PUBLIC WORKS DEPARTMENT

SPECIAL PROVISIONS
FOR

LINCOLN STREET AND 8TH STREET ROUNDABOUT

PROJECT NUMBER: WT17021
FEDERAL PROJECT NUMBER: CML-5008(176)

LINCOLN STREET AND 8TH STREET ROUNDABOUT

PROJECT No. WT17021
FEDERAL PROJECT No. CML-5008(176)

The special provisions contained herein have been prepared by, or under the direct supervision of, the following Registered Engineers:

CIVIL

SIGNED: James Pangburn
Registered Civil Engineer

DATE: 3/3/2022

REGISTERED PROFESSIONAL ENGINEER
James Pangburn
No. 71445
Exp. 12-31-23
CIVIL
STATE OF CALIFORNIA

ELECTRICAL

SIGNED: Kin Chan
Registered Civil Engineer

DATE: 3/2/2022

REGISTERED PROFESSIONAL ENGINEER
Kin Y. Chan
No. 55391
Exp. 12-31-22
STATE OF CALIFORNIA

LANDSCAPE

SIGNED: Robert J. Norbutas Jr.
Registered Landscape Architect

DATE: 3/2/2022

LICENSED LANDSCAPE ARCHITECT
Robert J. Norbutas Jr.
No. 5595
Exp. 11/30/22
STATE OF CALIFORNIA

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SPECIAL PROVISIONS
FOR
LINCOLN STREET AND 8TH STREET ROUNDABOUT
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DIVISION I – GENERAL PROVISIONS

SECTION 1 – GENERAL

1-1.01 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
Director -	Director of Public Works, City of Stockton
Standard Specifications -	City of Stockton, Standard Plans and Specifications, and any amendments or revisions thereto (Revised 9/27/16)
Caltrans Specifications -	State of California, Department of Transportation, 2018 Standard Plans and Specifications and any amendments or revisions thereto.
Laboratory -	City of Stockton's Department of Public Works or consultant laboratory
Department -	Department of Public Works, City of Stockton
Engineer -	City Engineer, City of Stockton, acting either directly or through properly authorized Engineer agents and consultants
MUTCD -	Latest edition of California Manual on Uniform Traffic Control Devices (MUTCD), and any amendments and revisions thereto

1-1.02 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 Specifications implement the STATE CONTRACT ACT, they shall not be applicable since the City of Stockton is not subject to said ACT.

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

a. Contract Change Order
b. Contract
c. Project Special Provisions
d. Project Plans
e. City's Standard Specifications
f. City's Standard Drawings
g. Revised Caltrans Standard Specifications
h. Caltrans Standard Specifications
i. Revised Caltrans Standard Plans
j. Caltrans Standard Plans
k. Supplemental Project Information

With regards to discrepancies or conflicts between written dimensions given on drawings and the scaled measurements, the written dimensions shall govern.

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

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

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

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

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

1-1.03 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 of the Caltrans Specifications.

See Instructions to Bidders for complete instructions and documentation forms.

SECTION 2 – BIDDING

2-1.01 GENERAL

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

The bidder's attention is directed to the provisions in Section 2, "Bidding," of the Standard Specifications and these special provisions for the requirements and conditions which the bidder must observe in the preparation for the submission of the bid.

The Bidder's Bond form mentioned in the last paragraph in Section 2-1.34, "Bidder's Security," of the Standard Specifications will be found following the signature page of the Proposal.

In conformance with Public Contract Code Section 7106, a Non-collusion Affidavit is included in the Proposal. Signing the Proposal shall also constitute signature of the Non-collusion Affidavit.

The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of Title 49 CFR (Code of Federal Regulations) part 26 in the award and administration of US DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

2-1.02 BID PROTEST

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 is to be sent to the following address:

Attention: *Travis Pazin*
City of Stockton
Public Works Department
22 E. Weber Avenue, Room 301
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.

Bid protests are to be delivered to the following address: Department of Public Works, 22 E. Weber Avenue, Room 301, Stockton, CA 95202, Attn: *Travis Pazin.* 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 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: *Travis Pazin*
22 E. Weber Avenue, Room 301
Stockton, CA 95202

3-1.03 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".

SECTION 4 – SCOPE OF WORK

4-1.01 DIFFERING SITE CONDITIONS (23 CFR 635.109)

Attention is directed to the provisions in Section 4-1.06, "Differing Site Conditions," of the Caltrans Specifications and the Standard Specifications. Contractor shall notify the Engineer if he/she finds physical conditions differing materially from contract documents.

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.

SECTION 5 – CONTROL OF WORK

5-1.01 COORDINATION WITH OTHER ENTITIES

The Contractor's attention is directed to Sections 5-1.20, "Coordination with other Entities," of the Caltrans Specifications.

Contractor shall coordinate with any other contractor or entity performing work at or near the job or material site to avoid delays, and shall be responsible to each other for damage to work, persons, or property and for costs due to unnecessary delays.

City has another project (Safe Routes to School – Priority Safety Project) occurring along Eighth Street between I-5 Off/On Ramp and El Dorado Street. Coordination with other contractors shall take place to avoid delays, and shall be included in the contract prices paid for various items of work.

5-1.01A PERMITS

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

The following is not an all-inclusive list of the required permits and/or licenses, if applicable:

- 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)
- State's Water Resources Control Board Stormwater Construction General Permit (contractor pays) – Notice of Intent (NOI) and Notice of Termination (NOT)
- 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: http://www.valleyair.org.
- Construction Water – The Contractor is responsible for obtaining a permit for water from California Water Service or City of Stockton, as applicable, for construction water obtained from a City hydrant. This permit shall be approved by the City of Stockton Fire Department.

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

5-1.02 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:

- List of submittals
- DAS-140
- Shop Drawings
- Material Submittals
- Product submittals

- Emergency Contacts/Authorized Representatives
- Manufacturer's Instructions/Field Reports
- Traffic Control Plan, including pedestrian detour plan
- Project Schedule (Critical Path Method)
- City of Stockton Construction and Demolition Debris Recycling Report
- City of Stockton Encroachment Permit (if applicable)
- Caltrans Encroachment Permit (if applicable)
- Staging Agreements with Private Property Owner (if applicable)
- Project information sign layout
- SWPPP
- Lead Compliance Plan
- Exhibit 16-B (Subcontracting Request)
- Exhibit 16-I (Notice of Material to be Used)
- Acknowledgement of Monument Preservation Form

The Contractor shall transmit each submittal to the Engineer for review and approval. Submittals shall be sequentially numbered on the submittal list form. Resubmittals shall be identified with the original number and a sequential resubmittal suffix letter. The original submittal shall be numbered X. The first resubmittal shall be numbered X-a and so on. Identify on the form the date of the submittal, and Contractor, Subcontractor or supplier. Any incomplete submittals will be returned for resubmittal. Transmit one (1) hard copy and an electronic copy of each submittal.

Schedule submittals to expedite the Project, and deliver to Engineer at the Engineer's office, see Section 10-1.01, "Order of Work," of these Special Provisions.

For each submittal for review, allow 15 calendar days excluding delivery time to and from the Contractor.

When revised for resubmission, identify all changes made since previous submission.

Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

Within 10 calendar days after Notice of Award submit a complete list of all submittals to be submitted and the dates when they will be submitted. **All submittals shall be submitted within 30 calendar days from the date the Notice of Award; otherwise project working days will commence, with or without issuance of the Notice to Proceed**.

Wherever called for in the Contract Documents, or where required by the Engineer, the Contractor shall furnish to the Engineer for review, 1 set, plus one reproducible copy, of each shop drawing submittal. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop drawings, fabrication and installation drawings, erection drawings, list, graphs, catalog sheets, data sheets, and similar items. Whenever the Contractor is required to submit design calculations as part of a submittal, such calculations shall bear the signature and seal of an engineer registered in the appropriate branch and in the state of California, unless otherwise directed.

Normally, a separate submittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of a submittal of various items using a single form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. A multi-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the Engineer.

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

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

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

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 City, the Contractor shall keep the cost accounting records specified above until complete resolution of all claims has been reached.

Full compensation for conforming to the 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 APPERANCE

The Contractor shall maintain a neat appearance to the work.

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 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 than60 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 or sheaths.

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

Notification Center	Telephone Number
Underground Service Alert – Northern California (USA)	811
	(800) 227-2600

Immediately upon encountering unknown existing facilities, the Contractor shall notify the Engineer in writing of the situation, request coverage of the work as extra work, and aid the Engineer in determining due diligence. 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. Delays due to encountering unexpected facilities shall be compensated as additional contract working days to the contractor. Contractor shall submit a written request to the Engineer requesting time extension due to the delay. No other compensation is allowed.

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.

5-1.06 REQUEST FOR INFORMATION

The Contractor’s attention is directed to Sections 5-1.42, “Request 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.

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.

5-1.07 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 and Extra Work", "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 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.

5-1.08 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 3 working days in advance of any construction. Contractor shall pay for overtime for inspection during City holidays, weekends and non-business hours.

5-1.09 CONSTRUCTION SURVEY

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, lighting, and pavement delineation plan described in the Plans and Specifications.
2. Contractor shall be responsible referencing all existing monumentation with the limits of the project prior to removal or adjustments of any existing monuments. Monuments referencing shall be reviewed and approved by the engineer prior to commencing of the work.
3. The contractor shall employ a registered Land Surveyor 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 Survey or Civil Engineer shall be are fully 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.

4. 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 various items of work, and no additional compensation will be made therefore.

5-1.10 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 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.

5-1.11 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 paved areas, such as driveways, 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 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.

5-1.12 RIGHTS IN LAND

The following is added to Section 5-1.32, “Areas for Use" of the Caltrans Specifications:

> "All work, equipment parking, or any other activity associated with the project shall be confined to the project limits within the street rights-of-way. 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."

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.

5-1.13 STAGING AREA

Attention is directed to the requirements specified in Section 5-1.32, “Areas for Use” of the Caltrans Specifications and these Special Provisions.

The street 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.

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.

5-1.14 DISADVANTAGED BUSINESS ENTERPRISE (DBE)

Attention is directed to the provisions in Section 5-1.13B, "Disadvantaged Business Enterprises" of the Caltrans Specifications and these Special Provisions. Refer to the DBE Instructions to Bidders and Federal Aid Contract Bidders Checklist for form submittal timeline. Also refer to DBE Instructions to Bidders for this project, listed on the City of Stockton’s website on the Bid Flash webpage: http://www.stocktongov.com/services/business/bidflash/default.html.

If a DBE is decertified before completing its work, the DBE must notify the prime contractor in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify the prime contractor in writing of the certification date. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change form. Submit the form within 30 days of Contract acceptance.

The contractor shall submit Exhibit 9-F (Monthly Disadvantaged Business Enterprise (DBE) Payment) once per month during construction activities to show payments made to all DBE subcontractors. If no work is performed that month by DBE’s, the form shall be submitted stating “no DBE work performed.”

Upon work completion, complete a *Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors* form CEM-2402(F) (Exhibit 17-F).

The contractor shall not terminate or substitute a listed DBE for convenience and perform the work with his own forces or obtain materials from other sources without authorization from the City. The City has established a project-specific DBE Goal of *11%*.

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 BUY AMERICA REQUIREMENTS

Attention is directed to the "Buy America" requirements of the Surface Transportation Assistance Act of 1982 (Section 165) and the regulations adopted pursuant thereto. Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or $2,500, materials produced outside the U.S. may be used.

Production includes:

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

6-1.05 QUALITY ASSURANCE PROGRAM

Refer to Instruction to Bidders.

6-1.06 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.

Contractor shall hire a certified, independent from contractor's company, laboratory to conduct compaction and material testing. Testing includes and not limited to compaction testing and material testing. A relative compaction of 95% is expected on AC overlay, roadway sub grade and sidewalk areas.

Compaction testing will be required for subsoil, AB, and hot mix asphalt. For AB, sieve analysis, cleanness value, and R value may be provided by the vendor if the source is consistent.

For Asphalt Concrete, certificate of compliance, one sieve analysis, and one oil content test per day is required from supplier.

For concrete, certificate of compliance for Curb Gutter/Sidewalk, driveway, and ADA ramp or ASTM C39 compaction test, 4 cylinders per day, with a required 28 day strength of 3,000 psi is required.

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.

6-1.07 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-and-delineation-materials-a11y.pdf

SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.01 GENERAL

Attention is directed to Section 7 “Legal Relations and Responsibility to the Public” of the Caltrans Specifications, Standard Specifications, and these Special Provisions.

7-1.02 MAINTAINING PUBLIC CONVENIENCE AND SAFETY

Attention is directed to Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", and Section 12, "Temporary Traffic Control", of the Caltrans Specifications. Attention is also directed to Part 6 of the California MUTCD and Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", of Standard Specifications, and Section 12-1.01, “Maintaining Traffic” of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in said sections and Part 6 of the California MUTCD.

7-1.03 TRENCH SAFETY

Attention is directed to Sections 7-1.02K(6)(b), "Excavation Safety” of the Standard Specifications and these Special Provisions.

If required, the Contractor shall furnish all labor, equipment, and materials required to design, construct, and remove all shoring, lagging, cribbing, piling, and/or other types of support for the wall of any open excavation required for the construction of this project.

In making excavations for the project, the Contractor shall be fully responsible for providing and installing adequate sheeting, shoring, and bracing, as may be necessary as a precaution against slides or cave-ins and to fully protect all existing improvements of any kind from damage.

The Contractor shall be solely responsible for any damages which may result from his failure to provide adequate shoring to support the excavations under any or all of the conditions of loading which may exist or which may arise during the construction project. Nothing herein shall be deemed to allow the use of shoring, sloping, or protective system less effective than that required by the Construction Safety Orders of the Division of Industrial Safety.

Full compensation for conforming to the provisions in this section shall be included in the prices paid for various bid items, and no additional compensation will be made therefore.

7-1.04 PUBLIC CONVENIENCE

Contractor’s attention is directed to Section 12-1.01, “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, paramedics, ambulance services in the area, Caltrans D10 Traffic Management Center and all affected utilities no later than seventy-two (72) hours before work is to begin. Contractor shall provide an emergency contact list, location, work activities, and affected times to the parties

mentioned above. 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 seventy-two (72) hours before work is to commence. In addition, the Contractor shall provide temporary "No Parking" signs posted seventy-two (72) hours 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 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.

7-1.05 PUBLIC SAFETY

The Contractor's attention is directed to Section 12-1.02, "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", latest MUTCD California Supplement, the current edition of the "Manual on Uniform Traffic Control Devices (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, moving, and removing of all necessary traffic control devices including, but not limited to, signing, striping, barricades, arrow boards, CMS, and flagging shall be included in the contract prices for "Traffic Control" and no additional compensation will be allowed therefore. Section 12-1.04, "Payment," of the Caltrans Specifications is deleted.

7-1.06 INDEMNIFICATION AND INSURANCE

Attention is directed to Section 7-1.05 "Indemnification" and Section 7-1.06, "Insurance" of the Standard Specifications, and Instruction to Bidders for this project.

Indemnification and Insurance shall conform to an Exhibit, which is attached to this project bid package and incorporated by this reference.

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.

7-1.07 FEDERAL LAWS FOR FEDERALLY–AID CONTRACTS (FORM 1273)

Attention is directed to Section 7-1.11 "Federal Laws for Federally-Aid Contracts" of the Caltrans Specifications, and Instruction to Bidders for this project.

Prime contractors and any lower-tier subcontractors with subcontracts in excess of $10,000 must complete form FHWA-1391 report for work performed during the last PAY PERIOD of July. Prime contractors are subject to a progress pay deduction (minimum amount of $1,000) for failure to submit form FHWA-1391s, including failure to submit form FHWA-1391s for applicable subcontractors, or if the report they submit are unsigned, illegal, or incomplete.

7-1.08 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 SCHEDULE

Summary

Comply with Section 8-1.02, “Schedule," of the Caltrans Specifications, except Contractor must:

1. Use computer software to prepare the schedule
2. Furnish compatible software for the Engineer's exclusive possession and use

The Contractor is responsible for assuring that all activity sequences are logical and that each schedule shows a coordinated plan for complete performance of the work.

Definitions

contract completion date: The current extended date for completion of the contract shown on the weekly statement of working days furnished by the Engineer as specified in Section 8-1.05, "Time," of the Caltrans Specifications.

data date: The day after the date through which a schedule is current. Everything occurring earlier than the data date is "as-built" and everything on or after the data date is "planned."

float: The difference between the earliest and latest allowable start or finish times for an activity.

milestone: An event activity that has zero duration and is typically used to represent the beginning or end of a certain stage of the project.

near critical path: A chain of activities with total float exceeding that of the critical path but having no more than 10 working days of total float.

time-scaled network diagram: A graphic depiction of a Critical Path Method (CPM) schedule comprised of activity bars with relationships for each activity represented by arrows. The tail of each arrow connects to the activity bar for the predecessor and points to the successor.

total float: The amount of time that an activity or chain of activities can be delayed before extending the scheduled completion date.

Submittals

General Requirements

Submit to the Engineer baseline, monthly updated, and final updated schedules, each consistent in all respects with the time and order of work requirements of the contract. Perform work in the sequence indicated on the current accepted schedule.

Each schedule must show:

1. Calculations using critical path method to determine controlling activities.
2. Duration activities less than 20 working days.
3. Each required constraint. Constraints other than those required by the special provisions may be included only if authorized.

The Engineer's review and acceptance of schedules does not waive any contract requirements and does not relieve the Contractor of any obligation or responsibility for submitting complete

and accurate information. Correct rejected schedules and resubmit them within 7 days of notification by the Engineer, at which time a new review period of 7 days will begin.

Errors or omissions on schedules do not relieve the Contractor from finishing all work within the time limit specified for completion of the contract. If, after a schedule has been accepted by the Engineer, either you or the Engineer discovers that any aspect of the schedule has an error or omission, the Contractor must correct it on the next updated schedule.

Baseline Schedule

Submit to the Engineer a baseline schedule within 20 days of approval of the contract. Allow 20 days for the Engineer's review after the baseline schedule and all support data are submitted. Beginning the week the baseline schedule is first submitted, meet with the Engineer weekly to discuss and resolve schedule issues until the baseline schedule is accepted. The baseline schedule must include the entire scope of work and must show how the Contractor plans to complete all work contemplated. Multiple critical paths and near-critical paths must be kept to a minimum. A total of not more than 50 percent of the baseline schedule activities must be critical or near critical, unless otherwise authorized by the Engineer. The baseline schedule must not extend beyond the number of working days originally provided in these special provisions.

Updated Schedule

Submit an updated schedule and meet with the Engineer to review contract progress on or before the 1st day of each month, beginning one month after the baseline schedule is accepted. Allow 15 days for the Engineer's review after the updated schedule and all support data are submitted, except that the review period will not start until any previous month's required schedule is accepted. Updated schedules that are not accepted or rejected within the review period are considered accepted by the Engineer.

The updated schedule must show:

1. Data date of the 21st day of the month or other date established by the Engineer
2. Changes from approved revised schedules

Final Updated Schedule

Submit a final updated schedule with actual start and finish dates for the activities within 30 days after completion of contract work. Provide a written certificate with this submittal signed by the Contractor's project manager or an officer of the company stating, "To my knowledge and belief, the enclosed final updated schedule reflects the actual start and finish dates of the actual activities for the project contained herein." An officer of the company may delegate in writing the authority to sign the certificate to a responsible manager.

8-1.02 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 (*Travis Pazin (209) 937 – 5654)*. 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.

8-1.03 POST CONSTRUCTION CONFERENCE

The Contractor shall attend a post-construction meeting that will be arranged by the Public Works Department *(Travis Pazin (209) 937-5654)* 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.

8-1.04 TIME OF COMPLETION

Attention is directed to the provisions in Section 8-1.05, "Time," of the Caltrans Specifications and these Special Provisions.

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

The Contractor shall diligently prosecute the contract work to completion within eighty (80) 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.

8-1.05 LIQUIDATED DAMAGES

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

The Contractor shall pay liquidated damages to the City of Stockton in the amount of **$4,000 (Four Thousand Dollars)** per day for each and every calendar day that the work, with the exception of the plant establishment and maintenance period, remains incomplete after expiration of the contract working days specified in these Special Provisions.

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.

SECTION 9 – PAYMENT

9-1.01 GENERAL

Attention is directed to Section 9 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 on Section 9 of the Caltrans Specifications.

All materials designated to be removed shall become the property of the Contractor, unless otherwise noted, and shall be disposed in accordance with local, state, and federal laws and ordinances.

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 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 9-1.16A, "Progress Payments - General,” 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. Traffic Control
   By lump sum. Includes designing, providing, erecting and maintaining traffic control, general information, and signage as indicated on the plans, described in Section 12 of the Caltrans Standard Specifications, and described the California MUTCD and these Special Provisions. Also includes performing all the work related to safe management of pedestrian, bicycle and vehicular traffic during construction of the project, including Traffic Control Plans and flaggers.

2. Job Site Management
   By lump sum. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Sections 13 of the Caltrans Standard Specifications, and described in these Special Provisions.

3. Water Pollution Control
   By lump sum. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 13 and 21 of the Caltrans Standard Specifications, and described in these Special Provisions. This item shall include preparing

the draft and final Storm Water Pollution Prevention Plan (SWPPP), and implementing storm water pollution prevention best management practices during construction.

4. Remove And Adjust Irrigation
   By the Lump Sum. Includes removing existing irrigation and adjusting to lines and spray heads on the southeast corner of the intersection and described in these Special Provisions. No payment for item will be issued if work is not needed.

5. Roadway Excavation
   By the cubic yard. Includes sawcut, excavating, removing existing concrete curb, gutter, and sidewalk, asphalt paving, off haul, stones, base and debris, scarifying, compacting, grading, and finishing subgrade, loading and removing waste materials from the site, as indicated on the Plans, described in Section 15 of the Caltrans Standard Specifications, and described in these Special Provisions.

6. Class 2 Aggregate Base
   By the cubic Yard. Includes providing and placing and compacting aggregate base, loading and removing waste materials from the site, and constructing the facilities as indicated on the Plans, described in Section 26 of the Caltrans Standard Specifications, and described in these Special Provisions.

7. Hot Mix Asphalt (Type A)
   By the ton, verified by weigh slips from an approved weigh station. Includes supplying and placing asphalt binder, supplying, preparing, placing and compacting asphalt concrete and constructing to the elevations, thickness and locations as indicated on the Plans, described in Section 39 of the Caltrans Standard Specifications, and described in these Special Provisions.

8. Slurry Seal
   By the square yard, verified by weigh slips from an approved weigh station. Includes supplying and placing asphalt binder, supplying, preparing, placing and compacting asphalt concrete and constructing to the elevations, thickness and locations as indicated on the Plans, described in Section 37 of the Caltrans Standard Specifications, and described in these Special Provisions.

9. Adjust Maintenance Hole to Grade (Sanitary Sewer)
   By the unit. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 71 of the Caltrans Standard Specifications, and described in these Special Provisions.

10. Remove Drainage Inlet
    By the unit. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 71 of the Caltrans Standard Specifications, and described in these Special Provisions.

11. Install Type 2 Curb Inlet Catch Basin

    By the unit. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 70 of the Caltrans Standard Specifications, and described in these Special Provisions.

12. Adjust Maintenance Hole to Grade (Storm Drain)

    By the unit. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 71 of the Caltrans Standard Specifications, and described in these Special Provisions.

13. Mountable Curb

    By the linear foot. Includes providing and placing, supplying concrete to the site, epoxy, forming, bar reinforcing steel, placing concrete, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the Plans, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

14. Median Curb - Type A3 over Existing Pavement

    By the linear foot. Includes providing and placing, 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

15. Central Island Curb

    By the linear foot. Includes providing and placing, 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

16. Retaining Curb (6" Min Height)

    By the linear foot. Includes providing and 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

17. Vertical Curb & Gutter

    By the linear foot. Includes providing and 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

18. Rolled Curb and Gutter

    By the linear foot. Includes providing and 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

19. Modified Rolled Curb and Gutter

    By the linear foot. Includes providing and 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

20. Concrete Sidewalk

    By the square foot. Includes providing and placing and compacting subgrade, 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions. Shall include all work required for placement of truncated domes.

21. Wheelchair Ramp

    By the unit. Includes providing and placing and compacting subgrade, 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions. Shall include all work required for placement of curb ramps.

22. Textured Concrete over Existing Pavement

    By the square foot. Includes providing and placing, supplying concrete to the site, coloring, forming, reinforcing, placing concrete, stamping, removing forms, curing, finishing, loading and removing waste materials from the site, and constructing the facilities as indicated on the Plans, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

23. Colored Concrete

    By the square foot. Shall be placed where shown on the plans and includes 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.

24. Walk On Bark (3” Depth)
    By the square foot. Includes labor, materials, equipment and work to provide and install mulch in all shrub areas, around trees and as shown on the plans. Includes preparation, placement, protection and maintenance of mulch during and after planting.

25. Chain Link Fence (Type Cl-6)
    By the linear foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans and described in these Special Provisions.

26. Remove Fence
    By the linear foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans and described in these Special Provisions.

27. Remove Gate
    By the unit. Includes full compensation for removing existing gate, as indicated on the Plans and described in these Special Provisions.

28. Furnish and Install Pavement Marker (Retroreflective)
    By the unit. Includes cleaning surface, providing and installing marker at the locations indicated on the Plans, described in Section 81 of the Caltrans Standard Specifications, and described in these Special Provisions.

29. Furnish and Install Roadside Sign
    By the unit. Includes full compensation for furnishing and installation of posts, furnishing and installation of sign panels, all labor, tools, equipment and incidentals for furnishing the materials, complete in place, as indicated on the Plans, described in Section 82 of the Caltrans Standard Specifications, and described in these Special Provisions.

30. Furnish and Install Median Nose Signs and Markers
    By the unit. Includes full compensation for furnishing and installation of posts, furnishing and installation of sign panels (signs R4-7, R6-1), furnishing and installation of markers (marker Type K), all labor, tools, equipment and incidentals for furnishing the materials, complete in place, as indicated on the Plans, described in Section 82 of the Caltrans Standard Specifications, and described in these Special Provisions. Reference COS drawing number R-31.

31. Remove Sign and Post
    By the unit. Includes providing all the labor, material, tools, equipment, and incidentals for removing existing signs and posts as indicated on the Plans, described in Section 82 of the Caltrans Standard Specifications, and described in these Special Provisions.

32. Furnish and Install Thermoplastic Traffic Stripe
    By the linear foot. Payment quantity for traffic stripe is the length measured along the line of the traffic stripe without deductions for gaps. A double thermoplastic traffic stripe consisting of two yellow stripes is measured as 1 traffic stripes. Includes cleaning surface,

providing and installing thermoplastic traffic stripe at the locations indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

33. Furnish and Install Pavement Marking

    By the square foot. Includes cleaning surface, providing and installing marker at the locations indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

34. Colored Pavement for Bike Lanes (Green)

    By square feet of green colored pavement material placed. The quantities of colored pavement for bike lanes may be adjusted, deleted, or omitted as directed by the Engineer to meet the existing requirements. No adjustment to the unit price bid will be made because of a change in quantity from the Engineer's estimate. Payment shall be at the unit price bid per square feet of green colored pavement material placed, and shall include full compensation for furnishing all labor, material, tools, equipment, incidentals and for doing all work involved with placing colored pavement for bike lanes as shown on the plans, as specified in these Special Provisions and as directed by the Engineer.

    By the square foot. Colored pavement for bike lanes (green) shall be placed where shown on the plans and shall conform to the applicable requirements Sections 84 of the Caltrans Standard Specifications and described in these Special Provisions.

35. Remove Existing Striping

    By the linear foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

36. Remove Existing Pavement Marking

    By the square foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

37. Lighting System

    By lump sum. Includes full compensation for furnishing all labor, tools, equipment and incidentals for furnishing the materials, complete in place, as indicated on the Plans, described in Section 86 & 87 of the Caltrans Standard Specifications, and described in under Section 77 as specified in these Special Provisions.

38. Rectangular Rapid Flashing Beacon System

    By lump sum. Includes full compensation for furnishing all labor, tools, equipment and incidentals for furnishing the materials, complete in place, as indicated on the Plans described in Section 86 & 87 of the Caltrans Standard Specifications and described in under Section 77 as specified in these Special Provisions.

39. CCTV System

    By lump sum. Includes full compensation for furnishing all labor, tools, equipment and incidentals for furnishing the materials, complete in place, as indicated on the Plans described in Section 86 & 87 of the Caltrans Standard Specifications and described in under Section 77 as specified in these Special Provisions.

40. 6" Flush Concrete Band

    By the linear foot. Includes providing and 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, described in Section 73 of the Caltrans Standard Specifications, and described in these Special Provisions.

41. Synthetic Turf

    By the square foot. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

42. Boulders

    By lump sum. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

43. Decomposed Granite Fines W/Stabilizer Mulch

    By the square foot. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

44. Irrigation Controller

    By the unit. Irrigation Controller and Enclosure shall include full compensation for furnishing all labor and materials to complete all work, as specified herein and no additional compensation will be allowed as indicated on the Plans and described in these Special Provisions.

45. Irrigation Connections And Equipment

    By lump sum. The bid price shall include hot test and all necessary controller programming. Installation shall include a grounding rod per manufacturers' recommendation. All components shall be new and factory manufactured using the latest upgrades and versions of software.

46. 1" Backflow Preventer, Pad and Cage

    By lump sum. Backflow Prevention Assembly, Pad and Cage shall include full compensation for furnishing all labor and materials to complete all work, as specified herein and no additional compensation will be allowed.

47. Mainline 1-1/2"

    By the linear foot. Includes tapping of water main, corporation stop, copper service, fittings, meter assembly, excavation, bedding, backfill and compaction as indicated on the Plans and described in these Special Provisions.

48. Control Wire (#12,#14 AWG-UF)

    By the linear foot. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

49. Sleeve Schedule 40

    By the linear foot. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

50. PVC Schedule 40 Lateral Lines

    By the linear foot. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

51. Gate Shutoff Valve 1-1/2"

    By the unit. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

52. Remote Control Valve 1"

    By the unit. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

53. Quick Coupling Valve 1"

    By the unit. Assembly shall include full compensation for furnishing all labor and materials to complete all work, as indicated on the Plans and described in these Special Provisions.

54. Shrub Drip Emitters/Laterals

    By the square foot. Layout and placement of sprinkler pipes, fittings, tees, tapped couplings, fabrication, and excavation, backfill, flushing emitters, fittings, excavation, bedding, backfill, compaction and operational testing.

55. Install Small Shrubs/Groundcover (1 Gallon)

    By the unit. Layout and placement of plant materials, excavation, soil preparation, import topsoil, organic materials, chemicals, staking, backfill, compaction and plant establishment as indicated on the Plans and described in these Special Provisions.

56. Install Medium Shrubs (5 Gallon)

    By the unit. Layout and placement of plant materials, excavation, soil preparation, import topsoil, organic materials, chemicals, staking, backfill, compaction and plant establishment as indicated on the Plans and described in these Special Provisions.

57. Planter Amendments

By lump sum. of planting areas covered with stockpiled topsoil shall include full compensation for furnishing all labor and materials to complete all work, cost and submittal of soil tests as specified herein. No additional compensation will be allowed.

58. Landscape Maintenance (90 Day)

By lump sum. Includes all labor, materials, equipment, and work to provide 90 day of landscape maintenance. Includes pruning, cultivating, watering, weeding, mowing, edging, and fertilization of landscape areas of the project, mulching, restoring planting saucers, resetting to proper grades or vertical position. Includes replacement of any landscape that shows signs of failure to thrive, damage or injury. Includes operating, maintaining, repairing, and monitoring of the automatic irrigation systems and controller assemblies. Maintenance period will begin upon successful completion of all contract work and any required remedial “punch list” work.

59. Mobilization

By lump sum. All costs connected with mobilization of Contractor’s operations as described in Section 9 of the Caltrans Specifications will be paid for at the Contract price as described in Section 9 of the Caltrans Specifications.

A1. Furnish And Install Pavement Marker (Retroreflective)

By the unit. Includes cleaning surface, providing and installing marker at the locations indicated on the Plans, described in Section 81 of the Caltrans Standard Specifications, and described in these Special Provisions.

A2. Furnish And Install Roadside Sign

By the unit. Includes full compensation for furnishing and installation of posts, furnishing and installation of sign panels, all labor, tools, equipment and incidentals for furnishing the materials, complete in place, as indicated on the Plans, described in Section 82 of the Caltrans Standard Specifications, and described in these Special Provisions.

A3. Paint Traffic Stripe (2-Coat)

By the linear foot. Payment quantity for traffic stripe is the length measured along the line of the traffic stripe without deductions for gaps. Includes cleaning surface, providing and installing paint traffic stripe with 2 coats and refreshing as directed by the engineer for the duration of construction at the locations indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

A4. Paint Pavement Marking (2-Coat)

By the square foot. Includes cleaning surface, providing and installing paint marker with 2 coats and refreshing as directed by the engineer for the duration of construction at the locations indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

A5. Furnish And Install Thermoplastic Traffic Stripe

By the linear foot. Payment quantity for traffic stripe is the length measured along the line of the traffic stripe without deductions for gaps. A double thermoplastic traffic stripe consisting of two yellow stripes is measured as 1 traffic stripes. Includes cleaning surface, providing and installing thermoplastic traffic stripe at the locations indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

A6. Remove Existing Striping

By the linear foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

A7. Remove Existing Pavement Marking

By the square foot. Includes providing all labor, materials, tools equipment, and incidentals as indicated on the Plans, described in Section 84 of the Caltrans Standard Specifications, and described in these Special Provisions.

9-1.03 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 Public Works Director. City Manager and/or City Council approval may be necessary depending on the amount of the change order.

9-1.04 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 “Mobilization” price paid for on the contract items of work and no additional compensation will be allowed therefore.

9-1.05 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*.

9-1.06 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 there with, 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 ITEMS:

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	TRAFFIC CONTROL	LS	1
2	JOB SITE MANAGEMENT	LS	1
3	WATER POLLUTION CONTROL	LS	1
4	REMOVE AND ADJUST IRRIGATION	LS	1
5	ROADWAY EXCAVATION	CY	270
6	CLASS 2 AGGREGATE BASE	CY	50
7	HOT MIX ASPHALT (TYPE A)	TON	240
8	SLURRY SEAL	SQYD	3070
9	ADJUST MAINTENANCE HOLE TO GRADE (SANITARY SEWER)	EA	1
10	REMOVE DRAINAGE INLET	EA	3
11	INSTALL TYPE 2 CURB INLET CATCH BASIN	EA	3
12	ADJUST MAINTENANCE HOLE TO GRADE (STORM DRAIN)	EA	1
13	MOUNTABLE CURB	LF	130
14	MEDIAN CURB - TYPE A3 OVER EXISTING PAVEMENT	LF	750
15	CENTRAL ISLAND CURB	LF	60
16	RETAINING CURB (6" MIN HEIGHT)	LF	35
17	VERTICAL CURB AND GUTTER	LF	370
18	ROLLED CURB AND GUTTER	LF	42
19	MODIFIED ROLLED CURB AND GUTTER	LF	30
20	CONCRETE SIDEWALK	SF	1850
21	WHEELCHAIR RAMP	EA	8

22	TEXTURED CONCRETE OVER EXISTING PAVEMENT	SF	1400
23	COLORED CONCRETE	SF	875
24	WALK ON BARK (3" DEPTH)	SF	830
25	CHAIN LINK FENCE (TYPE CL-6)	LF	12
26	REMOVE FENCE	LF	8
27	REMOVE GATE	EA	1
28	FURNISH AND INSTALL PAVEMENT MARKER (RETROREFLECTIVE)	EA	180
29	FURNISH AND INSTALL ROADSIDE SIGN	EA	26
30	FURNISH AND INSTALL MEDIAN NOSE SIGNS AND MARKERS	EA	4
31	REMOVE SIGN AND POST	EA	4
32	FURNISH AND INSTALL THERMOPLASTIC TRAFFIC STRIPE	LF	1140
33	FURNISH AND INSTALL PAVEMENT MARKING	SF	1100
34	COLORED PAVEMENT FOR BIKE LANES (GREEN)	SF	260
35	REMOVE EXISTING STRIPING	LF	2160
36	REMOVE EXISTING PAVEMENT MARKING	SF	750
37	LIGHTING SYSTEM	LS	1
38	RECTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM	LS	1
39	CCTV SYSTEM	LS	1
40	6" FLUSH CONCRETE BAND	LF	30
41	SYNTHETIC TURF	SF	60
42	BOULDERS	LS	1
43	DECOMPOSED GRANITE FINES W/STABILIZER MULCH	SF	100
44	IRRIGATION CONTROLLER	EA	1
45	IRRIGATION CONNECTIONS AND EQUIPMENT	LS	1
46	1” BACKFLOW PREVENTER, PAD AND CAGE	LS	1
47	MAINLINE 1-1/2"	LF	130
48	CONTROL WIRE (#12,#14 AWG-UF)	LF	80
49	SLEEVE SCHEDULE 40	LF	55
50	PVC SCHEDULE 40 LATERAL LINES	LF	40
51	GATE SHUTOFF VALVE 1-1/2"	EA	1
52	REMOTE CONTROL VALVE 1"	EA	1
53	QUICK COUPLING VALVE 1"	EA	1

54	SHRUB DRIP EMITTERS/LATERALS	SF	100
55	INSTALL SMALL SHRUBS/GROUNDCOVER (1 GALLON)	EA	11
56	INSTALL MEDIUM SHRUBS (5 GALLON)	EA	10
57	PLANTER AMENDMENTS	LS	1
58	LANDSCAPE MAINTANENCE (90 DAY)	LS	1
59	MOBILIZATION	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 award will be the lower bidder for 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.

ALTERNATIVE BID ITEMS:

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
A1	FURNISH AND INSTALL PAVEMENT MARKER (RETROREFLECTIVE)	EA	120
A2	FURNISH AND INSTALL ROADSIDE SIGN	EA	6
A3	PAINT TRAFFIC STRIPE (2-COAT)	LF	1520
A4	PAINT PAVEMENT MARKING (2-COAT)	SF	260
A5	FURNISH AND INSTALL THERMOPLASTIC TRAFFIC STRIPE	LF	160
A6	REMOVE EXISTING STRIPING	LF	2820
A7	REMOVE EXISTING PAVEMENT MARKING	SF	430

Alternate bid items are called for in the Contract Documents, the time required for completion of the alternate bid items has already been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. The City may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work. Accordingly, each bidder must ensure that each bid item contains a proportionate share of profit, overhead, and other costs or expenses which will be incurred by the bidder.

DIVISION II – GENERAL CONSTRUCTION

SECTION 10 – GENERAL

10-1.01 ORDER OF WORK

The order of work shall conform to the Contractor's approved project schedule described in Section 8-1.01, "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 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.

At those locations exposed to public traffic where guard railings or barriers are to be constructed, reconstructed, or removed and replaced, the Contractor shall schedule operations so that at the end of each working day there shall be no post holes open nor shall there be any railing or barrier posts installed without the blocks and rail elements assembled and mounted thereon.

Before obliterating any pavement delineation (traffic stripes, pavement markings, and pavement markers) that is to be replaced on the same alignment and location, as determined by the Engineer, the pavement delineation shall be referenced by the Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. The references shall include the limits or changes in striping pattern, including one- and 2-way barrier lines, limit lines, crosswalks and other pavement markings.

The Contractor shall stage and sequence the work as follows:

1. Upon award of the Construction Contract by Stockton's City Council (Notice of Award) the Contractor shall prepare all project submittals for City review as set forth in Section 4-1.04, "Submittals" of these Special Provisions.

2. The first order of work shall be the ordering of all items required, after all submittals are approved by the Engineer, for this project which may have long lead times to assure that their acquisition is not the cause for any delays. These items may include, but are not limited to, traffic signal equipment, street lighting, and related appurtenances. The Contractor shall furnish the Engineer with statements from the vendors that the orders for said equipment has been received and accepted by said vendors. These statements shall be furnished within ten (10) working days of the Notice to Proceed date.

3. Obtain all necessary permits.

4. Prior to the start of construction, the Contractor shall submit to the Engineer for approval a detailed "Traffic Control Plan" (if different from the approved plans) which also addresses pedestrian detours. The Traffic Control Plan shall be proposed in accordance with the provisions in Section 10-1.11 "Maintaining Traffic" of these Special Provisions.

5. Prior to the start of construction, the Contractor shall verify the location and depth of all existing utilities and underground facilities within the project limits. The Contractor shall notify the Engineer of any discrepancies between the conditions in the field and the Plans.

6. The Contractor shall develop and implement an Erosion Control Plan, 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.

7. The Contractor shall schedule a pre-construction meeting with the City before beginning any work. The Contractor shall prepare and submit a construction schedule before the pre-construction meeting. The Notice to Proceed (NTP) will be issued after all submittals have been approved and the pre-construction meeting has taken place.

8. Portions of existing concrete sidewalks, curbs, gutters and adjacent asphalt pavement that are removed shall be replaced within 10 working days after removal.

At the end of each working day if a difference in excess of 2 inches exists between the elevation of the existing pavement and the elevation of excavations within 4 feet of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose; however, once placing of the topsoil commences, topsoil material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 1:4 (vertical:horizontal) or flatter to the bottom of the excavation.

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 therefor.

10-1.02 PRE-CONSTRUCTION SURVEY

The Contractor shall perform pre-construction and post-construction survey of all existing structures, pavements and other above ground facilities within the project limits prior to beginning any work, noting their condition by means of dated photographs and video.

Color photographs shall be taken with a digital camera at locations (property sites) that are appropriate to show pre-existing conditions and after constructed conditions. Each photograph shall show the date and time the photograph was taken and clearly be labeled showing the

location, viewing direction, and any special features noted. Digital copies of photographs and video shall be submitted to the City prior to approval of project.

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.

10-1.03 MONUMENTS

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.

Prior to issuance of encroachment permit, Contractor's Licensed Land Surveyor shall sign the Acknowledgement of Monument Preservation form and submit to the City (Attachment 2).

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. A new record of survey shall be filed with the San Joaquin County Surveyor's office, which 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.

10-1.04 DIRECTIONAL BORING

Contractor's attention is directed to the provisions in Section 77-1.09, "Conduit" of these Special Provisions and Sections 86-1.02B, "Conduit and Accessories" and 87-1.03B, "Conduit Installation" of the Caltrans Specifications for the installation of signal and ITS conduits. Should the contractor desire to use other type(s) of conduit such as HDPE for the ITS conduits then the Contractor should submit the material specifications for the proposed conduit to the Engineer for his review and approval. Contractor's attention is also directed to the provisions in Section 5-1.05 "Submittals" of these Special Provisions.

Directional Boring under railroad tracks shall be a minimum of 3'-6" below the railroad ties. No trenching will be allowed within the railroad right of way. The Contractor shall comply with all requirements set forth by the CPUC and other rail authority.

A. General

1. Quality Assurance

The requirements set forth in this document specify a wide range of procedural precautions necessary to ensure that the very basic, essential aspects of a proper directional bore installation are adequately controlled. Strict adherence shall be required under specifically covered conditions outlined in this specification. Adherence to the specifications contained herein, or the

Engineer's approval of any aspect of any directional bore operation covered by this specification, shall in no way relieve the Contractor of their ultimate responsibility for the satisfactory completion of the work authorized under the Contract.

2. Submittals

a. WORK PLAN: Prior to beginning work, the Contractor must submit to the Engineer a general work plan outlining the procedure and schedule to be used to execute the project. Plan should document the thoughtful planning required to successfully complete the project.

b. EQUIPMENT: The Contractor shall submit specifications on directional boring equipment to be used to ensure that the equipment will be adequate to complete the project. Spares inventory shall be included.

c. MATERIAL: Specifications on material to be used shall be submitted to the Engineer. Material shall include the conduit, fittings and any other item which is to be an installed component of the project. Contractor's attention is directed to the provisions in Section 6-1.04, "Buy America requirements" of these Special Provisions for purchase of the signal and ITS conduits.

d. PERSONNEL: Documentation of training and relevant experience of personnel shall be submitted.

B. Equipment Requirements

1. General

The directional boring equipment shall consist of a directional boring rig of sufficient capacity to perform the bore and pullback the conduit, a boring fluid mixing and delivery system of sufficient capacity to successfully complete the boring, a guidance system to accurately guide boring operations and trained and competent personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials and spare parts on hand to maintain the system in good working order for the duration of this project.

2. Boring System

a. BORING RIG: The directional boring machine shall consist of a hydraulically powered system to rotate, push and pull hollow drill conduit into the ground at a variable angle while delivering a pressurized fluid mixture to a guidable drill (bore) head. The machine shall be anchored to the ground to withstand the pulling, pushing and rotating pressure required to complete the directional boring. The hydraulic power system shall be self-contained with sufficient pressure and volume to power boring operations. The hydraulic system shall be free of leaks. The rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be grounded during boring and pull-back operations. Sufficient spares shall be kept on hand for any break-downs which can be reasonably anticipated.

b. BORE HEAD: The bore head shall be steerable by changing its rotation and shall provide the necessary cutting surfaces and boring fluid jets.

3. Guidance System

The Guidance System shall be of a proven type and shall be setup and operated by personnel trained and experienced with this system. The Operator shall be aware of any magnetic

anomalies and shall consider such influences in the operation of the guidance system if using a magnetic system.

C. Operations

1. General

The Engineer must be notified 48 hours in advance of starting work. The Directional Bore shall not begin until the Inspector is present at the job site and agrees that proper preparations for the operation have been made. The Inspector's approval for beginning the installation shall in no way relieve the Contractor of the ultimate responsibility for the satisfactory completion of the work as authorized under the Contract. The conduit shall be installed below the minimum depth of 24" unless directed otherwise by the Engineer.

2. Boring Procedure

a. SITE PREPARATION: Prior to any alterations to the work site, the Contractor shall photograph or video tape the entire work area, including entry and exit points. One copy of which shall be given to the Engineer and one copy shall remain with the Contractor for a period of one year following the completion of the project.

The work site, as indicated on drawings, within right-of-way, shall be graded or filled to provide a level working area. No alterations beyond what is required for operations are to be made. The Contractor shall confine all activities to designated work areas.

b. BORE PATH SURVEY: The entire drill path shall be accurately surveyed with entry and exit stakes placed in the appropriate locations within the areas indicated on the drawings. If the Contractor is using a magnetic guidance system, the drill path shall be surveyed for any surface geo-magnetic variations or anomalies.

c. ENVIRONMENTAL PROTECTION: The Contractor shall protect all boring operation areas and any drainage or other area designated for such protection by contract documents and/or state, federal and local regulations. Additional environmental protection necessary to contain any hydraulic or boring fluid spills shall be put in place. The Contractor shall adhere to all applicable environmental regulations.

d. UTILITY LOCATES: the Contactor shall notify all companies with underground utilities in the work area via the state or local "one-call" to obtain utility locates. Once the utilities have been located the Contractor shall physically identify the exact location of the utilities by vacuum or hand excavation, when possible, in order to determine the actual location and path of any underground utilities which might be within 4 feet of the bore path. The Contractor shall not commence boring operations until the location of all underground utilities within the work area have been verified.

e. SAFETY: The Contractor shall adhere to all applicable state, federal and local safety regulations and all operations shall be conducted in a safe manner. Safety meetings shall be conducted at least weekly with a written record of attendance and topic submitted to the Engineer.

f. CONDUIT: Conduit shall be connected together in one length prior to pull-back operations, if space permits.

The Contractor's attention is called to the fact that extreme care will be required when placing the conduit so as to permit the installation of the conduit to the alignment and depth, as shown on the Plans and these Special Provisions. Variations from theoretical grade of the conduit at the time of completion of boring shall not exceed one percent of the distance from the bore pit point.

g. PILOT HOLE: Pilot hole shall be drilled on bore path with no deviations greater than 5% of depth over a length of 100'.

h. BORE PIT: Where ground conditions at the face of the bore pit are such that sloughing or caving of ground is likely to occur at the face of the excavation upon commencement thereof, the face of the pit shall be made stable so that an excessive void is not carried with the face of the excavation for the length of the casing or conduit. This may be accomplished by solid sheathing at the portal of the bore pit, or excavating and backfilling the face of the bore pit with cohesive material.

i. REAMING: Upon successful completion of pilot hole, the Contractor shall ream bore hole to a minimum of 25% greater than outside diameter of conduit using the appropriate tools. The Contractor shall not attempt to ream at one time more than the boring equipment are designed to safely handle.

j. PULL-BACK: After successfully reaming the bore hole to the required diameter, the Contractor shall pull the conduit through the bore hole. In front of the conduit shall be a swivel. Once pull-back operations have commenced, operations must continue without interruption until conduit is completely pulled into the bore hole. During pull-back operations the Contractor shall not apply more than the maximum safe conduit pull pressure at any time.

In the event that conduit becomes stuck, the Contractor shall cease pulling operations to allow any potential hydro-lock to subside and shall commence pulling operations. If conduit remains stuck, the Contractor shall notify the Engineer. The Engineer and the Contractor shall discuss options and then work shall proceed accordingly.

k. EXCAVATED MATERIAL: In general, excavated material shall be removed from the conduit as boring progresses and no accumulation of excavated material within the conduit will be permitted. Should appreciable loss of ground occur in installations where the face of the excavation is accessible, the voids shall be backpacked promptly to the extent practicable with an approved soil cement.

3. Site Restoration

Following boring operations, the Contractor shall de-mobilize equipment and restore the work site to its original condition. All excavations shall be backfilled and compacted according to the City of Stockton requirements.

4. Record Keeping, As-Builts

The Contractor shall maintain a daily project log of boring operations and a guidance system log with a copy given to the Engineer at the completion of the project. As-built drawings shall be certified as to accuracy by the Contractor.

D. Payment

Full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved with installing conduits by directional boring methods, including, but not be limited to, excavating, backfilling and compacting the boring and receiving pits, boring and tunneling, removing and replacing concrete sidewalk, as shown on the Plans, as set forth in these Special Provisions, and as directed by the Engineer will be considered as included in the contract prices paid for various items of work requiring installation of conduit, and no additional compensation will be allowed therefore.

10-1.05 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, sidewalk, roadway surfaces, ditches, etc., landscaped areas, and all other improvements disturbed or damaged by his operations.

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.

10-1.06 MAINTAINING TRAFFIC

Attention is directed to Part 6 of the California MUTCD, Sections 7-1.03, "Public Convenience", 7-1.04, "Public Safety", and 12, "Temporary Traffic Control", of the Caltrans Specifications, and Section 10-1.01, "Order of Work", of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in these sections.

Lane closures shall conform to Section 12-1.102, “Traffic Control System for Lane Closure” of these Special Provisions.

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

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 and Stockton Unified School District, as required by these Special Provisions, and as directed by the Engineer.

The Contractor shall submit to the City Engineer a detailed "Traffic Control Plan" for review and approval if different from the approved plans. The "Traffic Control Plan" shall be submitted no later than ten (10) working days following the Notice to Proceed date and at least 3 working days prior to commencing any work which requires implementation of any component of the "Traffic Control Plan". The plan shall be approved by the Engineer prior to its implementation by the Contractor.

The "Traffic Control Plan" shall conform to the typical traffic control details included in the Caltrans Standard Plans, Part 6 of the California MUTCD, and the requirements of Section 12-1.02, "Traffic Control

System for Lane Closure", of these Special Provisions. The Traffic Control Plan shall include, but not be limited to, detailed requirements for the following:

- Traffic control devices, including signs and markings.
- Construction routes, phasing and/or staging of both the roadway and sidewalk areas.
- Emergency vehicles access.
- Bus, refuse collection, and mail delivery access.
- Any parking zones to be removed on a temporary basis.
- Pedestrian and bicyclist access.

The 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.

SECTION 11 – BLANK

SECTION 12 – TEMPORARY TRAFFIC CONTROL

12-1.01 MAINTAINING TRAFFIC

Attention is directed to Sections 7-1.03, "Public Convenience," 7-1.04, "Public Safety," and 12, "Temporary Traffic Control," of the Caltrans Specifications, 10.01, "Order of Work," of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities specified in these sections.

The Contractor shall furnish, and maintain in good working order, all barricades, arrow boards, CMS, and flashers, and provide flaggers as necessary to protect pedestrians and vehicular traffic.

The Contractor shall furnish and maintain all barricades, arrow boards, CMS, flashers, and any detour signs twenty-four (24) hours a day, including covering or removing signs during non-construction hours.

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 and properties to completion. The Contractor shall coordinate limited closures with tenants or owners, as required by these Special Provisions, and as directed by the Engineer.

The Contractor shall submit to the City Engineer a detailed "Temporary Traffic Control Plan" for review and approval. The "Temporary Traffic Control Plan" shall be submitted no later than five (5) working days following the Notice to Proceed date and prior to commencing any work which requires implementation of any component of the "Traffic Control Plan." The plan shall be approved by the Engineer prior to its implementation by the Contractor.

The "Traffic Control Plan" shall conform to the typical traffic control details included in the requirements of Section 12-1.02, "Traffic Control System for Lane and Road Closure," of these Special Provisions. 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.

Traffic Lane and Sidewalk Closures

Lanes and sidewalks may be closed only as indicated in this section, "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. Any extended working hours require the approval of the 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.

Also, the Contractor shall provide adequate signing, barricades and flashers or portable flashing beacons, flaggers, and other equipment and personnel necessary to adequately control and direct traffic in a safe manner. The Contractor shall maintain all barricades, flashers and detour signs twenty-four (24) hours a day, including covering signs during non-construction hours. The Contractor shall also provide the City with the names and telephone numbers of three (3) representatives available at all times.

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 California MUTCD. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in Part 6 of California 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 various items of work of the bid schedule, and no additional compensation will be allowed therefore.

Maintaining Pedestrian Access

Means of passage of pedestrian traffic around and through 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 furnishing a temporary traffic control plan, furnishing, installing, maintaining, and removing all components of the required traffic control system, traffic lane and sidewalk closures, temporary pavement delineation, maintaining driveway and pedestrian traffic, and for maintaining traffic as specified in the plans and these Special Provisions, and as directed by the Engineer, shall be included in the contract prices for “Traffic Control” and no additional compensation will be allowed therefore.

12-1.02 <u>TRAFFIC CONTROL SYSTEM FOR LANE AND ROAD CLOSURE</u>

A traffic control system shall consist of closing traffic lanes and ramps in accordance with the provisions of Section 12, "Temporary Traffic Control,” of the Caltrans Specifications, the provisions under "Public Safety,” "Maintaining Traffic,” and "Construction Area Signs" elsewhere in these Special Provisions.

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 section 81-3, "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. If the Contractor so elects, the components may be stored at selected central locations, approved by the Engineer, within the limits of the highway right-of-way.

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.

Section 12-1.04, “Payment” of the Caltrans Specifications is amended as follows: "The Contractor shall pay fully the cost of furnishing all flaggers, including transporting flaggers, to provide for passage of public traffic."

Attention is directed to Part 6, “Temporary Traffic Control,” of the California MUTCD.

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

Full compensation for furnishing all labor (including flagging costs), 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 additional compensation will be allowed therefore.

The adjustment provisions in Section 4-1.05A, "Changes and Extra Work - General,” of the Standard Specifications shall not apply to the item of traffic control system. Adjustments in compensation for traffic control system will be made only for an 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.

12-1.03 MAINTAINING EXISTING AND TEMPORARY ELECTRICAL SYSTEMS

Maintaining existing electrical systems and communication systems shall conform to the provisions of Section 87, “Electrical Systems," of the Caltrans Specifications and these Special

Provisions. Existing traffic signal systems and communication systems shall be kept in effective operation for the benefit of the traveling public during the progress of the work, except when shut down is permitted. The traffic signal shutdowns shall be limited to the hours of 9:00 a.m. to 3:30 p.m., and shall be permitted only during the switch over from existing to new controller operation, unless prior approval is obtained from the Engineer. Contractor required to obtain authorization at least three (3) working days before interrupting communication between an existing system and the traffic management center (TMC).

Temporary standards with signal equipment may be required during the construction of the new installation. The Contractor shall provide temporary equipment if deemed necessary by the Contractor or Engineer. The cost of the temporary systems shall be included in the lump sum price paid for the various contract items of work involved and no additional compensation shall be allowed therefor.

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 Storm Water Pollution Prevention Plan (SWPPP), 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.

Full compensation for furnishing, installing, maintaining, and removing all components of the required water pollution control devices as specified in the plans and these Special Provisions, and as directed by the Engineer, shall be included in the contract prices for "Water Pollution Control" and no additional compensation will be allowed therefore.

SECTION 14 – ENVIRONMENTAL STEWARDSHIP

14-1.01 HAZARDOUS WASTE AND CONTAINMENT

Based on the Initial Site Assessment Recommendations, the project plans identify demolition of existing concrete curb, gutter, and sidewalk as part of the proposed project. Under the federal asbestos National Emissions Standards for Hazardous Air Pollutants regulations (NESHAP, 40 CFR Part 61, Subpart M), a Certified Asbestos Consultant (CAC) must make definitive conclusions regarding the presence of ACCM. Prior to demolition or reconstruction, existing structures are required to have an asbestos survey completed to determine the appropriate method of handling and disposal of demolition debris. Written notification to the Air Quality Management District of demolition or renovation operations on structures is required at least 10 business days prior to conducting the work, regardless of the presence or absence of asbestos in the tested material. Samples of the concrete scheduled for demolition should be collected under the supervision of a CAC and tested for the presence of asbestos prior to construction.

A Certified Lead Inspector/Assessor must collect and analyze samples from painted surfaces when the likelihood of flaking, peeling, or paint dust exists. If lead is identified at concentrations above threshold limits, painted surfaces must be disposed of in accordance with Caltrans 2018

Standard Specification Section 14-11.13, Disturbance of Existing Paint Systems on Bridges, and Caltrans 2018 Standard Special Provision 14-11.13. The presence, or likely presence, of lead in the project site requires preparation of a Lead Compliance Plan (Caltrans 2018 Standard Specifications section 7-1.02K(6)(j)(ii), Lead Compliance Plan, and Caltrans 2018 Standard Special Provision 7-1.02K(6)(j)(iii)), and a Health & Safety Plan for workers in accordance with Cal OSHA Title 8, Section 1532.1.

Payment for testing for concrete sidewalks for presence of asbestos, 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.

The project includes removal of yellow thermoplastic stripe that will produce hazardous waste residue. After the engineer accepts the analytical results, dispose of yellow thermoplastic and yellow paint hazardous was at a class 1 disposal facility located in California 30 days after accumulating 220 lb of residue. If less than 220 lb of hazardous waste residue and dust is general in total, dispose of it within 30 days after the start of accumulation of residue.

Thermoplastic traffic striping may contain heavy metals, including lead and cadmium, at concentrations in excess of the hazardous waste thresholds established by the California Code of Regulations, and may produce toxic fumes when heated. Consequently, the traffic striping within the project area should be tested to determine whether hazardous concentrations of heavy metals are present. If the volume of striping material to be removed by grinding or planing is anticipated to be small, it could be assumed to be hazardous waste and disposed of accordingly, at a Class 1 disposal facility. If painted paving material is removed and recycled, testing for heavy metals would not be required. For the yellow centerline striping and white traffic markings to be removed by planing or grinding, it is recommended that this material be tested for the presence of heavy metals prior to construction. SSP 84-9.03C requires a lead compliance plan even if lead is present at non-hazardous concentrations. If the painted pavement material is removed and recycled without grinding or planing it would not be required to be handled as hazardous waste.

Payment for testing for traffic striping material for heavy metals, 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.

Chemically treated wood must be handled as treated wood waste (TWW) and disposed of as hazardous waste. Section 66261.9.5 of Department of Toxic Substances Control (DTSC) regulations provide alternative management standards (AMS) for treated wood waste. SSP 14-11.14 for TWW is based on AMS regulations. This special standard provision directs the contractor to follow the AMS, including providing training to all personnel that may come in contact with TWW. Training must include, at a minimum, safe handling; sorting and segregating; storage; labeling (including date); and proper disposal methods. Relocation of treated wood utility poles is generally the responsibility of the utility owner.

Based on the Initial Site Assessment Recommendations, the Contractor shall test the following soil in the corners of the intersection for Aerially deposited lead (ADL). S. Lincoln and W. Eighth

Streets were installed in the 1920s, but the aerial photographs suggest that sidewalks may not have been installed until sometime between 1968 and 1976. Testing of soil at the corners of the intersection appears warranted given the extended period of time the street shoulders were apparently unpaved and potentially exposed to ADL from motor fuel exhaust.

Payment for testing for aerially deposited lead, 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.

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 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.

14-1.03 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.

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

The noise level requirement shall apply to the equipment on the job or related to the job, including, but not limited to, trucks, transit mixers, or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

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

14-1.04 CULTURAL REQUIREMENTS

General

Environmental reevaluation will be required if the scope of the project changes to include additional areas or activities, or if previously unknown cultural or other sensitive resources are discovered. Contact the Environmental Office if project changes occur or sensitive resources discovered.

Cultural

If cultural materials are discovered at the job site, do not disturb the resources and immediately:

1. Stop all work within a 60-foot radius of discovery
2. Protect the discovery area
3. Notify the Engineer
4. The Department Investigates. Do not move cultural materials or take them from the job site. Retain a qualified archaeologist to assess the significance of the find. Do not resume work within the discovery area until authorized.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County coroner contacted. Pursuant to Public Resources Code Section 5097.98. If the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At the same time the landowner will work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

14-1.05 ENVIRONMENTAL PERMITS

The contractor will comply with the Incidental Take Mitigation Measures (ITMM's) required by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) (See Attachment 1).

SECTION 15 – EXISTING FACILITIES

15-1.01 EXISTING FACILITIES

Contractor attention is directed to requirements of Section 5-1.16, "Property and Facility Preservation" of these Special provisions, and 7-1.05, "Indemnification" and 7-1.06 "Insurance", of the Caltrans Specifications.

The work shall be performed in connection with various existing highway facilities (i.e., traffic signals and streetlights, storm drain pipe, catch basins, sidewalk drains, roadway pavement, roadside signs, utility boxes, trees, fences, etc.) shall conform to the provisions in Section 15, "Existing Facilities", of the Caltrans Specifications and these Special Provisions.

All traffic control signs shall be maintained. If relocation is necessary to facilitate the construction, the Contractor shall notify the Public Works Department, at (209) 937-8381, three (3) working days prior to said relocation, and request for approval as to where sign is to be temporarily relocated. Full compensation for performing such removal and reinstallation shall

be considered as included in the various items of work and no additional compensation will be allowed therefore.

Fire hydrants, water valves, curb-stop boxes, and other utility facilities shall be unobstructed and accessible during the construction period.

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

Removed highway facilities that are not to be salvaged shall become the property of the Contractor and shall be disposed of according to these special provisions, Section 15 “Existing Facilities” of Caltrans specifications, and as indicated on the plans.

Items of work under this section, "Existing Facilities", for which specific bid items are not provided, shall be considered as included in the prices paid for the various items of work of the bid schedule, and no additional compensation will be provided therefore.

Any contract adjustment that may be warranted due to differing site conditions will be made in accordance with the provisions of Section 4-1.02, "Changes and Extra Work", of these Special Provision.

Relocations or repairs necessitated because of existing facilities which are not shown on the plans, or are shown at substantially different locations than shown may be paid as extra work in accordance with Section 4-1.02, “Changes and Extra Work”, of these Special Provisions, but only if the Engineer rules that the Contractor exercised due diligence in his operation. Due diligence may be determined by the Engineer by reviewing surface and subsurface conditions that were existing prior to exposing the facility, and determining the absence of any signs sufficient to warn a diligent Contractor of the possible existence of a facility in the area.

Utility Facilities

Attention is directed to the possible existence of underground utilities 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 such facilities prior to doing any work that may damage such facilities or interfere with their service.

Remove Existing Concrete

Existing concrete sidewalk, gutter, curb and gutter, driveways, wheelchair ramps, and other concrete surfacing, where shown on the plans to be removed, shall be removed and disposed of. Concrete removal includes removal of any steel embedded in the concrete. Sawcut concrete ramps, walks, curbs, and gutters to be removed at the nearest joint or scoreline, at the locations indicated on the plans, and as designated by the Engineer.

Remove Existing Pavement

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

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.

At the Contractor's option, existing signs may be temporarily removed 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.

All new non-mast arm mounted signs shall have High Intensity Prismatic (HIP) reflective sheeting (reflectivity; ASTM type III) and covered with anti-graffiti film. The anti-graffiti film shall be transparent overlay for use on signs. The reflective sheeting and anti-graffiti film shall be from same manufacturer and guaranteed for the same number years.

Full compensation for any temporary removal and reinstallation of roadside signs and removing existing concrete and pavement shall be considered included in the lump sum price paid for "Traffic Control", and no additional compensation will be allowed therefor.

SECTION 16 – BLANK

DIVISION III EARTHWORK AND LANDSCAPE

SECTION 17 – EARTHWORK AND LANDSCAPE

17-1.01 CLEARING AND GRUBBING

Clearing and Grubbing shall conform to the requirements of Section 16, "Clearing and

Grubbing", of the Standard Specifications, Section 17-2, "Clearing and Grubbing", of the Caltrans Specifications, and these Special Provisions.

Payment for removal of existing highway 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.

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 of the highway as provided in Section 4-1.13, "Cleanup", of the Caltrans Specifications.

Full compensation for clearing and grubbing shall be considered included in the various items of work, 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 18 – BLANK

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. If excavation exceeds 15 feet, water sampling will be required.

Subgrade for driveways, sidewalk, curb, and gutter shall be scarified and meet compaction requirements according to City Standard Drawing No. R-55, Notes 8 and 9.

Full compensation for Roadway Excavation shall be considered included in the contract prices paid by bid item “Roadway Excavation” and no additional compensation will be allowed.

19-1.02 TRENCH EXCAVATION AND BACKFILL

Trench excavation, pipe bedding, and backfill shall conform to the requirements of Section 71, "Sanitary Sewer and Storm Sewers", of the Standard Specifications and City of Stockton Standard Plan Nos. R36 through R43, and any amendment and revisions, these Special Provisions, and as specified on the plans. Controlled Density Fill (CDF) shall be mandatory for trenches 8” wide or less. Contractor shall grind 3” deep, 12” each side of trench, and repave. If excavation exceeds 15 feet in depth, water sampling will be required.

Water control shall conform to the provisions of Section 19-3.03B(5) “Water Control and Foundation Treatment” of the Caltrans Specifications and these Special Provisions. The

Contractor shall construct and maintain all necessary ditches, cofferdams, channels, drains, sumps, and temporary protective works, and shall furnish, install, and maintain all necessary pumping and other equipment for controlling flows, including ground water in the pipe trenches and structure excavations, so that no foundation will contain any free water. Full compensation for water control shall be included in the contract prices paid for various items of work, and no additional compensation will be made therefore.

The Contractor shall do all excavation of whatever substance is encountered to the lines and grades shown on the plans. Where it becomes necessary to excavate beyond the limits of normal excavation lines in order to remove boulders or other interfering objects, the void remaining after the removal of the boulders shall be backfilled with suitable material and density, as approved by the Engineer. The Contractor shall do such grading as is necessary to prevent surface water from entering the excavation. The Contractor shall remove and dispose of all water entering the excavation. Disposal of water shall be done in a manner to prevent damage or nuisance to adjacent properties.

Due to width limitations, proximity of existing utilities, structures, and access requirements, the Contractor may be required to provide a vertical, open trench, shoring system for portions of this project. Shoring of all trench excavations shall conform to the Sheeting and Shoring Section of these Special Provisions.

The amount of open trench or plated trench permitted at any one time shall not exceed fifty (50) feet or as allowed by the Engineer. Trench excavation shall be closed and all lanes shall be restored to traffic at the end of each workday. The Contractor shall furnish and install non-skid steel plates to span trench sections, which have not been backfilled. Non-skid trench plates shall have a manufactured surface with a coefficient of friction that equals or exceeds zero point thirty-five (0.35).

Approach and ending plates shall be attached to the roadway by a minimum of two (2) dowels predrilled into the corner of the plate and drilled a minimum of two (2) inches into the pavement. Interior plates are to be butted together. Fine graded asphalt concrete shall be compacted to form ramps with a maximum slope of eight and one-half percent (8.5%) with a minimum twelve-(12) inch taper to cover all exterior edges of the plates. When the plates are removed, the dowel holes in the pavement shall be backfilled with graded fines of asphalt concrete mix. A concrete slurry or equivalent slurry mix may be substituted with the approval of the Engineer.

All operations shall be carried out in an orderly fashion. Backfilling, compacting, and clean-up work shall be accomplished as the work is approved and traffic through the work shall be impeded or obstructed as little as possible.

The trench bottom shall be free of bumps or hollows and graded to provide uniform support along the length of pipe.

Excess excavated material shall become the property of the Contractor and shall be removed and disposed of away from the job site at the Contractor's expense. Full compensation for the removal and disposal of excess or unsuitable material shall be considered included in the contract unit prices paid for the various items of work and no additional compensation will be allowed therefore.

Pipe bedding and backfill shall be placed above and below the pipe to the lines and grades shown

on the City of Stockton Standard Plans Nos. R36 through R43, as shown on the plans, and as specified in these Special Provisions.

Delete Section 19-3.03E, "Structure Backfill", of the Caltrans Specifications and substitute the following:

"Pipe bedding, envelope, and trench backfill material shall consist of imported material, free from vegetable matter and other deleterious substances and shall form a firm, stable base when compacted. The percentage composition weight by weight shall conform to the following grading:

Sieve Size	Percentage Passing
1"	100
¾"	90-100
No. 4	35-60
No. 30	10-30
No. 200	2-9

The material shall conform to the following quality requirements:

	Requirements
Resistance(R-value)	78 min.
Sand equivalent	25 min.

In no case shall native excavated material be used as pipe bedding, envelope, and trench backfill.

Bedding material shall be placed to approximately the same elevation on both sides of pipe to prevent unequal loading and displacement of the pipe. The difference in elevation of the bedding backfill on either side of pipe shall not exceed six (6) inches at any time.

Trench backfill shall consist of the trench area from the top of the pipe bedding to the ground surface, or if within a roadway, to the bottom of the roadway subgrade.

Backfill shall be compacted by impact, vibration, or by a combination of these methods, as approved by the Engineer. However, impact type compactors shall not be used around or over PVC pipe until backfill over the top of the pipe will permit compaction of the backfill material without deflecting or damaging the pipe. Jetting will not be permitted.

All backfill shall be placed in maximum eight (8) inch uncompacted lifts.

Compaction shall be determined by ASTM D1557.

The Contractor shall place temporary surfacing promptly after backfilling and shall maintain such surfacing until permanent paving work can be installed.

Temporary paving shall consist of asphalt cutback rolled to provide a smoother surface. All edges shall be contoured to provide a smooth transition between the existing grade and the cutback surface. The Contractor shall maintain the surface free of depressions, bumps, loose pieces, and other defects at all times. During wet weather, the Contractor shall provide a solid, non-skid

surface over temporary pavement to protect the surface from damage by traffic.

Temporary pavement shall be replaced with permanent pavement, as soon as is practical after the trench is backfilled and as allowed by the Engineer.

Until the permanent pavement is placed, the base rock and temporary asphalt plant mix at the surface of the trench shall be maintained at all times. Continuous inspection and maintenance of the trench area will be required.

Any excavation shall also conform to the provisions in Section 100, “Street Opening and Pavement Restoration Regulations” of the Standard Specifications.

Full compensation for doing all the work involved in trench excavation, water control and dewatering, bedding and backfilling, and placement of temporary paving shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be made therefore.

19-1.03 DEWATERING

Attention is directed to Section 19-3.03B, "Structure Excavation", of the Caltrans Specifications and these Special Provisions.

If an NPDES (National Pollutant Discharge Elimination System) is required for disposal of water from construction dewatering activities, it shall be the obtained by the contractor prior to any dewatering activities. Contractor shall comply with SWRCB requirements for discharging water from any dewatering operation, including obtaining all necessary permits, testing, and/or monitoring.

Dewater the excavation if ground water is encountered. Continue dewatering before and during subsequent excavation to prevent damage to the work. Foundation must be free of water when footing concrete or pipes are placed.

The contractor shall dispose of the water so as not to cause damage to the public or private property, or to cause a nuisance or menace to the public or violate the law. Dewatering shall be installed and operated so that the groundwater level outside the excavation is not reduced to the extent which would cause damage or endanger adjacent structures or property. The static water level shall be drawn down a minimum of 1 foot below the bottom to excavations to maintain the undisturbed state of natural soils and allow the placement of any fill to the specified density. The control of groundwater shall be such that softening of the bottom of excavations, or formation of “quick” conditions or “Boils”, does not occur.

Full compensation for doing all the work involved in dewatering, water control and bedding and backfilling, and placement of temporary paving shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be made therefore.

SECTION 20 – LANDSCAPE

20-1.01 PLANTING AND IRRIGATION

The work performed in connection with planting shall conform to the provisions of Section 5-1.36, “Property and Facility Preservation,” Section 15, "Existing Facilities," and Section 20, "Landscape," of the Caltrans Specifications and these Special Provisions.

All trash, debris, rubble, concrete, and other foreign materials shall be removed from planting areas prior to modifying/repairing irrigation systems and planting.

Existing plants shall be maintained as directed by the Engineer. Payment for maintaining existing plants shall be considered as included in the various items of work and no additional compensation shall be allowed therefore.

Contractor shall furnish and install 12-inches minimum imported topsoil in planting areas. Existing on-site soil shall not be used unless approved by the Engineer. Imported topsoil shall be fertile, friable soil of loamy character having a normal amount of humus. The topsoil shall be free of subsoil, refuse, roots, rocks larger than 1/2" diameter, weeds and brush, nematodes or other objectionable material.

Contractor shall furnish and install sod equal to or better than the existing lawn. Final lawn (sod) acceptance shall be subject to the approval of the City. Where new concrete is to be constructed, existing turf at back of the walk, shall be adjusted to the new finished grade. Sod shall be a good quality bluegrass mix free of noxious weeds.

Contractor shall install additives and mulch as required by the Engineer. Commercial fertilizer (granular) shall be a pelleted or granular form controlled-release only and shall be applied at the rates as recommended by the manufacturer. Three applications of commercial fertilizer (slow release) shall be applied as directed by the Engineer. The plant establishment period shall be no less than 90 calendar days. All plant materials furnished and installed under this contract shall be guaranteed against any and all poor, inadequate or inferior installation and workmanship for the guarantee period of one year. Any materials found to be in poor condition during the plant establishment period shall be replaced immediately. The Engineer shall be the sole judge as to whether the poor condition of the material is the result of improper installation or of poor maintenance. Material to be replaced within the guarantee period shall be replaced by the Contractor within 10 days of written notification by the Engineer.

Existing sprinkler systems disturbed by the Contractor's activity shall be repaired to the satisfaction of the City. Contractor shall be responsible for the removal and relocation of existing irrigation systems, including replacement of sprinkler heads, valves, lines, controllers, connections, etc. and other work, materials, or equipment required completing the work. All repairs shall be made with new materials. Pipe materials for irrigation systems shall be Schedule 40 PVC. Nipples shall be threaded. Sprinklers shall be the type, pattern and material and shall have the operating characteristics as that which is removed or disturbed by the work. Contractor shall coordinate repairs and modifications to the irrigation system with the property owner.

If required to match new sidewalk grade, existing Lawns shall be (1) raised by lifting existing turf and filling with tamped imported Clements loam, replacing and rolling the turf; or (2) lowered by lifting existing turf, removing sufficient soil to lower properly, replacing and rolling the turf.

Where new sidewalk is to be constructed, the existing turf at the back of the walk, shall be adjusted to the new finished grade. The contractor has two options (1) remove the existing turf to adjust the grade and replace the existing turf with new turf or (2) lift the existing turf and by removing or adding sufficient soil adjust the turf to the new grade. Turf to be placed shall be a good quality bluegrass mix free of noxious weeds. All landscaping shall be maintained in good health upon completion of the project.

When fluctuations of water pressure and water supply are encountered during normal working hours, the Contractor shall water the plants as often and in sufficient amounts as conditions may require keeping the soil and plant roots moist during the life of the contract.

Full compensation for watering plants outside normal working hours shall be considered as included in the contract lump sum price paid for plant establishment work and no additional compensation will be allowed therefor.

Submittals:

1. Soil test and analysis for imported topsoil
2. Samples--submit the following:
    a. Imported topsoil (one liter bag)
    b. Root barrier
    c. Samples and manufacturers certificates for soil amendments
    d. One quart sample and manufacturers certificates for decomposed granite
    e. Mulch
3. Product data--submit manufacturers certificates for the following:
    a. Fertilizer: for packets.
4. "As-Built" Plan showing modifications to layout and quantities.
5. Maintenance schedule of watering for all sidewalk trees, conform areas, Public Art planter and median planters.

Progress Inspections

Progress inspections will be performed by the Engineer for completed street planting and irrigation system work at designated stages during the life of the contract.

Progress inspections will not relieve the Contractor of responsibility for installation in conformance with the special provisions, plans and Standard Specifications. Work within an area shall not progress beyond each stage until the inspection has been completed, corrective work has been performed, and the work is approved, unless otherwise permitted by the Engineer.

The requirements for progress inspections will not preclude additional inspections of work by the Engineer at other times during the life of the contract

The Contractor shall notify the Engineer, in writing, at least 4 working days prior to completion of the work for each stage of an area and shall allow a minimum of 3 working days for the inspection.

Progress inspections will be performed at the following stages of work:

A. After staking and layout of stabilized decomposed granite path.
B. During pressure testing of the pipelines on the supply side of control valves.
C. During testing of low voltage conductors.
D. Before planting begins and after completion of the work.

E. Before plant establishment work begins and after completion of the work.

F. At intervals of one month during the plant establishment period.

Cost Breakdown

The Contractor shall furnish to the Engineer a cost break-down for the contract lump sum items and unit costs of Street Planting, Irrigation System, and Plant Establishment and Maintenance prior to beginning work on these items.

Each cost breakdown shall include units of work. The Contractor shall designate units of work, the estimated quantity, value and amount for such units in the same manner as the bid item list should be provided.

The Contractor shall verify all quantities used in his cost breakdown. No adjustment in compensation will be made in the contract lump sum prices paid for street planting, irrigation system, or maintenance and the quantities required to complete the work as shown on the plans and as specified in these special provisions.

The sum of the amounts shown for the units of work listed in each cost break-down for street planting, irrigation system, and plant establishment and maintenance work shall equal the contract lump sum price bid for said work. Overhead and profit shall be included in each individual unit listed in each cost breakdown. The cost breakdowns must be approved by the Engineer before any partial payment for these items will be made.

Approved cost breakdowns will be used to determine partial payments during the progress of the work and as the basis of calculating any adjustment in compensation for the items of street planting, irrigation system, and maintenance due to changes ordered by the Engineer. When an ordered change increases or decreases the quantities of an approved cost break-down, the adjustment in compensation will be determined in the same manner specified for increases and decreases in the quantity of a contract item of work in accordance with Section 4-1.02, “Changes and Extra Work” of these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in restoring planting and irrigation systems, complete in place, including the maintenance period, shall be considered as included in the prices paid for the various items of work and no additional compensation will be allowed therefore.

20-1.02 TREE REMOVAL AND PRUNING AND ROOT TRIMMING

This work shall consist of removal and disposal off-site of trees if required. Tree removal shall be performed in accordance with these Special Provisions and as directed by the Engineer or City Arborist. Trees shall be felled in such a manner as not to injure improvements that are to be preserved. Trees shall be removed to a depth necessary to remove stumps and roots. All trees shall be completely removed where a structure is to be constructed, trenches are to be excavated, proposed trees will be replanted, or unsuitable material is to be removed.

Pruning shall be performed only by a certified arborist and with prior City approval. No pruning of new or existing trees shall be done without prior City Arborist approval. No hooks or any other climbing devices that might damage or puncture tree bark shall be used. The Contractor shall be responsible to report to the City Arborist in writing, any hazardous trees, dead structural limbs, or cavities so corrective action may be taken.

Tree root trimming shall be performed as directed by the City Arborist. Contractor shall request a root system inspection at least 48 hours prior to excavation and root cutting activities. City will issue a Notice to Resume Work to the contractor. Contractor shall adhere to City's instructions and shall resume work no later than 48 hours after receiving said Notice to Resume Work. If during root trimming, the Engineer or City Arborist determines that a tree, not originally designated for removal is to be removed, compensation will be paid in accordance with Section 4-1.05, "Changes and Extra Work" of the Caltrans Specifications.

If in the opinion of the Engineer or City Arborist a tree not approved for removal has been damaged due to the Contractor's operation and cannot be saved, the Contractor shall, when so ordered by the Engineer, remove the tree in its entirety and replant with a 48" box container size tree of the same kind, or as designated by the City Arborist, at the Contractor's expense.

Trees removed for the construction of this project, whether shown or not shown on the plans, shall be considered included in the contract prices paid for various items of work, and no additional compensation will be made therefore.

Should any direct or indirect damage or injury result to any public or private property by or on account of any act, omission, neglect, or misconduct in the execution of work, or as a consequence of the non-execution thereof on the part of the Contractor or any of his employees or agents, such property shall be restored at the expense of the Contractor to a condition equivalent to that existing before the damage or injury occurred by repairing or rebuilding the same, or by otherwise making restitution in an acceptable manner for such damage or injury.

The Contractor shall be required to provide and maintain barriers, guards, and lights when and where it may be necessary in order to effectively guard the public from the work being done. This includes open excavations resulting from tree removals. The Contractor shall also be required to post proper signage and traffic control for the public regarding detours and the condition of the work under construction, all in accordance with applicable provisions in Part 6 of the California MUTCD.

Material

All removed tree material, including debris, shall become the property of the Contractor who shall be responsible for its proper disposal. The Contractor shall not leave debris, including removed concrete, at the site overnight.

Imported Clements loam, or equal, shall be used to fill voids left by the removal of a stump. The Clements loam shall be free of rocks, clay balls, debris, noxious weeds and undecayed vegetable matter.

Trees that are removed shall be replaced with a 15-gallon container size tree of Ginkgo (Fairmount), or as designated by the City Arborist and planted to the satisfaction of the City Arborist. Newly planted trees shall be warranted by the Contractor for one (1) year for labor and materials.

Workmanship

Trees shall be progressively cut down and not felled. All limbs, twigs, and leaves shall be removed from the site as a tree is cut down. On-site burning will not be permitted. All tree stump removal sites shall be reported to Underground Service Alert, USA [(800) 227-2600] a minimum of 48 hours to locate and mark all utilities prior to the removal work being performed

at that site. The tree stumps shall be removed to a point twelve (12) inches below the top of the adjacent curb and/or sidewalk. In the absence of either curb or sidewalk, a small stump shall be removed twelve (12) inches below the adjacent ground level. All roots from said stump that are visible and within a ten-(10) foot radius shall be removed.

All debris resulting from the tree and stump removal shall be cleaned up and removed from the site. This includes wood chips and saw-dust left in any hole caused by the removal of a stump.

Within the same day that a stump is removed or ground, its void shall be backfilled with imported Clements loam and compacted to the same density as the adjacent undisturbed soil and then install lawn turf to match existing.

All tree roots shall be cut and removed twelve (12) inches below the sidewalk or adjacent ground level.

Contractor Work Procedure

The Contractor shall comply with the steps listed below:

1. The Contractor shall contact City of Stockton inspector who will then contact the Street Tree Division for a root system inspection prior to root cutting and installation of sidewalk. Provide at least 3 working days notice.
2. If tree removal is questionable, City of Stockton tree division will respond as soon as practicable (generally within 2 working days) to inspect tree and root system and will issue a decision on site.
3. Prior to resuming work and removing a tree, the City will obtain a Tree Removal Release from the property owner and the Contractor shall receive a Notice to Resume Work from a City Inspector.
4. Contractor shall adhere to City of Stockton Street Tree Division's instructions and shall resume work no later than 48 hours after receiving said Notice to Resume Work.

Replace curb, gutter and/or sidewalk in accordance with these Special Provisions, Section 73.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in tree removal and pruning and root Trimming, including the maintenance period, shall be considered as included in the prices paid for the various items of work and no additional compensation will be allowed therefore.

20-1.03 <u>DECOMPOSED GRANITE</u>

Refer to Sheet L-4.

The extent of work in this section includes the provision of materials and labor for the construction of all decomposed granite.

Decomposed granite, hereafter referred to as "DG", shall be yellow-brown or gold color as available from T.M.T. Enterprises, Inc. (408) 432-9429, or approved equal. Material shall also conform to the following:

Sieve Size	Percent Passing
3/8"	100%
No. 4	85% - 95%
No. 8	75% - 95%
No. 30	35% - 55%
No. 200	10% - 20%

Solidifying emulsion (stabilizer) must be either a water-based polymer or nontoxic organic powdered binder specifically manufactured to harden decomposed granite. The solidifying emulsion must not change the decomposed granite color.

Stabilized decomposed granite is not required in median planting areas, use unstabilized DG instead.

Do not place decomposed granite during rainy conditions.

Mix solidifying emulsion thoroughly and uniformly throughout the decomposed granite and under the manufacturer's instructions. Mix the material in the field using portable mixing equipment or have it delivered in mixer trucks from a local ready- mixed plant.

Place decomposed granite uniformly in layers no more than 1-1/2 inches thick. Compact each layer of decomposed granite to a relative compaction of not less than 90 percent. Start compaction at least 6 hours but no more than 48 hours after placement.

For field-mixed material, apply a solidifying emulsion after compaction as recommended by the manufacturer. Prevent runoff or overspray of solidifying emulsion onto adjacent paved or planting areas.

The finished decomposed granite surface must be smooth, uniform, and compacted to a relative compaction of not less than 90 percent. The finished surface must maintain the original flow lines, slope gradients, and contours of the job site.

Soil sterilant shall be chlorate-borate material with not less than 40 percent sodium chlorate and soluble in water to the extent of 3-1/2 lbs. of product per gallon of water ("Chipman-Chlorax 40", "Atrizine 80W", or approved equal).

Materials shall be pre-mixed at the plant before being delivered to the site. No bucket mixing or on-site mixing will be allowed.

Soil sterilant shall be applied to the subgrade soil of areas to be paved prior to baserock operations; uniformly applied per manufacturer's recommendations; minimum rate of 2.5 to 3.0 lbs./1000 square feet and watered with a minimum of 3 gallons/100 square feet. Contractor shall take all precautions necessary to avoid spray onto or runoff into planting areas.

DG mixture shall be deposited in such a manner as to minimize the necessity for spotting, picking up, or otherwise shifting the mixture. The mixture shall be compacted by use of light roller. The mixture shall not be screeded off or finished by floating. No steel tooling of edges shall be done.

The finished surface of the paving shall be kept moist for five days. Any cracks or wash-outs shall be filled in immediately.

No soil sterilant shall be applied in tree wells to receive decomposed granite.

Do not place stabilized decomposed granite over tree root ball, use unstabilized DG instead.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing the decomposed granite, complete in place, including any additional amendments and chemicals as required by the Engineer, shall be included in the lump sum unit price for "Street Planting" and no additional payment shall be made therefor.

20-1.04 BOULDERS

Refer to Sheet L-2 and L-4.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved, as shown on the plans, and as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the contract price paid for this item and no additional compensation shall be allowed therefor.

20-1.05 WATER METER BACKFLOW, CONTROLLER, AND CONNECTIONS

Refer to Sheet L-1.

The connection, service line and water meter for irrigation in the central median island shall be provided by California Water Service Company (CalWater). Contractor is responsible for furnishing and installing backflow device, controller, and all equipment and materials downstream of the water meter, as shown on the plans. Contractor shall coordinate work with CalWater as necessary, and shall be included in the contract prices paid for these items and no additional compensation shall be allowed therefor.

20-1.06 SYNTHETIC TURF SYSTEM

Refer to Sheet L-4.

The entire engineered system from aggregate base up shall meet the following requirements:

1. System shall meet owner's limits of organic substance content tests and inorganic substance leaching tests.
2. System turf shall have the following specification,

    a. The polyethylene pile yarn shall be a proven residential/commercial caliber yarn designed specifically for outdoor use and stabilized to resist the effect of UV degradation, heat, foot traffic, water, and airborne pollutants.
3. System shall include washed silica sand between 20 and 40 mesh for ballast.

EXECUTION

GENERAL

A. The installation shall be performed in full compliance with approved shop drawings.

B. Only factory-trained technicians skilled in the installation of residential/commercial caliber synthetic turf systems shall undertake the placement of the system.

C. The surface to receive the synthetic turf shall be verified by the Contractor as ready for the installation of the synthetic turf system and must be perfectly clean as installation commences and shall be maintained in that condition throughout the process.

BASE INSTALLATION

A. Handling and Placement

1. Prior to aggregate placement, remove any excess or contaminated backfill from the drainage trenches.
2. Should any separation of the materials occur, during any stage of the spreading or stockpiling, the Contractor must immediately remove and dispose of segregated material and correct or change handling procedures to prevent any further separation. Double handling of materials should be avoided.
3. The Contractor shall utilize laser-controlled equipment for the grading of the processed stone to ensure accuracy in grading tolerances.
4. Install processed stone base, whenever possible, from sideline toward centerline, parallel to the composite drain network (if applicable), to the lines and grades shown on the drawings. Distance material is pushed from point of discharge should be limited (~ 75') to that where segregation of materials does not occur.
5. Each layer must be spread uniformly with equipment that will not cause perceptible separation in gradation (segregation of the aggregates), preferably a self-propelled paving machine, or a small grader or low ground pressure (LPG) dozer.
6. The Contractor shall grade the surface of the processed stone acceptable to receive the final synthetic turf surface system.

B. Compaction and Planarity:

1. The processed stone shall be compacted to a minimum density of not less than 95%of maximum density as determined by ASTM D698.
2. Compaction shall be tested at a minimum spacing of 20' x 20' throughout the field AND within 4 inches of all edges at a spacing of not greater than 20' on center.
3. The finished aggregate surface shall not deviate (tolerance-to-grade) by more than plus or minus .25" (.02') from designated compacted grade elevations
4. Areas that deviate should be marked with spray paint and corrected by

re-grading or filling low areas with crushed stone, granite chips or screenings, and rolling to achieve required compaction.

C. Permeability Testing of Completed Aggregate Base Layer:

1. The surface of the processed aggregate base shall impermeable at all times and drain onto the street. No standing water shall be permitted at any time. The permeability of the aggregate shall be field checked.

SYNTHETIC TURF INSTALLATION

A. The Synthetic Turf Project Superintendent shall thoroughly inspect all synthetic turf materials delivered to the site for both mixing and quantity to assure that the entire installation shall have sufficient material to maintain proper mixing ratios.

B. Synthetic turf shall be loose-laid across the roundabout, stretched, and attached to the perimeter curb. Synthetic turf shall be of sufficient length to permit full cross installation.

G. All seams are glued, nailed, stapled or secured with manufacturer recommended 2 component polyurethane adhesive over manufacturer recommended seaming tape.

H. Infill materials shall be properly applied in numerous lifts using special broadcasting equipment. The synthetic turf shall be raked and brushed evenly during infill process.

CLEAN UP

A. Contractor shall provide the labor, supplies, and equipment, as necessary, for final cleaning of the surfaces.

B. The Contractor shall keep the area clean and clear of debris throughout the project.

C. Surfaces, recesses, enclosures, etc., shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by Owner

This item shall be measured and paid on a square foot basis. Payment shall include full compensation for furnishing all labor, materials, tools, and equipment necessary to install and secure (to the Aggregate Base) the synthetic turf as shown on the Drawings and as specified.

20-1.07 CONCRETE BAND

Refer to Sheet L-4 and bid item for 6” Flush Concrete Band.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved, as shown on the plans, and as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the contract price paid for this item and no additional compensation shall be allowed therefor.

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 prices paid for the various items of work and no additional compensation will be allowed therefore.

DIVISION IV SUBBASES AND BASES

SECTION 26 – AGGREGATE BASE

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 SUBSURFACE AND PAYMENT

SECTION 37 – BITUMINOUS SEALS

37-1.01 SLURRY SEALS

Attention is directed to the provisions of Section 37-3.02, "Slurry Seal", of the Caltrans Specifications, and Section 37 of the Standard Specifications. Contractor to use Slurry Seal Type II.

SECTION 39 – ASPHALT CONCRETE

39-1.01 ASPHALT CONCRETE

Attention is directed to the provisions of Section 39-2, "Hot Mix Asphalt", of the Caltrans Specifications, and Section 39 of the Standard Specifications.

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.

Contractor to use Type A Hot Mix Asphalt with 3/4 inch aggregate gradation.

The grade of asphalt binder shall be PG 64-10 or PG 64-16. Tack coat must comply with Section 39-2.01B(10), “Tack Coat”, of the State Standard Specifications.

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 shut down, 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, and for doing all the work involved in constructing asphalt concrete, complete in place, shall be considered as included in the prices paid for the work required under “Hot Mix Asphalt (Type A)” and no additional compensation will be allowed therefore.

DIVISIONS VI STRUCTURES

SECTION 52 – REINFORCEMENT

52-1.01 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 VII DRAINAGE FACILITIES

SECTION 70 – MISCELLANEOUS DRAINAGE FACILITIES

70.101 – MISCELLANEOUS DRAINAGE FACILITIES

Attention is directed to the provisions of Section 70, "Miscellaneous", of the Caltrans Specifications, and Section 70 of the Standard Specifications.

SECTION 71 – EXISTING DRAINAGE FACILITIES

71-1.01 REMOVE DRAINAGE FACILITIES

Attention is directed to the provisions of Section 71-2, "Remove Drainage Facilities", of the Caltrans Specifications, and Section 71 of the Standard Specifications.

DIVISION VIII – MISCELLANEOUS CONSTRUCTION

SECTION 73 – CONCRETE CURBS AND SIDEWALKS

73-1.01 CONCRETE CURBS, SIDEWALKS, AND WHEELCHAIR 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, including 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, grooving, 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 various contract items of work, 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, 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 items of work, 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.

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.

SECTION 75 – MISCELLANEOUS METALS

75-1 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 STRUCTURE

77 ELECTRICAL SYSTEMS FOR LIGHTING, RECTANGLE RAPID FLASHING BEACON (RRFB), AND WIRELESS SIGNAL INTERCONNECT SYSTEMS.

Furnishing and installing lighting, RRFB, CCTV and wireless signal interconnect systems 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

Lighting, RRFB, CCTV and wireless signal interconnect systems 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 FOUNDATIONS

Foundations shall conform to the provisions in Section 56-3 “Standards, Poles, Pedestals, and posts”, Section 87-1.03E(3) “Concrete Pads, Foundations, and Pedestals” of the Caltrans Specifications and these Special Provisions.

Certification of the concrete shall be received from the vendor and delivered to the City Inspector at the time the concrete is poured. The foundation shall be cast monolithically up to the top 2 inches which shall be placed after the standards have been plumbed. Construction of Concrete foundations includes placement of reinforcement required per City standards.

Attention is directed to Section 51-1, “General,” of the latest Caltrans Specifications regarding bonding, cold joints and construction preparations for same.

Dimensions of concrete footings for City of Stockton signal standards are shown on City of Stockton Standard Plans, Drawings R-93 and R-95. Type 15 pole foundation shall be installed in

conformance to City Standard Drawing No. R-89. Type 1-B foundation for RRFB shall be installed in conformance with Caltrans Revised Standard Plan RSP ES-7B. Type 15TS and PBA Post foundations shall be installed in conformance with Caltrans Revised Standard Plan RSP ES-7A.

Foundation reinforcement shall be installed in conformance with Caltrans Standard Plan ES-7N.

77-1.08 STANDARDS, STEEL PEDESTALS AND POSTS

Standards, steel pedestals and posts shall conform to the provisions in Section 56-3 "Standards, Poles, Pedestals and Posts", and Section 87-1.03J "Standards, Poles, Pedestals, and Posts" of the Caltrans Specifications and these Special Provisions.

The Contractor shall have the Engineer locate the position of mast arm poles to determine if mast arms will be in conflict with existing overhead utilities. If relocation of utilities is required, immediate notification shall be given to the appropriate utility company.

Type 1-B shall have four (4)-bolt foundation, utilizing a cast iron pipe flange with eight (8) holes. On Type 1-B poles for RRFB, the ornamental flange cover is not required. Type 1-B poles for RRFB shall be installed in conformance with Caltrans Revised Standard Plan RSP ES-7B.

The Type 15 Lighting Standard (see Pole K in plans) shall be installed in conformance with the City of Stockton Standard Drawings number R88 through R92. Type 15TS Lighting Standards shall be installed in conformance to Caltrans Revised Standard Plan RSP ES-7A.

PBA Post shall be installed in conformance to Caltrans Standard Plan ES-7A.

Grout height under poles shall be the height of the leveling nut plus a washer as a minimum and the height of the leveling nut, washer and one half inch as a maximum. This height will be measured from the highest point of grade under the pole.

All nuts used to attach standards to foundations and all bolts and nuts used to attach mast arms to standards shall be tightened with the correct size socket or box wrenches.

77-1.09 CONDUIT

Conduit shall conform to the provisions in Section 87-1.03B, "Conduit Installation," of the

Caltrans Specifications and these Special Provisions.

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

Insulated bonding bushings will be required on metal conduit. All nonmetallic conduits shall have a No.8 stranded (with green insulation) copper bounded/grounding wire. These bounding/grounding wires shall be connected in the pull box with cable connectors - Burndy-Servit No. KS -15 or an approved equal meeting Caltrans specifications.

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

After conductors have been installed, the ends of conduits terminating in pull boxes and/or controller cabinets will be sealed with an approved type of sealing compound. Refer to the City of Stockton Standard Drawing R87 for conduit/pull box details.

Refer to City of Stockton Standard Plan Drawing R37 for trench width and depth. All conduits shall be installed below the existing AC pavement regardless of the depth of the existing AC pavement.

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

Where existing conduits are to be used, as directed by the Engineer, the existing conduit shall be cleaned and both old and new cables shall be pulled into the existing conduit as a unit per the Caltrans Specifications Section 87-1.03F, "Conductors and Cable Installations".

77-1.10 PULL BOXES

Pull boxes shall conform to the provisions in Sections 86-1.02C "Pull Boxes" and 87-1.03C "Installation of Pull Boxes" of the Caltrans Specifications, these Special Provisions, and in conformance with the City of Stockton Standard Drawings number R87.

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

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

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

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

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

Recesses for suspension of ballasts will not be required.

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

All pull boxes shall have lids embossed with “TRAFFIC SIGNAL”.
All pull boxes shall include copper grounding rods per City Standard Drawing No. R87.

77-1.11 STREET LIGHTING PULL BOXES

All street lighting pull boxes shall have security lids, and backfilled as indicated on City of Stockton Standard Drawing No. R87. All pull boxes shall have lids embossed with “STREET LIGHTING”.

77-1.12 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.

Street lighting wires shall be Type THWW or THHN.

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.

RRFB light bar cable must be unshielded 4#18 awg conductor with color code black/red/white/green, PVC insulation, UL listed, CSA listed, RoHs, moisture resistant, 300V and 75^{o}C minimum, stranded tinned copper.

APS cable must be unshielded, 8 conductors, 20 Awg, AWM style 2464, CSA listed, RoHS, moisture resistant, 300 V minimum, 75 minimum stranded tinned copper, PVC insulation, non-UV rated. Conductor color code as shown below:

RED

BLACK

BLUE

BROWN

RED/BLACK

BLUE/BLACK

ORANGE

YELLOW

77-1.13 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.

77-1.14 BONDING AND GROUNDING

Bonding and grounding shall conform to the provisions in Sections 86-1.02F(2)(c)(ii), 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.

77-1.15 SERVICE

Service shall conform to the provisions in Sections 86-1.02P, 87-1.03L, and 87-1.03P of the Caltrans Specifications and these Special Provisions. Each service shall be suitable for the short circuit current available at its supply terminal.

Refer to Type III AF wiring diagram on improvements plans.

If service equipment cabinet design deviates in any way from the details shown on the, details of such deviation shall be submitted to the Engineer for review before fabrication of the contract cabinets. If deemed necessary by the Engineer, one complete prototype cabinet shall be delivered to the Engineer for review at least 30 days before fabrication of the contract fixtures. The prototype cabinet will be returned to the Contractor and if permitted by the Engineer, the cabinet may be installed in the work.

The Contractor shall furnish and install Type III-AF single meter service equipment. Cabinets (See State of California Standard Plan ES-2C and ES-2D) conforming to City of Stockton Specifications shall be constructed with anodized aluminum and per the Caltrans Specifications Sections 86-1.02Q, 86-1.02P, and 87-1.03Q. A 40 amp, 120 volt, metered circuit shall be furnished to the controller cabinet for traffic signal operation. The Contractor shall confirm and provide all service requirements with Pacific Gas and Electric Company, and the City of Stockton. The Contractor shall coordinate service connection with PG&E. Note: 120/240 volt service houses a 4 jaw meter socket, 120/208 volt service houses a 5 jaw meter socket.

Service Cabinet Fabrication:

- Maximum width 12", Maximum height 63" with a minimum of 60" maximum depth 9". Minimum opening to control section 8.25" x 39.25".
- **Cabinet shall be fabricated with anodized aluminum.**
- Internal part shall be fabricated for 14-gauge cold steel.
- Cabinet shall be welded construction with welding materials specifically designed for material used.
- All fasteners, hinges, latches, and hardware shall be of stainless steel and hinges shall be continuous piano style.
- There shall be no exposed nuts, bolts, screws, rivets, or other fasteners on the exterior.
- Cabinet shall have enclosed swept pull section with removable step.
- Cabinet shall have fully framed ride hinged outer door with swaged close tolerance sides for flush fit with top drip lip and closed cell neoprene flange compressed gaskets.
- Cabinet door shall have 2,000 LB stress rated stainless hasp, welded to cabinet door.
- Base mounting detail shall be identical to existing cabinets for emergency Dead-front Safety Door.
- Distribution and control panel shall have separate hinged dead-front panels with 1/4 turn latch and knotted knobs.
- Breaker compartment shall be safety barriered from the control compartment.
- Dead front shall be hinged on the same side as the front door and shall open a minimum of 120 degrees.
- Removable back-pan shall be mounted on 4 welded 1/4" studs.
- The cabinet shall have a type II lock.

Power Distribution Panel:

- Main breakers shall be available as 1 pole, 2 pole, 3 pole, or 4 pole.
- Provide separate metered main, lighting main and disconnects as required.
- All circuit breakers shall be installed in a vertical position, handle up for "On," handle down for "Off".
- Circuit breaker shall be industrial grade, Westinghouse Quicklag C or equal to match existing.
- There shall be no plug-in circuit breakers.
- All bushing shall be UL approved copper THHN cable bussing, fully rated 125 Amps.

Control Compartment:

- There shall be a minimum 25" from base to circuit breakers.
- All components shall match existing components in use for maintenance of spare parts and known reliability.
- Contactors shall be Westinghouse Class A202 or other to match existing.
- The cabinet shall be wired to include a spare contactor for street lighting (See the wiring diagram detail).
- The cabinet shall be completely pre-wired in the factory.
- Wiring will be to NEMA IIB standards showing external connections and external equipment.
- All control wiring shall be 19 strand #14 AWG THHN.
- All control wires shall be permanently labeled with matching engraved clip-sleeve nylon markers.
- All terminals shall be permanently labeled.

Nameplates and Drawings:

- The function of all circuit breakers, switches and other components as required shall be identified by laminated engraved plastic nameplates with minimum 1/4 " letters fastened with minimum of two 1/4", #4-40 machine screws.
- Wiring schematics shall be Computer Aided Drafted and include all external equipment and connections per NEMA IIB.
- As built factory drawings shall be enclosed in clear plastic and held inside the outer door by weld hooks.

Certification:

- Manufacturers will be required to furnish independent laboratory certification of material preparation and finish and to confirm that the overall product meets these specifications. If this agency wishes to witness this testing, all costs to be paid by the Contractor.

Photoelectric Control:

- Photoelectric control shall be NEMA Type V, three-prong, twist-lock, and housed inside the service cabinet. Photoelectric control shall have an instant on/delay (5 second) off incorporated as per State Standards, to prevent cycling if struck by vehicle headlights. The photoelectric cell shall be solid-state unit and the photocell sensitivity shall be in compliance with PG&E LS rate requirements. Photocell socket must be made of metal and not plastic. The service cabinet shall be install such that the photoelectric control faces north.

- A secondary photoelectric control system shall be wired from the mast arm street light to the service cabinet. After testing the secondary, the wire will be disconnected, coiled, and secured in the service cabinet until needed at a future date. The mast arm PEU shall have a north orientation. The photoelectric unit shall be a multi-voltage, instant on/ delay (5 sec) off, and three-prong twist-locking type unit. The photocells sensitivity shall be in compliance with PG&E LS rate requirements.

77-1.16 RECTANGULAR RAPID FLASHING BEACON (RRFB) M CABINET SPECIFICATIONS

City of Stockton RRFB cabinet specification shall supersede any applicable parts Caltrans Specifications and Standard Plans.

All specifications not covered by these specifications shall conform to Caltrans Standard Specifications and Standard Plans. RRFB (M) cabinet shall also comply with NEMA specifications where applicable.

The controller cabinet shall be furnished and installed by the contractor. The cabinet manufacturer shall have pre-approval by the City of Stockton on any cabinet that they propose to provide to the City. Said pre-approval shall have been obtained no less than 30 days prior to the closing date of the bid.

Cabinet Enclosure

At a minimum the cabinets shall meet the following criteria:

1. It shall have nominal dimensions of 56” high x 30” width x 17” depth and meet the footprint dimensions as specified in Section 7.3, Table 7-1 of NEMA TS2 standards for a Type M cabinet. The cabinet base shall have continuously welded interior mounting reinforcement plates with the same anchor bolt hole pattern as the footprint dimensions. There shall be 4-mounting holes on center front, back and side walls.

2. Shall be fabricated from 5052-H32 0.125-inch thick aluminum.

3. The cabinet shall be double-flanged where it meets the cabinet door.

4. The top of the cabinet shall be sloped 1” towards the rear to facilitate water runoff. And shall bend at a 90° angle at the front of the cabinet. Lesser slope angles are not allowed.

5. The inside of the cabinet shall utilize C channel rails. (2) Welded on the back wall on 20” center and (2) welded on each side wall on 08” center. The C channel rails on the back and side walls shall be 41” in length. The C”C” channel on the back wall shall start 3” from the bottom of the cabinet interior. The C channel rails on the side walls shall start 2” from the bottom of the cabinet interior. Adjustable rails are not allowed. A back panel shall be installed on C-Rails.

6. The Cabinet shall be supplied with an anodized finish as per 2010 California Standard Specification, Section 86-3.04A, “Cabinet Construction” (prior to the bid date of this special provision). Submit alternative design details for review and approval before manufacturing a cabinet.

7. All external fasteners shall be stainless steel. Pop rivets shall not be allowed on any external surface.

8. The door handle shall be ¾” round stock stainless steel bar.

9. A key shall be provided for the door cabinet lock. A closed-cell, neoprene gasket seal shall be bonded to the enclosure doors. A stiffener plate shall be welded across the width of the inside of the main door to prevent flexing. A main door bar stop shall be a two-position, three-point stop that accommodates open-angles at 90, 125, and 150 degrees. A louvered air entrance located at the bottom of the main door shall satisfy NEMA rod entry test requirements for 3R ventilated enclosures. Bearing rollers shall be applied to ends of door latches to discourage metal-on-metal surfaces from rubbing. The lock assembly shall be positioned so handle does not cause interference with key when opening the door.

10. The cabinet shall be equipped with a universal lock bracket capable of accepting a Best™ style lock and a Corbin #2 tumbler series lock. The cabinet shall come equipped with a Corbin #2 lock.

11. The cabinet shall be supplied with one door switch for the interior LED light.

12. All exterior seams shall be manufactured with a neatly formed continuously weld construction. The weld for the police box door shall be done on the inside of the cabinet door. All welds shall be free from burrs, cracks, blowholes or other irregularities.

13. The fan baffle panel seams shall be sealed with RTV sealant or equivalent material on the interior of the cabinet.

14. The cabinet shall be UL listed.

15. The cabinet shall come with lifting ears affixed to the upper exterior of the cabinet. These ears shall utilize only one bolt for easy reorientation.

16. The cabinet shall come with one (1) dual-ply Dustlock™ Media polyester, disposable air filter; and the filter performance shall conform to listed UL 900 Class 2 and conform to MERV-8 & ASHRAE Standard 52.2-1999. The filter element shall be secured to louvered entrance on the main door with Velcro type mounting on all four edges. The Velcro adhesive shall be rated for high temperatures.

17. The door shall be mounted with a single continuous stainless steel piano hinge that runs the length of the door. The hinge shall be attached via stainless steel tamper resistant bolts.

18. The wired cabinet facility shall use the latest technology applicable and shall be 100% compliant with Section 1605 of the American Recovery and Reinvestment Act of 2009, requiring the use of American iron, steel and manufactured goods. The contract shall provide a “Buy America” certificate.

19. A photoelectric control system shall be wired from the mast arm street light to the M-Cabinet and terminated in the control relay for the four Rectangular Rapid Flashing Beacon (RRFB) units. The photoelectric unit (PEU) shall have a north orientation. The PEU shall be a multi-voltage, instant on/ delay (5 sec) off, and three-prong twist-locking type unit. The photocells sensitivity shall be in compliance with PG&E LS rate requirements. The PEU for the RRFB units shall be installed on the same street light pole as secondary PEU. Per the 2010 Caltrans standard plan ES-7N, detail C.

20. Dimming control panel shall contain two eleven pin relays, socket, and associated wiring and terminal strip to control four (4) separate dimming control inputs from the RRFB’s. The

contactor coils shall be 120 VAC. A PEU input terminal strip shall be supplied for remote PEU. Panel shall also contain auto/test switch for service.

21. Cabinet shall accommodate four (4) 19.5”x10.5” RRFB cabinets and a 51”x27” backplate.

22. The internal enclosures shall accommodate all equipment within the cabinet.

Labels

A permanent printed thermo vinyl, engraved or silk screened label shall be provided for all terminals and sockets. Labels shall be legible and shall not be obstructed by cabinet wiring, panels or cables. All labels shall conform to the designations on the cabinet wiring prints. Labels for all shelf-mounted electronics and equipment shall be on the face of the shelf directly below their placement in the cabinet.

Cabinet Layout

LED light shall be mounted under Ventilator Plenum.

The power panel shall be mounted on the lower right wall.

The 120VAC video power panel shall be mounted above the power panel.

The 120VAC six position power strip shall be mounted above the video panel.

Ventilating Fans

The cabinet shall be provided with one (1) finger safe fan mounted on the right side of the cabinet plenum, and shall be thermostatically controlled (adjustable between 4-176° Fahrenheit). The safe touch thermostat and power terminal block(s) shall be din rail mounted on right side of cabinet plenum.

Cabinet Light Assembly

The cabinet shall have an LED lighting fixture with 15 high power LEDs using a cool white color emitting 300Im min @ 12VDC/750mA. The LED shall be a Rodeo Electronics TS-LED-05M02. The LED fixture shall be powered by a Mean Well class 2 power supply LPV-20-12 that shall be mounted on the inside top of the cabinet near the front edge. The cabinet light circuit shall be designed so a second LED fixture will be installed in the cabinet without the need a of a second power supply. An on/off switch that is turned on when the cabinet door is opened and off when it is closed shall activate the lighting fixture(s) power supply.

Convenience Outlet

The cabinet shall be wired with one (1) convenience outlet with a ground fault interrupter (GFI) and one (1) six position power strip outlet without ground fault interrupters. The ground fault outlet (GFI) shall be mounted on the right side of the cabinet on or near the power panel. The power strip outlet shall be mounted on the right side, below the bottom shelf. No outlets shall be mounted on the door. The GFI power shall be fed through the auxiliary breaker (CB2). The power strip outlet shall be fed through the ACO breaker (CB3).

Video Power Panel

The video power panel shall have five (5) din rail mounted terminal blocks, capable of accommodating 4 size #14 wires in each hole. There shall be two (2) for 120 AC+, two (2) for

120 AC- and one (1) for ground. They shall be labeled respectively. This panel shall be mounted on the right wall of the cabinet above the power panel.

Spare Panels

A sheet metal panel 12” x 10” shall be installed on the right wall of the cabinet.

Service Surge Suppression

The cabinet shall be equipped with an EDCO model SHP300-10 or approved equivalent surge arrestor mounted on the power panel. Power to all cabinet electronics equipment shall come through this surge suppression circuit.

Power Panel

The power panel shall handle all the power distribution and protection for the cabinet and shall be mounted on the lower right wall of the cabinet. All equipment shall be mounted on a 12” x 17” silkscreened aluminum panel and include at a minimum the following equipment:

• A 40-amp main breaker shall be supplied. This breaker shall supply power via the EDCO SHP300-10 to the auxiliary 15-amp breakers.

• A 15-amp auxiliary breaker shall supply power to the fans, lights and GFI.

• A 15-amp equipment breaker shall supply power to the video power panel and power strip outlet.

• A 60-amp, 125 VAC radio interference line filter.

• One see-through Plexiglas cover on stand-offs to protect maintenance personnel from AC line voltages. This shall be removable by loosening screws but without removing screws.

• Two (19) position solid aluminum, tin plated neutral buss bar with raised slotted & torque style screw heads.

• One (19) position solid aluminum, tin plated ground buss bar with raised slotted & torque style screw heads.

• Two MOVs shall be terminated on the 120AC in field terminal. One tied between line and ground, the other between neutral and ground.

• Four (4) 10-amp breakers for RRFB pad controls.

• One (1) 15-amp breaker for dimming control

RRFB Cabinet Installation

Install RRFB flasher control box in the cabinet as shown on the plans. The 51”x27” backplate shall be mounted to the rear of the cabinet. The 19.5”x10.5” RRFB cabinets shall be mounted to the backplate per the details on the plans.

Contractor shall prepare cabinet wiring diagram showing the installation of the RRFB and PPB and all wiring associated with the M Cabinet. This wiring diagram shall have pre-approval by the City of Stockton on any cabinet that they propose to provide to the City.

Manuals & Documentation

The cabinet shall be furnished with (3) complete sets of cabinet prints. All cabinet wiring, and layout shall come on (1) E1 size sheet, multiple pages shall not be allowed. Upon request (1) CDROM with AutoCAD v2008 cabinet drawing for the cabinet wiring.

CONTROLLER CABINET FOUNDATION

Type M traffic signal controller foundations shall be 18" above finished grade. All edges and corners of foundations shall be rounded or chamfered 1.5 inches radii to prevent chipping. Top surface of foundation shall have smooth or polished surface. No broom finish allowed. This is to facilitate cleaning in the future.

Anchor bolts for the controller cabinet shall extend 1-1/2 inches (plus or minus 1/8 inch) above the top of the foundation. When installing cabinet foundation bolts, install bottom set of nut and washer threaded on the foundation bolts so the nut is embedded in the concrete foundation. The bottom washer shall rest on the top of the concrete foundation. The cabinet then is placed on the washer to prevent direct contact on the concrete foundation. Mastix or plumber's tape shall be all along the base of the cabinet between the washers. After the cabinet is installed on the foundation, silicon sealant shall be used along the outside and inside of the cabinet base to ensure waterproofing.

The one inch foundation drain pipe in the back of the cabinet shall be fitted with a union fitting, with the union fitting set just below the top of the foundation grade. A 4" piece of 1" pipe shall be placed in the fitting until the concrete is cured. Then the 1" pipe if removed to ensure the drain is the lowest point of the foundation and will drain properly if it becomes necessary. The foundation shall be located on Minor Street nearest approach unless indicated differently.

WORKMANSHIP - FIELD CONDUCTOR PLACEMENT

Six to eight feet of field wiring, in two to three coils shall be placed in the bottom of the cabinet. These coils shall be neatly bound using tie wraps. Each set of camera wiring shall be incrementally brought out the coiled bundle depending on it’s connection point in the cabinet. All conductors or groups of conductors shall be labeled appropriately and only long enough to neatly connect to the load bay or terminal inside the cabinet. The fiber optic cable shall be securely attached to the right side of the cabinet. The connecting ends shall be long enough to be neatly placed along the back right corner of the cabinet and brought up to the camera modem or Ethernet switch. Labeling of field conductors shall use plastic labeling tie wrap, using permanent black marker compatible with nylon or plastic ty-wrap style.

77-1.17 LUMINAIRES AND NUMBERING STREET LIGHTING POLES

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

77-1.18 COPPER AND WIRE FOR STREET LIGHTING

The work shall consist of furnishing and installing street light 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.

Trail lighting luminaires and poles shall match existing model and type along the trail. Contractor shall provide a color sample to the City of Stockton for approval before ordering the equipment.

77-1.19 TRAFFIC SIGNAL CONTROLLER COMMUNICATIONS AND CCTV SYSTEM:

77-1.19.01 Fiber Optic Managed Ethernet Switches

The contractor shall supply and install the following devices one in the field controller cabinets and one in the City's Traffic Management Center (TMC) to establish communication between devices such as the traffic signal controller, IP based camera, and their associated central servers in TMC. Each Fiber Optic Ethernet Switch shall consist of the following:

1. GENERAL SPECIFICATIONS

The Ethernet data switch shall be environmentally hardened Ethernet 8-port managed switch, supports 10/100/1000 Mbps (one for field and one for central control center installation), with manufacture provided lifetime warranty.

The module shall support transmission utilizing Category 5 cable or better, multimode, or single-mode fiber. The module shall support the Ethernet data IEEE 802.3 protocol using Auto-negotiating and Auto-MDI/MDI-X features. The module shall feature 4 (four) 10/100/1000T(X) RJ-45 ports and 4 (four) combo 10/100/1000T(X) RJ-45 ports / 100/1000FX ports. Use of an SFP port disables the corresponding 10/100/1000TX RJ-45 port. Similarly, use of a 10/100/1000TX RJ-45 port disables the corresponding SFP port. The module shall require no in-field electrical or optical adjustments or in-line attenuators to ease installation. The module shall provide power, link speed, and fiber port status indicating LED's for monitoring proper system operation. The modules shall provide automatic re-settable solid-state current limiters on each module to reduce the chance of a single point failure of the system. The module shall have dual redundant power supply connections to minimize single point failure. The module shall provide a serial connection for local management of the device. The module shall have a lifetime warranty to reduce system life cycle cost in an event of a module failure.

1. DATA SPECIFICATIONS
   a) Data Interface: Ethernet IEEE802.3
   b) Data Rate: up to 1000 Mbps
   c) Data Inputs/Outputs: up to 8
   d) Operation Mode: Half or Full Duplex

2. OPTICAL SPECIFICATIONS
   a) Number of Optical ports: up to 4 SFP-based
   b) Number of Fibers Required: 1 or 2, SFP-dependent
   c) Optical Wavelength: 850, 1310 or 1550 nm, SFP-dependent
   d) Optical Power Budget: SFP-dependent
   e) Maximum Distance: up to 120 km (70 mi) single mode, SFP-dependent

3. STATUS INDICATORS
   a) Power 1-2: Proper Power = Green
   b) R.M.: C-Ring Master = Green
   c) Ring: Ring Enabled = Green
   d) Fault: Fault Present = Amber
   e) RJ-45 Link/Data: Green, No Link/No Data: Off
   f) SFP Link/Data: Green, No Link/No Data: Off

4. CONNECTORS
   a) Optical: LC or SC, SFP-dependent
   b) Power: Screw Clamp Terminal Strip
   c) Data: RJ-45
   d) Console: RJ-45 serial communication.

5. ELECTRICAL SPECIFICATIONS
   a) Power: Two Redundant 12VDC to 48VDC @ 25W maximum input
   b) Current Protection: Automatic re-settable solid-state current limiters
   c) Voltage Regulation: Solid-state, Independent on each board
   d) Circuit Board: UL 94 flame rated and meets all IPC standards.

6. ENVIRONMENTAL SPECIFICATIONS
   a) MTBF: >100,000 Hours
   b) Operating Temp: –40˚ C to +75˚ C
   c) Storage Temp: -40˚ C to +85˚ C
   d) Relative Humidity: 0% to 95% (non-condensing).

7. MOUNTING SPECIFICATIONS
   Shall be mounted on wall, shelf, and DIN rail

8. REGULATORY AGENCIES/APPROVALS AND LISTINGS
   a) Underwriters Laboratory (UL) Listing
   b) UL 94-flame rated PCB board

9. SMALL FORM-FACTOR PLUGGABLE (SFP) MODULE
   a) All SFPs should come with manufacture provided lifetime warranty.
   b) Temperature Requirements: Products shall operate in an environment with an ambient temperature range of 0˚ F to +150˚ F without the assistance of fan-forced cooling. The modules shall have an MTBF (Mean time between failures) of >100,000 hours.
   c) Provide MSA Compliant one fiber SC Small Form-Factor Pluggable (SFP) Optical Device. The devices shall utilize 1000fx, 1310/1550 nm optics capable of simultaneous bi-directional signal transmission on one single mode optical fiber. The SFPs shall have the same transmitting sensitivities with the matching SFPs upstream or downstream. The SFP modules shall have different wavelengths and optical power to offer distances from 300 meters to 120 kilometers. The module shall require no in-field electrical or optical adjustments or in-line attenuators to ease installation. The module shall be UL listed.

The circuit board shall be UL 94 flame rated and meet all IPC standards. Housing shall be of all metal construction. All LED indicators and both electrical and mechanical connections shall be identified with silk-screened labels. The Contractor shall install one 1000fx, 1550nm, 1 fiber SC SFP into Port 4 of the 8-port Ethernet switch and one 1000fx, 1310nm, 1 fiber SC SFP into Port 1 of the 8-port Ethernet switch for field installation, and deliver one each of the 1550nm and 1310nm SFPs to the City for central installation.

d) Copper 10/100/1000 Mbps RJ45 SFP module. The module shall require no in-field electrical or optical adjustments or in-line attenuators to ease installation. The module shall be UL listed. The circuit board shall be UL 94 flame rated and meet all IPC standards. Housing shall be of all metal construction. All LED indicators and both electrical and mechanical connections shall be identified with silk-screened labels. Housing shall be of all metal construction. The Contractor shall install one each copper RJ45 SFP in ports 5 and 6 of the 8-port Ethernet switch in traffic signal cabinet and deliver additional two for central installations.

The module shall be UL listed. The circuit board shall be UL 94 flame rated and meet all IPC standards. Housing shall be of all metal construction. All LED indicators and both electrical and mechanical connections shall be identified with silk-screened labels. Housing shall be of all metal construction. The Contractor shall install one each copper RJ45 SFP in ports 5 and 6 of the 8-port Ethernet switch in traffic signal cabinet, and deliver additional two for central installations.

3. ACCESSORIES

6-foot Cat5e cable (with yellow skin) to connect the traffic signal controller and port 5 of the 8-port Ethernet switch.

a) 6-foot Cat5e cable (with red skin) to connect the EVP phase selector and port 6 of the 8-port Ethernet switch.
b) Associated switch mounting hardware, power supply.
c) Other accessories as required by the manufacturer.

77-1.19.02 Monitoring Camera Cabling (General)

CAT5e RJ45 10/100/1000Base-TX Ethernet (High Power-over-Ethernet) or PoE+ (IEEE 802.3at, class 4 standard) 21-30 VAC, 50/60 Hz, outdoor, shielded cable with integrated ESD drain wire and anti-crosstalk divider and secondary shielding. RJ45 connectors shall provide protections against ESD attacks and Ethernet hardware damages,

Power cable shall be A11403-BWG (water and sun resistant, 3 #14 AWG, white/green/black, UL Type TC 600V, NEC Type TFN Conductors, IEEE 1202/CSA FT4, IEEE 383, UL Subject 1277, and OSHA acceptable) or accepted equivalent.

77-1.19.03 Traffic Monitoring Camera Conductors Field Installation (General)

The installation of the wiring will require that a hole be drilled into the camera supporting structure for all the camera installations. Prior to drilling this hole the existing wiring inside the pole or mast arm shall be removed or protected such that it is not damage by the drilling operation. The edges of the drilled hole shall be smoothed. The Contractor shall install a

watertight gland nut (or grommet) in this hole that securely holds the wiring. All cables shall be:

- Installed without damaging the conductors or insulation
- Installed without kinks
- Handled in accordance with manufacturers specifications and recommended bending radius
- Run continuously between terminations without splices
- Installed with sufficient slack for equipment movement
- Neatly tagged at the cabinet to indicate which camera it serves
- Rated for outdoor use and resistant to water and UV radiation
- Have a watertight, strain relieved plug type connection to the camera housing

The Contractor shall make all connections of this wiring to the camera assembly, the video transmission device, and power.

77-1.19.04 High Speed Dome Pan/Tilt/Zoom Traffic Monitoring Camera

The high speed camera unit shall be 1080p HD Outdoor Day/Night Network PTZ Dome Camera that delivers 1920 x 1080 resolution video with up to 30x optical zoom and providing a 360 degree viewing field. It comes equipped with an outdoor pendant housing. It features complete network-based control of all dome functionality, including pan/tilt/zoom operation, presets, tours, and alarms, as well as web-based configuration of all dome settings. It also provides direct network video streaming using H.264 compression and bandwidth throttling to efficiently manage bandwidth and storage requirements. Equipment shall include all mounting adaptor (pole mount, and/or luminaire arm mount), pendant arm and power supply, camera unit, data cable, power cable, to make the installation complete and operational with the existing City traffic management's video system.

The camera shall meet all federal Buy America provisions.

The camera shall be fully compatible and shall communicate with the City's existing Bosch' Allegiant Microprocessor Based Switcher/Control System LTC 8903/60, without requiring modification or re-configuration after being decoded. After submitting the camera submittal, under the direction of the Engineer, the Contractor may be required to demonstrate that the proposed camera adheres to the requirements of these technical specifications. The demonstration shall take place at a City facility and show that the camera is compatible with the existing camera switch, and that the camera can be controlled from the City's central camera control location. The camera used in the demonstration shall be the exact make and model, using the exact software, of the camera that Contractor proposes to install in the field. Satisfactory demonstration of camera functionality shall be determined by the Engineer. The Contractor shall be responsible arranging the demonstration at no additional charge to the City nor to the project.

The proposed camera shall have features and functionality that meet or exceed the following specifications:

1. The mounting hardware shall include a mast mount option to be installed on traffic signal

poles, as well as a pipe mount option to be installed on luminaire arms.

2. If it is mast mounted, the arm mount assembly shall provide minimum 14" clearance between the edge of the pole and the center of the camera.
3. The camera and its housing's weight shall not exceed 7 lbs.
4. Camera shall have a minimum of 50 preset scenes, which shall be presentable in a preset tour.
5. Camera assembly shall be housed in an IP66 enclosure.
6. Shall have at a 30x Zoom, and 12x Digital Zoom. The 12x digital zoom shall not cause the image to become unrecognizable.
7. The effective pixel shall be 1900x1040(2.0 MP).
8. Shall have internal heater that is powered through RJ45 10/100Base-TX Ethernet (High Power-over-Ethernet) 21-30 VAC, 50/60 Hz.
9. The camera shall have a wide dynamic range of 120 dB and signal-to noise ratio greater than 50dB.
10. The camera shall be capable of the following preset speeds:
    a. Pan – 360 degrees per second
    b. Tilt – 250 degrees per second
11. The camera shall be capable of automatically pivoting the sensor to follow a target that moves underneath the camera.
12. Record and play back minimum two 30-minutes tours.
13. The lens shall return to a preset scene after a user defined idling time.
14. The pan, tilt, and zoom shall be able to function simultaneously for manually tracking speeding objects.
15. The camera shall be able to be configured remotely without needing to access any part of the camera equipment locally.

The camera shall meet or exceed the following technical specifications:

<u>Construction</u>

Housing:	Aluminum
Bubble:	Acrylic (high-resolution), clear
Installation Environment:	IP66, NEMA 4X
Operating Temperature:	Maximum 130 F Minimum 15 F

<u>Electrical</u>

Input Voltage:	21 to 30 VAC, 50/60 Hz
Power Consumption:	60W (max)
Control Data:	RJ45 10/100Base-TX Ethernet

Video:	H.264 (ISO/IEC 14496-10), MJPEG, JPEG
Audio:	Available

Testing and Final Acceptance

Make proper adjustments to video system devices to for correct operation in accordance with manufacturer's instructions.

Make any adjustment of camera settings that are required in order to meet the operations needs of the City.

Demonstrate upon final inspection that the video management system and devices function properly when controlled from Central.

The Contractor shall be fully responsible for purchasing, assembling, installing, testing, and troubleshooting the camera system and all the corresponding camera mounting hardware at each installation location.

77-1.19.05 High Speed Dome Pan/Tilt/Zoom Camera Installation

The Contractor shall obtain an IP address from the City and configure it in the camera prior to the installation. The contractor shall install and fully adjust the camera with the associated lens, communication addressing, power supplies, housings, and all-necessary cabling, etc., to make the assembly operational. The Contractor shall firmly attach the dome system to the assigned poles as shown on the Plans. The Contractor shall exercise care to tighten the camera mount within the torque limits specified by the camera manufacturer.

The Contractor shall properly terminate all of the electrical cables to the camera and firmly attach them. The Contractor shall dress and secure the electrical cables inside the dome enclosure and traffic signal cabinet so that they do not interfere with the closing of the cabinet, with the fan, or with any other moving part.

Cameras and other video sources where possible, shall use the electrical power supply 60 Hz signal for synchronization. When cameras are initially installed, the camera shall be in a position where its view of the roadway will not be obstructed by the pole it is mounted on. At a 4-leg intersection, the camera shall be capable of seeing all four legs without its view being blocked by the signal pole.

The contractor shall supply one camera license from Verint for each camera installed.

After all cameras are installed and central equipment is operational, the Contractor shall arrange an interactive session with the Engineer to fine-tune any adjustments to the camera that require a technician in the field. This session shall enable the Engineer to observe the image at the control room while being in verbal communication with the Contractor at the camera.

77-1.19.06 Point-to-Point Wireless Ethernet Kit

The Contractor shall furnish and install Industrial Grade high performance point-to-point wireless ethernet radio kit, power supplies, housings, and all necessary cabling for operational

use. The Contractor shall firmly attach wireless radios to the assigned poles as shown on the Plans. Radios give the option of narrowing channel bandwidth as network grows which will increase the number of non-overlapping channels and improve stability. Radios will come standard with an integrated antenna and IP67 rated impact resistant polycarbonate enclosure that is designed to survive extreme conditions. Must be FCC certified for us in the United States.

When wireless radios are initially installed, the line of sight between radios shall be clear of obstructions. The Contractor shall trim trees as needed.

The proposed wireless radio shall have features and functionality that meet or exceed the following specifications:

- Up to 240 Mbps Throughput
- 802.11 a/n Compliant
- 5, 10, 20 and 40 Mhz Channel Bandwidth Support
- IEEE 802.3at PoE Compliant PD on port 1
- IEEE 802.3af power source (PSE) available on port 2
- Environmentally Hardened -35° to +70° C
- Meets class IP67 dust and water immersion protection standards
- Secure transmission: WPA2 – AES or TKIP encryption
- Firmware Upgrades Included Free for the life of the product
- Radio Internal Components covered by Lifetime Warranty
- Enclosures covered by Three Year Warranty
- Installation and Configuration Trainings offered by manufacturer
- Indicating LEDs: Power On, Ethernet Link, Signal Strength
- Operating Voltage: 24 to 56 VDC
- Power Consumption 5W Max

77-1.19.07 Power Over Ethernet Injector

The Contractor shall furnish and install industrial power over Ethernet (PoE) injection module that injects 56 VDC at 0.625 amperes to any network cable. The Contractor shall firmly install PoE Injection Module as shown on the Plans with all necessary cabling for operational use. The PoE injection module shall be fully compliant with the requirements of IEEE 802.3at for Power Sourcing Equipment (PSE), and features auto detection of powered devices (PDs). Transmission distances of up to 300 feet are supported, and this injector supplies operating power for all PDs drawing a maximum of 30 watts.

The proposed PoE injection module shall have features and functionality that meet or exceed the following specifications:

- Combines operating power and 10/100/1000T(X) Ethernet data to one network cable
- Compliant with IEEE Standard 802.3at for Power Sourcing Equipment
- Internal 90 to 264 VAC power supply provides short circuit protection for powered devices
- Designed for deployment in industrial -25° to +70° C operating environments.
- True plug-and-play operation: no user configuration or settings required
- Unit can be wall mounted or DIN rail mounted using the included adaptor kit

- 5 Year Warranty
- Power Consumption: 35W Max
- Indicating LEDs: PoE+ Output (green)

77-1.20 Payment

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

Hauling and stockpiling of salvaged material off the right-of-way and delivered to the City Corporation Yard, 1465 South Lincoln Street, will be considered as included in the contract prices paid for the various items of work, and no additional payment will be allowed therefor.

77-1.21 Removing, Reinstalling or Salvaging Electrical Equipment

Removing, reinstalling or salvaging electrical equipment shall conform to the provisions in 87-21.03A "General" and 87-21.03D "Removing Existing Electrical Systems" of the Caltrans Specifications and these Special Provisions.

Existing facilities that are removed (i.e., streetlights, electroliers, frames, grates, covers, roadside signs, etc.) shall be salvageable wherever shown on the plans and as determined by the Engineer. Equipment shall be tagged with intersection name from which it was removed.

All equipment to be salvaged shall be handled as follows: All signal equipment (signal heads, pedestrian heads, push buttons, etc.) shall be removed from the poles and stacked on pallets. This includes signal hardware, conductors, and terminal compartments. The equipment shall be secured on the pallets and delivered to Corporation Yard. All poles shall be salvaged to the storage yard on Daggett Road. Contact the City's Operation and Maintenance at (209) -937-8341, giving 3 days advanced notice prior to delivery. Staff will direct contractor to Daggett Road yard and where to leave signal equipment in the Corp Yard.

All conductors shall be removed from abandoned conduits. Otherwise, removed items shall become the property of the Contractor and shall be disposed of as provided in Section 14 and Section 5-1.20B(4) of the Caltrans Specifications and these Special provisions.

The following materials shall be salvage to the City;

- LED fixture

77-22 <u>RECTANGULAR RAPID FLASHING BEACONS</u>

77-22.01 General

Furnishing and installing AC powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies shall conform to the latest applicable provisions of the Caltrans, California MUTCD, and City of Stockton Standard Specifications and Plans, and the project plans and these Special Provisions.

Each RRFB assembly may consist of, but is not limited to, light indications, wireless communication equipment, AC power equipment, and electrical components (wiring, solid-state circuit boards, etc.). An assembly may include the following items:

77-22.02 Light Indications

Each indication shall be a minimum size of approximately 7” wide x 3” high.

Two indications shall be installed on an assembly facing each direction of approaching vehicular traffic. The two indications shall be aligned horizontally, with the longer dimension of the indication horizontal, and a minimum space between the two indications of approximately 7” measured from inside edge of one indication to inside edge of second indication.

A single indication shall be installed on an assembly facing in the direction of approaching pedestrian traffic to serve as a confirmation for the pedestrian that the system has been activated.

The outside edges of the two indications, including any housing, shall not protrude beyond the outside edges of the integral signage of the assembly.

The light intensity of the indications shall meet the minimum specifications of the Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005. Contractor shall furnish a Certificate of Compliance for this standard. Specifically, the certificate should state that the indications: “Meet photometry of jurisdictional compliance standard(s) identical to: 2 J595 Class 2 Nov08 Yellow Peak Cd and 2 J595 Class 1 Nov08 Yellow Cds/Min.

Each indication shall be located between the bottom of the crossing warning sign and the top of the supplemental downward diagonal arrow plaque.

All exposed hardware shall be anti-vandal.

77-22.03 Sign

All signs shall be supplied and installed as part of this bid item.

77-22.04 Control Circuit

The control circuit shall have the capability of independently flashing up to two independent outputs. The LED light outputs and flash pattern shall be completely programmable.

The flashing output shall be the wig-wag plus simultaneous (WW+S) pattern in accordance with FHWA official ruling number 4(09)-41 (I).

Flash rates with the frequencies of 5 to 30 flashes/second shall not be used to avoid inducing seizures.

When activated, the RRFB shall operate for a predetermined interval based on MUTCD procedures for timing of pedestrian clearance times for pedestrian signals. Coordinate with the Engineer for this interval.

The control circuit shall be installed in an NEMA 3R (minimum) rated enclosure.

All circuit connectors shall be rated dust proof, and protected from temporary immersion in water.

77-22.06 Wireless Radio

Radio shall integrate with communication of RRFB system control circuit to activate light indications from pushbutton input.

The Radio shall synchronize all of the remote light indications so they will turn on within 120msec of each other and remain synchronized through-out the duration of the flashing cycle.

Radio systems shall operate from 3.6vdc to 15vdc.

77-22.08 Rectangular Rapid Flasher (RRFB) Accessible Pedestrian Signal (APS)

APS shall be a 6-wire type system and shall conform to the latest applicable provisions of the California MUTCD, and these Special Provisions. The APS shall be from the same manufacturer of RRFB and shall be furnish and installed as one package.

A. The housing for the unit shall be 9"x12" (green) and made of 356 Aluminum heat-treated to meet Spec. T-6. It shall be of a telescoping, vandal-proof design. The color shall be Olive Green. Adaptors may be required to install the navigator pushbutton housing and the sign plate. The PPB shall be installed right side up.

B. Each APS shall connect to a control unit located inside its associated RRFB housing in the M cabinet. The Push Button Stations (PBS) shall provide information and cues upon pedestrian actuation via an audible message saying "**CROSS STREET WITH CAUTION, VEHICLES MAY NOT STOP,"** and cease operation at a predetermined time, after the pedestrian clears the crosswalk. All sounds shall emanate from the back of the unit. The weather-proof speaker shall be protected by a vandal resistant screen. A sunlight visible red LED latches "ON" to confirm the button has been pushed. PBS shall include frame, sign, ADA compliant push button and mounting hardware. By interfacing with the Control Unit that is installed in the pedestrian signal indication housing, the PBS shall provide the following standard features.

- Confirmation of button push via latching LED, and sound.
- Direction of travel (with extended button push).
- Standard voice messaging in English.
- Button with arrow.
- Standard City of Stockton locating tone.
- All sounds automatically adjust to ambient over 60dB range.
- All sounds shall be synchronized/
- Extended button push shall turn on and/or boost volumes.

C. The button shall be located within five (5) feet of the crosswalk line, and mounted at a height of 42" above the finished grade.

D. The pedestrian instruction sign shall be R10-25 and installed with security screws. The security screws shall be stainless steel, button head socket cap screws #8 diameter, 3/8 inch in length and 32 threads per inch. The socket shall be 3/32 inch Allen. The sign shall be integral with each pedestrian pushbutton.

E. The duration of a predetermined period of operation of the RRFB following each actuation should be based on the MUTCD procedure for timing of pedestrian clearance times for pedestrian signals.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing APS shall be considered as included in the contract lump sum prices paid for RRFB system and no additional compensation will allowed therefor.

77-22.09 Pedestal Shaft

The pedestal shaft shall be furnished and installed in accordance to the pertinent provisions in Rectangular Rapid Flashing Beacon Assembly Detail as part of this bid item.

77-22.09 (1) Pedestal Base

The pedestal base shall be furnished and installed in accordance to the pertinent provisions in Rectangular Rapid Flashing Beacon Assembly Detail as part of this bid item.

77-22.09 (2) Concrete Base

The concrete base and anchor bolts shall be furnished and installed in accordance to the pertinent provisions in Rectangular Rapid Flashing Beacon Assembly Detail as part of this bid item.

77-22.10 Hardware

Furnish all hardware, connections, etc. to make the RRFB system fully operational.

77-23 Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing a lighting system consisting of service pedestal, foundation, standards, LED luminaires, pull boxes, hardware, manuals and testing shall be considered as included in the contract lump sum prices paid for lighting system as shown on the plans, and no additional compensation will allowed therefor.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing AC powered rectangular rapid flashing beacon (RRFB) system consisting of multiple assemblies, signs, standards, power equipment and APS shall be considered as included in the contract lump sum prices paid for RRFB system as shown on the plans, and no additional compensation will allowed therefor.

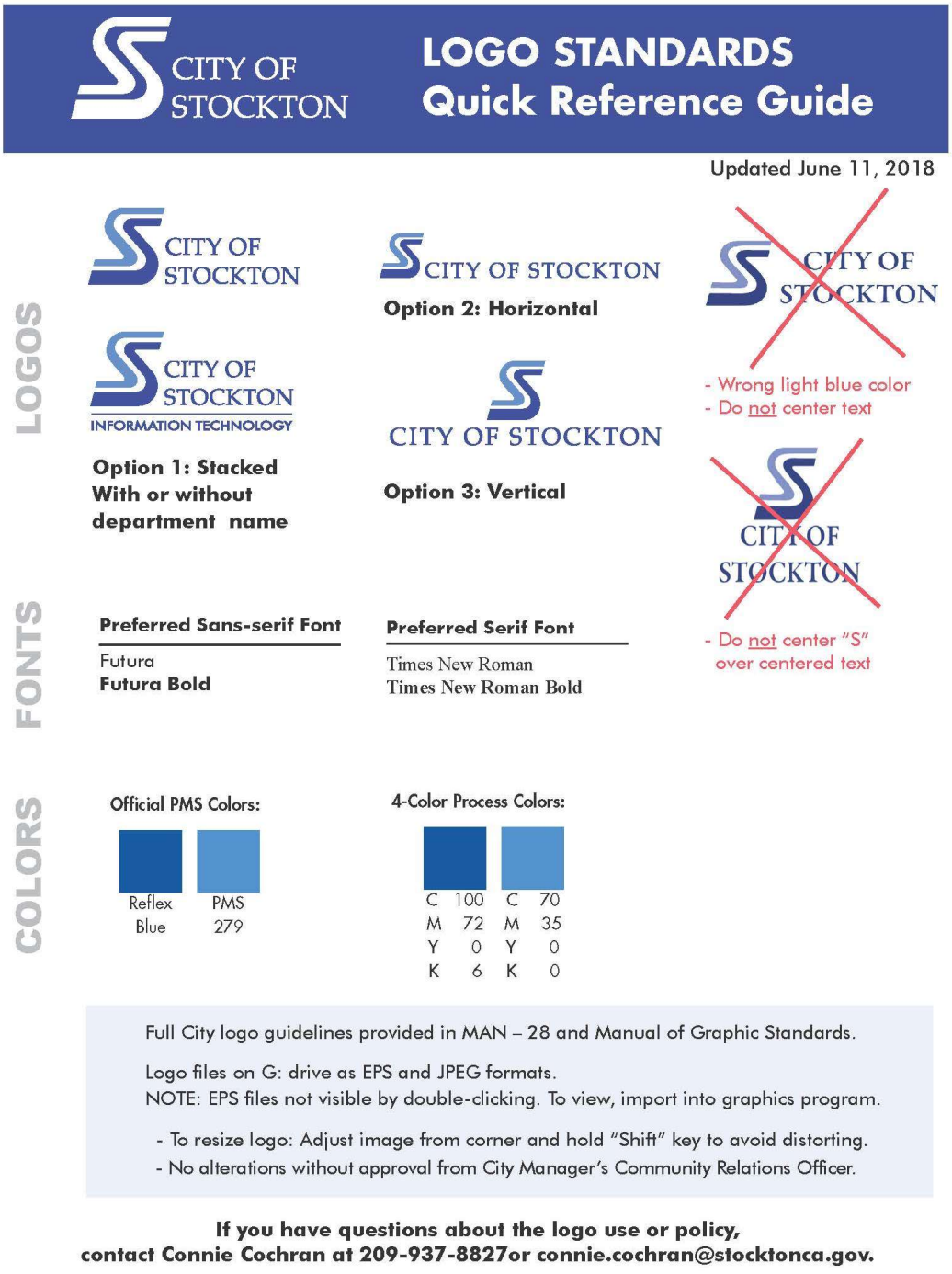
Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and installing CCTV system consisting of multiple assemblies, foundation, standards, PTZ camera, video and data modems, hardware, wireless signal interconnect, Ethernet switch, manuals and testing shall be considered as included in the contract lump sum prices paid for CCTV system as shown on the plans, and no additional compensation will allowed therefor.

DIVISION IX TRAFFIC CONTROL DEVICES

SECTION 82 – SIGNS AND MARKERS

82-1.01 CITY OF STOCKTON – LOGO STANDARDS

Contractor to use the following Logo standards from the City of Stockton below.



SECTION 84 – MARKINGS

84-1.01 TRAFFIC STRIPES, PAVEMENT MARKINGS, AND PAVEMENT 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.

Painted traffic stripes shall comply with Section 84-2 of the Caltrans Specifications.

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 Section 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, micro-surfacing, 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.

The contract lump sum price paid for signs and striping shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing thermoplastic and painted traffic stripes, painted curbs, pavement markings, pavement markers and legends, including any necessary cat tracks, dribble lines, and layout work, placement, removal, and disposal of any and all conflicting striping and pavement markers, complete in place, as shown on the plans, as specified in the Caltrans Specifications and these Special Provisions, and as directed by the Engineer.

84-1.02 <u>COLORED PAVEMENT FOR BIKE LANES (GREEN)</u>

Attention is directed to the Section 84, "Markings" of the Caltrans Specifications and these Special Provisions.

Material Properties

The colored pavement material shall be a methyl methacrylate (MMA) acrylic based resin system used for color pavement marking and anti-skid surfacing. The resin, catalyst, and aggregate compounds shall be capable of full cure in a wide range of temperatures without requiring external heat sources.

Properties	**Unit of Measure**	**Test**
Neat Resin		
Tensile Strength	2000 psi (14MPa) min	ASTM D638
Elongation	70% min	ASTM D638
Tensile Modulus of Elasticity	1370 psi (9.5 MPa) min	ASTM D638
Hardness	15 – 20 Shore D	ASTM D2240
Water Absorption	0.25% max	ASTM D570
Density	13.42 lb/gal (1.6 gm/ml)	ASTM D2849
Pot Life	15 minutes @ 72˚F (22˚C)	AASHTO T237
Flash Point	50˚F (10˚C)	ASTM D1310
Solids Content	99%	ASTM D1644

Skid Resistant	45 minimum	ASTM E274
Aggregate		
Specific Gravity	2.65	ASTM C128
Hardness	7.0	Mohs Scale

Material Color

The daytime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
x	y	X	y	x	y	x	y
0.230	0.754	0.266	0.500	0.367	0.500	0.444	0.555

The daytime luminance factor (Y) shall be at least 7, but no more than 35.

The nighttime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
x	y	X	y	x	y	x	y
0.230	0.754	0.336	0.540	0.450	0.500	0.479	0.520

Surface Preparation

Before applying colored pavement material, cover manholes, valve and monument covers, grates, or other exposed facilities located within the area of application, using a plastic or oil resistant construction paper secured by tape of adhesive to the facility being covered.

All surfaces that are to receive colored pavement material shall be thoroughly clean, dry, and free of all dirt, grease, and other contaminates that might interfere with proper adhesion

Clean the pavement surface using high pressure water, compressed air, sandblasting, shot-blasting, or mechanical abrasion. The surface should be visibly dry and the moisture content should be tested according to ASTM D4263 (modified to 2 hours). New asphalt shall have been placed for a minimum of 15 days prior to installation of the colored pavement material and surface oils shall not be present. The temperature of the pavement and air shall be between 40˚F- 104˚F (5˚C - 40˚C).

All areas to be coated shall be masked prior to application of primer and masked again prior to application of the colored pavement material.

Mixing and Application

Mixing and applying colored pavement material and primer shall be in accordance with the manufacturer's instructions.

DIVISION X ELECTRICAL WORK – NOT USED

DIVISION XI MATERIALS

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.

ATTACHMENT 1 – INCIDENTAL TAKE MITIGATION MEASURES

S J C O G, Inc.

555 East Weber Avenue ● Stockton, CA 95202 ● (209) 235-0600 ● FAX (209) 235-0600

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan (SJMSCP)

Lincoln Street & 8th Street Roundabout Project
SJMSCP Incidental Take Minimization Measures
(Existing Street)

Date: August 10, 2020

Findings: No SJMSCP covered species on site

Total Disturbed Acres Anticipated: 0.50 acres

Habitat Types to be Disturbed: Urban (U) Habitat Land (City of Stockton Compensation Map)

Project Jurisdiction: City of Stockton

Advisory Statements

After inspecting the project site, and project site conditions, the San Joaquin Council of Governments (SJCOG) provides the following *advisory statements* to the applicant. No further action is required with the SJCOG with respect to the following statements. SJCOG does not accept any liability for the accuracy of these statements since each regulatory agency discussed below must determine the extent of its own regulatory authority with respect to the proposed project.

It should be noted that two important federal and state agencies (U.S. Army Corps of Engineers and the California Regional Water Quality Control Board) and California Department of Fish and Wildlife Streambed Alteration requirements have not issued permits to the SJCOG and so payment of the fee to use the SJMSCP will not modify requirements (1600/1602) now imposed by these agencies. **If potential waters of the United States [pursuant to Section 404 Clean Water Act] may occur on the project site,** it therefore may be prudent to obtain a preliminary wetlands map from a qualified consultant. If waters of the United States are confirmed on the project site, the Corps and the Regional Water Quality Control Board (RWQCB) would have regulatory authority over those mapped areas [pursuant to Section 404 and 401 of the Clean Water Act respectively] and permits would likely be required from each of these resource agencies prior to impacting these features on the project site.

The SJMSCP covers lawful activities which must comply with all federal, state and local laws for coverage. The **Migratory Bird Treaty Act (MBTA)** is a federal act which protects many birds and their habitats. Those species go beyond the listed SJMSCP species but are included as protective measures for compliance with the federal MBTA measures. The measures will be stated under **MBTA Compliance** in the prescribed ITMM.

The ITMM is not deemed complete until finalized by SJCOG, Inc. staff and provided back to the project.

Conditions

Prior to ground disturbance:

1. Incidental Take Minimization Measures (ITMMs) will be issued to the project and must be signed by the project applicant prior to any ground disturbance but no later than six (6) months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant must reapply for SJMSCP Coverage. Upon receipt of signed ITMMs from project applicant, SJCOG, Inc. staff will sign the ITMMs. This is the effective date of the ITMMs.

2. Under no circumstance shall ground disturbance occur without compliance and satisfaction of the ITMMs.

3. Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant must:
   a. Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond should be valid for no longer than a 6 month period); or
   b. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or
   c. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
   d. Purchase approved mitigation bank credits.

4. Within 6 months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant must:
   a. Pay the appropriate SJMSCP for the entirety of the project acreage being covered; or
   b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
   c. Purchase approved mitigation bank credits.

   Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.

Pay appropriate SJMSCP 2020 fees based on habitat categories and rates to **SJCOG, Inc**.:

- Urban (U) Habitat – 0.50 acres x $0.00 per acre = **$0.00**

Total Fee due: $0.00

Note: If fees are not paid prior to January 1, 2021 this project will be subject to the subsequent fee change, and the fee above will no longer be applicable.

Project Proponent Must Initial Here As to Understanding the Note Above: _____

During project construction:

All food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the construction site.

In reliance on the Section 10(a)(l)(B) Permit issued by the United States Fish and Wildlife Service and the Section 208l(b) Incidental Take Permit issued by the California Department of Fish and Wildlife, City of Stockton has consulted with and agreed to allow coverage pursuant to the SJMSCP for the *Lincoln Street*

& 8th Street Roundabout Project its successors, agents and assigns pursuant to the "Implementation Agreement for the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan" which will allow the *Lincoln Street & 8th Street Roundabout Project,* its successors, agents and assigns to construct, operate and maintain the Project commonly known as the *Lincoln Street & 8th Street Roundabout Project* and located within the existing Street which could result in a legally permitted Incidental Take of the SJMSCP Covered Species in accordance with and subject to the terms and conditions of the *Lincoln Street & 8th Street Roundabout Project* approved by the City of Stockton. This Certification applies only to activities on the subject parcel(s) which are carried out in full compliance with the approved plans for the *Lincoln Street & 8th Street Roundabout Project*, Section 10(a)(l)(B) Permit, and Section 208l(b) Incidental Take Permit conditions.

I have read, acknowledge, and agree to the preceding conditions:

Travis Pazin _____ 8/10/2020 _____

Project Proponent for the *Lincoln Street & 8th Street Roundabout Project* Date

Travis Pazin, Junior Engineer

Please Print Name Here

FOR SJCOG, Inc. Use Only:

_____ 08/10/2020 _____

SJCOG, Inc. Staff Signature Official Date of Issuance

Laurel Boyd _____ 02/10/2021 _____

SJCOG, Inc. Staff Print Name Here Mitigation Due Date

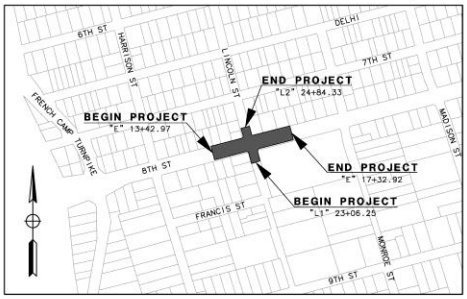
LINCOLN STREET AND 8TH STREET ROUNDABOUT

CITY OF STOCKTON

PROJECT NO. PW1721

FEDERAL PROJECT NO. CML-5008(176)

VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

SHEET No.		SHEET TITLE
1	T-1	TITLE SHEET
2	GN-1	GENERAL NOTES
3	SC-1	SURVEY CONTROL
4 TO 5	X-1 TO X-2	TYPICAL SECTIONS
6	DE-1	DEMOLITION PLAN
7	P-1	PAVING PLAN
8 TO 9	C-1 TO C-2	CONSTRUCTION DETAILS
10	EC-1	EROSION CONTROL
11 TO 12	SS-1 TO SS-2	SIGNING AND STRIPING
13 TO 15	TC-1 TO TC-3	TRAFFIC CONTROL PLANS
16	E-1	LIGHTING, CCTV & RRFB SYSTEMS
17 TO 21	E-2 TO E-6	ELECTRICAL PLANS

MARK THOMAS & CO., INC.
701 UNIVERSITY AVE, SUITE 200
SACRAMENTO CA, 95826
(916) 381-9100/FAX (916) 381-9180

Y&C TRANSPORTATION CONSULTANTS
3250 RAMOS CIRCLE
SACRAMENTO CA, 95827
(916) 366-8000/FAX (916) 366-8008

BEFORE EXCAVATING
CALL U.S.A.
UNDERGROUND SERVICE ALERT
811
TOLL FREE
2 WORKING DAYS BEFORE ALL
PLANNED WORK OPERATIONS

ORIGINAL SCALE IN INCHES
FOR REDUCED PLAN
0 1 2 3

Revision No.	Description	Date	By	Approved By

MARK THOMAS
701 UNIVERSITY AVENUE, SUITE 200
SACRAMENTO, CALIFORNIA 95825
(916) 381-9100 FAX:(916)381-9180

LINCOLN ST./EIGHTH ST. ROUNDABOUT PROJECT

TITLE SHEET

PUBLIC WORKS DEPARTMENT
CITY OF STOCKTON, CALIFORNIA

SCALE:
DESIGNED BY: LK
DRAWN BY: LK
CHECKED BY: MK
REVISED INFO:

APPROVED BY:
DATE
CITY ENGINEER
STOCKTON, CALIFORNIA

SHEET NO.
T-1
OF 21 SHEETS
PW1721
PROJECT NO.

ATTACHMENT 2 – ACKNOWLEDGEMENT OF MONUMENT PRESERVATION FORM

CITY OF STOCKTON

COMMUNITY DEVELOPMENT DEPARTMENT
Permit Center • 345 N. El Dorado Street • Stockton, CA 95202-1997 • 209 / 937-8266 • Fax 209 / 937-8893
www.stocktongov.com/cdd

Acknowledgement of Monument Preservation
Monument Preservation prior to construction activity

I, _____, duly licensed Land Surveyor or Professional
(Please Print)

Engineer authorized to perform Land Surveying in the State of California, Registration No. _____, hereby acknowledge and accept all responsibility for the monument preservation as required per Section 8771 (a-f) of the Business and Professional Code within the bounds of the construction activity permitted by the City of Stockton Permit No./ Plan No. 5397C .

I further acknowledge that I am hereby responsible for the Acknowledgement of Monument Responsibility prior to final acceptance of construction activity permitted by the City of Stockton Permit No./ Plan No. 5397C

_____
Signature

_____
Date

Seal

[ ] Survey monuments found - Post Acknowledgment/ Corner Record to follow.
[ ] No survey monuments found.

CITY OF STOCKTON

COMMUNITY DEVELOPMENT DEPARTMENT
Permit Center • 345 N. El Dorado Street • Stockton, CA 95202-1997 • 209 / 937-8266 • Fax 209 / 937-8893
www.stocktongov.com/cdd

Acknowledgement of Monument Preservation
Monument Preservation prior to final acceptance of construction activity

I, _____, duly licensed Land Surveyor or Professional
(Please Print)

Engineer authorized to perform Land Surveying in the State of California, Registration No. _____, hereby acknowledge and accept all responsibility for the monument preservation as required per Section 8771 (a-f) of the Business and Professional Code within the bounds of the construction activity permitted by the City of Stockton Permit No./ Plan No. 5397C .

I hereby state that all monuments within the bounds of the construction activity permitted by the City of Stockton Permit No./ Plan No. 5397C are in the original location or have been reset in accordance with Section 8771 (a-f) of the Business and Professional Code.

_____
Signature

_____
Date

Seal

[ ] Survey monuments found - Corner Record to be filed.
[ ] No survey monuments found.

CITY OF STOCKTON

COMMUNITY DEVELOPMENT DEPARTMENT
Permit Center • 345 N. El Dorado Street • Stockton, CA 95202-1997 • 209 / 937-8266 • Fax 209 / 937-8893
www.stocktongov.com/cdd

Legislation changes effective January 1, 2015
Senate Bill No. 1467, Chapter 400

"SURVEY MONUMENT PRESERVATION"

Section 16: Section 8771(d) of the Business and Professions Code (Land Surveyor's Act):

> *(d) The governmental agency performing or permitting construction or maintenance work is responsible for ensuring that either the governmental agency or landowner performing the construction or maintenance work provides for monument perpetuation required by this section.*

The City of Stockton has modified the Encroachment, Grading, and Building permit process to ensure that a responsible individual is in charge of the Land Surveying activities within the bounds of the permitted construction activity. The responsible individual shall be a Licensed Land Surveyor or a Professional Engineer authorized to perform Land Surveying in the State of California. It shall be at the sole discretion of the Public Works Department to determine if the permitted construction activity warrants the need to fulfill this requirement.