



PUBLIC WORKS DEPARTMENT

**SPECIAL PROVISIONS
FOR**

**LOCAL STREET RESURFACING PROGRAM
FY23-24 SB1 – MILL AND OVERLAY PROJECT NO.
WD24003D**

BID OPENING: Thursday, September 14, 2023 @ 2:00 p.m.

Table of Contents

DIVISION I – GENERAL PROVISIONS	5
SECTION 1 – GENERAL.....	5
1-1.01 TERMS AND DEFINITIONS	5
1-1.02 SPECIFICATIONS	6
1-1.03 PLANS	7
SECTION 2 – BIDDING.....	8
2-1.01 GENERAL	8
2-1.02 BID PROTEST	8
SECTION 3 – CONTRACT AWARD AND EXECUTION	9
3-1.01 CONTRACT AWARD.....	9
3-1.02 CONTRACT EXECUTION.....	9
3-1.03 CONTRACT BONDS.....	9
SECTION 4 – SCOPE OF WORK.....	10
4-1.01 DIFFERING SITE CONDITIONS.....	10
4-1.01 EXTRA WORK.....	10
4-1.02 CLEANUP	10
SECTION 5 – CONTROL OF WORK.....	11
5-1.01 PERMITS.....	11
5-1.02 SUBMITTALS.....	11
5-1.03 RECORDS.....	13
5-1.04 JOB SITE APPEARANCE.....	13
5-1.05 PROPERTY PRESERVATION/EXISTING FACILITIES (If Applicable)	13
5-1.06 PRESERVING AND PERPETUATING SURVEY MONUMENTS.....	15
5-1.07 CONSTRUCTION SURVEY.....	16
5-1.08 REQUEST FOR INFORMATION.....	17
5-1.09 NOTICE OF POTENTIAL CLAIM	17
5-1.10 INSPECTIONS.....	18
5-1.11 RIGHTS IN LAND	18
5-1.12 STAGING AREA (If Applicable).....	18
SECTION 6 – CONTROL OF MATERIALS	18
6-1.01 CITY-FURNISHED MATERIALS.....	18
6-1.02 QUALITY ASSURANCE PROGRAM.....	18
6-1.03 TESTING.....	19
6-1.04 PRE-QUALIFIED AND TESTED SIGNING AND DELINEATION MATERIAL	19
SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC	20

7-1.01 PUBLIC CONVENIENCE	20
7-1.02 PUBLIC SAFETY	21
7-1.03 PUBLIC NOTIFICATION	21
SECTION 8 – PRESECUTION AND PROGRESS	26
8-1.01 SCHEDULE	23
8-1.02 PRE-CONSTRUCTION CONFERENCE	23
8-1.03 POST CONSTRUCTION CONFERENCE	23
8-1.04 TIME OF COMPLETION.....	23
8-1.05 LIQUIDATED DAMAGES.....	24
8-1.06 CITY OF STOCKTON HOLIDAY SCHEDULE FOR 2023	25
SECTION 9 – PAYMENT	26
9-1.01 GENERAL	26
9-1.02 PAYMENTS	26
9-1.03 INCREASE OR DECREASE QUANTITIES	28
9-1.04 MOBILIZATION	29
9-1.05 STOP NOTICE.....	29
9-1.06 QUANTITIES.....	29
DIVISION II – GENERAL CONSTRUCTION.....	30
SECTION 10 – GENERAL	30
10-1.01 ORDER OF WORK	30
10-1.02 PRE-CONSTRUCTION SURVEY	31
SECTION 11 – BLANK	31
SECTION 12 – TEMPORARY TRAFFIC CONTROL	31
12-1.01 MAINTAINING TRAFFIC.....	31
12-1.02 TRAFFIC CONTROL SYSTEM FOR LANE AND ROAD CLOSURE.....	34
13-1.01 WATER POLLUTION CONTROL.....	35
14-1.01 HAZARDOUS WASTE AND CONTAINMENT	35
14-1.02 DUST CONTROL.....	36
14-1.03 NOISE CONTROL REQUIREMENTS	36
DIVISION III – EARTHWORK AND LANDSCAPE	37
SECTION 15 – EARTHWORK	37
15-1.01 ROADWAY EXCAVATION.....	37
15-1.02 RELATIVE COMPACTION.....	37
SECTION 16 – EROSION CONTROL AND HIGHWAY PLANTING	37
16-1.01 LANDSCAPE REPAIR.....	37
16-1.02 EXISTING IMPROVEMENTS.....	37
16-1.03 SPRINKLER SYSTEMS, SERVICE WATER LINE AND FENCES.....	38
16-1.04 LAWN TURF.....	38

16-1.05 REPAIR OF TURFED AREAS	38
DIVISION VI – TECHNICAL SPECIFICATION	38
SECTION 19 – CURB-RAMP	38
19-1.01 GENERAL	38
19-1.02 CONSTRUCTION	39
19-1.03 MATERIAL.....	40
19-1.04 PAYMENT	40
SECTION 39 – HOT MIX ASPHALT.....	41
39-1.01 GENERAL	41
39-1.02 MATERIALS.....	42
39-1.03 CONSTRUCTION	42
39-1.04 PAYMENT	49
SECTION 84 – PAVEMENT STRIPING	49
84-1.01 TEMPORARY PAVEMENT STRIPING AND MARKING	49
84-1.02 THERMOPLASTIC STRIPING AND MARKINGS	50
84-1.05 PAVEMENT MARKERS.....	54

**SPECIAL PROVISIONS
FOR
LOCAL STREET RESURFACING PROGRAM FY23-24 SB1 – MILL AND OVERLAY
PROJECT NO. WD24003D**

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 -	Current and latest State of California, Department of Transportation, 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
Working Day -	Defined as any eight (8) hour day, except as follows: Saturdays, Sundays, City-observed holidays, and days on which the Contractor is prevented by inclement weather or conditions resulting immediately therefrom adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 75 percent of the normal labor and equipment force engaged on that operation or operations for at least 60 percent of the total daily time being currently spend on the controlling operation or operations.

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 implements 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 Standard Specifications
- f. City 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. Contractor 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.

See following page

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 a 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: *Thinh Phan*
City of Stockton
Public Works Department
1465 South Lincoln Street
Stockton, CA 95206

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 the contract.

Bid protests are to be delivered to the following address: Department of Public Works, 1465 South Lincoln Street, Stockton, CA 95206, Attn: *Thinh Phan*. The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed.

Pursuant to the implementation of the Community Workforce Training Agreement (CWTA) adopted by the City Council on July 26, 2016, and Council extended the term to August 25, 2024, the successful bidder shall be required to comply with the provisions of CWTA. For any project subject to this agreement, the Local Hire, Priority Apprentice and Workforce Development Program requirements shall apply in lieu of the requirements of Stockton Municipal Code Section 3.68.095 and no separate compliance with Section 3.68.095 will be required of the Contractors/Employers working on the project.

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: *Thinh Phan*
1465 South Lincoln Street
Stockton, CA 95206

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 the 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

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 PERMITS

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

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

- Contractor's License. A valid California Class A Contractor License.
- Business License. The 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 – The Contractor is responsible for obtaining a permit and pay fees.
- 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 and pay fees for the water meter 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:

- DAS-140 & DAS-142
- CWTA Compliance Report
- Water Pollution Control Program (WPCP) by a QSD, Best Management Practices
- Emergency Contacts/Authorized Representatives
- Traffic Control Plan
- Project Schedule (Critical Path Method)
- City of Stockton Construction and Demolition Debris Recycling Report
- City of Stockton Encroachment Permit
- Public Notifications (Flyer, News Release letter, etc)
- Staging Agreements with Private Property Owner (if applicable)
- Concrete Mix Design
- Truncated Dome
- Acknowledgements of Monument Preservation

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.

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 the 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 the 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, lists, graphs, catalog sheets, datasheets, 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 submittal of various items using a single form will be permitted only when the items are 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.

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

5-1.03 RECORDS

The Contractor’s attention is directed to Sections 5-1.27, “Records,” of the Caltrans Specifications.

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

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

5-1.04 JOB SITE APPEARANCE

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 (If Applicable)

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 to be taken by the Contractor to protect the health, safety, and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to, conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases, natural gas in pipelines six (6) inches or greater in diameter, or pipelines operating at pressures greater than 60 psi (gage); underground electric supply system conductors or cables with potential to ground of more than 300 V, either directly buried or in duct or conduit, which do not have concentric grounded or other effectively grounded metal shields 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
	811

Underground Service Alert – Northern California (USA)	(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 "downtime" 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 a 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 PRESERVING AND PERPETUATING SURVEY MONUMENTS

Action by:	Action:
<i>Contractor's Land Surveyor</i>	<ol style="list-style-type: none"> 1. Identifies existing survey monuments. 2. Lists all existing survey monuments. 3. Ties out / performs construction staking of survey monuments. 4. Indicates survey monuments on construction plans.
	<ol style="list-style-type: none"> 5. Files all pre-construction Corner Records or Records of Survey with San Joaquin County. The Corner Records or Record of Survey will show monuments within the area of construction reasonably subject to removal or disturbance not shown on a recent record document (recent record document is a filed survey map or corner record document completed with acceptable modern survey methods that includes survey ties from monuments within the construction area to monuments outside of the construction area). 6. Submits copies of pre-construction Corner Records or Records of Survey filed with San Joaquin County to City Engineer/Project Manager
<i>Contractor</i>	<ol style="list-style-type: none"> 7. Preserves/perpetuates all survey monumentation during construction, including, but not limited to, those listed. 8. Restores survey monuments disturbed by construction.
<i>Contractor's Land Surveyor,</i>	<ol style="list-style-type: none"> 9. Files all post-construction Corner Records and Records of Survey with San Joaquin County for all monuments disturbed during construction. 10. Submits copies of Corner Records or Records of Survey filed with San Joaquin County to City Engineer/Project Manager.

Monuments set shall be sufficient in number and durability and efficiently placed so as not to be readily disturbed, to assure, together with monuments already existing, the perpetuation or facile reestablishment of any point or line of the survey.

When monuments exist that control the location of subdivisions, tracts, boundaries, roads, streets, or highways, or provide horizontal or vertical survey control, the monuments shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer prior to the time when any streets, highways, other rights-of-way, or easements are improved, constructed, reconstructed, maintained, resurfaced, or relocated, and a corner record or record of survey of the references shall be filed with the county surveyor. They shall be reset in the surface of the new construction, a suitable monument box placed thereon, or permanent witness monuments set to perpetuate their location if any monument could be destroyed, damaged, covered, or otherwise obliterated, and a corner record or record of survey filed with the county surveyor prior to the recording of a certificate of completion for the project. Sufficient controlling monuments shall be retained or replaced in their original positions to enable property, right-of-way and easement lines, property corners, and subdivision and tract boundaries to be reestablished without devious surveys necessarily originating on monuments differing from those that currently control the area. It shall be the responsibility of the governmental agency or others performing construction work to provide for the monumentation required by this section. It shall be the duty of every land surveyor or civil engineer to cooperate with the governmental agency in matters of maps, field notes, and other pertinent records. Monuments set to mark the limiting lines of highways, roads, streets or right-of-way or easement lines shall not be deemed adequate for this purpose unless specifically noted on the corner record or record of survey of the improvement works with direct ties in bearing or azimuth and distance between these and other monuments of record.

The decision to file either the required corner record or a record of survey pursuant to subdivision shall be at the election of the licensed land surveyor or registered civil engineer submitting the document.

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 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, and traffic signalization, pavement delineation plan described in the plans and specifications.

2. Contractor shall be responsible referencing all existing monumentation within the limits of the project prior to removal of any existing monuments. Monument referencing shall be reviewed and approved by the engineer prior to commencing of the work.
3. The Contractor shall employ a Land Surveyor registered in the State of California or an appropriately registered Civil Engineer to perform such survey work. All stakes and marks set by the Contractor's Land Surveyor or Civil Engineer shall be carefully preserved by the Contractor. In case such stakes and marks are destroyed or damaged, they will be promptly replaced, at the direction of the Engineer at no additional cost to the City. Copies of all field notes and cut sheets shall be provided to the City at no additional cost to the City.

Full compensation for conforming to the 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.

5-1.08 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.

5-1.09 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.

5-1.10 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 forty-eight (48) hours in advance of any construction. Contractor shall pay for overtime for inspection during City holidays, weekends and non-business hours.

5-1.11 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.

5-1.12 STAGING AREA (If Applicable)

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.

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 CITY-FURNISHED MATERIALS

The City shall furnish hot mix asphalt.

6-1.02 QUALITY ASSURANCE PROGRAM

Refer to Instruction to Bidders document.

6-1.03 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.

6-1.04 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:

http://www.dot.ca.gov/hq/esc/approved_products_list/pdf/signing_and_delineation_materials.pdf

SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1.01 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, and all affected utilities no later than seventy-two (72) hours before work is to begin. The Contractor shall provide the City with the name and telephone number (business, home, and mobile) of three (3) representatives available at all times during the duration of the contract. Said names and telephone numbers shall be provided to the City of Stockton Public Works, Fire and Police Departments.

The Contractor shall circulate printed form letters, approved by the Engineer, explaining the project to be constructed and the length of time inconvenience will be caused by the project and deliver same to the residents and businesses to be affected at least 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.

7-1.02 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.

7-1.03 PUBLIC NOTIFICATION

The Contractor shall circulate printed form letters/door hangers, approved by the Engineer, explaining the project to be done and the length of time inconvenience will be caused by the project and deliver same to the residents and/or businesses to be affected no earlier than 72 hours, nor later than 48 hours, before work is to commence. The Contractor shall install "Road Closed," arrows, detour signs, and barricades as necessary.

In addition, the Contractor shall provide temporary "Tow-away, No Parking" signs posted in advance of the work which signs shall be removed upon completion of the work and the opening of the street to traffic. The signs shall not be less than 12"x18" size, "Tow-away, No Parking" words shall be in white letters on red background, and must have Stockton Municipal Code 10-011.6, California Vehicle Code 22651(l)(n), Stockton Police Department telephone number 937-8354, and date and time of parking restriction clearly indicated on it. Such signs shall be placed no

farther than fifty (50) feet apart. It shall be the Contractor's responsibility to arrange for the removal of any vehicles obstructing his/her operations.

The Contractor shall notify all residents and businesses affected by the construction, Utilities, School Districts, Sunrise Sanitation, Stockton Scavenger, and San Joaquin Regional Transit District at least 48 -72 hours prior to starting the work. Any changes to the original schedule/notification would prompt the re-notification by the Contractor. A list of agencies with the contact information is available below.

The Contractor shall inform the City Fire Comm, (209) 464-4648, no later than twenty-four (24) hours before work is to begin. Any changes in the Contractor's original schedule/notification shall be promptly reported to the City Fire Comm, so that they are fully informed at all times of the locations of street closures/construction.

<u>Agency</u>	<u>Phone</u>	<u>Fax</u>	<u>email address</u>
Lodi Unified School District (Transportation) 1305 E. Vine Street, Lodi, CA.	953-8170	331-7821	
Lincoln Unified School District (Transportation) 6749 Harrisburg Place, Stockton, CA	953-8596	957-3626	
Stockton Unified School District (Transportation) 2963 Sanguinetti Lane, Stockton, CA	933-7145	943-0079	
Waste Management 1240 Navy Drive, Stockton, CA	(530) 356-3756	948-4013	sjager@wm.com
Republic Services 1145 W. Charter Way, Stockton, CA	483-2934	466-2371	donald.gomez@awin.com
Stockton Police Dispatch	937-8377	937-8845	
Towed Vehicle Information	937-8354		
Stockton Fire Dispatch	464-4648	937-8013	
San Joaquin Regional Transit District (Bus Dispatch)	948-5566 ext. 652	948-8516	jram@sj-smart.com

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.

SECTION 8 – PROSECUTION AND PROGRESS

8-1.01 SCHEDULE

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

The Contractor's construction schedule must be approved before any construction may commence.

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

8-1.02 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 (*Thin Phan and 209-937-8885*). 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 (*Thin Phan 209-937-8885*) 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.

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 forty (40) 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 **\$4,800.00 (four thousand eight hundred)** 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.

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

Failure to provide and/or non-compliance to or violation of accepted construction scheduling, per Section 5-1.08 and 5- 1.13	\$250.00	per each calendar day
Failure to provide and/or non-compliance with accepted Traffic Control Plans per Section 5-1.08	\$250.00	per each calendar day
Failure to provide adequate Project Site Maintenance 24/7, per Sections 5-1.08, and 5-1.17	\$250.00	per each calendar day
Failure to provide appropriate driveway access and pedestrian access, per Section 5-1.09, and 5-1.10	\$250.00	per each half-hour delay
Failure to follow proper procedure for storage of equipment and/or materials in public streets, per Section 5-1.27	\$250.00	per each calendar day/incident
Failure to provide adequate advance notices to RTD, Fire Com, Police, Schools for sidewalks and lane closures	\$250.00	per each day/incident

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

8-1.06 CITY OF STOCKTON HOLIDAY SCHEDULE FOR 2023

- Monday, January 16, 2023.....Martin Luther King, Jr.'s Birthday
- Monday, February 13, 2023.....Lincoln's Birthday Observance
- Monday, February 20, 2023.....Washington's Birthday
- Monday, May 29, 2023.....Memorial Day
- Tuesday, July 04, 2023.....Independence Day
- Monday, September 04, 2023Labor Day
- Monday, October 09, 2023.....Indigenous People Day
- Friday, November 10, 2023Veteran's Day
- Thursday and Friday, November 23 and 24, 2023.....Thanksgiving Holidays
- Monday, December 25, 2023.....Christmas Day
- Monday, January 01, 2024.....New Year's Day

Similar holidays are scheduled in year 2024.

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. Mobilization: paid by lump sum, shall include but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site.
2. Traffic Control: paid by lump sum, shall include all preparatory work and operations, including, but not limited to, designing, furnishing, installing and maintaining traffic control and pedestrian access. Also, includes materials (including signs, cones, flashing arrows, and barricades and all other items shown on the traffic handling plans), tools, equipment, and incidentals (including overhead lighting, cellular phones and radios), and all incidentals for doing all work involved in traffic control, complete in place as specified in these Special Provisions and as directed by the Engineer.
3. Water Pollution Control: paid by lump sum, shall include preparing the WPCP, implementation of erosion control BMPs identified in WPCP, providing all labor, materials, tools equipment, and incidentals as described in Section 13 of the Caltrans Standard Specifications and these Special Provisions.

4. Adjust Utility (Bid Item Nos. 4-5): paid on a per each basis as determined on the actual count of work completed, shall include, but not limited to: surface and site preparation, locating utilities, coordinating and obtaining approval from utility owners, coordinating and contacting underground service USA (811), excavating and backfilling, removal and disposal of concrete, asphalt concrete, and/or base materials, protecting existing utilizes, provide adjustment rings, adjust manhole and cleanout frames and covers, water valve boxes, complete in place, as indicated on the plans and these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.
5. Adjust Centerline Survey Monuments: paid on a per each basis as determined on the actual count of work completed, shall include, but not limited to: coordinate with surveyor, protect existing monument, adjust monument box and all related work, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.
6. Install Residential Driveway Per Stockton DWG R-58: paid on a per each basis as determined on actual count of work completed, shall include, but not limited to: saw cutting, removal and disposal of existing asphalt, concrete, and debris, cutting and removal of tree roots under the existing driveway; excavating existing base to install 6" thick of concrete driveway and 4" thick of compacted aggregate base; installation of dowels; saw cutting of existing asphalt pavement and dirt to fit wood forms; and repair of damaged landscape and irrigation sprinklers due to the construction work, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.
7. Install Curb Ramp (Bid Item Nos. 8-11): paid on a per each basis as determined on actual count of work completed, shall include, but not limited to: saw cutting, removal and disposal of existing concrete, and debris; excavating existing base to install concrete curb-ramp and compacted aggregate base; adjusting existing catch basin and pull box; installation of dowels; saw cutting and removal of existing asphalt pavement (up to 5' wide) and dirt to fit wood forms; repair of damaged landscape and sprinkler due to the construction work; and, placement of truncated domes, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.
8. Detectable Warning Surface: paid on per each basis as determined on actual count of work completed, shall include, but not limited to: furnishing and installing the detectable warning surface, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.
9. Install Traffic Loops: paid on per each basis as determined on actual count of work completed, shall include, but not limited to: saw cutting new loops wire, connect to existing detector

lead-in cable (DLC), sealant, testing, activating, and making all necessary connections for a complete system, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

10. Install Striping (Bid Item Nos. 14-21): Measurement and payment for the various striping item shall be as indicated below. Striping shall include installing thermoplastic traffic stripes, pavement markings, and markers as specified in the **CA MUTCD**, the plans and these Special Provisions.
 - Striping, consisting of new Thermoplastic stripes with or without reflectors as necessary shall be measured and paid for on a linear foot basis.
 - Striping, consisting of applying Pavement Legends shall be measured and paid on a square foot basis.
 - Striping, consisting of applying pavement bump legends shall be measured and paid on each basis.

11. Cold Planing – (3.0-Inch): paid per the square yard as determined on the actual count of work completed, shall include, but not limited to: protecting existing surface facilities, tree brach trimming and tree root pruning, sawcutting, grinding, cold planning, excavating, , removing and disposing of asphalt concrete and/or sub-grade material, and disposal of materials with non-recyclable fabric if found, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

12. Hot Mix Asphalt (Type A) – Asphalt Material Provided by City’s Asphalt Contract: paid per a ton as determined on the actual count of work completed, shall include, but not limited to: surface and site preparation, tack coat at rates approved by the Engineer, transporting asphalt material from plant to project site, coordinating with City’s asphalt contract supplier, placing, spreading and compacting HMA, compact aggregate base, protecting existing surface facilities, repair of poor workmanship or damage, sweeping, and clean up, complete in place, as indicated on these special provision, specified in the Standard Plans and Specifications, and as directed by the Engineer, and no additional compensation will be allowed.

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 therewith, but reserves the right to increase or decrease the amount of any class or portion of the work without increase or decrease in the unit price bid or to omit portions of the work that may be deemed necessary or expedient by the Engineer.

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	Mobilization	LS	1
2	Traffic Control	LS	1
3	Water Pollution Control	LS	1
4	Adjust Maintenance Hole	EA	30
5	Adjust Water Valve Cover	EA	5
6	Adjust Centerline Survey Monument Cover	EA	6
7	Install Residential Driveway Per Stockton DWG R-58	EA	1
8	Install Curb Ramp Per Stockton DWG R-65	EA	21

9	Install Curb Ramp Per Stockton DWG R-66	EA	1
10	Install Curb Ramp Per Modified A	EA	4
11	Install Curb Ramp Per Modified C	EA	1
12	Install Truncated Dome	EA	3
13	Install Traffic Loops	EA	12
14	Install Detail 2 Striping	LF	1700
15	Install Detail 9 Striping	LF	500
16	Install Detail 22 Striping	LF	500
17	Install Detail 27M Striping	LF	700
18	Install Detail 29 Striping	LF	300
19	Install Detail 32 Striping	LF	200
20	Install Detail 38A Striping	LF	400
21	Install White Thermoplastic (Arrows, Crosswalks, and All Pavement Legends)	SF	1700
22	Cold Planing – (3.0-Inch)	SY	24500
23	Hot Mix Asphalt (Type A) – Asphalt Material Provided by City’s Asphalt Contract	TON	4,200

Each bidder shall bid each item on the Bid Schedule. Failure to bid an item shall be just cause for considering the bid as non-responsive. 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.

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.

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 videos 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.

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 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 8:30 a.m. and 4:30 p.m. Any extended working hours require the approval of the Engineer. The Engineer may restrict or alter the hours of work on a street due to high traffic or other considerations.

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, maybe 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 TRAFFIC CONTROL SYSTEM FOR LANE AND ROAD CLOSURE

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.

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

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

In conformance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.07, "Delays," of the Caltrans Specifications.

14-1.02 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.

DIVISION III – EARTHWORK AND LANDSCAPE

SECTION 15 – EARTHWORK

15-1.01 ROADWAY EXCAVATION

All Portland cement concrete flatwork shall be saw cut a minimum of 3½ inches deep prior to removal. All monolithic Portland Cement Concrete shall be saw cut a minimum of 8 inches deep prior to removal. 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.

15-1.02 RELATIVE COMPACTION

Relative compaction of not less than 95% shall be obtained for a minimum depth of 0.5 foot below the grading plane for areas of concrete curb-ramp. Aggregate base shall be placed on top of the grading plane and compacted to a minimum of 95% of the maximum density a depth of 4" under all new concrete curb-ramps.

Existing asphalt concrete sections to be removed shall be neatly saw cut two and one-half inches (2½") deep and excavated to a depth of eight (8) inches (thicker where required). The vertical edges of the pavement shall be neatly trimmed. All debris shall be removed. The top six inches of the subgrade shall be compacted to 95% of the maximum density at near optimum moisture content.

SECTION 16 – EROSION CONTROL AND HIGHWAY PLANTING

16-1.01 LANDSCAPE REPAIR

The cost for landscape repair shall be included in various bid items. The nature of the work is such that damage to adjacent property, irrigation system, fence, landscaping, etc. is expected. The contractor shall be fully responsible for repair of, and temporary maintenance of property owners' facilities. No additional compensation shall be made irrespective of different site conditions. The contractors are required to survey the identified sites on their own before submitting the bids and shall include all work in the unit bid price of related items.

16-1.02 EXISTING IMPROVEMENTS

The Contractor shall protect the existing adjacent improvements, including utilities.

16-1.03 SPRINKLER SYSTEMS, SERVICE WATER LINE AND FENCES

Existing sprinkler systems, service water lines and fences disturbed by the Contractors activity shall be repaired to the satisfaction of the City. In California Water Company Service areas, the utility will only provide markings up to the water meter. The Contractor shall proceed carefully digging by hand after this demarcation point, since the water pipe may be located right underneath the curb-ramp. Any damage to the water line must be repaired immediately by the contractor after notification to the residents. All repairs to sprinkler systems and service water lines shall be made with new materials. The temporary fences shall be maintained by the contractor during the project.

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.

16-1.04 LAWN TURF

If required to match new curb-ramp grade, existing lawns shall be: (1) raised by lifting existing turf, filling with tamped imported Clements loam and replacing and rolling the turf; (2) lowered by lifting existing turf, removing sufficient soil to lower properly, replacing and rolling the turf; and (3) repaired as directed by the Project Inspector.

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

16-1.05 REPAIR OF TURFED AREAS

The Contractor shall fill all created depressions in the landscape strip with Clements loam or equal which shall be free of rocks, clay balls, undecomposed vegetable matter, debris, and noxious weed seeds. Loam backfill shall be compacted to match the surrounding material. The Contractor has the option of furnishing and installing turf equal to that of the existing lawn or reseeding with a good quality lawn seed, raked in with peat moss, and maintained to the satisfaction of the City until the lawn has been established.

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

DIVISION VI – TECHNICAL SPECIFICATION

SECTION 19 – CURB-RAMP

19-1.01 GENERAL

Use City of Stockton Standard Specifications and Plans, and Drawings Nos. R-50 through R-67, “Wheelchair Ramp Modified A” and “Wheelchair Ramp Modified C” with the following exception: Sand is to be replaced with Class 2 – ¾” aggregate base or approved equal.

Flow line for the new curb and gutter shall be established by the Contractor so that the water runoff does not puddle and can flow to the nearest catch basin.

19-1.02 CONSTRUCTION

All concrete shall conform to minor concrete of Standard Specification section 73. For curb-ramps, the concrete shall contain two (2) pints of liquid dispersed lamp black per cubic yard except when adjacent concrete is of a different color or texture. In that case, it shall be matched in color and quality at no additional cost to the City. Score marks shall match those of existing adjacent walkways where applicable. Concrete shall be saw cut at score marks prior to removal. The color, quality and texture of the new curb-ramp shall match the existing adjacent concrete. The contractor is required to replace any expansion joints removed during curb-ramp installation.

Contractor shall accurately tie out and leave adequate marks in the field for his/her concrete crew to accurately stamp utility curb markings (e.g. W for water, S for sewer in concrete). The contractor shall accurately tie out property crosses per Section 5-1.09 of these Special Provisions (done by or under supervision of a Licensed Land Surveyor) and the contractor shall replace these marks once work is completed. New concrete curb that is adjacent to catch basin shall be stamped with "NO DUMPING DRAINS TO DELTA" message with fish symbol. Painted address on curb that was removed during the repair shall be replaced by the Contractor at no additional cost.

Curb-ramps shall be constructed as per direction by the Engineer and as specified in the Caltrans Standard Specifications and Plans, and City of Stockton Standard Specifications and Plans. Installation of COS Standard Details R-64, R-65, R-66 and 'Wheelchair Ramp Modified A' and 'Wheelchair Ramp Modified C'. Curb-ramps shall include saw cutting, removal and replacement of the asphalt-concrete, curb, gutter, and sidewalk from Beginning Curb Return (BCR) to End Curb Return (ECR). Additional sidewalk may need to be removed beyond BCR/ECR to establish proper compliance with ADA standards and will be paid per square foot in bid item Additional Sidewalk Removal and Replacement.

Installation of 'Wheelchair Ramp Modified A' curb-ramps shall include saw cutting, removal and replacement of the asphalt-concrete, curb, gutter, and sidewalk from Beginning Curb Return (BCR) to End Curb Return (ECR) and any additional sidewalk, up to 8' beyond the BCR and ECR, or from expansion joint to expansion joint, whichever is greater, to establish proper compliance with ADA standards.

No extra payment shall be made within the BCR/ECR limit. If the existing situation warrants the installation of dual ramps type within the BCR/ECR limit, it shall be considered as one curb-ramp and paid as one unit of bid item. The limit may be extended up to the nearest score mark as per the Engineer's direction. The contractor is responsible for establishing the limits of the curb-ramp, no extra payment will be made for additional concrete removed if proper limits are not established.

The demolition of existing corner may require the removal of asphalt-concrete pavement up to five (5) feet from the lip of the gutter. No extra payment shall be made for this extra asphalt-concrete removal and replacement, or any tasks associated with this operation.

If the existing condition requires, catch basins shall be reset at no additional cost. Field directive of the Engineer shall supersede all specifications and plans. Contractor shall be responsible for installing curb-ramps such that the runoff does not accumulate at the flow line.

19-1.03 MATERIAL

Curb-ramps shall have a truncated dome panel(s) for a total width of four feet and length of three feet (4'x3'). The minimum size of each panel is 2'x3'. Up to two panels can be put together for a total width of four feet and length of three feet (4'x3') dimension. The following list of panels are pre-qualified and approved by the City for this project:

1. Vitrified polymer composite, embedded type, manufactured by Armor Tile Tactile Systems.
2. Replaceable composite (wet-set) tiles, manufactured by ADA Solutions, Inc.
3. Stainless steel cast-in-place manufactured by Advantage Tactile Systems.
4. Concrete base polymer manufactured by Tekway Dome Tiles.

If the contractor wants to use other products, he/she shall submit a request of an "approved equal" product at least fifteen (15) days before commencement of the project. Proper documentation and samples must be submitted with the request. A sample installation may be required at no cost to the City. All truncated dome panels shall be cast-in-place. The decision of the Engineer to approve or disapprove the product will be final.

The ramps shall be constructed in accordance with the City of Stockton Standard Details and Specifications, Caltrans Standard Plans and Specifications RSP A88A, RSP A88B, and the Engineer's direction. The color of the detectable warning surface is preferred to be yellow conforming to Federal Standard 595B, Color number 33538, or similar. Other colors may be accepted, only if approved by the engineer.

The manufacturer shall provide a five-year material and labor warranty for prefabricated detectable warning surfaces guaranteeing removal and replacement in full, when there is a defect in the dome shape, color, fastness, sound-on-cane acoustic quality, resilience, or attachment. The warranty shall also include damage due to cracking, chipping and/or imperfect installation including, but not limited to, air pockets under the tiles. The warranty period shall begin on the date of acceptance of the project.

19-1.04 PAYMENT

The contract price paid per each curb-ramp shall include full compensation for saw cutting, removal and replacement of existing PCC and AC curb, gutter, sidewalk, pavement, curb-ramp; furnishing all labor, materials, tools, equipment and incidentals; and for doing all the work

involved in placing of truncated dome and concrete, finishing, brooming, curing, and protecting it for at least seven (7) calendar days after placement, as shown on the plans, specified in Standard Specifications and these Special Provisions, and as directed by the Engineer.

SECTION 39 – HOT MIX ASPHALT

39-1.01 GENERAL

This section includes general specifications for producing and placing hot mix asphalt.

Work performed on HMA must comply with section 39, “Asphalt Concrete”, of the State Standard Specifications.

Comply with Section 39, “Hot Mix Asphalt” of the City Standard Specifications.

Quality Control

The Contractor is responsible for Quality Control. Quality Control activities are required in various sections of Section 139.

Quality Control Plan

At least 5 business days prior to the pre-paving meeting, submit a QC plan for HMA. The QC plan must describe the organization and procedures for:

1. Controlling HMA quality characteristics
2. Taking samples, including sampling locations
3. Establishing, implementing, and maintaining QC
4. Determining when corrective actions are needed
5. Implementing corrective actions
6. Using methods and materials for backfilling core locations

The QC plan must address the elements affecting HMA quality, including:

1. Aggregates
2. Asphalt binder
3. Additives
4. Production
5. Paving

Allow 5 business days for review of the QC plan.

If change QC procedures, personnel, or sample testing locations, submit a QC plan supplement before implementing the proposed change. Allow 3 business days for review of the QC plan supplement.

Dispute Resolution

Contractor and the Engineer must work together to avoid potential conflicts and to resolve disputes regarding test result discrepancies. Both Contractor and the Engineer may request

witness testing and sharing of test data worksheets. Notify the Engineer within 3 business days of receiving a test result if dispute the test result.

An independent third party performs referee testing. The independent third party must have no prior direct involvement with this Contract. By mutual agreement, the independent third party is chosen from among laboratories not currently employed by the Contractor or HMA producer.

The Agency is responsible for securing and maintaining split samples. If the Agency's portion of the split acceptance samples are not available, the independent third-party samples and uses any available material agreed on by the Contractor and the Engineer as representing the disputed HMA for evaluation. When addressing disputes related to density, use cores or density gauges correlated to cores from the work.

The results of the tests performed by the independent third party shall prevail. If the independent third party determines the Engineer's test results are valid, the Engineer deducts the independent third party's testing costs from payments. If the independent third party determines the test results are valid, the Engineer pays the independent third party's testing costs.

39-1.02 MATERIALS

Type A HMA

The City has an asphalt supply contract with Granite Construction. The awarded contractor shall schedule with Granite Construction to pick up the hot mix asphalt.

Tack Coat

Tack coat shall be SS-1h or CSS-1h, and comply with Section 94, "Asphaltic Emulsions" of the State Standard Specifications.

Reclaimed Asphalt Pavement (RAP)

Substitute RAP for part of the virgin aggregate in a quantity up to 15 percent of the aggregate blend.

39-1.03 CONSTRUCTION

General

If a WMA technology is used, a technical representative for the WMA technology must attend the preconstruction meeting.

Do not place HMA on wet pavement or frozen surface.

HMA must be free of:

1. Segregation
2. Coarse or fine aggregate pockets

3. Hardened lumps
4. Marks
5. Tearing
6. Irregular texture

If widening existing pavement, construct new pavement structure to match the elevation of the existing pavement's edge before placing HMA over the existing pavement.

Until the adjoining through lane's top layer has been paved, do not pave the top layer of:

1. Shoulders
2. Tapers
3. Transitions
4. Road connections
5. Driveways
6. Curve widenings
7. Chain control lanes
8. Turnouts
9. Turn pockets

If the number of lanes changes, pave each through lane's top layer before paving a tapering lane's top layer. Simultaneous to paving a through lane's top layer, pave an adjoining area's top layer, including shoulders. Do not operate spreading equipment on any area's top layer until completing final compaction.

If shoulders or median borders are shown, pave shoulders and median borders adjacent to the lane before opening a lane to traffic.

If shoulder conform tapers are shown, place conform tapers concurrently with the adjacent lane's paving.

If a driveway or a road connection is shown, place additional HMA along the pavement's edge to conform to road connections and driveways. Hand rake, if necessary, and compact the additional HMA to form a smooth conform taper.

Spreading Equipment

Paving equipment for spreading must be:

1. Self-propelled
2. Mechanical
3. Equipped with a screed or strike-off assembly that can distribute HMA the full width of a traffic lane
4. Equipped with a full-width compacting device
5. Equipped with automatic screed controls and sensing devices that control the thickness, longitudinal grade, and transverse screed slope

Install and maintain grade and slope references.

The screed must be heated and produce a uniform HMA surface texture without tearing, shoving, or gouging.

The paver must not leave marks such as ridges and indentations unless eliminate them by rolling.

Rollers must be equipped with a system that prevents HMA from sticking to the wheels. Use a parting agent that does not damage the HMA or impede the bonding of layers.

Material Transfer Vehicle

If a material transfer vehicle is specified, the material transfer vehicle must have sufficient capacity to prevent stopping the paver and must be capable of:

6. Either receiving HMA directly from trucks or using a windrow pickup head to load it from a windrow deposited on the roadway surface
7. Remixing the HMA with augers before transferring into the paver's receiving hopper or feed system
8. Transferring HMA directly into the paver's receiving hopper or feed system

Surface Preparation

Prepare subgrade to receive HMA under the sections for the material involved. Subgrade must be free of loose and extraneous material.

Before placing HMA, remove loose paving particles, dirt, and other extraneous material by any means.

The full-width of a surface to which tack coat is to be applied shall be cleaned with a self-propelled, truck-mounted sweeper equipped with both power brooms and a vacuum system to remove loose dirt, sand, dust and other objectionable material. The surface to which tack coat is to be applied shall be dry prior to application.

Tack Coat

Prior to applying tack coat, submit calculations for the minimum spray rate required to achieve the minimum residual rate.

Apply a tack coat:

1. To existing pavement including planed surfaces
2. Between HMA layers
3. To vertical surfaces of:
 - 3.1. Curbs
 - 3.2. Gutters
 - 3.3. Construction joints

The surfaces of structures and trees adjacent to the areas being treated shall be protected to prevent their being splashed or damaged.

Equipment for the application of tack coat must comply with section 37-1.03B of the Caltrans Standard Specifications.

For gore points and other areas not accessible to a truck distributor bar apply by hand spraying.

Close areas receiving tack coat to traffic. Do not allow the tracking of tack coat onto pavement surfaces beyond the job site.

If use an asphalt binder for tack coat, the asphalt binder temperature must be from 285 to 350 degrees F when applied.

A certificate of compliance for each truckload of emulsion or asphalt binder shall be provided to the Engineer before the application of tack coat starts. The Engineer may obtain and retain samples for testing.

Immediately after cleaning the surface, except if water was used, apply a tack coat in one application at the minimum residual rate shown in the table. If water was used, do not apply a tack coat until immediately after the surface is dry. The distributor truck spray bar shall be pressurized during application and discharge tack coat material in a fan shape (spray cone) from each nozzle. The spray bar shall be set at a height above the existing pavement which results in each interior spray cone overlapping a minimum of twice before coming into contact with the underlying pavement. Streaking or streaked applications will not be accepted.

Tack Coat Application Rates for HMA

HMA over:	Minimum residual rates ¹ (gallons/square yard)		
	CSS-1/CSS-1h, SS-1/SS-1h and QS-1h/CQS-1h asphaltic emulsion	CRS-1/CRS-2, RS-1/RS-2 and QS-1/CQS-1 asphaltic emulsion	Asphalt binder and PMRS-2/PMCRS-2 and PMRS-2h/PMCRS-2h asphaltic emulsion
New HMA (between layers)	0.02	0.03	0.02
Concrete pavement and existing asphalt concrete surfacing	0.03	0.04	0.03
Cold Milled/Micro-Milled/Cold Planed Pavement	0.05	0.06	0.04

¹The residual application rate will be verified in accordance with ASTM D2995.

Following the application of tack coat, the surface shall be allowed to cure without being disturbed for period of time necessary to permit setting of the tack coat. Tack coat shall be applied only as far in advance of the placing of the overlying layer as required for that day's operation. Treated surface shall be protected from damage until the succeeding course of pavement is placed.

Apply a tack coat to vertical surfaces with a residual rate that will thoroughly coat the vertical face without running off.

Notify the Engineer if dilute asphaltic emulsion with water. The weight ratio of added water to asphaltic emulsion must not exceed 1 to 1.

Measure added water either by weight or volume under section 9-1.02 of the Caltrans Standard Specifications or use water meters from water agencies. If measure water by volume, apply a conversion factor to determine the correct weight.

With each dilution, submit:

1. Weight ratio of water to bituminous material in the original asphaltic emulsion
2. Weight of asphaltic emulsion before diluting
3. Weight of added water
4. Final dilution weight ratio of water to asphaltic emulsion

If authorized, change tack coat rates.

Immediately in advance of placing HMA, apply additional tack coat to damaged areas or where loose or extraneous material is removed.

Placement

General

The Engineer will meet daily with the Contractor on days when paving occurs to ensure the Contractor's operations are continuous and non-stop.

Deliver HMA to the site in a thoroughly mixed condition and spread by a self-propelled asphalt paving machine.

HMA shall not be placed when the air temperature is below 50°F unless using an approved WMA technology.

HMA with WMA water injection technology shall be spread at a mix temperature of not less than 260°F, or not less than 250°F if a WMA additive technology is used.

No placement will be allowed when the roadway is moist, damp or when it is raining. For the purpose of this provision, "raining" means any weather condition that causes the roadway to become moist or damp. In the case of sudden precipitation, all paving work must stop immediately, all HMA on site not yet placed and all HMA in transit from the plant will be rejected and no payment will be allowed.

Deposit HMA in a windrow and load it in the paver if:

1. Paver is equipped with a hopper that automatically feeds the screed
2. Loading equipment can pick up the windrowed material and deposit it in the paver hopper without damaging base material
3. Activities for depositing, pickup, loading, and paving are continuous

Do not use petroleum products such as kerosene or diesel fuel to release HMA from trucks, spreaders, or compactors.

Where the pavement thickness shown is 0.30 foot or greater, place HMA in multiple lifts not less than 0.15 foot each. If placing HMA in multiple lifts:

1. Table in Section 139.3.1.3 does not apply
2. Aggregate gradation must comply with the requirements shown in the following table:

Aggregate Gradation Requirements

HMA lift thickness	Gradation
0.15 to less than 0.20 foot	1/2 inch
0.20 foot to less than 0.25 foot	3/4 inch
0.25 foot or greater	3/4 inch

3. Apply a tack coat before placing a subsequent lift
4. The Engineer evaluates each HMA lift individually for compliance

If the ambient air temperature is below 60 degrees F, cover the loads in trucks with tarpaulins. If the time for HMA discharge to truck at the HMA plant until transfer to paver's hopper is 90 minutes or greater and if the ambient air temperature is below 70 degrees F, cover the loads in trucks with tarpaulins, unless the time from discharging to the truck until transfer to the paver's hopper or the pavement surface is less than 30 minutes. The tarpaulins must completely cover the exposed load until transfer the mixture to the paver's hopper or the pavement surface.

Spread HMA with WMA at the ambient air and surface temperatures shown in the following table:

Minimum Ambient Air and Surface Temperatures

Lift thickness (feet)	Ambient air (°F)		Surface (°F)	
	Unmodified asphalt binder	Modified asphalt binder	Unmodified asphalt binder	Modified asphalt binder
<i>HMA produced with WMA water injection technology</i>				
<0.15	55	50	60	55
≥0.15	45	45	50	50
<i>HMA produced with WMA additive technology</i>				
<0.15	45	45	50	45
≥0.15	40	40	40	40

139-6.5.2 Longitudinal Joints

Longitudinal joints in the top layer must match lane lines. Alternate the longitudinal joint offsets in the lower layers at least 0.5 foot from each side of the lane line. Other longitudinal joint placement patterns are allowed if authorized.

A vertical longitudinal joint of more than 0.15 foot is not allowed at any time between adjacent lanes open to traffic.

For an HMA thickness of 0.15 foot or less, the distance between the ends of the adjacent surfaced lanes at the end of each day's work must not be greater than can be completed in the following day of normal paving.

For an HMA thickness greater than 0.15 foot, must place HMA on adjacent traveled way lanes or shoulder such that at the end of each work shift the distance between the ends of HMA

layers on adjacent lanes is from 5 to 10 feet. Place additional HMA along the transverse edge at each lane's end and along the exposed longitudinal edges between adjacent lanes. Hand rake and compact the additional HMA to form temporary conforms. Place kraft paper or other authorized release agent under the conform tapers to facilitate the taper removal when paving activities resume.

If placing HMA against the edge of existing pavement, saw cut or grind the pavement straight and vertical along the joint and remove extraneous material.

139-6.6 Compaction

Start rolling at the lower edge and progress toward the highest part except when compacting layers which exceed 4 inches in compacted thickness. For layers which exceed 4 inches in compacted thickness, start rolling in the middle of the mat, and advance gradually to both edges. Roll supported edges (edges along concrete curbs and gutters, or headers) before unsupported edges. If approved, delay rolling of an unsupported edge if the required density is achieved on the remainder of the mat after the completion of finish rolling.

Complete finish rolling activities before the pavement surface temperature is:

1. Below 150 degrees F for HMA with unmodified binder
2. Below 140 degrees F for HMA with modified binder

Rolling must leave the completed surface compacted and smooth without tearing, cracking, or shoving.

If a vibratory roller is used as a finish roller, turn the vibrator off.

HMA, after the completion of rolling, shall be compacted to not less than 92 percent and not more than 97 percent of the maximum theoretical density (MTD) as determined in accordance with AASHTO T 209.

Do not open new HMA pavement to traffic until its mid depth temperature is below 160 degrees F.

If the surface to be paved is both in sunlight and shade, pavement surface temperatures are taken in the shade.

Smoothness

The HMA pavement top layer must not vary from the lower edge of a 12-foot-long straightedge:

1. More than 0.01 foot when the straight edge is laid parallel with the centerline
2. More than 0.02 foot when the straightedge is laid perpendicular to the centerline and extends from edge to edge of a traffic lane
3. More than 0.02 foot when the straightedge is laid within 24 feet of a pavement

conform Quality Control

HMA Density

The Contractor shall demonstrate that their equipment and operation can achieve the required density on a test strip not less than 200 feet long and 12 feet wide in accordance with California Test 375. The Contractor is responsible for the quality control process necessary to achieve the required density.

The test strip construction may be on the same day as production testing or the first day of paving. If on the first day of paving, the Engineer will issue a notice to proceed for paving after the completion of the test strip. Contractors are fully responsible for achieving the required in-place density both prior to, and after, determination of the theoretical maximum density.

In-Place Density

The Engineer determines the percent of theoretical maximum density by determining the in-place density by nuclear gauge and dividing by the theoretical maximum density.

The Engineer will determine the field density by a nuclear gauge calibrated from cores taken from the test strip in accordance with California Test 375. Nuclear gauge asphalt testing devices will be re-correlated whenever there is a change in lift thickness of 1/2 inch or greater, underlying material, materials source, or mix design.

39-1.04 PAYMENT

Included in Section 9-1.02, "Payments", of these special provisions.

Hot Mix Asphalt (HMA) shall conform to Section 39 of the Caltrans Standard Specifications except that the aggregate shall be Type A with 1/2" nominal maximum aggregate size (NMAS) and grade PG 64-10. All vertical edges shall be coated with RS-1 or SS-1h at a rate of 0.01 to 0.03 gallons per square yard of residual asphalt. HMA tags for the material used in the project shall be submitted to the Engineer or his or her designee.

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.

SECTION 84 – PAVEMENT STRIPING

84-1.01 TEMPORARY PAVEMENT STRIPING AND MARKING

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

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

84-1.02 THERMOPLASTIC STRIPING AND MARKINGS

The work herein provided for consists in general of installing thermoplastic striping and all associated work. The workflow is anticipated as follows:

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

Contractor’s responsibility

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

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

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

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

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

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

Traffic stripes and pavement marking shall conform to the dimensions and details shown on California MUTCD. Any discrepancies on measurement of completed stripes to their respective California MUTCD details will be a pay deduct of their respective line item unit price. If the discrepancies are substantial, the traffic stripes must be removed and replaced.

The completed traffic stripes must have clean and well-defined edges without running or deformation, must be uniform, must be straight on tangent alignment and must be a true arc on curved alignment. The completed pavement markings must have clean and well-defined edges without running or deformation and must conform to the dimensions shown on the MUTCD standard. Minor variation maybe accepted at the Engineer's discretion.

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

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

Material

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

Primer

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

Striping

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

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

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

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

84-1.04 PAVEMENT STRIPING AND MARKINGS

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

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

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

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

Minimum Marking*	Minimum Application
Thickness (inches)	Rate (lb/ft)
0.098	0.34 lb/ft

*Minimum thickness for cross walk markings is 0.12 inches

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

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

Thermoplastic Traffic Stripe (Sprayable)

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

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

Retroreflectivity of the sprayable traffic stripes shall conform to the requirements in ASTM Designation: D 6359-99. White sprayable thermoplastic traffic stripes shall have a minimum initial retroreflectivity of $250 \text{ mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$. Yellow sprayable thermoplastic traffic stripes shall have a minimum initial retroreflectivity of $150 \text{ mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$.

At the option of the Contractor, permanent traffic striping and pavement marking tape conforming to the provisions in "Prequalified and Tested Signing and Delineation Materials" of these special provisions may be placed instead of the sprayable thermoplastic traffic stripes. Permanent tape, if used, shall be installed in conformance with the manufacturer's specifications.

Where striping joins existing striping, as shown on the plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

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

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

84-1.05 PAVEMENT MARKERS

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

The Contractor shall furnish the Engineer certificates of compliance.

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

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

Specification	ASTM Designation	Requirement
Penetration, mm, 100 g, 5 seconds, 25°C	D 5	3.0 Maximum
Softening Point, °C	D 36	93 Minimum
Brookfield Thermosel Viscosity, Pa s, No. 27 Spindle, 20 RPM, 191°C	D 4402	2.5 - 6
Ductility, cm, 5 cm/min, 25°C	D 113	15 Minimum
Ductility, cm, 1 cm/min, 4°C	D 113	5 Minimum
Flexibility	D 3111 ^{1, 2, 3, 4}	No breaks or cracks
Notes:		
Modify ASTM Designation: D 3111, Paragraph 6, to "The test apparatus consists of a mandrel one inch in diameter by 3 inch to 6 inch in length, supported at each end."		
Modify ASTM Designation: D 3111, Paragraph 7, to "The test specimen dimensions are one inch wide, 6 inch long, and 1/8 inch thick."		
Modify ASTM Designation: D 3111, Paragraph 8, to "Condition the test specimens and apparatus for 4 hours at 19° F before testing."		
Modify ASTM Designation: D 3111, Paragraph 10.5, to "Bend the test specimens 90° over the mandrel at a uniform rate in 10 seconds while maintaining intimate contact with the mandrel."		

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

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

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

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

Payment for pavement markers shall be considered as included in the price paid for the various pavement striping items of work, and no additional compensation will be allowed therefore.

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