones, the system shall provide a tracking mechanism that counts pedestrian volume moving within the crossing area, and determine the average, maximum, and minimum speed of pedestrians moving within the crossing zone. The system shall also provide discrete outputs when pedestrians are in the crosswalk during normal crossing phases (one for each direction of travel) and when a red phase input has been detected. The system shall also provide a visual indication on the video image that a pedestrian is in the crosswalk.

# 77.1.10.02 MSVDS Hardware

# Central Control Unit (CCU)

The CCU shall be a single-rack detector card width and provide provision for up to four sensors/cameras. The Detection Processor shall be embedded in the CCU to provide one single cabinet interface. Each sensor/camera shall be connected to the CCU via Ethernet cable. The interface connectors shall be RJ-45 type. The CCU shall have four detection status LEDs on the front panel. The CCU shall enable the loading of modified or enhanced software through either the Ethernet or front-panel USB port (using a USB thumb drive). The shelf-mount format CCU shall be powered from a 48V DC power supply. CCU power consumption shall not exceed 150 Watts. The CCU shall have logic inputs for future use.

The CCU shall incorporate surge suppression for each sensor input. The CCU shall incorporate power surge suppression both on the input power and on the power supplied to the sensors. The CCU shall incorporate power management for the various parts of the MSVDS such that if fault conditions are detected the power supply will safely shut down the power to that peripheral.

The CCU shall provide 2 USB 'A' ports on the front panel. These ports can be utilized for various functions. The USB ports shall be used as part of system setup and configuration. The CCU shall provide an output to a monitor. The port shall be HDMI. The native resolution of the monitor port shall be 1024 x 768.

An Ethernet communications port shall be provided on the front panel. The Ethernet port shall be compliant with IEEE 802.3 and shall use a RJ-45 type connector mounted on the front panel of the CCU. The Ethernet communications interface shall allow the user to remotely configure the system and/or to extract calculated vehicle/roadway information. The interface protocol shall be documented, or interface software shall be provided. Each MSVDS shall have the capability to be IP addressable. The CCU shall support data rates of up to100Mbps.

The CCU shall provide an SDLC connection to the traffic controller. The connector shall be a 'D-15' type, in compliance with NEMA TS-2 specifications. The CCU shall provide a Wi-Fi connection. The connection shall be over a standard 2.4GHz connection. The Wi-Fi connection shall be enabled and disabled by a switch on the CCU. The CCU shall provide an indicator when the Wi-Fi connection is active. The CCU shall provide a connection for a removable antenna. The antenna connection shall be a SMA Male type.

## MSVDS Sensor/Camera

The MSVDS sensor shall have two components; a camera sensor and a radar sensor.

The MSVDS sensor shall utilize a single shielded CAT5E or CAT6 cable for power, communications and video. Cable termination at the camera shall not require crimping or special tools. An optional RJ45 direct connector shall be made available.

The MSDS shall detect vehicles and bicycles and pedestrians in real time as they travel across each camera detection zone. Vehicles, bikes, and pedestrians' detection outputs shall be on separate channels within the same field of view. The MSVDS shall default to a safe condition, such as a constant call on each active detection channel, in the event of unacceptable interference or loss of the video and/or radar signal.

A user-selected alarm output shall be available to be used during the low-visibility condition that can modify the controller operation if connected to the appropriate controller input modifiers (Max1 or Max2). The system shall automatically revert to normal detection mode when the low-visibility condition no longer exists. An On-Screen Icon shall be displayed while the system is in this mode. Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon site geometry, sensor placement, camera image quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to sensor location or quality. Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

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

The MSDS shall have the capability to change the characteristics of a detection zone based on external inputs such as signal phase. Each detection zone shall be able to switch from one zone type (i.e. presence, extension, pulse, etc.) to another zone type based on the signal state.

The On-Screen Display shall include an Automatic Traffic Volume graph. This graph will display estimated Vehicles Per Hour (VPH) per movement for each camera view. The graph will display a rolling 24-hour period of VPH. The On-Screen Display shall include an Occupancy Graph. This graph will display estimated approach occupancy for each camera view. The graph will display a rolling 24-hour period of Occupancy. The On-Screen Display shall include a Speed Graph. This graph will display average speed of vehicles through each sensor view for the last Bin Interval. The graph will display a rolling 24-hour period of Speed.

## 77.1.10.03 Installation

The CCU shall be appropriately grounded to the cabinet ground rod using 14 AWG (2.5mm2) minimum. The cable to be used between the MSVDS sensor/Camera and the CCU in the traffic cabinet shall be Cat-5e, shielded, direct burial. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. Shielded RJ-45 connectors shall be used where applicable. The MSVDS system shall be installed by factory-certified installers as recommended by the supplier and documented in installation materials provided by the

supplier. Proof of factory certification shall be provided. Each cable shall be tagged in cabinet as well as in the pull box near each associated traffic signal pole. The following configuration shall be used for Cat5e/Cat6 cable installation.

Cable Color	Phases	CCU Port
Red	2 & 5	1
Green	4 & 7	2
Blue	6&1	3
Yellow	8&3	4

# 77.1.10.04 Warranty

Furnish minimum of 3-year replacement warranty from the manufacturer against defects in material and workmanship or failures. The effective date of the warranty is the date of acceptance of the project. Submit all warranty documentation before installation. Replacement parts must be furnished within 10 days of receipt of a fail unit. The City does not pay for replacement. During the warranty period, updates to DP software shall be available from the supplier without charge.

# 77.1.10.05 Maintenance and Support

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

The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for on-site technical support services. Installation or training support shall be provided by a factory-authorized representative and shall be a minimum IMSA-Level II Traffic Signal Technician certified.

# 77-1.11 Luminaires and Numbering Street Lighting Poles and Traffic Signal Poles

The Contractor shall furnish and install luminaires with accordance to City of Stockton Standard Drawing R88 through R93 with the exception of the LED luminaires at signalized intersections, which shall be able to deliver 4000K (NW) color and 13,270 lumens at 107 Watts.

# 77.1.11.1 Copper and Wire for Street Lighting

The work shall consist of furnishing and installing streetlight conductor in conformance with the plans, these Specifications, and as directed by the Engineer.

Copper wire shall be UL approved A.W.G. No. 8 Minimum, 7-strand soft copper, type THWN or THHN with minimum of 3/64 in. polyvinyl chloride insulation, unless otherwise noted. No. 10 in pole may be used.

Full compensation for furnishing all labor, materials, equipment, tools and incidentals necessary to complete the installation of copper wire as indicated on the plans, in these Special Provisions, and as directed by the Engineer shall be included in the lump sum price paid for "Signal Modification" and no additional compensation shall be allowed therefor.

## 77-1.12 Payment

Payment for furnishing and installing traffic signals, street lighting shall conform to the provisions in Section 9, "Payment," of the Caltrans Specifications and these Special Provisions.

Full compensation for furnishing the labor, materials, tools, equipment, including installing Multi Sensor Video Detection System, hardware, conduits, cables and wiring, complete in place as shown on the plans and as specified in the Standard Specifications, these Special Provisions, and as directed by the Engineer, shall be considered as included in the contract lump sum price paid for "Signal Modification" in various locations and no additional compensation will be allowed therefor.

# DIVISION IX - TRAFFIC CONTROL DEVICES

#### SECTION 82 – SIGNS AND MARKERS

Signs shall be in accordance with the plans, provisions of Section 82, "Signs and Markers," of the Caltrans Standard Specifications and these Special Provisions.

Signs shall be fabricated from a single sheet aluminum panel as set forth in Section 82-2.02E, "Single Sheet Aluminum Panels" of the Caltrans Standard Specifications.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in removing and replacing signs, complete in place, will be considered as included in the contract unit price paid for "Install Traffic Regulatory and Warning Signs", and no additional compensation shall be allowed therefore.

#### SECTION 83 – RAILINGS AND BARRIERS

Metal guardrailing shall be in accordance with the plans, provisions of Section 82-3, "Metal Railings and Barriers," of the Caltrans Standard Specifications and these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing guradrailing, shall be considered as included in the contract prices for "Midwest Guardrail System" and no additional compensation will be allowed therefore.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing guardrail terminal, shall be considered as included in the contract prices for "Guardrail Terminal System" and no additional compensation will be allowed therefore.

## SECTION 84 - MARKINGS

## 84-1.01 TRAFFIC STRIPES, PAINTED CURBS, PAVEMENT MARKINGS & MARKERS

Traffic stripes and pavement legends, including crosswalks, shall be placed as shown on the plans, must comply with the California MUTCD, as modified herein, and as directed by the Engineer. All pavement traffic stripes, legends, arrows and crosswalks shall be installed with hot applied thermoplastic pavement material. The width and patterns of striping lines shall conform to the striping details shown in Figures 3A-101 (CA) through 3A-113 (CA) in the California MUTCD.

The thermoplastic material shall be free of lead and chromium and conform to State Specification PTH-02ALKYD (for markings) and PTH-02SPRAY (for stripes). Thermoplastic material shall be applied to the pavement at a minimum thickness of 0.060 inches for long lines (4 inches stripes and 8 inches stripes in width) and 0.100 inches for all legends and arrows. The crosswalk lines and limit lines shall be installed at a minimum thickness of 0.125 inches. A double extruded thermoplastic traffic stripe consisting of two 4-inch wide yellow stripes is measured as 2 traffic stripes.

A double sprayable thermoplastic traffic stripe consisting of two 4-inch wide yellow stripes is measured as 1 traffic stripe.

If the contractor chooses to install stripes by using a cart (extruded) rather than a striping vehicle, all striping shall be applied to the pavement at a minimum thickness of 0.090 inches. Glass beads shall conform to State Specification in Sections 84-2.02D, 84-2.02E, and 84-2-03C(2)e. Thermoplastic pavement markings and stripes shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

Use appropriate installation procedures according to manufacturer. If pavement markings are applied to existing surface over existing painted legends (arrows and crosswalks), existing pavement legends (arrows and sidewalks) shall be removed before thermoplastic material is applied. For either material, pavement shall be preheated to remove all residual moisture prior to installation.

At intersections where existing pavement is removed and replaced, Contractor shall install new crosswalk control points for the City to review and approve.

Configuration of traffic stripes, pavement markings, and crosswalks shall conform to the detail and methods as set forth in the latest issue of the California MUTCD and Caltrans Specifications, unless specifically modified on the plans.

All existing traffic stripes and pavement markings shall be removed where shown on the plans, where the existing striping conflicts with proposed striping, and as designated by the Engineer.

Existing pavement markers, including underlying adhesive, when no longer required for traffic lane delineation, as directed by the Engineer, shall be removed and disposed of.

Removal of traffic stripes and pavement markings, or the removal of objectionable material, shall be performed using methods approved in advance by the Engineer. All resulting residue and dust shall be removed immediately from the surface being treated. Such removal shall be by a vacuum attachment operating concurrently with the blast cleaning operation. The removal of yellow paint and thermoplastic material shall include testing for lead prior to disposal of the material. Disposal of materials containing lead shall conform to state approved practices. The removal of yellow paint and thermoplastic material shall also conform to the provisions in Section 14-1.01 "Construction Site Waste Materials Management" of these special provisions.

The Contractor shall place control points for the Engineer to review and approve. No additional "cat tracks" shall be placed until control points are approved by the Engineer. The Contractor

shall obtain approval from the Engineer on all striping cat tracks prior to final application and striping and markers.

The Contractor shall place and remove any temporary striping required for routing traffic through the project area.

All thermoplastic shall be provided by the Contractor. Manufacturer and specifications shall be submitted for approval and shall conform to the specifications contained herein. All thermoplastic supplied shall conform to the local air pollution regulations. Traffic line markings shall be reflectorized conforming to the Caltrans Specifications, Section 84-2,"Traffic Stripes and Pavement Markings".

Existing surface which is to receive the thermoplastic material shall be mechanically wire brushed to remove all dirt and contaminants. Thermoplastic material shall be applied only to the dry pavement surfaces and only when the pavement surface temperature is above fifty (50°F) degrees Fahrenheit. Thermoplastic shall be applied only on a thoroughly dry surface and during periods of favorable weather.

The Contractor shall make all necessary conform striping as required. The completed stripes and markings shall be sharp and clear with clean, well-defined edges.

Any damage by the elements to the newly stripe or marking due to the failure of any Contractor to protect his work shall be repaired by him at no additional cost. Any over-spray or tracking of fresh thermoplastic material onto unpainted surfacing shall be removed by any methods to the satisfaction of the Engineer.

On one-way streets and median-divided streets, the side of the retroreflective raised pavement markers that is visible to traffic proceeding in the wrong direction shall be red. The other retroreflective side shall be white or yellow as per the detail. This section is applicable to Details 9, 10, 12, 13, 25, 25A, 26 and 27 in the California MUTCD.

Blue Raised Pavement Markers shall be installed after any surface treatment (overlay, microsurfacing, chip-seal, cape-seal, etc.) solely for aiding in locating fire hydrants. Typical marker locations are shown on Figure 3B-102 (CA) of the California MUTCD.

(1) Two-Way Streets—Markers should be placed 6 inches from the edge of painted centerline on the side nearest the fire hydrant. If the street has no centerline, the marker should be placed 6 inches from the approximate center of the roadway on the side nearest the hydrant.

(2) Streets with Left Turn Lane at Intersection—Markers should be placed 6 inches from the edge of painted white channelizing line on the side nearest the hydrant.

(3) Streets with Continuous Two-Way Turn Lane—Markers should be placed 6 inches from the edge of the painted yellow barrier line on the side nearest the fire hydrant.

(4) One-way streets and median-divided streets—Markers should be placed 6 inches from the edge of lane line on the side nearest the fire hydrant (at least 12' from curb or edge of traveled way).

The noise level created by the combined grinding activities must not exceed 86 dBA when measured at a distance of 50 feet at right angles to the direction of travel.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement markings, complete in place, will be considered as included in the contract price paid for "Place Thermoplastic Pavement Markings", and no additional compensation shall be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement striping, complete in place, will be considered as included in the contract price paid for: "Place 6" White Longitudinal Stripe (Buffer Zone)", and no additional compensation shall be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement striping, complete in place, will be considered as included in the contract price paid for: "Place 4" White Diagonal Stripe (Buffer Zone)", and no additional compensation shall be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement striping, complete in place, will be considered as included in the contract price paid for: "Place 2'x6" White Dashed Stripe (Bike Lane Line)", and no additional compensation shall be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement markings, complete in place, will be considered as included in the contract price paid for: "Place Green Bike Pavement Markings", and no additional compensation shall be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement striping, complete in place, will be considered as included in the contract price paid for: "Place 12" White Cross Walk Stripe", and no additional compensation shall be allowed therefore.

Full compensation for furnishing all labor, materials, tools equipment, and incidentals as required and doing all work involved in installing thermoplastic pavement striping, complete in place, will be considered as included in the contract price paid for: "Place 24" White Limit line Stripe", and no additional compensation shall be allowed therefore.

#### SECTION 90 - CONCRETE

Attention is directed to the Section 90, "Concrete" of the Standard Specifications and these Special Provisions.

#### 90-1.01 MINOR CONCRETE

Section 90-2, "Minor Concrete", of the Caltrans Specifications is amended by adding the following:

Mineral admixture will be required in the manufacture of concrete containing aggregate that is determined to be "deleterious" or "potentially deleterious" when tested in accordance with ASTM Designation: C 289. The use of mineral admixture in such concrete shall conform to the requirements in Section 90-1.02 of the Caltrans Specifications, "Materials", except the use of Class C mineral admixture will not be permitted.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved in placing minor concrete shall be including in the various item of work involving minor concrete work.