



**CITY OF GRASS VALLEY  
ENGINEERING DIVISION**

**NOTICE TO CONTRACTORS,  
SPECIAL PROVISIONS, AND  
CONSTRUCTION CONTRACT**

**FOR**

**2020 ANNUAL STREET REHABILITATION PROJECT  
PROJECT NO. 20-01**

**2020 ANNUAL STREET REHABILITATION PROJECT  
PROJECT NO. 20-01**



A handwritten signature in blue ink, appearing to be "Bjorn P. Jones", written over a horizontal line.

Bjorn P. Jones, PE  
Assistant City Engineer

A handwritten date "6/18/20" in blue ink, written over a horizontal line.

Date

**CITY OF GRASS VALLEY  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION**

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**NOTICE TO CONTRACTORS**

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**Sealed proposals for the work shown on the plans entitled:**

**2020 ANNUAL STREET REHABILITATION PROJECT  
PROJECT NO. 20-01**

Bids will be received at the City of Grass Valley, Engineering Division, 125 East Main Street, Grass Valley, CA 95945 until **3:30 P.M. on July 9, 2020**, at which time they will be publicly opened and read aloud at said address. Any Protest regarding the award of the contract must be submitted pursuant to the instructions stated in the special provisions.

**GENERAL WORK DESCRIPTION:**

The scope of work, in general, includes; installation of concrete sidewalk, curb, gutter, driveway and accessible ramps, drainage improvements, hot mix asphalt paving, traffic signing and pavement marking and striping. Other related items not mentioned above, that are required by the plans, specifications or these Special Provisions shall be performed, placed, constructed, or installed.

Project Location: West Empire Street, Whiting Street, Le Duc Street, Stacey Lane and Mainhart Drive, in Grass Valley, California.

The Engineer's estimate for this project is **\$800,000.00**

The time of completion shall consist of **30 Working Days**

**BID INFORMATION:**

Bids are required for the entire work described herein. The City of Grass Valley reserves the right to postpone the date and time for the opening of proposals at any time prior to the date and time announced in the advertisement in accordance with applicable law.

No pre-bid meeting is scheduled for this project.

The City of Grass Valley reserves the right to reject any and all bids or to waive any minor defects or irregularity in bidding in accordance with applicable law. In accordance with California Public Contract Code Section 20103.8, if the City elects to award a contract for performance of the project, the contract will be awarded in accordance with California Public Contract Code Section 20162 and other applicable law to the responsible bidder submitting a responsive bid with the lowest total bid price for the base bid without consideration of the bid price for any additive or deductive items. All bids will remain valid for 90 days after the bid opening. Except as permitted by law and subject to all applicable remedies, including forfeiture of bidder's security, bidders may not withdraw their bid during the 90 day period after the bid opening.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

Attention is directed to the requirements specified in Section 3-1.06, "Contractor License", of the Standard Specifications. The Contractor shall possess a valid California Class "A" Contractor's License, or a combination of the following classes: C-8 - Concrete Contractor, C12 - Earthwork and Paving

Contractors, C31 - Construction Zone Traffic Control Contractor, C32 - Parking and Highway Improvement Contractor, C34 - Pipeline Contractor, and D-63 Construction Cleanup Contractor, and all other classes required by the categories and types of work included in the contract at the time of the bid award. All licenses shall remain in effect throughout the term of the contract.

Plans, specifications and proposal forms for bidding this project can be obtained directly from the City of Grass Valley, Engineering Division, 125 E. Main Street, Grass Valley, CA 95945, Telephone (530) 274-4373. A non-refundable fee of forty dollars (\$40.00) per bid set will be charged if picked up, or fifty (\$50.00) per bid set if mailed. Alternatively, bidders may download an electronic copy of the bid set free of charge from the City's website at <http://www.cityofgrassvalley.com/departments/engineering/rfpsrfqs-and-current-bids>

The City reserves the right, during the bid process and prior to the deadline for submitting bids, to issue one or more addenda, clarifications, or other communication concerning the bid process, including possible changes as to the time, place, and manner for submitting bids. The City will provide this information to any potential bidder who has obtained a bid package directly from the City. The City will also provide notice of the availability of revisions/addenda to any potential bidder who has obtained a bid package electronically from a contractor bid room or other source, if that bidder has provided a request for revisions, including the bidder's name, company, mailing address, phone number, email or fax number and the project name that the bidder is requesting notifications for. The request for revisions shall be submitted as soon as possible, but no later than five (5) business days prior to the date specified for opening bids in the manner described below:

- Faxes: To the attention of the Project Manager, at (530) 274-4327.
- Emailed: To the attention of the Project Manager at: [catharined@cityofgrassvalley.com](mailto:catharined@cityofgrassvalley.com)
- Mailed: To the attention of the Project Manager, City of Grass Valley, Engineering Division, 125 East Main Street, Grass Valley, CA 95945

Bidders who do not purchase bid documents directly from the City of Grass Valley, but who have requested to receive revisions as described above, shall only receive email and/or fax notices of the availability of revisions/addenda. It shall be the bidder's responsibility to access the actual revisions/addenda as electronic copies from the City's website.

The City will also endeavor to provide such revisions/addenda to any contractor bid room which has requested copies of the bid documents. The City takes no responsibility for notifying a bidder who does not obtain bid documents from the City or does not provide the specified request for revisions to the City. Such bidder may be found non-responsive if that bidder fails to acknowledge, as set forth herein, any addenda or does not take into account any additional information provided by the City.

All questions concerning this project shall be provided in writing as soon as reasonably possible, but no later than five (5) working days before the date specified for opening bids. Questions received less than five (5) working days before the date specified for opening bids may not be answered. All questions must be received by the City, in the manner described below.

- Faxes: To the attention of the Project Manager, at (530) 274-4327.
- Emailed: To the attention of the Project Manager at: [catharined@cityofgrassvalley.com](mailto:catharined@cityofgrassvalley.com)
- Mailed: To the attention of the Project Manager, City of Grass Valley, Engineering Division, 125 East Main Street, Grass Valley, CA 95945

Bidders are responsible to confirm receipt of written questions by the Engineering Division. Additionally, the City will answer a bidder's question only if the bidder provides the City a means for a response, including a telephone number, address, and fax number.

Bid Bonds shall be required for this project. The successful bidder shall be required to furnish a Payment Bond and a Performance Bond and certificates of liability and property damage insurance. The amounts

of liability and property damage insurance will not be less than the amounts shown in the Contract and shall also include the endorsements specified.

Bidders are urged to obtain DBE participation on this project, although there are no specific goals for DBE participation.

The City of Grass Valley hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Pursuant to Section 1773 of the Labor Code, the general prevailing rate of wages for Nevada County have been determined by the Director of the California Department of Industrial Relations (DIR). These wages are set forth in the General Prevailing Wage Rates for this project, may be examined at the office of the Engineering Division, City of Grass Valley and are available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov/DLSR/PWD>. The Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished will apply to work done under this Contract.

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

Dated: June 18, 2020

BJORN P. JONES  
ASSISTANT CITY ENGINEER  
CITY OF GRASS VALLEY  
ENGINEERING DIVISION

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**CONSTRUCTION CONTRACT.....APPENDIX A**

**PROPOSAL AND BIDDER'S CERTIFICATE..... SEPARATE ATTACHMENT**



**CITY OF GRASS VALLEY  
ENGINEERING DIVISION**

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**SPECIAL PROVISIONS**

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**2020 ANNUAL STREET REHABILITATION PROJECT  
PROJECT NO. 20-01**

**INSTRUCTIONS TO BIDDERS**

**1. BIDDER'S REPRESENTATIONS**

Each bidder by submitting a bid represents that:

- 1.1. The bidder has read and understands the bid package and the bid is in accordance with all of the requirements of the bid package and applicable law.
- 1.2. Neither the bidder nor any subcontractor included on the list of proposed subcontractors submitted with the bid are ineligible to perform work on public works projects pursuant to California Labor Code Sections 1777.1 or 1777.7.
- 1.3. The bidder understands that quantities of unit price items may vary from the estimates provided in the Special Provisions, proposal, technical specifications, and construction contract.
- 1.4. Representatives of the bidder have visited the Project site and have familiarized themselves with the conditions under which the Project work is to be performed to ensure that the Project work may be performed for the amount bid.
- 1.5. The bidder has informed the City in writing no later than five (5) working days prior to the time specified for bid opening of any apparent conflicts, errors, or ambiguities contained in the bid package or between the contents of the bid package and the Project site.

**2. PRE-BID COMMUNICATION AND INTERPRETATION OF THE BID PACKAGE**

- 2.1. Any bidder that discovers any apparent conflicts, errors, or ambiguities contained in the bid package or between the contents of the bid package and the Project site, or that has questions or requires clarification concerning the bid package or its intent must inform the City in writing as soon as reasonably possible, but no later than five (5) working days before the date specified in the bid opening. Such notice shall be sent as specified in the Notice to Contractors for questions concerning the bid package. Questions received less than five (5) working days before the time specified for opening bids may not be answered.
- 2.2. Any interpretation, correction or change of the bid package prior to bid opening will be made by addendum signed by the City Engineer and transmitted to all bid package recipients. No other interpretation or information concerning the bid package issued prior to the date specified for opening bids will be binding. All addenda signed by the City Engineer and issued prior to the time and date specified for opening bids will form a part of the contract documents and must be acknowledged on the bid forms. Any changes, exceptions or conditions concerning the Project and/or the bid package submitted by any bidder as part of a bid may render that bid non-responsive.
- 2.3. The City takes no responsibility for notifying a bidder who does not obtain bid documents from the City or does not provide the specified Request for Revisions statement to the City. Such bidder may be found non-responsive if that bidder fails to acknowledge, as set forth herein, any addenda or does not take into account any additional information provided by the City.
- 2.4. No other interpretation or information concerning the bid package issued prior to the date specified for opening bids will be binding. All addenda signed by the City Engineer and issued prior to the time and date specified for opening bids will form a part of the contract documents and must be acknowledged on

the bid forms. Any changes, exceptions or conditions concerning the Project and/or the bid package submitted by any bidder as part of a bid may render that bid non-responsive.

### 3. PRE-BID ACCESS TO THE SITE

- 3.1. Prior to submitting a bid, it will be the sole responsibility of each bidder to conduct any additional examination, investigation, exploration, test, study or other inquiry and to obtain any additional information pertaining to the physical conditions (including surface, subsurface, and underground utilities) at or near the Project site that may affect the cost, progress, or performance of the Project, and that the bidder deems are necessary to prepare its bid for performance of the Project in accordance with the bid package and contract documents. Bidders seeking any such additional examination or other inquiries or information concerning the Project will do so at the bidder's sole expense.
- 3.2. Bidders seeking to conduct any additional examination or other inquiry at the Project site must request site access from the City at least two (2) working days in advance. The location of any excavation, boring or other invasive testing will be subject to approval on behalf of the City and any other agencies with jurisdiction over such testing. Bidders may not conduct tests at the Project site prior to obtaining City approval. The City may require bidders to execute an access agreement or encroachment permit prior to approving testing at the Project site. Once approved testing is complete, bidders shall fill all trenches or holes, restore all pavements to match the existing structural section, and otherwise clean up and restore the test site to its pre-test condition solely at the bidder's expense.
- 3.3. The Bidder's attention is directed to the requirements of Section 2-1.30, "Job Site and Documentation Examination," of the Standard Specifications and these Special Provisions.

### 4. BIDDING PROCEDURE

- 4.1. Bids shall be delivered to the City of Grass Valley, Engineering Division, 125 East Main Street, Grass Valley, CA 95945, no later than the time and date specified in the Notice to Contractors. Bids will be opened and read publicly at that time. Bids that are submitted late according to the time shown on the official bid clock located in City Hall will be returned unopened. Telephones for use by bidders are not available at the City offices.
- 4.2. In accordance with California Public Contract Code Section 20170, bids must be presented under sealed cover. Bids must be submitted using the proposal forms furnished with the bid package. Bids must include all documents provided in the Proposal. Bids must bear the bidder's legal name and be signed by a representative authorized to bind the bidder. Bids shall be typed or written in ink. Corrections may be made if initialed by the bidder. No oral or telegraphic modifications of bids, including facsimile modifications, will be considered. Bids that are incomplete or that are not presented on the proposal forms furnished with the bid package may be deemed non-responsive.
- 4.3. Each bid must give the full business address of the bidder. Bids of partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership, or by an authorized representative, followed by the printed name and title of the person signing. Bids of corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the president, secretary or other person authorized to bind the corporation. The name of each person signing shall also be typed or printed below the signature. Upon request of the City, bidders will furnish satisfactory evidence of the authority of the person signing the bid. Bids of joint ventures must include a certified copy of the legal agreement constituting the joint venture.
- 4.4. No person, firm, corporation, partnership, or legal joint venture may submit more than one bid for the Project. However, a person, firm, corporation, partnership or legal joint venture that has submitted a subcontract proposal to a bidder, or that has quoted prices on materials to a bidder may submit a subcontract proposal, quote prices to other bidders and submit its own bid.
- 4.5. In accordance with California Public Contract Code Section 20171, all bids must include one of the forms of security specified in Caltrans Standard Specifications in an amount of at least ten (10) percent of the total of the bid prices. Bidders that elect to provide bidder's security in the form of a bid bond must execute

a bid bond using the form provided in the bid forms. The bidder's security is tendered as a guarantee that the successful bidder, if awarded the Project contract, will execute and submit to the City all required bonds, certificates of insurance, and completed contract forms and enter into a contract with the City within ten (10) working days of receipt of the Notice of Award. The bidder's security of any successful bidder that fails to do so will be forfeited to the City. All bidders' security not forfeited to the City will be returned once a successful bidder provides all required documents and enters a contract with the City in accordance with all applicable bid package requirements. Forfeiture of the bidder's security to the City will not waive or otherwise limit any other remedy available to the City under applicable law.

- 4.6. In accordance with California Business and Professions Code Section 7028.15, Public Contract Code Section 20103.5, and as specified in the Notice to Contractors, all Project work must be performed by properly licensed contractors and subcontractors with active licenses in good standing as of the date and time specified for bid opening, or, if the Project involves federal funds, no later than the time the Project contract is awarded. Bidders must verify their Contractor's license number and license expiration date on the proposal cover page under penalty of perjury. Bids that do not satisfy applicable licensing requirements will be considered non-responsive and rejected and may subject the bidder to criminal and/or civil penalties. In addition, all licenses shall remain in effect throughout the term of the contract.
- 4.7. Bids may be withdrawn prior to the time set for bid opening by a written request signed by an authorized representative of the bidder filed with the City Engineer. The bid security submitted with bids so withdrawn will be returned to the bidder. Bidders that have withdrawn their bid in accordance with this provision may submit a new bid prior to the time set for bid opening in accordance with all applicable bid package requirements. Bids may not be withdrawn during the ninety-day period after the time set for bid opening except as permitted by law pursuant to California Public Contract Code Section 5100 and following. Any other bid withdrawal will result in forfeiture of the bidder's bid security to the City.
- 4.8. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professional Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment to the parties.

## 5. BID PROTESTS

Any protest of the proposed Project award must be submitted in writing to the City no later than 5:00 PM on the third business day following the date of the bid opening.

- 5.1. The initial protest must contain a complete statement of the basis for the protest.
- 5.2. The protest must state the facts and refer to the specific portion of the document or the specific statute that forms the basis for the protest. The protest must include the name, address, and telephone number of the person representing the protesting party.
- 5.3. The party filing the protest must concurrently transmit a copy of the initial protest to the apparent low bidder.
- 5.4. The party filing the protest must have actually submitted a bid for the Project. A subcontractor of a party filing a bid for the Project may not submit a bid protest. A party may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.
- 5.5. The procedure and time limits set forth in these Instructions to Bidders are mandatory and are the bidders' sole and exclusive remedy in the event of a bid protest. Any bidder's failure to fully comply with these procedures shall constitute a waiver of any right to further pursue a bid protest, including filing of a challenge of the award pursuant to the California Public Contract Code, filing of a claim pursuant to the California Government Code, or filing of any other legal proceedings.

- 5.6. The City shall review all timely protests prior to award of the Project. The City shall not be required to hold an administrative hearing to consider any protests, but may do so at its option. At the time of the City Council's consideration of the Project award, the City Council shall also consider the merits of any timely protests. The City Council may either reject the protest and award to the lowest responsible bidder or accept the protest and award the bid to the next lowest responsible bidder. Nothing in this section shall be construed as a waiver of the City Council's right to reject all bids.

## 6. AWARD

- 6.1. The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution", and Section 4, "Beginning of Work, Time of Completion and Liquidated Damages," of these Special Provisions.
- 6.2. In accordance with applicable law, the City reserves the right to reject any or all bids and to waive any informality in any bid. The City reserves the right to accept any portion of any bid, unless the bid package expressly provides that the award will be made as a whole. If the City elects to award a contract for performance of the Project, the contract will be awarded in accordance with California Public Contract Code Section 20162 and other applicable law to the responsible bidder submitting a responsive bid with the lowest total bid price for the base bid and those additive or deductive alternate items listed in the Proposal. In accordance with the contract documents and other applicable law, the City may add or deduct items of work from the Project after the lowest responsible bidder is determined.
- 6.3. The contract shall be awarded, if an award is made, to the lowest responsible bidder within 90 calendar days from the date bids are publicly opened and declared. If the award is not made within that period, all bids submitted are deemed rejected by the governing body.

A contract shall exist between the Contractor and the City when all of the following steps have been completed.

- (a) Award of the contract by the governing body.
- (b) Execution of a written contract by the Contractor within ten (10) working days of receipt of written notice of award.
- (c) Delivery by the Contractor to the City, the Faithful Performance and Labor and Materials bonds required herein, within ten (10) working days of receipt of written notice of award.
- (d) Delivery by the Contractor to the City, all City-approved Insurance Policies, on the appropriate forms, as required, within ten (10) working days of receipt of written notice of award.

Contractor shall execute a written agreement with the City using the form set forth hereafter.

- 6.4. The successful bidder and any subcontractors and others engaged in performance of the Project shall have valid local business licenses, as applicable, before commencing work on the Project.
- 6.5. Upon verifying that the successful bidder has provided complete, executed copies of all documents specified necessary to execute the contract and an authorized City representative has signed the contract, the Engineering Division will issue a Notice to Proceed in accordance with Section 4, "Beginning of Work, Time of Completion and Liquidated Damages," of these Special Provisions. The number of days within which the Project must be complete begins to run on the project commencement date.

## 7. PRICING

- 7.1. Inconsistency of bid unit items, item prices, and/or totals shall be resolved in accordance with the requirements specified in the Proposal.
- 7.2. Any federal, state, or local tax payable on articles to be furnished for the Project shall be included in the lump sum total bid price and paid by the Contractor under the contract.

## 8. QUANTITIES

- 8.1. Quantities, including but not limited to, material or labor quantities, that are provided in the bid package concerning the Project are estimates only and are provided solely as a general indication of the Project scope. The City does not warrant that such quantity estimates provided in the bid package represent the actual quantities required to perform the Project in accordance with the contract documents. Such quantity estimates do not bind the City and bidders should not rely on them in preparing their bids. Each bidder is solely responsible for determining the quantities on which to base their bids in light of information contained in the bid package, bidder investigation and analysis of the Project and the Project site, and any other analysis or expertise of the bidder concerning the Project.
- 8.2. The City may amend, decrease or increase the Project work in accordance with the bidding package and the contract documents. If the City amends, decreases or increases the Project work prior to award of the Project, each bidder will be solely responsible for determining the revised quantities, if any, on which to base their bid in light of information contained in the bid package and any amendments or addenda to the bid package, bidder investigation and analysis of the Project as amended, decreased or increased, the Project site, and any other analysis or expertise of the bidder concerning the Project.

## 9. SUBSTITUTION OF "OR EQUAL" ITEMS

- 9.1. In accordance with California Public Contract Code Section 3400 concerning the submittal of an "or Equal" product, bidder's attention is directed to the requirements of Section 2-1.02, "Required Listing of Proposed Products "or Equals" with Bid Proposal" of these Special Provisions, and the Proposal.

## 10. SUBCONTRACTING

- 10.1. Bids must be in accordance with the requirements of the Subletting and Subcontracting Fair Practices Act, California Public Contract Code Section 4100 and the following. Bids must include a completed list of proposed subcontractors on the form included in the bid package. In accordance with California Public Contract Code Section 4104, completed lists of proposed subcontractors must include the name, business location, the portion (type or trade), and dollar amount of the Project work to be subcontracted for each subcontractor that will perform a portion of the Project work (including special fabrication and installation of a portion of the work) valued in excess of one half of one percent of the total Project bid price. If the Project work includes construction of streets or highways, the completed list of proposed subcontractors must include the subcontractor name, business location, type of work and dollar amount to be subcontracted for each subcontractor that will perform a portion of the Project work (including special fabrications and installation of a portion of the work) valued in excess of one half of one percent of the total Project bid price, or one thousand dollars (\$1,000), whichever is greater.
- 10.2. In accordance with California Public Contract Code Section 4106, for any portion of the Project work with a value of more than one half of one percent of the total Project bid price for which no subcontractor is listed, or for which more than one subcontractor is listed, bidders certify by submitting their bids that they are qualified to perform that portion of the Project work and that they will perform that portion of the Project work with their own forces. Bidders may not substitute another subcontractor for a subcontractor listed in their bid except as permitted by the City in accordance with Section 4107 and following of the California Public Contract Code.
- 10.3. Bidder's attention is directed to the requirements specified in "Subcontracting," of these Special Provisions and the Proposal.

## 11. ASSIGNMENT

- 11.1. Bidders may not assign, sublet, sell, transfer, or otherwise dispose of their bid or any right, title or interest in their bid, or their obligations under their bid, without the written consent of the City Engineer. Any purported assignment, subletting, sale, transfer or other disposition of a bid or any interest in a bid, or of any obligations under a bid without such written consent will be void and of no effect.
- 11.2. Bidder's attention is directed to the requirements specified in Section 5-1.12, "Assignment," of the Construction Specifications.

## 12. BONDS

- 12.1. The successful bidder shall submit to the City a performance bond within ten (10) working days of receiving written notice of award. The successful bidder shall submit to the City a payment or labor and materials bond within ten (10) working days of receiving written notice of award. City shall retain the Performance Bond for a one-year guarantee period from the date of the City's acceptance of the work. All Project bonds shall be executed using the forms provided in the bid package.
- 12.2. The bonds shall be obtained from a California admitted surety that is licensed by the State of California to act as a surety upon bonds and undertakings and which maintains in this State at least one office for the conduct of its business. The surety shall furnish reports as to its financial condition from time to time upon request by City.
- 12.1. In accordance with California Civil Code Section 9550, labor and materials bond must be in the amount of one hundred percent of the total amount payable by the terms of the Project contract and guarantee payment to persons listed in California Civil Code Section 9100 for work performed and for charges for materials, supplies, and equipment provided under the Project contract (including amounts due under or subject to the Unemployment Insurance Code) in accordance with the requirements of California Civil Code Section 9554.
- 12.2. The performance bond must be in the amount of one hundred percent of the amount payable by the terms of the Project contract to guarantee the faithful performance of the Project work.
- 12.3. Bidder's attention is directed to the requirements specified in Section 3-1.05, "Contract Bonds," and "Warranty," of these Special Provisions, and the Contract.

## 13. LABOR LAWS

- 13.1. Bidders must comply with applicable provisions of the California Labor Code.
- 13.2. In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Project is to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in the California Labor Code shall be paid to all workers engaged in performing the Project.
- 13.3. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for work in the locality in which the Project is to be performed. In accordance with California Labor Code Section 1773, the City has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the Project is to be performed for each craft, classification or type of worker needed to perform the Project. In accordance with California Labor Code Section 1773.2, copies of the prevailing rate of per diem wages for Nevada County are on file at the City offices, 125 E. Main Street, Grass Valley, California 95945. These wage rates are not included in the Special Provisions but will be made available on request.
- 13.4. In accordance with California Labor Code Section 1777.1, contractors and subcontractors that are found guilty of willfully violating Chapter 1 of Part 7 of Division 2 of the Labor Code (except for Section 1777.5), or that are found guilty of such violations with intent to defraud, and entities in which such contractors or subcontractors have any interest, may be ineligible to bid on, be awarded, or perform Project work as a subcontractor.
- 13.5. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

13.6. Bidder's attention is directed to the requirements specified in "Prevailing Wage," "Labor Nondiscrimination," and "Labor Code Requirements," of these Special Provisions, and Section 7-1.02K, "Labor Code", of the Standard Specifications.

## SECTION 1 GENERAL SPECIFICATIONS AND PLANS

### 1-1.01 GENERAL

The work embraced herein shall be done in accordance with the Project Plans, Standard Specifications and Standard Plans dated 2018 of the Department of Transportation, and the City of Grass Valley's Improvement Standards and in accordance with the following Special Provisions.

Amendments to the Department of Transportation's Standard Specifications set forth in these Special Provisions shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.02, "Contract Components" of the Standard Specifications and are included as Attachment A to these Special Provisions. Whenever either the term "Standard Specification is amended" or the term "Standard Specifications are amended" is used in the Special Provisions, the text following said term shall be considered an amendment to the Standard Specifications. In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.

In case of conflict between the City of Grass Valley's Improvement Standards, and these Special Provisions, the Special Provisions shall govern, take precedence over, and be used in lieu of such conflicting portions. The Department of Transportation's Standard Specifications and Standard Plans shall govern over the City of Grass Valley's Improvement Standards.

Units in the United States Standard Measures shall apply to this contract.

### 1-1.02 REVISED STANDARD SPECIFICATIONS AND STANDARD PLANS

All references to the Department of Transportation's Standard Specifications and Standard Plans shall be considered to include any revisions issued by the Office of Construction Contract Standards in effect at the time of printing of these Special Provisions.

Revised Standard Specifications and Standard Plans can be found on the Caltrans website as provided in the following link: <http://www.dot.ca.gov/des/oe/construction-contract-standards.html>.

### 1-1.03 DEFINITIONS AND TERMS

As used herein, unless the context otherwise requires, the following terms have the following meaning:

**City:** City of Grass Valley.

**City Engineer:** The City Engineer of the City of Grass Valley, State of California.

**City Hall:** The City building located at 125 East Main Street, Grass Valley, California, 95945.

**Contract Documents:** All of the written matter describing the contemplated work, including the Plans, Special Provisions, Improvement Standards, Bonds, Agreement, and any approved Change Orders.

**Department:** The Engineering Department of the City of Grass Valley, State of California, except when referring to documents, laws or departments of the State of California. Any reference in question shall be as designated by the Engineer.

**Department of Transportation:** The Engineering Division of the City of Grass Valley, State of California, except when referring to documents, laws or departments of the State of California. Any reference in questions shall be as designated by the Engineer.

**Director of Transportation:** The City Engineer of the City of Grass Valley, State of California.

**District Director of the District:** The City Engineer of the City of Grass Valley, State of California.

**Engineer:** The City Engineer of the City of Grass Valley, State of California, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

**Improvement Standards:** The Design Standards, Construction Standards and Standard Details of the City of Grass Valley Public Works Department, Engineering Division

**Laboratory:** The established laboratory of the Materials and Research Department of the Department of Transportation of the State of California or laboratories authorized by the Engineer to test materials and work



involved in the Contract, except when referring to documents, laws or departments of the State of California. Any reference in question shall be as designated by the Engineer

**Standard Plans:** The 2018 edition of the Standard Plans of the State of California, Department of Transportation including any revisions to the Standard Plans issued by the Office of Construction Contract Standards in effect at the time of printing of these Special Provisions. Any reference therein to the State of California or a State agency, office, or officer shall be interpreted to refer to the City or its corresponding agency, office, or officer acting under this contract.

**Standard Specifications:** The 2018 edition of the Standard Specifications of the State of California, Department of Transportation including any revisions to the Standard Specifications issued by the Office of Construction Contract Standards in effect at the time of printing of these Special Provisions. Any reference therein to the State of California or a State agency, office, or officer shall be interpreted to refer to the City or its corresponding agency, office, or officer acting under this contract.

**State:** The City of Grass Valley, except when referring to documents, laws or departments of the State of California. Any reference in question shall be as designated by the Engineer.

**State Highway Engineer:** The City Engineer of the City of Grass Valley, State of California, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

**Transportation Building, Sacramento:** City Hall of the City of Grass Valley, State of California except when referring to documents, laws or departments of the State of California. Any reference in question shall be as designated by the Engineer.

**Working Day:** Monday through Friday, except holidays, from 7am to 7pm, or as further specified in these Special Provisions.

Contractor's attention is directed to the definitions and terms specified in Section 1, "Purpose and Definitions," of the Design Standards and Section 1, "Purpose and Definitions," of the Construction Standards.

## **SECTION 2 BIDDING**

### **2-1.01 GENERAL**

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 of the proposal form and the submission of the bid.

Each proposal shall include unit costs, and total costs for the base bid.

Bidders are required to specify a physical business street address to receive certified mail in accordance with the Proposal. The City shall be notified in writing a minimum of thirty (30) days in advance of any changes of address.

Section 2-1.06A, "General," of the Standard Specifications is replaced in its entirety with the following:

Improvement Standards may be viewed at the City of Grass Valley's website: [http://www.cityofgrassvalley.com/services/departments/engineering/Standard\\_Specifications\\_and\\_Drawings](http://www.cityofgrassvalley.com/services/departments/engineering/Standard_Specifications_and_Drawings)

The Notice to Contractors, Special Provisions, and Construction Contract, Proposal and Bidder's Certificates and Improvement Plans may be viewed at the City of Grass Valley website, <http://www.cityofgrassvalley.com/services/departments/engineering/rfpsrfgs-and-current-bids>, or at City Hall at 125 East Main Street, Grass Valley, CA 95945. The Proposal form is bound separate from the Contract and the Special Provisions.

In addition to the subcontractors required to be listed in conformance with, "Subcontractor List," of these Special Provision, each proposal shall have listed therein the portion of work that will be done by each subcontractor listed. The listing subcontractor shall also set forth the portion of work that will be done by each subcontractor listed. A sheet for listing the subcontractors is included in the Proposal.

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Labor Code Section 1725.5 . It is not a violation of this section for an unregistered contractor to submit a bid that is

authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

In conformance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the Proposal. Signing the Proposal shall also constitute signature of the Noncollusion 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 49 CFR part 26 in the award and administration of Department of Transportation 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.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on any future public works contracts.

#### **2-1.02 REQUIRED LISTING OF PROPOSED PRODUCTS "OR EQUALS"**

On the sheet provided herein, to be submitted as part of the proposal, the bidder shall list each proposed substitution of an "equal" product. The bidder shall identify the proposed substitution by the section of the specifications that specifies the product, the name of the product proposed to be substituted out, and the name and manufacturer of the product proposed to be substituted. Prior to the award of the Contract and upon the request of the Engineer, the bidder shall submit the written request for substitution within three (3) days. The request shall be accompanied by evidence satisfactory to the Engineer that the materials and products proposed for use are equal to or better than the materials and products specified or detailed on the plans. The burden of proof as to the quality and suitability of substitutions shall be upon the bidder. Failure to submit the information as requested by the Engineer shall be deemed a voluntary withdrawal of the proposed substitution.

No requests for any substitution shall be allowed unless listed on the sheet provided. No requests for substitution shall be allowed after the opening of the bid. Requests for substitution shall be reviewed and considered by the Engineer promptly after the award of the contract to the lowest responsible Bidder. In its sole discretion, the Engineer may request additional information about the proposed substitution.

The decision by the Engineer as to whether a proposed substitution is an "Equal" product shall be made by the Engineer based upon the information submitted and will be final.

The Engineer will be the sole judge as to whether a proposed substitution is an "Equal" product. The Engineer's decision will be made based upon the information submitted and will be final.

A sheet for listing the proposed substitutions of an "Equal" product, as required herein, is included in the Proposal.

#### **2-1.03 SUBCONTRACTOR LIST**

Contractor's attention is directed to the requirements of "Subcontractor List" of the Standard Specifications, the Proposal, and these Special Provisions.

In addition to the Subcontractors required to be listed, each proposal shall have listed herein the **name and address, DIR registration number, and license designation number** of each Subcontractor to whom the bidders proposes to directly subcontract portions of the work. The list of Subcontractors shall also set forth the portion of work that will be done by each Subcontractor listed.

A sheet for listing the subcontractors, as required herein, is included in the Proposal.

#### **2-1.04 BIDDER'S SECURITY**

The form of Bidder's Bond mentioned in "Bidder's Security," of the Standard Specifications will be found following the signature page of the Proposal annexed hereto.

#### **2-1.05 NON-COLLUSION AFFIDAVIT**

In accordance with Public Contract Code 7106, a Non-Collusion Affidavit is included in the proposal.

#### **2-1.06 DISADVANTAGE BUSINESS ENTERPRISES (DBE)**

The City maintains a goal that Disadvantaged Business Enterprises (DBEs), as defined in Part 26, Title 49 CFR, shall be encouraged to participate in the performance of City contracts. The Contractor should ensure that DBEs, as defined in Part 26, Title 49 CFR, have the opportunity to participate in the performance of this contract and shall take all necessary and reasonable steps, as set forth in Part 26, Title 49 CFR, for this assurance. The

Contractor shall not discriminate on the basis of race, color, national origin, or gender in the award and performance of subcontracts. Failure to carry out the requirements of this paragraph shall constitute a breach of contract and may result in termination of this contract or other remedy the City may deem appropriate.

Bidders shall be fully informed respecting the requirements of the Code of Federal Regulations and are urged to obtain DBE participation in this project.

Caltrans has engaged the services of a contractor to provide supportive services to contractors and subcontractors to assist in obtaining DBE participation on federally funded construction projects. Bidders and potential subcontractors should check the Caltrans website at <http://www.dot.ca.gov/hq/bep> to verify the current availability of this service.

### **SECTION 3 CONTRACT AWARD AND EXECUTION**

#### **3-1.01 GENERAL**

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Standard Specifications, "Award," of the Instruction To Bidders of these Special Provisions, and these Special Provisions for the requirements and conditions concerning submittal of DBE information, award, and execution of contract.

Bid protests are to be delivered to the following address: **Engineering Division, 125 East Main Street, Grass Valley, CA 95945.**

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

No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

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 the following address: **Engineering Division, 125 East Main Street, Grass Valley, CA 95945.**

#### **3-1.02 AWARD OF CONTRACT**

The City of Grass Valley reserves the right to reject any and all bids or to waive any minor defects or irregularity in bidding in accordance with applicable law. In accordance with California Public Contract Code Section 20103.8, if the City elects to award a contract for performance of the project, the contract will be awarded in accordance with California Public Contract Code Section 20162 and other applicable law to the responsible bidder submitting a responsive bid with the lowest total bid price for the base bid without consideration of the bid price for any additive or deductive items. All bids will remain valid for 90 days after the bid opening. Except as permitted by law and subject to all applicable remedies, including forfeiture of bidder's security, bidders may not withdraw their bid during the 90 day period after the bid opening.

#### **3-1.03 CONTRACT BONDS**

Contractor shall provide, at the time of the execution of the agreement or contract for work, and at his own expense, a surety bond ("Performance Bond") in an amount equal to at least 100 percent (100%) of the contract price as security for the faithful performance of said agreement within the time prescribed, in a manner satisfactory to the Engineer, and that all materials and workmanship will be free from original or developed defects. This Performance Bond must remain in effect until the end of all warranty periods set forth in the Special Provisions. Contractor shall also provide, at the time of the execution of the agreement or contract for the work, and at his own expense, a separate surety bond ("Payment Bond") in an amount equal to at least 100 percent (100%) of the contract price as security for the payment of all persons performing labor and furnishing materials in connection with said agreement. This Payment Bond shall be maintained by the Contractor in full force and effect until the work is accepted by the City and until all claims for materials and labor are paid, and shall otherwise comply with Civil Code. Sureties on each of said bonds shall be satisfactory to the City Attorney.

Should any bond become insufficient, the Contractor shall renew the bond within ten (10) working days after receiving notice from the Engineer.

Should any Surety at any time be unsatisfactory to the City, notice will be given the Contractor to that effect. No further payments shall be deemed due or will be made under said agreement until a new Surety shall qualify and be accepted by the City.

Changes in said agreement of extensions of time, made pursuant to the agreement, shall in no way release the Contractor or Surety from its obligations. Notice of such changes or extensions shall be waived by the Surety.

## **SECTION 4 BEGINNING OF WORK, TIME OF COMPLETION, AND LIQUIDATED DAMAGES**

### **4-1.01 GENERAL**

Attention is directed to the provisions in Section 8-1.04, "Start of Job Site Activities," Section 8-1.05, "Time," and Section 8-1.10, "Liquidated Damages," of the Standard Specifications, and "General Requirements," of these Special Provisions.

The Contractor shall begin work by the date identified in writing in the Notice to Proceed by the City of Grass Valley and shall diligently prosecute the same before the expiration of

#### **30 Working Days**

Beginning on the first day of work or the date stated in the Notice to Proceed, whichever comes first.

Due to the project site being critical segments of roadway and due to seasonal constraints, time is of the essence to complete the contract work.

The Contractor shall pay to City of Grass Valley the sum of \$500 per day, as liquidated damages, for each and every calendar day delay in finishing the work in excess of the working days prescribed above. At the Engineer's option, said sum may be deducted from any payment due to or to become due the Contractor.

The 72 hours advance notice before beginning work specified in Section 8-1.04, "Start of Job Site Activities," of the Standard Specifications is changed to 5 days advance notice for this project.

### **4-1.02 HOLIDAYS**

Designated legal holidays are: January 1st, the third Monday in January, the third Monday in February, the last Monday in May, July 4th, the first Monday in September, the second Monday in October, November 11th, Thanksgiving Day, the day after Thanksgiving day and December 25th. When a designated legal holiday falls on a Sunday, the following Monday shall be a designated legal holiday. When a designated legal holiday falls on a Saturday, the preceding Friday shall be a designated legal holiday.

### **4-1.03 WINTERIZATION**

The Contractor shall, at his sole expense, winterize the project if construction activities are not completed by October 15. The Contractor shall winterize the project in conformance with the requirements of "Water Pollution Control," of these Special Provisions for all construction activities that take place between October 15<sup>th</sup> and May 1<sup>st</sup>. An acceptable winterization plan shall be submitted to the Engineer no later than October 1st for his review and acceptance.

The Contractor's winterization plan is required for all construction activities that take place between October 15<sup>th</sup> and May 1<sup>st</sup> and shall be in conformance with the requirements of "Water Pollution Control," of these Special Provisions.

The intent of winterization is as follows:

1. To assure that erosion of earthen materials is prevented to greatest extent practicable.
2. To assure that storm waters are allowed to pass through the site without substantial damage to the project site.

After the acceptance of a winterization plan and the installation of all required temporary winterization measures, work may proceed after October 15<sup>th</sup>, if approval is obtained in writing from the California Regional Water Quality Control Board and the Engineer. All work done after October 15<sup>th</sup> must be able to be winterized within 24 hour notice.

**Winter Suspension:** The City may, at its option, suspend work between October 15<sup>th</sup> and May 1<sup>st</sup> of the following year. If this occurs, the entire site shall be winterized including areas not yet seeded or planted.

Full compensation for conforming to the provisions of this section, not otherwise provided for in other sections of these Special Provisions, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

#### **4-1.04 PRE-CONSTRUCTION CONFERENCE**

A pre-construction conference will be held at the office of the City Engineer for the purpose of discussing with the Contractor the scope of work, contract drawings, specifications, existing conditions, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution and the satisfactory completion of the project as required. The Contractor's representative at this conference shall include all major superintendents for the work and may include major subcontractors. A "Key Personnel and Emergency Phone Numbers" list (for which these key personnel could be contacted 24 hours per day, 7 days a week) shall be submitted to the City. Attendance by the Contractor or the Contractor's authorized representative is mandatory.

Full compensation for conforming to the provisions of this section, not otherwise provided for in other sections of these Special Provisions, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

#### **4-1.05 ARCHAEOLOGICAL FINDS**

All articles of archaeological interest, which may be uncovered by the Contractor during the progress of the work, shall be reported immediately to the Engineer. The further operations of the Contractor, with respect to the find will be decided under the direction of the Engineer.

#### **4-1.06 EXTRA WORK**

Section 4-1.05, "Changes and Extra Work," of the Standard 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.

#### **4-1.07 SCOPE OF WORK**

Shall conform to the provisions of Section 4, "Scope of Work," of the Standard Specifications and these Special Provisions.

#### **4-1.08 ELIMINATION OF ITEMS OF WORK**

The Contractor's attention is directed to Section 4-1.05, "Changes and Extra Work," of the Standard Specifications concerning the elimination of items of work, and these Special Provisions.

### **SECTION 5 GENERAL**

#### **SECTION 5-1 MISCELLANEOUS**

#### **THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH CALIFORNIA LABOR CODE SECTIONS 1774 AND 1775, AND RELATED CODES.**

#### **5-1.01 LABOR NONDISCRIMINATION**

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

#### **NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOV. CODE, SECTION 12990)**

Your attention is called to the "Nondiscrimination Clause", set forth in Section 7-1.02I(2), "Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt State contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The specifications are applicable to all nonexempt State construction contracts and subcontracts of \$5,000 or more.

#### **5-1.02 LABOR CODE REQUIREMENTS**

For all new projects awarded on or after April 1, 2015, the contractors and subcontractors must furnish electronic certified payroll records to the Labor Commissioner. After January 1, 2015, the requirement to furnish electronic certified payroll records to the Labor Commissioner will apply to all public works projects, whether new or ongoing.

Attention is directed to the provisions in Section 7-1.02K(5), "Working Hours" and Section 7-1.02K(3), "Certified Payroll Records" of the Standard Specifications.

### **5-1.03 PREVAILING WAGE**

Attention is directed to the provisions in Section 7-1.02K(2), "Wages" of the Standard Specifications.

The general prevailing wage rates and any applicable changes to these wage rates determined by the Director of Industrial Relations for Nevada County, may be examined at the City of Grass Valley Engineering Division Office and are available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov/DLSR/PWD>. These wage rates are not included in the Proposal and Construction Contract for the project. Changes, if any, to the general prevailing wage rates will be available at the same location.

The general prevailing wage rates and any applicable changes to these wage rates determined by the United States Department of Labor, Branch of Construction Wage Determinations, for Nevada County, are available at the City of Grass Valley Engineering Division Office located at 125 East Main Street, Grass Valley, CA 95945 [telephone (530) 274-4373]. Changes, if any, to the general prevailing wage rates will be available at the same location. General prevailing wage rates area also available on the California Department of Transportation website: <http://www.dot.ca.gov/hq/esc/oe/federal-wages/>.

The Contractor and any subcontractor shall pay each worker that is employed for any public work done under contract, not less than the higher of the prevailing wage rates as determined by the California Director of Industrial Relations and the United States Department of Labor, Branch of Construction Wage Determinations.

### **5-1.04 SUBCONTRACTING**

Attention is directed to the provisions in Section 5-1.13, "Subcontracting," of the Standard Specifications and these Special Provisions.

All subcontractors doing work shall possess an appropriate valid California Contractor's License for the type of work the subcontractor will perform at the time of the bid submittal and the license shall remain in effect throughout the duration of employment on the job.

All applicable license designations and numbers for Subcontractors doing work in excess of \$1,000.00 shall be included on the LIST OF SUBCONTRACTORS within the Proposal.

No subcontract releases the Contractor from the contract or relieves the Contractor of their responsibility for a subcontractor's work.

If the Contractor violates Pub Cont Code § 4100 et seq., the City of Grass Valley may exercise the remedies provided under Pub Cont Code § 4110. The City of Grass Valley may refer the violation to the Contractors State License Board as provided under Pub Cont Code § 4111.

The Contractor shall perform work equaling at least 30 percent of the value of the original total bid with the Contractor's own employees and equipment, owned or rented, with or without operators.

Each subcontract must comply with the contract.

Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

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

Upon request by the Engineer, immediately remove and not again use a subcontractor who fails to prosecute the work satisfactorily.

### **5-1.05 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS**

Attention is directed to the provisions in Sections 10262 and 10262.5 of the Public Contract Code concerning prompt payment to subcontractors. A prime contractor or subcontractor shall pay any subcontractor not later than 10 days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 10 days is applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanctions and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

### **5-1.06 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS**

No retainage will be held by the agency from progress payments due the prime contractor. Any retainage kept by the prime contractor or by a subcontractor must be paid in full to the earning subcontractor in 30 days after the

subcontractor's work is satisfactorily completed. Any delay or postponement of payment may take place only for good cause and with the agency's prior written approval. Any violation of these provisions shall subject the violating contractor or subcontractor to the penalties, sanctions, and remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor, deficient subcontractor performance.

#### **5-1.07 PAYMENTS**

Attention is directed to Sections 9-1.16, "Progress Payments," and 9-1.17, "Payment After Contract Acceptance," of the Standard Specifications and these Special Provisions.

#### **5-1.08 INTEREST ON PAYMENTS**

Interest shall be payable on progress payments, payments after acceptance, final payments, extra work payments, and claim payments shall be in accordance with Section 9-1.03, "Payment Scope," of the Standard Specifications, the Standard Specifications, and these Special Provisions.

The rate of interest payable on any award in arbitration shall be 6 percent per annum if allowed under the provisions of Civil Code Section 3289.

#### **5-1.09 WITHHOLDS**

Payment of withheld funds shall conform to Section 9-1.16E, "Withholds," of the Standard Specifications and these Special Provisions.

Funds withheld from progress payments to ensure performance of the contract that are eligible for payment into escrow or to an escrow agent pursuant to Section 10263 of the California Public Contract Code do not include funds withheld or deducted from payment due to failure of the Contractor to fulfill a contract requirement.

#### **5-1.10 PLANS AND WORKING DRAWINGS**

When the specifications require working drawings to be submitted to the Division of Structure Design, the drawings shall be submitted to the Engineer, unless otherwise specifically noted.

#### **5-1.11 EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT, AND SITE OF WORK**

The third through seventh paragraph of Section 2-1.06B, "Supplemental Project Information," of the Standard Specifications is amended to read:

Where the Department has made investigations of site conditions, including subsurface conditions in areas where work is to be performed under the contract, or in other areas, some of which may constitute possible local material sources, bidders or Contractors may, upon written request, inspect the records of the Department as to those investigations subject to and upon the conditions hereinafter set forth.

Attention is directed to "Differing Site Conditions" of these Special Provisions regarding physical conditions at the site which may differ from those indicated in the Contract Documents.

#### **5-1.12 DIFFERING SITE CONDITIONS**

Attention is directed to Section 4-1.06, "Differing Site Conditions," of the Standard Specifications.

During the progress of the work, if subsurface or latent conditions are encountered at the site differing materially from those indicated in the Contract Documents or an examination of the conditions above ground at the site, the party discovering those conditions shall promptly notify the other party in writing of the specific differing conditions before they are disturbed and before the affected work is performed.

The Contractor will be allowed 15 days from the notification of the Engineer's determination of whether or not an adjustment of the contract is warranted, in which to file a notice of potential claim in conformance with the provisions of Section 9-1.17D, "Final Payment and Claims," of the Standard Specifications and as specified herein; otherwise the decision of the Engineer shall be deemed to have been accepted by the Contractor as correct. The notice of potential claim shall set forth in what respects the Contractor's position differs from the Engineer's determination and provide any additional information obtained by the Contractor, including but not limited to additional geotechnical data. The notice of potential claim shall be accompanied by the Contractor's certification that the following were made in preparation of the bid: a review of the contract, Contract Documents, to the extent they were made available to bidders prior to the opening of bids, and an examination of the conditions above ground

at the site. Supplementary information, obtained by the Contractor subsequent to the filing of the notice of potential claim, shall be submitted to the Engineer in an expeditious manner.

### **5-1.13 VALUE ENGINEERING**

Attention is directed to Section 4-1.07, "Value Engineering," of the Standard Specifications.

Prior to preparing a written value engineering change proposal, the Contractor shall request a meeting with the Engineer to discuss the proposal in concept. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, peer reviews, overall merit of the proposal, and review times required by the City.

If a value engineering change proposal submitted by the Contractor, and subsequently approved by the Engineer, provides for a reduction in contract time, 50 percent of that contract time reduction shall be credited to the City by reducing the contract working days, not including plant establishment. Attention is directed to "Beginning of Work, Time of Completion and Liquidated Damages" of these Special Provisions regarding the working days.

If a value engineering change proposal submitted by the Contractor, and subsequently approved by the Engineer, provides for a reduction in traffic congestion or avoids traffic congestion during construction, 60 percent of the estimated net savings in construction costs attributable to the cost reduction proposal will be paid to the Contractor. In addition to the requirements in Section 4-1.07, "Value Engineering," of the Standard Specifications, the Contractor shall provide detailed comparisons of the traffic handling between the existing contract and the proposed change, and estimates of the traffic volumes and congestion.

### **5-1.14 PUBLIC SAFETY**

The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications and these Special Provisions.

The Contractor shall install temporary railing (Type K) between a lane open to public traffic and an excavation, obstacle or storage area when the following conditions exist:

- A. Excavations – The near edge of the excavation is 12 feet or less from the edge of the lane, except:
  - 1. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
  - 2. Excavations less than one foot deep.
  - 3. Trenches less than one foot wide for irrigation pipe or electrical conduit, or excavations less than one foot in diameter.
  - 4. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
  - 5. Excavations in side slopes, where the slope is steeper than 4:1 (horizontal: vertical).
  - 6. Excavations protected by existing barrier or railing.
- B. Temporarily Unprotected Permanent Obstacles – The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or the Contractor, for the Contractor's convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.
- C. Storage Areas – Material or equipment is stored within 12 feet of the lane and the storage is not otherwise prohibited by the provisions of the Standard Specifications and these Special Provisions.

The approach end of temporary railing (Type K), installed in conformance with the provisions in this section "Public Safety" and in Section 7-1.04, "Public Safety," of the Standard Specifications, shall be offset a minimum of 15 feet from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than one foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15-foot minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Reflectors on temporary railing (Type K) shall conform to the provisions in "Pre-qualified and Tested Signing and Delineation Materials," of these Special Provisions.

Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" of these Special Provisions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, the Contractor shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these Special Provisions:



Approach Speed of Public Traffic (Posted Limit) (Miles Per Hour)	Work Areas
Over 45	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45	Within 3 feet of a traffic lane but not on a traffic lane

The lane closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of a traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the Engineer.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians facilities.

#### **Special Requirements:**

The Contractor attention is directed to "Notification and Scheduling," of these Special Provisions. The Contractor shall notify the Police Department, Fire Departments, Ambulance Service, Schools, CHP, Caltrans, and the Engineer forty-eight (48) hours prior to any lane closure. Notification may be in conjunction with the scheduling requirements of the "Scheduling" portion of the Standard Specifications and these Special Provisions. The Contractor shall coordinate traffic control with the Sheriff's Department with respect to any special events that may be affected by construction activities. Particular attention shall be given to the construction of adequate facilities on any street to permit the passing of emergency vehicles.

Full compensation for conforming to the provisions in this section "Public Safety," including furnishing and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed.

#### **5-1.15 TESTING**

Testing of materials and work shall conform to the provisions in "Quality Assurance," of the Standard Specifications and these Special Provisions.

Whenever the provisions of "Quality Assurance" of the 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.

The Engineer will refer to the "Quality Assurance Program" for acceptance testing requirements as appropriate for the project's size and scope. Minor quantities of materials from a known, reliable source may be accepted without testing if: a visual inspection of the material is performed and the supplier certifies that the material complies with specification requirements.

For construction materials that have been accepted by a Certificate of Compliance, job site inspection of materials tags and delivery notices shall be performed to verify acceptability of the supplied materials. As directed by the Engineer, further acceptance sampling and testing may be performed at the locations and frequencies as given in the "Quality Assurance Program"

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

#### **5-1.16 RESPONSIBILITY TO OTHER ENTITIES**

The Contractor shall be responsible for any liability imposed by law and for injuries to or death of any person including, but not limited to, workers and the public or damage to property, and shall indemnify and save harmless any county, city or district, its officers and employees connected with the work, within the limits of which county, city or district the work is being performed, all in the same manner and to the same extent conforming to the provisions in Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications, for the protection of the State of California and all officers and employees thereof connected with the work.

#### **5-1.17 AREAS FOR CONTRACTOR'S USE**

Attention is directed to the provisions in Section 5-1.32, "Areas for Use," of the Standard Specifications and these Special Provisions.

The project area (contract limits) shall be used only for purposes that are necessary to perform the required work. The Contractor shall not occupy the right of way, or allow others to occupy the right of way, for purposes which are not necessary to perform the required work.

No area is available for the exclusive use of the Contractor within the contract limits. The Contractor shall secure, at the Contractor's own expense, areas required for plant sites, storage of equipment or materials, or for other purposes.

Residence trailers will not be allowed within the project site.

The Contractor shall remove equipment, materials, and rubbish from the work areas and other City-owned property which the Contractor occupies. The Contractor shall leave the areas in a presentable condition in conformance with the provisions in "Cleanup," of the Standard Specifications.

The Contractor shall take all necessary precautions to protect the staging area from chemical contamination due to oil or fuel spills or any other contaminants. If contamination occurs, the site shall be decontaminated to the satisfaction of the Engineer prior to further improvement to the contaminated area or to further construction activities in general, whichever is applicable as determined by the Engineer. Methods of decontamination shall include any method deemed appropriate by the Engineer including removal and disposition of the contaminated soils in conformance with CEQA and regulatory agency requirements.

Full compensation for conforming to the provisions of this section, including furnishing all labor, materials, grading, tools, equipment and incidentals, and for doing all work associated with 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.

#### **5-1.18 SOUND CONTROL REQUIREMENTS**

The noise level from the Contractor's operations, between the hours of 7:00 p.m. and 7:00 a.m., shall not exceed 86 dBa at a distance of 50 feet, unless night work is otherwise permitted by the City Engineer. This requirement shall not relieve the Contractor from responsibility for complying with local ordinances regulating noise level.

All equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust. As directed by the Engineer, the Contractor shall implement the appropriate additional noise mitigation measures including, but not limited to, shutting off idling equipment, or additional notifications of adjacent residents than already specified in these Special Provisions.

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.

#### **5-1.19 PROJECT APPEARANCE**

The Contractor shall maintain a neat appearance to the work and shall cleanup all tracked material and debris on a daily basis.

In areas visible to the public, the following shall apply:

- A. Broken concrete and debris developed during clearing and grubbing shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed of weekly.
- B. Mud, dirt, soil, and any debris resulted in trail from equipment and construction will be cleaned and cleared from the roadway and away from traffic daily.
- C. The Contractor shall furnish trash bins for all debris from construction. All debris shall be placed in trash bins daily. Forms or falsework that are to be reused shall be stacked neatly concurrently with their removal. Forms and falsework that are not to be reused are to be disposed of concurrently with their removal.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed.

#### **5-1.20 RECORDS**

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

- A. Direct costs of contract item work.
- B. Direct costs of changes in character in conformance with Section 4-1.05B, "Work-Character Changes," of the Standard Specifications.

- C. Direct costs of extra work in conformance with Section 4-1.05, "Changes and Extra Work," of the Standard Specifications.
- D. Direct costs of work not required by the contract and performed for others.
- E. Direct costs of work performed under a notice of potential claim in conformance with the provisions in Section 9-1.17D(2), " Claim Statement," of the Standard Specifications.
- F. Indirect costs of overhead.

Cost accounting records shall include the information specified for extra work in Section 4-1.05, "Changes and Extra Work," of the Standard Specifications. The requirements for furnishing the Engineer completed daily extra work reports shall only apply to work paid for on a force account basis.

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

#### **5-1.21 RELATIONS WITH CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**

The location of the project is within an area controlled by the Regional Water Quality Control Board. The Contractor shall be fully informed of rules, regulations, and conditions that may govern the Contractor's operations in the areas and shall conduct the work accordingly.

Copies of the order may be obtained at the City of Grass Valley Engineering Division Office located at 125 East Main Street, Grass Valley, CA 95945 [telephone (530) 274-4373].

Attention is directed to Section 5-1.36, " Property and Facility Preservation," and Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications.

#### **5-1.22 CONTRACTOR'S LICENSING LAWS**

Attention is directed to the requirements specified in Section 3-1.06, "Contractor License", of the Standard Specifications. The Contractor shall possess a valid California Class "A" Contractor's License, or a combination of the following classes: C-8 - Concrete Contractor, C12 - Earthwork and Paving Contractors, C31 - Construction Zone Traffic Control Contractor, C32 - Parking and Highway Improvement Contractor, C34 - Pipeline Contractor, C36 - Plumbing Contractor, C45 - Sign Contractor, and D-63 Construction Cleanup Contractor, and all other classes required by the categories and types of work included in the contract at the time of the bid award. All licenses shall remain in effect throughout the term of the contract.

#### **5-1.23 ARBITRATION**

Section 9-1.22, "Arbitration," of the Standard Specifications is amended in its entirety to read as follows:

##### **Section 9-1.22, "Dispute Resolution"**

9-1.22 All claims filed with the City must be in writing and include the documents necessary to substantiate the claim. Claims must be filed within the time limits set forth in this contract. In no circumstances, however, may a claim be filed after the day of final payment. Nothing in this subsection is intended to extend the time limit or supersede notice requirements for the filing of claims as set forth elsewhere in this contract.

- 1) Claims of \$50,000.00 or Less
  - (a) The City will respond in writing to all written claims less than or equal to fifty thousand dollars (\$50,000.00) within forty-five (45) days of receipt of the claim. Within thirty (30) days of receipt of the claim, the City may request any additional documentation supporting the claim or relating to defenses or claims the City may have against the claimant.
  - (b) If additional information is thereafter required, it shall be requested and provided pursuant to this subsection, upon mutual agreement of the City and the claimant.
  - (c) The City's written response to the claim, as further documented, shall be submitted to the claimant within fifteen (15) days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.
- 2) Claims Between \$50,000.01 and \$375,000.00
  - (a) The City will respond in writing to all written claims between fifty thousand dollars and one cent (\$50,000.01) and less than or equal to three hundred seventy-five thousand dollars (\$375,000.00), within sixty (60) days of receipt of the claim. Within thirty (30) days of receipt of the claim, the City may request, in writing, any additional documentation supporting the claim or relating to defense to the claim the City may have against the claimant.
  - (b) If additional information is thereafter required, it shall be requested and provided pursuant to this Subdivision, upon mutual agreement of the City and the claimant.

- (c) The City's written response to the claim, as further documented, shall be submitted to the claimant within thirty (30) days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information or requested documents, whichever is greater.
- 3) Claims in Excess of \$375,000.00 The City shall, within a reasonable time after the presentation of any claim in excess of \$375,000.00, make a decision in writing on such claim.
  - 4) Meet and Confer Conference
    - (a) If the claimant disputes the City's written response, or the City fails to respond within the time prescribed, the claimant may so notify the City, in writing, either within fifteen (15) days of receipt of the City's response or within fifteen (15) days of the City's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the City shall schedule a meet and confer conference within thirty (30) days for settlement of the dispute.
    - (b) If, following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the California Government Code. For the purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to this Section until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.
  - 5) Contractor's Duty During Claim Resolution: The Contractor shall proceed with the Work in accordance with the plans and specifications and determinations and instructions of the City Engineer during the resolution of any claims disputes.
  - 6) Certification. The Contractor shall certify in writing, at the time of submission of any claim, as follows:  
I certify under penalty of perjury under the laws of the State of California, that the claim is made in good faith, that the supporting data are accurate and complete, and that the amount requested accurately reflects the monies due for work performed under the Contract for which the City of Grass Valley is liable.  
By: \_\_\_\_\_  
(Contractor's signature)
  - 7) City Remedies. In the event the Contractor refuses or neglects to make good any loss or damage for which the Contractor is responsible under this Contract, the City may itself, or by the employment of others, make good any such loss or damage, and the cost and expense of doing so, including any reasonable engineering, legal and other consultant fees, and any costs of administrative and managerial services, shall be charged to the Contractor. Such costs and expenses may be deducted by the City from claims for payment made by the Contractor for work completed or remaining to be completed.
  - 8) Assignment. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to this contract, the Contractor and all subcontractors shall offer and agree to assign to the City all rights, title, and interest in and to all causes of action it may have under section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or subcontract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgment by the parties.
  - 9) Contractor Waiver and Limitation. The Contractor agrees that it can be adequately compensated by money damages for any breach of this Contract which may be committed by the City and hereby agrees that no default, act, or omission of the City or the Engineer, shall constitute a material breach of the Contract entitling the Contractor to cancel or rescind the provisions of this Contract or (unless the City shall so consent or direct in writing) to suspend or abandon performance of all or any part of the work. The Contractor hereby waives any and all rights and remedies to which it might otherwise be or become entitled, save only its right to money damages.
  - 10) Venue. Any litigation arising out of this Contract shall be brought in the Superior Court of Nevada County, and the Contractor hereby waives the removal provisions of Code of Civil Procedure Section 394.

#### 5-1.24 NOTICE OF POTENTIAL CLAIM

Attention is directed to the requirements specified in Section 5-1.43, "Potential Claims And Dispute Resolution," of the Standard Specifications.

#### 5-1.25 FINAL PAYMENT AND CLAIMS

Attention is directed to Section 9-1.17D, "Final Payment and Claims," of the Standard Specifications.

If the Contractor files a timely written statement of claims in response to the proposed final estimate, the City will submit a claim position letter to the Contractor by hand delivery or deposit in the U.S. mail. The claim position letter will delineate the City's position on the Contractor's claims. If the Contractor disagrees with the claim position letter, the Contractor shall submit a written notification of its disagreement to be received by the City not later than 15 days after the Contractor's receipt of the claim position letter. The written notification of disagreement shall set forth the basis for the Contractor's disagreement and be submitted to the office designated in the claim position letter. The Contractor's failure to provide a timely, written notification of disagreement shall constitute the Contractor's acceptance and agreement with the determinations provided in the claim position letter and with final payment pursuant to the claim position letter.

If the Contractor files a timely notification of disagreement with the City claim position letter, the City Engineer or a board of review appointed by the City Engineer shall review claims that remain in dispute and may meet with the Contractor within 45 days after receipt by the City of the notification of disagreement. Attendance by the Contractor at the City meeting concerning the notification of disagreement shall be mandatory.

If the City fails to submit a claim position letter to the Contractor within 135 days after the acceptance of the contract and the Contractor has claims that remain in dispute, the Contractor may request a meeting with the City Engineer or a board of review appointed by the City Engineer to review claims that remain in dispute. The Contractor's request for a meeting shall identify the claims that remain in dispute. If the Contractor files a request for a meeting, the City Engineer or a board of review appointed by the City Engineer will meet with the Contractor within 45 days after the City receives the request for the meeting. Attendance by the Contractor at this review meeting shall be mandatory.

Failure of the Contractor to file a timely written statement of claims in response to the proposed final estimate, or to file a timely notification of disagreement with the City's claim position letter, or to attend the City's review meeting shall constitute a failure to pursue diligently and exhaust the administrative remedies in the contract and shall be a bar to future legal proceedings by Contractor.

#### **5-1.26 SURFACE MINING AND RECLAMATION ACT**

Attention is directed to the Surface Mining and Reclamation Act of 1975, commencing in Public Resources Code, Mining and Geology, Section 2710, which establishes regulations pertinent to surface mining operations, and to California Public Contract Code Section 10295.5.

Material from mining operations furnished for this project shall only come from permitted sites in compliance with California Public Contract Code Section 10295.5.

#### **5-1.27 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES**

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

#### **5-1.28 EXCAVATION SAFETY PLANS**

The Contractor's attention is directed to requirements of "Earthwork," of the Special Provisions concerning Temporary Shoring Plan and Section 7-1.02K(6)(b), "Excavation Safety," of the Standard Specifications.

The Contractor shall submit a Temporary Shoring Safety System Plan to the Engineer in accordance with "Earthwork," of these Special Provisions. The Contractor's attention is directed to the requirements specified in Section "Earthwork," of these Special Provisions.

Full compensation for conforming to the provisions of this section, not otherwise provided for in other sections of these Special Provisions, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

### 5-1.29 AIR POLLUTION CONTROL

Air pollution control shall conform to the provisions of Section 14-9, "Air Quality," of the Standard Specifications and these Special Provisions.

No burning of materials to be disposed of will be permitted for this project.

Full compensation for conforming to the provisions of this section including, but not limited to, obtaining permits and performing work in accordance with any permit requirements, not otherwise provided for, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

### 5-1.30 PERMITS

Attention is directed to the provisions in Sections 5-1.20B, "Permits, Licenses, Agreements, and Certifications," of the Standard Specifications and these Special Provisions.

Full compensation for conforming to the provisions in this Section and to the requirements in the permit, not otherwise provided for in other sections of these Special Provisions, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

### 5-1.31 INSURANCE

Throughout the period of this agreement, the CONTRACTOR shall provide the following minimum insurance coverage as listed below. CONTRACTOR shall file with CITY certificate(s) of Insurance and endorsements, in a form acceptable to CITY, and consistent with this agreement at the time of execution of this agreement. The insurance company must be acceptable to CITY, with a Best's Rating of no less than A:VII. Documentation of such rating acceptable to the CITY shall be provided at the same time Insurance Certificates are submitted.

Any deductibles must be declared to, and approved by, the City.

In the event any of the required policies are canceled prior to the completion of the project and the CONTRACTOR does not furnish a new certificate(s) of insurance prior to cancellation, the CITY may obtain the required insurance and deduct the premium(s) from Contract monies due the CONTRACTOR.

#### 5-1.31.1 WORKER'S COMPENSATION AND EMPLOYERS LIABILITY INSURANCE

The CONTRACTOR shall maintain adequate Workers' Compensation Insurance under the Laws of the State of California. CONTRACTOR shall fully comply with the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for Workers' Compensation or to undertake self insurance in accordance with the provisions of that Code, before commencing the performance of the work. CONTRACTOR shall require all subcontractors to maintain adequate Workers' Compensation Insurance. Certificates of such Workers' Compensation shall be filed forthwith with the CITY upon demand.

By CONTRACTOR'S signature hereunder, CONTRACTOR certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and he/she will comply with such provisions before commencing the performance of this Contract. If such insurance is underwritten by any agency other than State Compensation Fund, such agency shall be a company authorized to do business in the State of California.

Worker's Compensation Insurance shall be provided as required by any applicable law or regulation. Employer's liability insurance shall be provided in amounts not less than the following:

One Million dollars (\$1,000,000) each accident for bodily injury by accident

One Million dollars (\$1,000,000) policy limit for bodily injury by disease

One Million dollars (\$1,000,000) each employee for bodily injury by disease

If there is an exposure of injury to CONTRACTOR'S employees under the U.S. Longshoremen's and Harbor Worker's Compensation Act, the Jones Act, or under laws, regulations, or statutes applicable to maritime employees, coverage shall be included for such injuries or claims.

Each Worker's Compensation policy shall be endorsed with the following specific language:

**Cancellation Notice:** "This policy shall not be canceled or materially changed without first giving thirty (30) days prior written notice to the City of Grass Valley."

**Waiver of Subrogation:** "The Insurance Company agrees to waive all rights of subrogation against the City of Grass Valley, its elected or appointed officials, agents, employees and volunteers for losses paid under the terms of this policy which arise from the work performed by the Named Insured for the City of Grass Valley."

#### 5-1.31.2 GENERAL LIABILITY INSURANCE

Commercial General Liability insurance covering all operations by or on behalf of CONTRACTOR, providing insurance for bodily injury liability and property damage liability for the limits of liability indicated

below and including coverage for: premises; operations; products and completed operations; contractual liability insuring the obligations assumed by CONTRACTOR in this Agreement; broad form property damage (including completed operations); explosion, collapse, and underground hazards; personal injury liability.

Except with respect to bodily injury and property damage included within the products and completed operations hazards, the aggregate limits, where applicable, shall apply separately to CONTRACTOR'S work under the Contract.

One of the following forms is required: Commercial General Liability (Occurrence); or Commercial General Liability (Claims Made).

If CONTRACTOR carries a Commercial General Liability (Occurrence) policy:

1. The limits of liability shall not be less than:

➤ One Million dollars (\$1,000,000) each occurrence (combined single limit for bodily injury and property damage)

➤ One Million dollars (\$1,000,000) Personal Injury Liability

➤ Two Million dollars (\$2,000,000) Products-Completed Operations

➤ Two Million dollars (\$2,000,000) General Aggregate

2. If the policy does not have an endorsement providing that the General Aggregate Limit applies separately, or if defense costs are included in the aggregate limits, then the required aggregate limits shall be Two Million dollars (\$2,000,000).

### 5-1.31.3 CONFORMITY OF COVERAGES

If more than one policy is used to meet the required coverages, such as a separate umbrella policy, such policies shall be consistent with all other applicable policies used to meet these minimum requirements. For example, all policies shall be Occurrence Liability policies, or all shall be Claims Made Liability policies if approved by the CITY as noted above. In no case shall the types of coverages be different.

### 5-1.31.4 ADDITIONAL REQUIREMENTS

**Premium Payments:** The insurance companies shall have no recourse against the CITY and funding agencies, its officers and employees or any of them for payment of any premiums or assessments under any policy issued by a mutual insurance company.

**Policy Deductibles:** The CONTRACTOR shall be responsible for all deductibles in all of CONTRACTOR'S insurance policies. The amount of deductibles for insurance coverage required herein should be reasonable and subject to CITY'S approval.

**CONTRACTOR'S Obligations:** CONTRACTOR'S indemnity and other obligations shall not be limited by the foregoing insurance requirements and shall survive the expiration of this agreement.

**Material Breach:** Failure of the CONTRACTOR to maintain the insurance required by this agreement, or to comply with any of the requirements of this section, shall constitute a material breach of the entire agreement.

**Duration of Coverage:** City must be an additional insured for completed operations for a period of one (1) year after completion of the work.

**Project Reference:** The Certificate of Insurance must reference the project specifically by project title

### 5-1.31.5 ENDORSEMENTS

Each Commercial General Liability policy shall be endorsed with the following specific language:

**Cancellation Notice:** "This policy shall not be canceled, material reduced, or materially changed without first giving thirty (30) days prior written notice to the City of Grass Valley."

"Provisions Regarding the Insured's Duties: Any failure to comply with reporting provisions of the policy or breaches or violations of warranties shall not affect coverage provided to the City of Grass Valley, its elected or appointed officers, officials, employees or volunteers."

"Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits, conditions, agreements or exclusions of the policy to which this endorsement is attached."

"The City of Grass Valley, and additional insureds, and all insureds officers, agents, outside parties hired to inspect and/or design the work, employees, and volunteers are to be covered as insured for all liability arising out of the operations by or on behalf of the named insured in the performance of this Agreement."

The City of Grass Valley's policy of insurance shall be excess and noncontributing. "The insurance provided by the Contractor, including any excess liability or umbrella form coverage, is primary coverage to the City of Grass Valley and additional insureds, with respect to any insurance or self-insurance programs

maintained by the City of Grass Valley and additional insureds, and no insurance held or owned by the City of Grass Valley and additional insureds shall be called upon to contribute to a loss."

**5-1.31.6 AUTOMOBILE LIABILITY INSURANCE**

CONTRACTOR shall provide Automobile Liability insurance covering bodily injury and property damage in an amount no less than One Million dollars (\$1,000,000) combined single limit for each occurrence.

Covered vehicles shall include owned, non-owned, and hired automobiles/trucks.

Endorsements: The endorsements listed above for General Liability shall also apply to the Automobile Liability Policy.

**5-1.32 WARRANTY**

Should any failure of the work occur within a period of one year from the acceptance of the project by the Grass Valley City Council due to faulty materials, poor workmanship, or defective equipment, the Contractor shall promptly make the needed repairs at his or her expense in accordance with the Special Provisions and to the satisfaction of the Engineer.

Security for this warranty shall be in the form of the Performance Bond, required elsewhere in these specifications, which shall remain in effect for a period of one (1) year after acceptance of the project by the Grass Valley City Council. The Performance Bond will not be reduced to an amount less than the bid amount of the project prior to the expiration of the one (1) year warranty period.

The City is hereby authorized to make such repairs, or to have such repairs made by others, if the Contractor fails to make such repairs, or to have such repairs made by others, if the Contractor fails to make or undertake with due diligence the aforesaid repairs within ten (10) days after receiving written notice of such failure or within a time specified in the notice if different; provided, however, that in case of an emergency where, in the opinion of the Engineer, that delay would cause serious loss or damages, or a serious hazard to the public, and a reasonable attempt has been made to notify the Contractor, the repairs may be made without prior notice to the Contractor; and the Contractor's sureties shall be liable for the entire cost thereof.

**SECTION 6 (BLANK)**

**SECTION 7 (BLANK)**

**SECTION 8 MATERIALS**

**SECTION 8-1 MISCELLANEOUS**

**PREQUALIFIED AND TESTED SIGNING AND DELINEATION MATERIALS**

The Department maintains the following list of Pre-qualified and Tested Signing and Delineation Materials. The Engineer shall not be precluded from sampling and testing products on the list of Pre-qualified and Tested Signing and Delineation Materials.

The manufacturer of products on the list of Pre-qualified and Tested Signing and Delineation Materials shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied.

For those categories of materials included on the list of Pre-qualified 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 Pre-qualified 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 may be added to the list of Pre-qualified and Tested Signing and Delineation Materials if the manufacturer submits a New Product Information Form to the New Product Coordinator at the Transportation Laboratory. Upon a Departmental request for samples, sufficient samples shall be submitted to permit performance of required tests. Approval of materials or products will depend upon compliance with the specifications and tests the Department may elect to perform.

**8-1.02.1 PAVEMENT MARKERS**

**PAVEMENT MARKERS, PERMANENT TYPE**

**Retroreflective With Abrasion Resistant Surface (ARS)**

- A. Apex, Model 921AR (4" x 4")
- B. Avery Dennison, Models C88 (4" x 4"), 911 (4" x 4") and 953 (2.75" x 4.5")



- C. Ray-O-Lite, Model "AA" ARS (4" x 4")
- D. 3M Series 290 (3.5" x 4")
- E. 3M Series 290 PSA, with pressure sensitive adhesive pad (3.5" x 4")

**Retroreflective With Abrasion Resistant Surface (ARS)**

(for recessed applications only)

- A. Avery Dennison, Model 948 (2.3" x 4.7")
- B. Avery Dennison, Model 944SB (2" x 4")\*
- C. Ray-O-Lite, Model 2002 (2.3" x 4.6")
- D. Ray-O-Lite, Model 2004 ARS (2" x 4")\*

\*For use only in 4.5 inch wide (older) recessed slots

**Non-Reflective, 4 inches Round**

- A. Apex Universal (Ceramic)
- B. Apex Universal, Models 929 (ABS) and 929PP (Polypropylene)
- C. Glowlite, Inc. (Ceramic)
- D. Hi-Way Safety, Inc., Models P20-2000W and 2001Y (ABS)
- E. Interstate Sales, "Diamond Back" (Polypropylene)
- F. Novabrite Models Cdot (White) Cdot-y (Yellow), Ceramic
- G. Novabrite Models Pdot-w (White) Pdot-y (Yellow), Polypropylene
- H. Three D Traffic Works TD10000 (ABS), TD10500 (Polypropylene)

**PAVEMENT MARKERS, TEMPORARY TYPE**

**Temporary Markers For Long Term Day/Night Use (6 months or less)**

- A. Vega Molded Products "Temporary Road Marker" (3" x 4")

**Temporary Markers For Short Term Day/Night Use (14 days or less)**

(For seal coat or chip seal applications, clear protective covers are required)

- A. Apex Universal, Model 932
- B. Bunzl Extrusion, Models T.O.M., T.R.P.M., and "HH" (High Heat)
- C. Hi-Way Safety, Inc., Model 1280/1281
- D. Glowlite, Inc., Model 932

**STRIPING AND PAVEMENT MARKING MATERIAL**

**Permanent Traffic Striping and Pavement Marking Tape**

- A. Advanced Traffic Marking, Series 300 and 400
- B. Brite-Line, Series 1000
- C. Brite-Line, "DeltaLine XRP"
- D. Swarco Industries, "Director 35" (For transverse application only)
- E. Swarco Industries, "Director 60"
- F. 3M, "Stamark" Series 380 and 5730
- G. 3M, "Stamark" Series 420 (For transverse application only)

**Temporary (Removable) Striping and Pavement Marking Tape (6 months or less)**

- A. Advanced Traffic Marking, Series 200
- B. Brite-Line, Series 100
- C. Garlock Rubber Technologies, Series 2000
- D. P.B. Laminations, Aztec, Grade 102
- E. Swarco Industries, "Director-2"
- F. Trelleborg Industries, R140 Series
- G. 3M, Series 620 "CR", and Series A750
- H. 3M, Series A145, Removable Black Line Mask  
(Black Tape: for use only on Asphalt Concrete Surfaces)
- I. Advanced Traffic Marking Black "Hide-A-Line"  
(Black Tape: for use only on Asphalt Concrete Surfaces)
- J. Brite-Line "BTR" Black Removable Tape  
(Black Tape: for use only on Asphalt Concrete Surfaces)
- K. Trelleborg Industries, RB-140  
(Black Tape: for use only on Asphalt Concrete Surfaces)

**Preformed Thermoplastic (Heated in place)**

- A. Avery Dennison, "Hotape"
- B. Flint Trading, "Premark," "Premark 20/20 Flex," and "Premark 20/20 Flex Plus"
- C. Ennis Paint Inc., "Flametape"

**Ceramic Surfacing Laminate, 6" x 6"**

- A. Highway Ceramics, Inc.

**8-1.02.2 DELINEATORS AND MARKERS**

**CLASS 1 DELINEATORS**

**One Piece Driveable Flexible Type, 66 inches**

- A. Bunzl Extrusion, "Flexi-Guide Models 400 and 566"
- B. Carsonite, Curve-Flex CFRM-400
- C. Carsonite, Roadmarker CRM-375
- D. FlexStake, Model 654 TM
- E. GreenLine Models HWD1-66 and CGD1-66

**Special Use Type, 66 inches**

- A. Bunzl Extrusion, Model FG 560 (with 18 inches U-Channel base)
- B. Carsonite, "Survivor" (with 18 inches U-Channel base)
- C. Carsonite, Roadmarker CRM-375 (with 18 inches U-Channel base)
- D. FlexStake, Model 604
- E. GreenLine Models HWDU and CGD (with 18 inches U-Channel base)
- F. Impact Recovery Model D36, with #105 Driveable Base
- G. Safe-Hit with 8 inches pavement anchor (SH248-GP1)
- H. Safe-Hit with 15 inches soil anchor (SH248-GP2) and with 18 inches soil anchor (SH248-GP3)

**Surface Mount Type, 48 inches**

- A. Bent Manufacturing Company, Masterflex Model MF-180EX-48
- B. Carsonite, "Super Duck II"
- C. FlexStake, Surface Mount, Models 704 and 754 TM
- D. Impact Recovery Model D48, with #101 Fixed (Surface-Mount) Base
- E. Three D Traffic Works "Channelflex" ID No. 522248W

**CHANNELIZERS**

**Surface Mount Type, 36 inches**

- A. Bent Manufacturing Company, Masterflex Models MF-360-36 (Round) and MF-180-36 (Flat)
- B. Bunzl Extrusion, Flexi-Guide Models FG300PE and FG300UR
- C. Carsonite, "Super Duck" (Flat SDF-436, Round SDR-336)
- D. Carsonite, "Super Duck II" Model SDCF203601MB "The Channelizer"
- E. FlexStake, Surface Mount, Models 703 and 753 TM
- F. GreenLine, Model SMD-36
- G. Hi-Way Safety, Inc. "Channel Guide Channelizer" Model CGC36
- H. Impact Recovery Model D36, with #101 Fixed (Surface-Mount) Base
- I. Repo, Models 300 and 400
- J. Safe-Hit, Guide Post, Model SH236SMA
- K. Three D Traffic Works "Channelflex" ID No. 522053W

**Lane Separation System**

- A. Bunzl "Flexi-Guide (FG) 300 Curb System"
- B. Qwick Kurb, "Klemmfix Guide System"
- C. Recycled Technology, Inc. "Safe-Lane System"

**CONICAL DELINEATORS, 42 inches**

(For 28 inch Traffic Cones, see Standard Specifications)

- A. Bent Manufacturing Company "T-Top"

- B. Plastic Safety Systems "Navigator-42"
- C. Radiator Specialty Company "Enforcer"
- D. Roadmaker Company "Stacker"
- E. Traffix Devices "Grabber"
- F. Three D Traffic Works "Ringtop" TD7000, ID No. 742143

### **OBJECT MARKERS**

#### **Type "K", 18 inches**

- A. Bunzl, Model FG318PE
- B. Carsonite, Model SMD 615
- C. FlexStake, Model 701 KM
- D. Repo, Models 300 and 400
- E. Safe-Hit, Model SH718SMA

#### **Type "K-4" / "Q" Object Markers, 24 inches**

- A. Bent Manufacturing "Masterflex" Model MF-360-24
- B. Bunzl Extrusion, Model FG324PE
- C. Carsonite, Super Duck II
- D. FlexStake, Model 701KM
- E. Repo, Models 300 and 400
- F. Safe-Hit, Models SH8 24SMA\_WA and SH8 24GP3\_WA
- G. The Line Connection, Model DP21-4Q
- H. Three D Traffic Works "Q" Marker, ID No. 531702W

### **BARRIER MARKERS AND TEMPORARY RAILING REFLECTORS**

#### **Impactable Type**

- A. ARTUK, "FB"
- B. Bunzl Extrusion, Models PCBM-12 and PCBM-T12
- C. Duraflex Corp., "Flexx 2020" and "Electriflexx"
- D. Hi-Way Safety, Inc., Model GMKRM100
- E. Plastic Safety Systems "BAM" Models OM-BARR and OM-BWAR
- F. Three D Traffic Works "Roadguide" Model TD 9304

#### **Non-Impactable Type**

- A. ARTUK, JD Series
- B. Plastic Safety Systems "BAM" Models OM-BITARW and OM-BITARA
- C. Vega Molded Products, Models GBM and JD
- D. Plastic Vacuum Forming, "Cap-It C400"

### **METAL BEAM GUARD RAIL POST MARKERS**

(For use to the left of traffic)

- A. Bunzl Extrusion, "Mini" (3" x 10")
- B. Creative Building Products, "Dura-Bull, Model 11201"
- C. Duraflex Corp., "Railrider"
- D. Plastic Vacuum Forming, "Cap-It C300"

### **CONCRETE BARRIER DELINEATORS, 16 inches**

(For use to the right of traffic)

- A. Bunzl Extrusion, Model PCBM T-16
- B. Safe-Hit, Model SH216RBM

### **CONCRETE BARRIER-MOUNTED MINI-DRUM (10 inches x 14 inches x 22 inches)**

- A. Stinson Equipment Company "SaddleMarker"

### **SOUND WALL DELINEATOR**

(Applied vertically. Place top of 3" x 12" reflective element at 48 inches above roadway)

- A. Bunzl Extrusion, PCBM S-36

## **GUARD RAILING DELINEATOR**

(Place top of reflective element at 48 inches above plane of roadway)

### **Wood Post Type, 27 inches**

- A. Bunzl Extrusion, FG 427 and FG 527
- B. Carsonite, Model 427
- C. FlexStake, Model 102 GR
- D. GreenLine GRD 27
- E. Safe-Hit, Model SH227GRD
- F. Three D Traffic Works "Guardflex" TD9100

### **Steel Post Type**

- A. Carsonite, Model CFGR-327 with CFGRBK300 Mounting Bracket

## **8-1.02.3 SIGN MATERIALS**

### **RETROREFLECTIVE SHEETING**

#### **Channelizers, Barrier Markers, and Delineators**

- A. Avery Dennison T-6500 Series (For rigid substrate devices only)
- B. Avery Dennison WR-6100 Series
- C. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
- D. Reflexite, PC-1000 Metalized Polycarbonate
- E. Reflexite, AC-1000 Acrylic
- F. Reflexite, AP-1000 Metalized Polyester
- G. Reflexite, Conformalight, AR-1000 Abrasion Resistant Coating
- H. 3M, High Intensity

#### **Traffic Cones, 13 inches Sleeves**

- A. Reflexite SB (Polyester), Vinyl or "TR" (Semi-transparent)

#### **Traffic Cones, 4 inch x 6 inch Sleeves**

- A. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
- B. Reflexite, Vinyl, "TR" (Semi-transparent) or "Conformalight"
- C. 3M Series 3840
- D. Avery Dennison S-9000C

#### **Barrels and Drums**

- A. Avery Dennison WR-6100
- B. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
- C. Reflexite, "Conformalight", "Super High Intensity" or "High Impact Drum Sheeting"
- D. 3M Series 3810

#### **Barricades: Type I, Medium-Intensity (Typically Enclosed Lens, Glass-Bead Element)**

- A. American Decal, Adcolite
- B. Avery Dennison, T-1500 and T-1600 series
- C. 3M Engineer Grade, Series 3170

#### **Barricades: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)**

- A. Avery Dennison, T-2500 Series
- B. Kiwalite Type II
- C. Nikkalite 1800 Series

#### **Signs: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)**

- A. Avery Dennison, T-2500 Series
- B. Kiwalite, Type II
- C. Nikkalite 1800 Series

#### **Signs: Type III, High-Intensity (Typically Encapsulated Glass-Bead Element)**

- A. Avery Dennison, T-5500 and T-5500A Series

- B. Nippon Carbide Industries, Nikkalite Brand Ultralite Grade II
- C. 3M Series 3870

**Signs: Type IV, High-Intensity (Typically Unmetallized Microprismatic Element)**

- A. Avery Dennison, T-6500 Series
- B. Nippon Carbide Industries, Crystal Grade, 94000 Series
- C. Nippon Carbide Industries, Model No. 94847 Fluorescent Orange
- D. Nippon Carbide Industries, Model No. 94844 Fluorescent Yellow Green

**Signs: Type VI, Elastomeric (Roll-Up) High-Intensity, without Adhesive**

- A. Avery Dennison, WU-6014
- B. Novabrite LLC, "Econobrite"
- C. Reflexite "Vinyl"
- D. Reflexite "SuperBright"
- E. Reflexite "Marathon"
- F. 3M Series RS34 Orange and RS20 Fluorescent Orange

**Signs: Type VII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)**

- A. 3M LDP Series 3924 Fluorescent Orange
- B. 3M LDP Series 3970

**Signs: Type VIII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)**

- A. Avery Dennison, T-7500 Series
- B. Avery Dennison, T-7511 Fluorescent Yellow
- C. Avery Dennison, T-7513 Fluorescent Yellow Green
- D. Avery Dennison, W-7514 Fluorescent Orange
- E. Nippon Carbide Industries, Nikkalite Crystal Grade Series 92800
- F. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92844 Fluorescent Yellow/Green
- G. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92847 Fluorescent Orange

**Signs: Type IX, Very-High-Intensity (Typically Unmetallized Microprismatic Element)**

- A. 3M VIP Series 3981 Diamond Grade Fluorescent Yellow
- B. 3M VIP Series 3983 Diamond Grade Fluorescent Yellow/Green
- C. 3M VIP Series 3990 Diamond Grade

**SPECIALTY SIGNS**

- A. Hallmark Technologies, Inc., All Sign STOP Sign (All Plastic), 30 inches
- B. Reflexite "Endurance" Work Zone Sign (with Semi-Rigid Plastic Substrate)

**SIGN SUBSTRATE**

**Fiberglass Reinforced Plastic (FRP)**

- A. Fiber-Brite
- B. Sequentia, "Polyplate"
- C. Inteplast Group "InteCel" (0.5 inch for Post-Mounted CZ Signs, 48 inches or less)

**Aluminum Composite**

- A. Alcan Composites "Dibond Material, 0.08 inch" (for temporary construction signs only)
- B. Mitsubishi Chemical America, Alpolic 350 (for temporary construction signs only)

**SECTION 8-2 PORTLAND CEMENT CONCRETE**

Portland cement concrete shall conform to the provisions in Section 90, "Concrete," of the Standard Specifications and these Special Provisions.

Mineral admixture shall be combined with cement in conformance with the provisions in Section 901.02B(3), "Supplementary Cementitious Materials," of the Standard Specifications for the concrete materials.

The Department maintains a list of sources of fine and coarse aggregate that have been approved for use with a reduced amount of mineral admixture in the total amount of cementitious material to be used. A source of aggregate will be considered for addition to the approved list if the producer of the aggregate submits to the Transportation Laboratory certified test results from a qualified testing laboratory that verify the aggregate complies

with the requirements. Prior to starting the testing, the aggregate test shall be registered with the Department. A registration number can be obtained by calling (916) 227-7228. The registration number shall be used as the identification for the aggregate sample in correspondence with the Department. Upon request, a split of the tested sample shall be provided to the Department. Approval of aggregate will depend upon compliance with the specifications, based on the certified test results submitted, together with any replicate testing the Department may elect to perform. Approval will expire 3 years from the date the most recent registered and evaluated sample was collected from the aggregate source.

Qualified testing laboratories shall conform to the following requirements:

- A. Laboratories performing ASTM Designation: C 1293 shall participate in the Cement and Concrete Reference Laboratory (CCRL) Concrete Proficiency Sample Program and shall have received a score of 3 or better on all tests of the previous 2 sets of concrete samples.
- B. Laboratories performing ASTM Designation: C 1260 shall participate in the Cement and Concrete Reference Laboratory (CCRL) Pozzolan Proficiency Sample Program and shall have received a score of 3 or better on the shrinkage and soundness tests of the previous 2 sets of pozzolan samples.

Aggregates on the list shall conform to one of the following requirements:

- A. When the aggregate is tested in conformance with the requirements in California Test 554 and ASTM Designation: C 1293, the average expansion at one year shall be less than or equal to 0.040 percent; or
- B. When the aggregate is tested in conformance with the requirements in California Test 554 and ASTM Designation: C 1260, the average of the expansion at 16 days shall be less than or equal to 0.15 percent.

The amounts of cement and mineral admixture used in cementitious material shall be sufficient to satisfy the minimum cementitious material content requirements specified in Section 90-1.02, "Materials," of the Standard Specifications and shall conform to the following:

- A. The minimum amount of cement shall not be less than 75 percent by weight of the specified minimum cementitious material content.
- B. The minimum amount of mineral admixture to be combined with cement shall be determined using one of the following criteria:
  - 1. When the calcium oxide content of a mineral admixture is equal to or less than 2 percent by weight, the amount of mineral admixture shall not be less than 15 percent by weight of the total amount of cementitious material to be used in the mix.
  - 2. When the calcium oxide content of a mineral admixture is greater than 2 percent by weight, and any of the aggregates used are not listed on the approved list as specified in these Special Provisions, then the amount of mineral admixture shall not be less than 25 percent by weight of the total amount of cementitious material to be used in the mix.
  - 3. When the calcium oxide content of a mineral admixture is greater than 2 percent by weight and the fine and coarse aggregates are listed on the approved list as specified in these Special Provisions, then the amount of mineral admixture shall not be less than 15 percent by weight of the total amount of cementitious material to be used in the mix.
  - 4. When a mineral admixture that conforms to the provisions for silica fume in Section 90-1.02B(3), "Supplementary Cementitious Materials," of the Standard Specifications is used, the amount of mineral admixture shall not be less than 10 percent by weight of the total amount of cementitious material to be used in the mix.
  - 5. When a mineral admixture that conforms to the provisions for silica fume in Section 90-1.02B(3), "Supplementary Cementitious Materials," of the Standard Specifications is used and the fine and coarse aggregates are listed on the approved list as specified in these Special Provisions, then the amount of mineral admixture shall not be less than 7 percent by weight of the total amount of cementitious material to be used in the mix.
- C. The total amount of mineral admixture shall not exceed 35 percent by weight of the total amount of cementitious material to be used in the mix. The total weight of cement and mineral admixture per cubic yard shall not exceed the specified maximum cementitious material content.

Unless otherwise specified, mineral admixture will not be required in Portland cement concrete used for precast concrete girders.

The Contractor will be permitted to use Type III Portland cement for concrete used in the manufacture of precast concrete members.

## **SECTION 9 (BLANK)**

## **SECTION 10 CONSTRUCTION DETAILS**

### **SECTION 10-1 GENERAL**

#### **10-1.01 SCOPE OF WORK**

The scope of work, in general, includes; installation of concrete sidewalk, curb, gutter, driveway and accessible ramps, drainage improvements, hot mix asphalt paving, traffic signing and pavement marking and striping. Other related items not mentioned above, that are required by the plans, specifications or these Special Provisions shall be performed, placed, constructed, or installed.

#### **10-1.02 GENERAL REQUIREMENTS**

The order of work shall conform to the provisions in the Standard Specifications and these Special Provisions.

The Contractor's attention is directed to the requirements of "Cooperation", "Mobilization," "Maintaining Traffic" and "Traffic Control System" of these Special Provisions, the Project Plans, and the Standard Specifications.

Except as otherwise provided or with City Engineer approval of reduced roadway widths, the full width of the traveled way shall be open for use by public traffic on Saturdays, Sundays and designated legal holidays; after 4:00 p.m. Monday through Friday and when construction operations are not actively in progress.

Weekend hours of work, which do not significantly change the cost of the work may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be adequately 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.

The Contractor shall provide the Engineer all required submittals within the time frame specified by the Special Provisions, the Project Plans, and/or the Standard Specifications.

The Contractor shall submit to the Engineer a progress schedule in accordance with Section 8-1.02, "Schedule," of the Standard Specifications and these Special Provisions. Attention is directed to the requirements of these sections for scheduling a pre-construction scheduling conference within 10 working days of the approval of the contract and submitting a baseline schedule to the Engineer within 20 days of the contract approval.

The Contractor is responsible for verifying the location of all existing underground facilities, within the project area, that may have potential to conflict with the location of proposed improvements, and other work as shown on the Plans. The City has made every effort to show locations of any and all existing surface and subsurface structures. However, actual field conditions and locations can vary considerably from the plan locations. Therefore, the City cannot, and does not, assume responsibility for the existence or location of any structure such as, but not limited to, utilities and pipelines. The contractor is responsible for contacting all agencies and/or owners to verify this information prior to and during construction of any of the proposed improvements. If any existing utilities are found in conflict with the proposed location of the improvements shown on the plans, the Contractor shall contact the Engineer. The Engineer shall provide the Contractor with new grades to eliminate such conflict or shall arrange to have the utilities relocated to avoid the conflict. The Contractor shall work with the Engineer to schedule surveyors to be onsite during pot-holing of conflicts for utility elevation verification. Any delays, which may result from failure of the Contractor to pothole potential utility conflicts, shall be at the Contractor's expense.

At the end of each working day if a difference in excess of three inches (3") exists between the elevation of the existing pavement and the elevation of excavations within six feet (6') of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way unless Type K barrier rail has been placed between the traveled way and the excavation in accordance with "Type K Temporary Railing" of the Standard Specifications and these Special Provisions. During excavation operations, native material may be used for this purpose; however, once placing of the structural section commences, structural material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 1:4 (vertical:horizontal) or flatter to the bottom of the excavation. Treated base shall not be used for the taper. Full compensation for placing the material on a 1:4 slope, regardless of the number of times the material is required, and subsequent removing or reshaping of the material to the lines and grades shown on the plans shall be considered as included in the contract price paid for the materials involved and no additional compensation will be allowed. No payment will be made for material placed in excess of that required for the structural section.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in the provisions of this section, including, but not limited to, coordination with the applicable utility companies, pot-holing, excavation and backfill as shown on the plans, as specified in the Standard Specifications

and these Special Provisions, and as directed by the Engineer shall be considered as included in prices paid for the various Contract Items of work involved and no additional compensation will be allowed.

### 10-1.03 REQUEST FOR INFORMATION

All Requests for Information (RFI's) from the Contractor shall be submitted in writing to the Engineer, and shall be numbered sequentially as they are generated. The Engineer will have 5 working days from the date of receipt of each RFI to provide a response to the Contractor. All requests must come from the prime Contractor, the Engineer will not respond to RFI's received directly from subcontractors.

If the response provided by the Engineer is not satisfactory for the Contractor, the RFI may be re-submitted with more detailed requests noting the particular areas that have not been addressed. The Engineer will have three (3) working days to respond to the second request from the Contractor. If the second response is still not satisfactory to the Contractor, a meeting will be scheduled to resolve any outstanding items that have not been properly addressed.

A Request for Information shall only be used for obtaining information or clarification on project documents. The RFI process is not the proper media for notification of potential claims, writing letters, requesting a change order, etc... If the Contractor wishes to file a Notice of Potential Claim, it shall be filed in accordance with Section 5-1.43, "Potential Claims and Dispute Resolution," of the Standard Specifications.

### 10-1.04 LINES AND GRADES

Attention is directed to "Lines and Grades," of the Standard Specifications.

**The Contractor shall be responsible for setting stakes or marks that the Contractor determines to be necessary to establish the lines and grades required for the completion of the work specified.** The Engineer reserves the right to check, correct or require layout work to be revised in order to construct the improvements as shown on the plans and as directed by the Engineer. If any stakes or marks are destroyed or damaged, it is the Contractor's responsibility to reestablish the stakes or marks.

Concrete curb ramp, sidewalk, curb and gutter, street pavement and drainage facilities may not have elevations identified on the plans or otherwise precisely determined. Compliance with City and Caltrans Standards, Building Codes and Accessibility Standards for clearance and slopes are expected whenever possible, however deviations and field adjustments may be necessary to conform to existing topography, features and conditions. Common sense and accepted professional practices prevail in the setting of lines and grades and the Contractor shall immediately notify and clarify with the Engineer whenever conditions warrant a departure from establish standards or would cause a conflict with the lines and grades shown on the plans.

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

### 10-1.05 WATER POLLUTION CONTROL

#### 10-1.05.1 GENERAL

Water pollution control work shall conform to the provisions in Section 13, "Water Pollution Control," of the Standard Specifications, section of these Special Provisions entitled "Relations With California Regional Water Quality Control Board," and these Special Provisions.

The Contractor shall perform water pollution control work in conformance with the requirements in the "Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual" and addenda in effect on the day the Notice to Contractors is dated. This manual is referred to as the "Preparation Manual." Copies of the Preparation Manual may be obtained from:

State of California  
Department of Transportation  
Publication Distribution Unit  
1900 Royal Oaks Drive  
Sacramento, California 95815  
Telephone: (916) 445-3520

The Preparation Manual and other references for performing water pollution control work are available from the Department's Construction Storm Water and Water Pollution Control web site at: <http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm>.

The Contractor shall know and fully comply with applicable provisions of the Manuals, and Federal, State, and local regulations and requirements that govern the Contractor's operations and storm water and non-storm water discharges from both the project site and areas of disturbance outside the project limits



during construction. Attention is directed to Section 7, "Legal Relations and Responsibility to the Public," of the Standard Specifications and these Special Provisions.

Water pollution control requirements shall apply to storm water and non-storm water discharges from areas outside the project site that are directly related to construction activities for this contract including, but not limited to, asphalt batch plants, material borrow areas, concrete plants, staging areas, storage yards and access roads. The Contractor shall comply with the Manuals for those areas and shall implement, inspect and maintain the required water pollution control practices. Installing, inspecting and maintaining water pollution control practices on areas outside the highway right of way not specifically arranged and provided for by the Department for the execution of this contract, will not be paid for.

The Contractor shall be responsible for penalties assessed or levied on the Contractor or the City as a result of the Contractor's failure to comply with the provisions in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Manuals, and Federal, State and local regulations and requirements as set forth therein.

Penalties as used in this section shall include fines, penalties and damages, whether proposed, assessed, or levied against the Department or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, by governmental agencies or as a result of citizen suits. Penalties shall also include payments made or costs incurred in settlement for alleged violations of the Manuals, or applicable laws, regulations, or requirements. Costs incurred could include sums spent instead of penalties, in mitigation or to remediate or correct violations.

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

#### **10-1.05.2 WATER POLLUTION CONTROL IMPLEMENTATION**

Unless otherwise specified, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting, maintaining, removing, and disposing of the water pollution control practices. Unless otherwise directed by the Engineer, the Contractor's responsibility for "Water Pollution Control" implementation shall continue throughout any temporary suspension of work ordered in conformance with the provisions in Section 8-1.06, "Suspensions," of the Standard Specifications. Requirements for installation, construction, inspection, maintenance, removal, and disposal of water pollution control practices shall conform to the requirements in the Manuals and these Special Provisions.

If the Contractor or the Engineer identifies a deficiency in the implementation of the "Water Pollution Control" practices, the deficiency shall be corrected immediately. The deficiency may be corrected at a later date and time if requested by the Contractor and approved by the Engineer in writing, but shall be corrected prior to the onset of precipitation. If the Contractor fails to correct the identified deficiency by the date agreed or prior to the onset of precipitation, the project shall be in nonconformance with this section. Attention is directed to Section 5-1.03, "Engineer's Authority," of the Standard Specifications, and to "Retention of Funds" of this section for possible nonconformance penalties.

If the Contractor fails to conform to the provisions of this section, "Water Pollution Control," the Engineer may order the suspension of construction operations until the project complies with the requirements of this section.

#### **10-1.05.3 PAYMENT**

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in "Water Pollution Control" including, but not limited to installing, constructing, inspecting, maintaining, removing, and disposing of the water pollution control practices including non-storm water management, waste management and materials pollution water pollution control practices, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer shall be considered as included in the various items of work requiring these activities, and no additional compensation will be allowed therefore.

#### **10-1.05.4 CONSTRUCTION SITE MANAGEMENT**

Construction site management shall consist of controlling potential sources of water pollution before they come in contact with storm water systems or watercourses. The Contractor shall control material pollution and manage waste and non-storm water existing at the construction site by implementing effective handling, storage, use, and disposal practices.

The Contractor shall train all employees and subcontractors regarding:

- A. Material pollution prevention and control;
- B. Waste management;
- C. Non-storm water management;
- D. Identifying and handling hazardous substances; and
- E. Potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances.

Training shall take place before starting work on this project. New employees shall receive the complete training before starting work on this project. The Contractor shall have regular meetings to discuss and reinforce spill prevention and control; material delivery, storage, use, and disposal; waste management; and non-storm water management procedures.

Instructions for material and waste handling, storage, and spill reporting and cleanup shall be posted at all times in an open, conspicuous, and accessible location at the construction site.

Non-hazardous construction site waste and excess material shall be recycled when practical or disposed of in accordance with the provisions in Section 5-1.20B(4), "Contractor-Property Owner Agreement," of the Standard Specifications, unless otherwise specified.

Vehicles and equipment at the construction site shall be inspected on a frequent, predetermined schedule, and by the operator each day of use. Leaks shall be repaired immediately, or the vehicle or equipment shall be removed from the construction site.

#### **10-1.05.4.1 SPILL PREVENTION AND CONTROL**

The Contractor shall implement spill and leak prevention procedures when chemicals or hazardous substances are stored. Spills of petroleum products; substances listed under CFR Title 40, Parts 110, 117, and 302; and sanitary and septic waste shall be contained and cleaned up as soon as is safe.

Minor spills involve small quantities of oil, gasoline, paint, or other material that can be controlled by the first responder upon discovery of the spill. Cleanup of minor spills includes:

- A. Containing the spread of the spill,
- B. Recovering the spilled material using absorption,
- C. Cleaning the contaminated area, and
- D. Disposing of contaminated material promptly and properly.

Semi-significant spills are those that can be controlled by the first responder with the help of other personnel. Cleanup of semi-significant spills shall be immediate. Cleanup of semi-significant spills includes:

- A. Containing the spread of the spill;
- B. Recovering the spilled material using absorption if the spill occurs on paved or an impermeable surface;
- C. Containing the spill with an earthen dike and digging up contaminated soil for disposal if the spill occurs on dirt;
- D. Covering the spill with plastic or other material to prevent contaminating runoff if the spill occurs during precipitation; and
- E. Disposing of contaminated material promptly and properly.

Significant or hazardous spills are those that cannot be controlled by construction personnel. Notifications of these spills shall be immediate. The following steps shall be taken:

- A. Construction personnel shall not attempt to cleanup the spill until qualified staff have arrived;
- B. Notify the Engineer and follow up with a written report;
- C. Obtain the services of a spills contractor or hazardous material team immediately;
- D. Notify the local emergency response team by dialing 911 and county officials at the emergency phone numbers kept on the construction site;
- E. Notify the Governor's Office of Emergency Services Warning Center at (805) 852-7550;
- F. Notify the National Response Center at (800) 424-8802 regarding spills of Federal reportable quantities in conformance with CFR Title 40, Parts 110, 119, and 302;
- G. Notify other agencies as appropriate, including:
  - 1. Fire Department,
  - 2. Public Works Department,
  - 3. Highway Patrol,
  - 4. City Police or County Sheriff Department,

5. Department of Toxic Substances,
6. California Division of Oil and Gas,
7. Cal OSHA, or
8. Regional Water Resources Control Board.

The contractor shall oversee and enforce proper spill prevention and control measures. Minor, semi-significant, and significant spills shall be reported to the contractor who shall notify the Engineer immediately.

The Contractor shall prevent spills from entering storm water runoff before and during cleanup. Spills shall not be buried or washed with water.

The Contractor shall keep material or waste storage areas clean, well organized, and equipped with enough cleanup supplies for the material being stored. Plastic shall be placed under paving equipment when not in use to catch drips.

#### **10-1.05.4.2 MATERIAL MANAGEMENT**

Material shall be delivered, used, and stored for this contract in a manner that minimizes or eliminates discharge of material into the air, storm drain systems, or watercourses.

The Contractor shall implement the practices described in this section when taking delivery of, using, or storing the following materials:

- A. Hazardous chemicals including:
  1. Acids,
  2. Lime,
  3. Glues,
  4. Adhesives,
  5. Paints,
  6. Solvents, and
  7. Curing compounds;
- B. Soil stabilizers and binders;
- C. Fertilizers;
- D. Detergents;
- E. Plaster;
- F. Petroleum products including:
  1. Fuel,
  2. Oil, and
  3. Grease;
- G. Asphalt components and concrete components; and
- H. Pesticides and herbicides.

The Contractor shall supply the Material Safety Data Sheet to the Engineer for material used or stored. The Contractor shall keep an accurate inventory of material delivered and stored at the construction site.

Employees trained in emergency spill cleanup procedures shall be present when hazardous materials or chemicals are unloaded.

The Contractor shall use recycled or less hazardous products when practical.

Application of herbicides and pesticides shall be performed by a licensed applicator. The Contractor shall complete the Report of Chemical Spray forms when spraying herbicides or pesticides, and shall submit a copy to the Engineer before application.

#### **Material Storage**

The Contractor shall store liquids, petroleum products, and substances listed in CFR Title 40, Parts 110, 117, and 302 in containers or drums approved by the United States Environmental Protection Agency, and place them in secondary containment facilities.

Secondary containment facilities shall be impervious to the materials stored there for a minimum contact time of 72 hours.

Throughout the rainy season secondary containment facilities shall be covered during non-working days and when precipitation is predicted. Secondary containment facilities shall be adequately ventilated.

The Contractor shall keep the secondary containment facility free of accumulated rainwater or spills. After precipitation, or in the event of spills or leaks, accumulated liquid shall be collected and placed into drums within 24 hours. These liquids shall be handled as hazardous waste in

accordance with the provisions in "Hazardous Waste" of these Special Provisions, unless testing determines them to be non-hazardous.

Incompatible materials, such as chlorine and ammonia, shall not be stored in the same secondary containment facility.

Materials shall be stored in the original containers with the original product labels maintained in legible condition. Damaged or illegible labels shall be replaced immediately.

The secondary containment facility shall have the capacity to contain precipitation from a 24-hour-long, 25-year storm; and 10 percent of the aggregate volume of all containers, or all of the volume of the largest container within the facility, whichever is greater.

The Contractor shall store bagged or boxed material on pallets. Throughout the rainy season, bagged or boxed material shall be protected from wind and rain during non-working days and when precipitation is predicted.

The Contractor shall provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas shall be kept clean, well-organized, and equipped with cleanup supplies appropriate for the materials being stored.

The Contractor shall repair or replace perimeter controls, containment structures, covers, and liners as needed. Storage areas shall be inspected before and after precipitation, and at least weekly during other times.

### **Stockpile Management**

The Contractor shall reduce or eliminate potential air and water pollution from stockpiled material including soil, paving material, or pressure treated wood. Stockpiles shall be located out of floodplains when possible, and at least 50 feet from concentrated flows of storm water, drainage courses, or inlets unless written approval is obtained from the Engineer.

The Contractor may discontinue adding or removing material for up to 21 days and a stockpile will still be considered active.

The Contractor shall protect active stockpiles with plastic or geotextile cover, soil stabilization measures, or with linear sediment barrier when precipitation is predicted. Active stockpiles of cold mix asphalt concrete shall be placed on an impervious surface and covered with plastic when precipitation is predicted.

The Contractor shall protect inactive soil stockpiles with a plastic or geotextile cover, or with soil stabilization measures at all times during the rainy season. A linear sediment barrier around the perimeter of the stockpile shall also be used. During the non-rainy season soil stockpiles shall be covered and protected with a linear sediment barrier when precipitation is predicted. The Contractor shall control wind erosion during dry weather as provided in "Dust Control," of the Standard Specifications.

Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate sub-base shall be covered with plastic or geotextile, or protected with a linear sediment barrier at all times during the rainy season, and when precipitation is predicted during the non-rainy season.

Stockpiles of cold mix asphalt concrete shall be placed on and covered with impermeable material at all times during the rainy season, and when precipitation is predicted during the non-rainy season.

Stockpiles of pressure treated wood shall be covered with impermeable material and placed on pallets at all times during the rainy season, and when precipitation is predicted during the non-rainy season.

The Contractor shall repair or replace linear sediment barriers and covers as needed or as directed by the Engineer to keep them functioning properly. Sediment shall be removed when it accumulates to 1/3 of the linear sediment barrier height.

## **10-1.05.4.3 WASTE MANAGEMENT**

### **Solid Waste**

The Contractor shall not allow litter or debris to accumulate anywhere on the construction site, including storm drain grates, trash racks, and ditch lines. The Contractor shall pick up and remove trash and debris from the construction site at least once a week. The contractor shall monitor solid waste storage and disposal procedures on the construction site. The Contractor shall provide enough dumpsters of sufficient size to contain the solid waste generated by the project. Dumpsters shall be emptied when refuse reaches the fill line. Dumpsters shall be watertight. The Contractor shall not wash out dumpsters on the

construction site. The Contractor shall provide additional containers and more frequent pickup during the demolition phase of construction

Solid waste includes:

- A. Brick,
- B. Mortar,
- C. Timber,
- D. Metal scraps,
- E. Sawdust,
- F. Pipe,
- G. Electrical cuttings,
- H. Non-hazardous equipment parts,
- I. Styrofoam and other packaging materials,
- J. Vegetative material and plant containers from highway planting, and
- K. Litter and smoking material, including litter generated randomly by the public.

Trash receptacles shall be provided and used in the Contractor's yard, field trailers, and locations where workers gather for lunch and breaks.

### **Hazardous Waste**

The Contractor shall implement hazardous waste management practices when waste is generated on the construction site from the following substances:

- A. Petroleum products,
- B. Asphalt products,
- C. Concrete curing compound,
- D. Pesticides,
- E. Acids,
- F. Paints,
- G. Stains,
- H. Solvents,
- I. Wood preservatives,
- J. Roofing tar, and
- K. Materials classified as hazardous by California Code of Regulations, Title 22, Division 4.5; or listed in CFR Title 40, Parts 110, 117, 261, or 302.

Nothing in these Special Provisions shall relieve the Contractor of the responsibility for compliance with Federal, State, and local laws regarding storage, handling, transportation, and disposal of hazardous wastes.

The CONTRACTOR shall oversee and enforce hazardous waste management practices. Production of hazardous materials and hazardous waste on the construction site shall be kept to a minimum. Perimeter controls, containment structures, covers, and liners shall be repaired or replaced when damaged.

The Contractor shall have a laboratory certified by the California Department of Public Health (CDPH) sample and test waste when hazardous material levels are unknown to determine safe methods for storage and disposal.

The Contractor shall segregate potentially hazardous waste from non-hazardous waste at the construction site. Hazardous waste shall be handled, stored, and disposed of as required in California Code of Regulations, Title 22, Division 4.5, Section 66262.34; and in CFR Title 49, Parts 261, 262, and 263.

The Contractor shall store hazardous waste in sealed containers constructed and labeled with the contents and date accumulated as required in California Code of Regulations, Title 22, Division 4.5; and in CFR Title 49, Parts 172, 173, 178, and 179. Hazardous waste containers shall be kept in temporary containment facilities conforming to the provisions in "Material Storage" of these Special Provisions.

There shall be adequate storage volume and containers shall be conveniently located for hazardous waste collection. Containers of hazardous waste shall not be overfilled and hazardous wastes shall not be mixed. Containers of dry waste that are not watertight shall be stored on pallets. The Contractor shall not allow potentially hazardous waste to accumulate on the ground. Hazardous waste shall be stored away from storm drains, watercourses, moving vehicles, and equipment.

The Contractor shall clean water based or oil based paint from brushes or equipment within a contained area and shall not contaminate soil, watercourses, or storm drain systems.

Paints, thinners, solvents, residues, and sludges that cannot be recycled or reused shall be disposed of as hazardous waste. When thoroughly dry, latex paint and paint cans, used brushes, rags, absorbent materials, and drop cloths shall be disposed of as solid waste.

The Contractor shall dispose of hazardous waste within 90 days of being generated. Hazardous waste shall be disposed of by a licensed hazardous waste transporter using uniform hazardous waste manifest forms and taken to a Class I Disposal Site. A copy of the manifest shall be provided to the Engineer.

#### **Contaminated Soil**

The Contractor shall identify contaminated soil from spills or leaks by noticing discoloration, odors, or differences in soil properties. Soil with evidence of contamination shall be sampled and tested by a laboratory certified by CDPH. If levels of contamination are found to be hazardous, the soil shall be handled and disposed of as hazardous waste.

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

- A. Berms,
- B. Cofferdams,
- C. Grout curtains,
- D. Freeze walls, or
- E. Concrete seal course.

If water mixes with contaminated soil and becomes contaminated, the water shall be sampled and tested by a laboratory certified by the CDPH. If levels of contamination are found to be hazardous, the water shall be handled and disposed of as hazardous waste.

#### **Concrete Waste**

The Contractor shall implement practices to prevent the discharge of Portland cement concrete or asphalt concrete waste into storm drain systems or watercourses.

Portland cement concrete or asphalt concrete waste shall be collected at the following locations and disposed of:

- A. Where concrete material, including grout, is used;
- B. Where concrete dust and debris result from demolition;
- C. Where sawcutting, coring, grinding, grooving, or hydro-concrete demolition of Portland cement concrete or asphalt concrete creates a residue or slurry; or
- D. Where concrete trucks or other concrete-coated equipment is cleaned at the construction site.

#### **Sanitary and Septic Waste**

Wastewater from sanitary or septic systems shall not be discharged or buried within the Department right of way. The CONTRACTOR shall inspect sanitary or septic waste storage and monitor disposal procedures at least weekly. Sanitary facilities that discharge to the sanitary sewer system shall be properly connected and free from leaks.

The Contractor shall obtain written approval from the local health agency, city, county, and sewer district before discharging from a sanitary or septic system directly into a sanitary sewer system, and provide a copy to the Engineer. The Contractor shall comply with local health agency requirements when using an on-site disposal system.

#### **Liquid Waste**

The Contractor shall not allow construction site liquid waste, including the following, to enter storm drain systems or watercourses:

- A. Drilling slurries or fluids,
- B. Grease-free or oil-free wastewater or rinse water,
- C. Dredgings,
- D. Liquid waste running off a surface including wash or rinse water, or
- E. Other non-storm water liquids not covered by separate permits.

The Contractor shall hold liquid waste in structurally sound, leak proof containers such as:

- A. Sediment traps,
- B. Roll-off bins, or
- C. Portable tanks.

Liquid waste containers shall be of sufficient quantity and volume to prevent spills and leaks. The containers shall be stored at least 50 feet from storm drains, watercourses, moving vehicles, and equipment.

The Contractor shall remove and dispose of deposited solids from sediment traps as provided in "Solid Waste" of these Special Provisions, unless determined infeasible by the Engineer.

Liquid waste may require testing to determine hazardous material content before disposal.

Drilling fluids and residue shall be disposed of outside the highway right of way. If the Engineer determines that an appropriate location is available, fluids and residue exempt under California Code of Regulations, Title 23, Section 2511(g) may be dried by infiltration and evaporation in a leak proof container. The remaining solid waste may be disposed of as provided in "Solid Waste" of these Special Provisions.

#### **10-1.05.4.4 NON-STORM WATER MANAGEMENT**

##### **Water Control and Conservation**

The Contractor shall prevent erosion or the discharge of pollutants into storm drain systems or watercourses by managing the water used for construction operations. The Contractor shall obtain the Engineer's approval before washing anything on the construction site with water that could discharge into a storm drain system or watercourse. Discharges shall be reported to the Engineer immediately.

The Contractor shall implement water conservation practices when water is used on the construction site. Irrigation areas shall be inspected and watering schedules shall be adjusted to prevent erosion, excess watering, or runoff. The Contractor shall shut off the water source to broken lines, sprinklers, or valves, and they shall be repaired as soon as possible. When possible, water from waterline flushing shall be reused for landscape irrigation. Paved areas shall be swept and vacuumed, not washed with water.

Construction water runoff, including water from water line repair, shall be directed to areas to infiltrate into the ground and shall not be allowed to enter storm drain systems or watercourses. Spilled water shall not be allowed to escape water truck filling areas. When possible, the Contractor shall direct water from off-site sources around the construction site, or shall minimize contact with the construction site.

##### **Illegal Connection and Discharge Detection and Reporting**

The Contractor shall inspect the construction site and the site perimeter before beginning work for evidence of illegal connections, discharges, or dumping. Subsequently, the construction site and perimeter shall be inspected on a frequent, predetermined schedule.

The Contractor shall immediately notify the Engineer when illegal connections, discharges, or dumping are discovered. The Contractor shall take no further action unless directed by the Engineer. Unlabeled or unidentifiable material shall be assumed to be hazardous.

The Contractor shall look for the following evidence of illegal connections, discharges, or dumping:

- A. Debris or trash piles,
- B. Staining or discoloration on pavement or soils,
- C. Pungent odors coming from drainage systems,
- D. Discoloration or oily sheen on water,
- E. Stains or residue in ditches, channels or drain boxes,
- F. Abnormal water flow during dry weather,
- G. Excessive sediment deposits,
- H. Nonstandard drainage junction structures, or
- I. Broken concrete or other disturbances near junction structures.

##### **Vehicle and Equipment Cleaning**

The Contractor shall limit vehicle and equipment cleaning or washing on the construction site to that necessary to control vehicle tracking or hazardous waste. Vehicles and equipment shall not be cleaned on the construction site with soap, solvents, or steam until the Engineer has been notified. The resulting waste shall be contained and recycled, or disposed of as provided in "Liquid Waste" or "Hazardous Waste" of these Special Provisions, whichever is applicable. The Contractor shall not use diesel to clean vehicles or equipment, and shall minimize the use of solvents.

The Contractor shall clean or wash vehicles and equipment in a structure equipped with disposal facilities. If using a structure is not possible, vehicles and equipment shall be cleaned or washed in an outside area with the following characteristics:

- A. Located at least 50 feet from storm drainage systems or watercourses,
- B. Paved with asphalt concrete or Portland cement concrete,
- C. Surrounded by a containment berm, and
- D. Equipped with a sump to collect and dispose of wash water.

When washing vehicles or equipment with water, the Contractor shall use as little water as possible. Hoses shall be equipped with a positive shutoff valve.

Wash racks shall discharge to a recycle system or to another system approved by the Engineer. Sumps shall be inspected regularly, and liquids and sediments shall be removed as needed.

### **Vehicle and Equipment Fueling and Maintenance**

The Contractor shall fuel or perform maintenance on vehicles and equipment off the construction site whenever practical. When fueling or maintenance must be done at the construction site, the Contractor shall designate a site, or sites, and obtain approval from the Engineer before using. The fueling or maintenance site shall be protected from storm water, shall be on level ground, and shall be located at least 50 feet from drainage inlets or watercourses. The CONTRACTOR shall inspect the fueling or maintenance site regularly. Mobile fueling or maintenance shall be kept to a minimum.

The Contractor shall use containment berms or dikes around the fueling and maintenance area. Adequate amounts of absorbent spill cleanup material and spill kits shall be kept in the fueling and maintenance area and on fueling trucks. Spill cleanup material and kits shall be disposed of immediately after use. Drip pans or absorbent pads shall be used during fueling or maintenance unless performed over an impermeable surface.

Fueling or maintenance operations shall not be left unattended. Fueling nozzles shall be equipped with an automatic shutoff control. Vapor recovery fueling nozzles shall be used where required by the Air Quality Management District. Nozzles shall be secured upright when not in use. Fuel tanks shall not be topped-off.

The Contractor shall recycle or properly dispose of used batteries and tires.

### **Material and Equipment Used Over Water**

Drip pans and absorbent pads shall be placed under vehicles or equipment used over water, and an adequate supply of spill cleanup material shall be kept with the vehicle or equipment. Drip pans or plastic sheeting shall be placed under vehicles or equipment on docks, barges, or other surfaces over water when the vehicle or equipment will be idle for more than one hour.

The Contractor shall provide watertight curbs or toe boards on barges, platforms, docks, or other surfaces over water to contain material, debris, and tools. Material shall be secured to prevent spills or discharge into water due to wind.

### **Structure Removal Over or Adjacent to Water**

The Contractor shall not allow demolished material to enter storm water systems or watercourses. The Contractor shall use covers and platforms approved by the Engineer to collect debris. Attachments shall be used on equipment to catch debris on small demolition operations. Debris catching devices shall be emptied regularly and debris shall be handled as provided in "Waste Management" of these Special Provisions.

The CONTRACTOR shall inspect demolition sites within 50 feet of storm water systems or watercourses every day.

### **Paving, Sealing, Sawcutting, and Grinding Operations**

The Contractor shall prevent the following material from entering storm drain systems or water courses:

- A. Cementitious material,
- B. Asphaltic material,
- C. Aggregate or screenings,
- D. Grinding or sawcutting residue,
- E. Pavement chunks, or



F. Shoulder backing.

The Contractor shall cover drainage inlets and use linear sediment barriers to protect downhill watercourses until paving, sealing, sawcutting, or grinding operations are completed and excess material has been removed. Drainage inlets and manholes shall be covered during the application of seal coat, tack coat, slurry seal, or fog seal.

During the rainy season or when precipitation is predicted, paving, sawcutting, and grinding operations shall be limited to places where runoff can be captured. Seal coat, tack coat, slurry seal, or fog seal operations shall not begin if precipitation is predicted for the application or the curing period. The Contractor shall not excavate material from existing roadways during precipitation.

The Contractor shall vacuum up slurry from sawcutting operations immediately after the slurry is produced. Slurry shall not be allowed to run onto lanes open to public traffic or off the pavement.

The Contractor shall collect residue from Portland cement concrete grinding operations with a vacuum attachment on the grinding machine. The residue shall not be left on the pavement or allowed to flow across the pavement.

Material excavated from existing roadways may be stockpiled as provided in "Stockpile Management" of these Special Provisions if approved by the Engineer. Asphalt concrete chunks used in embankment shall be placed above the water table and covered by at least one foot of material.

Substances used to coat asphalt trucks and equipment shall not contain soap, foaming agents, or toxic chemicals.

#### **Thermoplastic Striping and Pavement Markers**

Thermoplastic striping and preheating equipment shutoff valves shall work properly at all times when on the construction site. The Contractor shall not preheat, transfer, or load thermoplastic within 50 feet of drainage inlets or watercourses. The Contractor shall not fill the preheating container to more than 6 inches from the top. Truck beds shall be cleaned daily of scraps or melted thermoplastic.

The Contractor shall not unload, transfer, or load bituminous material for pavement markers within 50 feet of drainage inlets or watercourses. All pressure shall be released from melting tanks before removing the lid to fill or service. Melting tanks shall not be filled to more than 6 inches from the top.

The Contractor shall collect bituminous material from the roadway after marker removal.

#### **Pile Driving**

The Contractor shall keep spill kits and cleanup material at pile driving locations. Pile driving equipment shall be parked over drip pans, absorbent pads, or plastic sheeting where possible. When not in use, pile driving equipment shall be stored at least 50 feet from concentrated flows of storm water, drainage courses, or inlets. The Contractor shall protect pile driving equipment by parking it on plywood and covering it with plastic when precipitation is predicted. The CONTRACTOR shall inspect the pile driving area every day for leaks and spills.

The Contractor shall use vegetable oil instead of hydraulic fluid when practical.

#### **Concrete Curing**

The Contractor shall not overspray chemical curing compound. Drift shall be minimized by spraying as close to the concrete as possible. Drainage inlets shall be covered before applying curing compound.

The Contractor shall minimize the use and discharge of water by using wet blankets or similar methods to maintain moisture when curing concrete.

#### **Concrete Finishing**

The Contractor shall collect and dispose of water and solid waste from high-pressure water blasting. Drainage inlets within 50 feet shall be covered before sandblasting. The nozzle shall be kept as close to the surface of the concrete as possible to minimize drift of dust and blast material. Blast residue may contain hazardous material.

Containment structures for concrete finishing operations shall be inspected for damage before each day of use and before predicted precipitation. Liquid and solid waste shall be removed from the containment structure after each work shift.

**10-1.05.4.5 PAYMENT**

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in spill prevention and control, material management, waste management, non-storm water management, and dewatering and identifying, sampling, testing, handling, and disposing of hazardous waste, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the contract prices paid for the items of work that require construction site management and no additional compensation will be allowed.

**10-1.05.5 TEMPORARY CONCRETE WASHOUT FACILITY**

Temporary concrete washout facilities shall be constructed, maintained, and later removed at the locations shown on the approved Storm Water Pollution Prevention Plan in conformance with "Water Pollution Control" of these Special Provisions, and in conformance with details shown on the plans and these Special Provisions.

Temporary concrete washout facilities shall be one of the water pollution control practices for waste management and materials pollution control. The Storm Water Pollution Prevention Plan shall include the use of temporary concrete washout facilities.

**10-1.05.5.1 MATERIALS**

**Plastic Liner**

Plastic liners shall be single ply, new polyethylene sheeting, a minimum of 10 mils thick and shall be free of holes, punctures, tears or other defects that compromise the impermeability of the material. Plastic liners shall not have seams or overlapping joints.

**Gravel-filled Bags**

Gravel bag fabric shall be non-woven polypropylene geotextile (or comparable polymer) and shall conform to the following requirements:

Specification	Requirements
Weight per unit area, ounces per square yard, min. ASTM Designation: D 5261	8.0
Grab tensile strength (one inch grip), kilonewtons, min. ASTM Designation: D 4632*	205
Ultraviolet stability, percent tensile strength retained after 500 hours, ASTM Designation: D 4355, xenon arc lamp method	70

\* or appropriate test method for specific polymer

Gravel bags shall be between 24 inches and 32 inches in length, and between 16 inches and 20 inches in width.

Yarn used for binding gravel bags shall be as recommended by the manufacturer or bag supplier and shall be of a contrasting color.

Gravel shall be between 3/8 inch and 3/4 inch in diameter, and shall be clean and free from clay balls, organic matter, and other deleterious materials.

The opening of gravel-filled bags shall be secured to prevent gravel from escaping. Gravel-filled bags shall be between 30 pounds and 50 pounds in weight.

**Straw Bales**

Straw for straw bales shall conform to the provisions in Section 13-10.02H, "Straw Bales," of the Standard Specifications.

Straw bales shall be a minimum of 14 inches in width, 18 inches in height, 36 inches in length and shall have a minimum weight of 50 pounds. The straw bale shall be composed entirely of vegetative matter, except for binding material.

Straw bales shall be bound by either wire, nylon or polypropylene string. Jute or cotton binding shall not be used. Baling wire shall be a minimum of 16 gage in diameter. Nylon or polypropylene string shall be approximately 0.08-inch in diameter with 80 pounds of breaking strength.

### **Stakes**

Stakes shall be wood or metal. Wood stakes shall be untreated fir, redwood, cedar, or pine and cut from sound timber. They shall be straight and free of loose or unsound knots or other defects which would render them unfit for the purpose intended. Wood stakes shall be a minimum 2" x 2" in size. Metal stakes may be used as an alternative, and shall be a minimum of 0.5-inch in diameter. Stakes shall be a minimum of 4 feet in length. The tops of the metal stakes shall be bent at a 90-degree angle or capped with an orange or red plastic safety cap that fits snugly to the metal stake. The Contractor shall submit a sample of the metal stake and plastic cap, if used, for the Engineer's approval prior to installation.

### **Staples**

Staples shall be as shown on the plans. An alternative attachment device such as geotextile pins or plastic pegs may be used instead of staples. The Contractor shall submit a sample of the alternative attachment device for the Engineer's approval prior to installation.

### **Signs**

Wood posts for signs shall conform to the provisions in "Wood Posts," of the Standard Specifications. Lag screws shall conform to the provisions in "Sign Panel Fastening and Mounting Hardware," of the Standard Specifications.

Plywood shall be freshly painted for each installation with not less than 2 applications of flat white paint. Sign letters shown on the plans shall be stenciled with commercial quality exterior black paint. Testing of paint will not be required.

## **10-1.05.5.2 INSTALLATION**

Temporary concrete washout facilities shall be as follows:

- A. Temporary concrete washout facilities shall be installed prior to beginning placement of concrete and located a minimum of 50 feet from storm drain inlets, open drainage facilities, and water courses unless determined infeasible by the Engineer. Temporary concrete washout facilities shall be located away from construction traffic or access areas at a location determined by the Contractor and approved by the Engineer.
- B. A sign shall be installed adjacent to each washout facility at a location determined by the Contractor and approved by the Engineer. Signs shall be installed in conformance with the provisions in "Construction," and "Sign Panel Installation," of the Standard Specifications.
- C. The length and width of a temporary concrete washout facility may be increased from the minimum dimensions shown on the plans, at the Contractor's expense and upon approval of the Engineer.
- D. Temporary concrete washout facilities shall be constructed in sufficient quantity and size to contain liquid and concrete waste generated by washout operations for concrete wastes. These facilities shall be constructed to contain liquid and concrete waste without seepage, spills, or overflow.
- E. Berms for below grade temporary concrete washout facilities shall be constructed from compacted native material. Gravel may be used in conjunction with compacted native material.
- F. A plastic liner shall be installed in below grade temporary concrete washout facilities.

Details for an alternative temporary concrete washout facility shall be submitted to the Engineer for approval at least 7 days prior to installation.

Temporary concrete washout facilities shall be disposed of in conformance with the provisions in Section 13-9, "Temporary Concrete Washouts," of the Standard Specifications.

Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary concrete washout facilities shall be backfilled and repaired in conformance with the provisions in Section 15, "Existing Facilities," of the Standard Specifications.

### **10-1.05.5.3 MAINTENANCE**

Temporary concrete washout facilities shall be maintained to provide adequate holding capacity with a minimum freeboard of 12 inches. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials shall be removed and disposed of in conformance with the provisions in Section 13-9, "Temporary Concrete Washouts," of the Standard Specifications. Holes, rips, and voids in the plastic liner shall be patched and repaired by taping or the plastic liner shall be replaced. The plastic liner shall be replaced when patches or repairs compromise the impermeability of the material as determined by the Engineer.

Gravel bags shall be replaced when the bag material is ruptured or when the yarn has failed, allowing the bag contents to spill out.

Temporary concrete washout facilities shall be repaired or replaced on the same day the damage occurs. Damage to temporary concrete washout facilities resulting from the Contractor's vehicles, equipment, or operations shall be repaired at the Contractor's expense.

### **10-1.05.5.4 PAYMENT**

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing a temporary concrete washout facility, complete in place, including excavation and backfill, maintenance, and removal, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the various items of work requiring concrete and no additional compensation will be allowed.

## **10-1.06 PROPERTY AND FACILITY PRESERVATION**

Attention is directed to Section 5-1.36 "Property and Facility Preservation," of the Standard Specifications and these Special Provisions.

Existing utilities and facilities shall be preserved and protected from damage by the Contractor. An effort has been made to show existing surface and underground structures on the plans, however not all infrastructure may be shown and infrastructure locations may be in different locations from those described. The Contractor is responsible for contacting all agencies and utility owners to verify the location of underground infrastructure prior to and during construction.

The Contractor shall be responsible to repair, restore, replace and stabilize, as closely as possible to existing condition any facilities, landscaping, or any other improvements, that are disturbed as a result of constructing frontage improvements (sidewalk, driveway, paving or signage) or performing work associated with this contract.

Before starting any work that could damage or interfere with underground infrastructure, the Contractor shall pothole and locate existing infrastructure, including laterals and appurtenances, and shall determine the presence of other underground infrastructure inferred from visible facilities such as buildings, meters and junction boxes. Existing infrastructure damaged due to negligence of the Contractor shall be completely repaired at the Contractor's expense and in coordination with the effected utility owner.

The Contractor shall accurately tie off and record the location of all utility covers, cleanouts, pull boxes and manholes to be lowered or temporarily overlaid prior to raising to grade. A copy of said record shall be provided to the Engineer prior to resurfacing the street.

Existing trees, shrubs and other plants, that are not to be removed as shown on the plans or specified in these Special Provisions, and are injured or damaged by reason of the Contractor's operations, shall be replaced by the Contractor. The minimum size of tree replacement shall be 24 inch box and the minimum size of shrub replacement shall be No. 15 container {15-gallon}. Replacement ground cover plants shall be from flats and shall be planted 12 inches on center. Replacement of *Carpobrotus* ground cover plants shall be from cuttings and shall be planted 12 inches on center. Replacement planting shall conform to the requirements in "Replacement Plants," of the Standard Specifications. The Contractor shall water replacement plants in conformance with the provisions in "Watering," of the Standard Specifications.

Damaged or injured plants shall be removed and disposed of outside the highway right of way in conformance with the provisions in 5-1.20B(4), "Contractor-Property Owner Agreement," of the Standard Specifications. At the option of the Contractor, removed trees and shrubs may be reduced to chips. The chipped material shall be spread within the highway right of way at locations designated by the Engineer.

Replacement planting of injured or damaged trees, shrubs, and other plants shall be completed prior to the start of the plant establishment period. Replacement planting shall conform to the provisions in Section 20-7, "Highway Planting," of the Standard Specifications.

Replacement planting of injured or damaged trees, shrubs and other plants shall be completed not less than 20 working days prior to acceptance of the contract. Replacement plants shall be watered as necessary to maintain the plants in a healthy condition.

Survey monuments and markers shown on the plans or encountered within the project limits shall be protected from damage by the Contractor. The Contractor shall notify the Engineer of monuments encountered and shall not remove or disturb said monument until the monument can be cross-referenced and tied out by a licensed surveyor. The Contractor shall allow a minimum of one working day for such referencing to be accomplished. When notified by the Engineer that the ties have been completed, the monument or marker can then be removed. The Contractor is not responsible for the replacement of any monument or marker of which the removal is necessitated by the work performed and which has been referenced and tied. If through negligence or carelessness on the part of the Contractor, notification is not made as provided above, markers are removed, or disturbed which are not in direct conflict with the construction, the Contractor shall be responsible for the cost of referencing, resurveying, and replacement of the monument or marker. Such sums for the replacement shall be deducted from the final contract payment.

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

**10-1.07 COOPERATION**

Attention is directed to Section 5-1.09, "Partnering," and Section 5-1.20, "Coordination with Other Entities," of the Standard Specifications and these Special Provisions. Attention is also directed to "General Requirements" of these Special Provisions.

Following is a list of some, but not necessarily all, of the utility companies that may have facilities in the project area:

<u>Utility Company</u>	<u>Contact Person</u>	<u>Telephone Number</u>
Pacific Gas & Electric	Lee Wells	530-477-3260
AT&T	Astrid Willard	916-484-2388
Comcast Cable	Justin Haggin	530-790-3369
City of Grass Valley – Sewer/Water/Storm Drain	Public Works Department	530-274-4350

The Contractor shall coordinate with Pacific Gas and Electric Company for the removal, relocation, repair, or disturbance of any gas or electric facilities caused by project work.

The Contractor shall coordinate with the AT&T for the removal, relocation, repair, or disturbance of any telecommunications facilities caused by project work.

The Contractor shall coordinate with the Comcast Cable for the removal, relocation, repair, or disturbance of any cable television facilities caused by project work.

The Contractor shall coordinate with the City of Grass Valley for the removal, relocation, repair, or disturbance of any water, sewer storm drain facilities caused by project work.

The Contractor shall apply for and obtain an Encroachment Permit from the California Department of Transportation for any construction or traffic control performed within the State right of way.

Any utilities not listed above or damaged by the Contractor during the course of project work shall be repaired or replaced in cooperation with the affected utility company.

The Contractor shall provide sufficient notification to the affected utility company to allow time for scheduling and completion of the required work. Any delays resulting from the Contractor’s failure to properly notify or schedule utility company work shall be at the Contractor’s expense.

Full compensation for conforming to the provisions of 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.

**10-1.08 PROGRESS SCHEDULE**

Progress schedules are required for this contract and shall be submitted in conformance with the provisions in Section 8-1.02, " Schedule," of the Standard Specifications and these Special Provisions. The Contractor shall notify the Engineer on a daily basis of the areas of work scheduled for the following day.

The Contractor shall submit to the Engineer a practicable "Critical Path Method" progress schedule within 10 working days of approval of the contract, and within 10 working days of the Engineer’s written request at any other time.

The progress schedule shall follow the general order of work detailed in "General Requirements," of these Special Provisions, and shall meet the milestones listed in "Beginning of Work, Time of Completion, and Liquidated Damages," of these Special Provisions.

Full compensation for conforming to the provisions of 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.

**10-1.09 OBSTRUCTIONS**

Attention is directed to Section 5-1.20, "Coordination with Other Entities," of the Standard Specifications and of these Special Provisions.

Attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to: natural gas in pipelines underground electric supply system conductors or cables, with potential to ground of more than 300 V, either directly buried or in a duct or conduit which do not have concentric grounded or other effectively grounded metal shields or sheaths, water mains, gravity sanitary sewer lines, and telephone conduits.

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

Notification Center	Telephone Number
Underground Service Alert – Northern California (USA)	1-800-227-2600

The Contractor is hereby notified that prior to commencing construction, he is responsible for contacting all utility companies for verification at the construction site of the locations of all underground facilities that may conflict with the placement of the improvements shown on the plans. Where potential conflict exists, the Contractor shall pothole existing utilities to determine their elevation. Call "Underground Service Alert" at 800-227-2600 forty-eight (48) hours before any excavation is started.

Full compensation for conforming to the provisions of this section, including exposing existing utilities, and any potholing, not otherwise provided for, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

**10-1.10 DUST CONTROL**

Dust control shall conform to the provisions in "Dust Control," of the Standard Specifications and these Special Provisions.

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

**10-1.11 MOBILIZATION**

Mobilization shall conform to the provisions in the Standard Specifications and these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all work involved in "Mobilization," including but not limited to the movement of personnel, equipment, supplies and incidentals to the project site shall be included in the contract lump sum price paid for "Mobilization," and no additional compensation will be allowed.

**10-1.12 CONSTRUCTION AREA TRAFFIC CONTROL DEVICES**

Flagging, signs, and temporary traffic control devices furnished, installed, maintained, and removed when no longer required shall conform to the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

Category 1 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices. These devices shall be certified as crashworthy by crash testing, crash testing of similar devices, or years of demonstrable safe performance. Category 1 temporary traffic control devices include traffic cones, plastic drums, portable delineators, and channelizers.

If requested by the Engineer, the Contractor shall provide written self-certification for crashworthiness of Category 1 temporary traffic control devices at least 5 days before beginning any work using the devices or within 2 days after the request if the devices are already in use. Self-certification shall be provided by the manufacturer or Contractor and shall include the following:

- A. Date,
- B. Federal Aid number (if applicable),

- C. Contract number, district, county, route and post mile of project limits,
- D. Company name of certifying vendor, street address, city, state and zip code,
- E. Printed name, signature and title of certifying person; and
- F. Category 1 temporary traffic control devices that will be used on the project.

The Contractor may obtain a standard form for self-certification from the Engineer.

Category 2 temporary traffic control devices are defined as small and lightweight (less than 100 pounds) devices that are not expected to produce significant vehicular velocity change, but may cause potential harm to impacting vehicles. Category 2 temporary traffic control devices include barricades and portable sign supports.

Category 2 temporary traffic control devices shall be on the Federal Highway Administration's (FHWA) list of Acceptable Crashworthy Category 2 Hardware for Work Zones. This list is maintained by FHWA and can be located at:

[http://safety.fhwa.dot.gov/roadway\\_dept/road\\_hardware/listing.cfm?code=workzone](http://safety.fhwa.dot.gov/roadway_dept/road_hardware/listing.cfm?code=workzone).

The Department also maintains this list at:

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/pdf/Category2.pdf>.

Category 2 temporary traffic control devices that have not received FHWA acceptance shall not be used. Category 2 temporary traffic control devices in use that have received FHWA acceptance shall be labeled with the FHWA acceptance letter number and the name of the manufacturer. The label shall be readable and permanently affixed by the manufacturer. Category 2 temporary traffic control devices without a label shall not be used.

If requested by the Engineer, the Contractor shall provide a written list of Category 2 temporary traffic control devices to be used on the project at least 5 days before beginning any work using the devices or within 2 days after the request if the devices are already in use.

Category 3 temporary traffic control devices consist of temporary traffic-handling equipment and devices that weigh 100 pounds or more and are expected to produce significant vehicular velocity change to impacting vehicles. Temporary traffic-handling equipment and devices include crash cushions, truck-mounted attenuators, temporary railing, temporary barrier, and end treatments for temporary railing and barrier.

Type III barricades may be used as sign supports if the barricades have been successfully crash tested, meeting the NCHRP Report 350 criteria, as one unit with a construction area sign attached.

Category 3 temporary traffic control devices shall be shown on the plans or on the Department's Highway Safety Features list. This list is maintained by the Division of Engineering Services and can be found at: [http://www.dot.ca.gov/hq/esc/approved\\_products\\_list/HighwaySafe.htm](http://www.dot.ca.gov/hq/esc/approved_products_list/HighwaySafe.htm).

Category 3 temporary traffic control devices that are not shown on the plans or not listed on the Department's Highway Safety Features list shall not be used.

Full compensation for providing self-certification for crashworthiness of Category 1 temporary traffic control devices and for providing a list of Category 2 temporary traffic control devices used on the project shall be considered as included in the prices paid for the various Contract items of work requiring the use of the Category 1 or Category 2 temporary traffic control devices and no additional compensation will be allowed.

### 10-1.13 CONSTRUCTION AREA SIGNS

Construction Area Signs shall be furnished, installed, maintained, and removed when no longer required in conformance with the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

Attention is directed to the provisions in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions. Type II retroreflective sheeting shall not be used on construction area sign panels. Type III, IV, VII, VIII, or IX retroreflective sheeting shall be used for stationary mounted construction area sign panels.

Orange background on construction area signs shall be fluorescent orange.

Repair to construction area sign panels will not be allowed, except when approved by the Engineer. At nighttime under vehicular headlight illumination, sign panels that exhibit irregular luminance, shadowing or dark blotches shall be immediately replaced at the Contractor's expense.

The Contractor shall notify the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 calendar days, prior to commencing excavation for construction area sign posts. The regional notification centers include, but are not limited to, the following:

Notification Center	Telephone Number
Underground Service Alert – Northern California (USA)	(800) 642-2444 (800) 227-2600

Excavations required to install construction area signs shall be performed by hand methods without the use of power equipment, except that power equipment may be used if it is determined there are no utility facilities in the area of the proposed post holes. The post hole diameter, if backfilled with Portland cement concrete, shall be at least 4 inches greater than the longer dimension of the post cross section.

Construction area signs placed within 15 feet from the edge of the travel way shall be mounted on stationary mounted sign supports as specified in "Construction Area Traffic Control Devices" of these Special Provisions.

The Contractor shall maintain accurate information on construction area signs. Signs that are no longer required shall be immediately covered or removed. Signs that convey inaccurate information shall be immediately replaced or the information shall be corrected. Covers shall be replaced when they no longer cover the signs properly. The Contractor shall immediately restore to the original position and location any sign that is displaced or overturned, from any cause, during the progress of work.

The Contractor may be required to cover certain signs during the progress of the work. Signs that are no longer required or that convey inaccurate information to the public shall be immediately covered or removed or the information shall be corrected. Covers for construction area signs shall be of sufficient size and density to completely block out the complete face of the signs. The reflective face of the covered signs shall not be visible either during the day or at night. Covers shall be fastened securely so that the signs remain covered during inclement weather. Covers shall be replaced when they no longer cover the signs properly.

Construction Area Signs shown on the Contractor's accepted Traffic Control Plan, or as directed by the Engineer, shall be included in the Contract price paid for, "Traffic Control System," and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in furnishing construction area signs required for the direction of public traffic through or around the work and for erecting or placing, maintaining (including covering and uncovering as needed) and, when no longer required, removing construction area signs.

#### **10-1.14 TEMPORARY OBJECT MARKERS**

Object markers shall be stationary mounted on wood or metal posts in conformance with the details shown on the plans and the provisions in "Markings," of the Standard Specifications.

Marker panels for Type P object markers shall conform to the provisions for sign panels for stationary mounted signs.

Full compensation for furnishing, placing, maintaining, and removing temporary object markers, including but not limited to for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in Temporary Object Markers, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, as required per the Contractor's accepted Traffic Control Plan, and as directed by the Engineer shall be considered as included in the Contract prices paid for the various items of work and no separate payment will be made.

#### **10-1.15 MAINTAINING TRAFFIC**

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

Lane closures shall conform to the provisions in "Closure Requirements and Conditions," and "Traffic Control System" of these Special Provisions.

The full width of the travel way shall remain open for public use at all times unless otherwise specified in these Special Provisions or approved by the City Engineer.

Construction activity requiring lane closures shall conform to the following restrictions;

- **The travel way of collector and primary residential streets may be reduced to one 11 foot lane of traffic with two way stop control between the hours of 7:00am to 4:00pm, as necessary and subject to the approval of the Engineer.**
- **The travel way of minor residential streets may be closed to through traffic between the hours of 7:00am to 4:00pm, as necessary and subject to the approval of the Engineer.**

Five days advance notice shall be given to all residents, businesses and local authorities prior to beginning work involving full street closures and/or closures to one lane. The Contractor shall accommodate any special needs that arise that may require ingress and egress to a property.

The Contractor may request day and/or weekend hours of work, which do not significantly change the cost of the work may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.

The Contractor shall provide access to parking lots, driveways, residences and businesses at all times unless otherwise specified in these Special Provisions or approved by the City Engineer. Access to parking lots, driveways,



and businesses within the project area shall be detailed in the Contractor's Traffic Control Plan for review and acceptance by the Engineer. Five days advance notice shall be given to all residents, businesses and local authorities prior to beginning work involving temporary closures to driveways or parking lots.

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

The Contractor shall notify local authorities of the Contractor's intent to begin work at least 7 days before work is begun. The Contractor shall cooperate with local authorities relative to handling traffic through the area and shall make arrangements relative to keeping the working area clear of parked vehicles.

Whenever work vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent orange traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 traffic cones or portable delineators shall be used for the taper. A W20-1 (ROAD WORK AHEAD) or W21-5b (RIGHT/LEFT SHOULDER CLOSED AHEAD) or C24(CA) (SHOULDER WORK AHEAD) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where designated by the Engineer and/or as required as part of the Contractor's accepted Traffic Control Plan. The sign shall be a minimum of 48" x 48" in size. The Contractor shall immediately restore to the original position and location a traffic cone or delineator that is displaced or overturned, during the progress of work.

Minor deviations from the requirements of this section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of the Contractor if, in the opinion of the Engineer, public traffic will be better served and the work expedited. These deviations shall not be adopted by the Contractor until the Engineer has approved them in writing. All other modifications will be made by contract change order.

When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane. The lane closure provisions of this section shall not apply if the work area is protected by a temporary railing or barrier.

Pedestrian and bicycle access facilities shall be provided through construction areas within the right of way, unless otherwise approved by the Engineer, and included in the Contractor's Traffic Control Plan for review and acceptance by the Engineer.

Full compensation for all flagging costs required for contract items and work within the Project Limits shall be included in the contract price paid for "Traffic Control System" and no additional compensation will be allowed.

Full compensation for furnishing all signs, pedestrian and bicycle access facilities, posting signs, detours, lane closures, materials, tools, equipment, and incidentals and for doing all work involved in "Maintaining Traffic" complete in place as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer will be included in the Contract lump sum price paid for "Traffic Control System" and no additional compensation will be allowed.

#### **10-1.16 CLOSURE REQUIREMENTS AND CONDITIONS**

Lane closures shall conform to the provisions in "Maintaining Traffic" of the Standard Specifications and these Special Provisions.

The term closure, as used herein, is defined as the closure of a traffic lane or lanes, including ramp or connector lanes, within a single traffic control system.

##### **10-1.16.1 CLOSURE SCHEDULE**

By noon Monday, the Contractor shall submit a written schedule of planned closures for the following week period, defined as Friday noon through the following Friday noon.

The Closure Schedule shall show the locations and times when the proposed closures are to be in effect. The Contractor shall submit the Closure Schedule request in a form acceptable to the City for approval. Closure Schedules submitted to the Engineer with incomplete, unintelligible or inaccurate information will be returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

Amendments to the Closure Schedule, including adding additional closures, shall be submitted to the Engineer, in writing, at least 3 working days in advance of a planned closure. Approval of amendments to the Closure Schedule will be at the discretion of the Engineer.

The Contractor shall confirm, in writing, all scheduled closures by no later than 8:00 a.m. 3 working days prior to the date on which the closure is to be made. Approval or denial of scheduled closures will be made no later than 4:00 p.m. 2 working days prior to the date on which the closure is to be made. Closures not confirmed or approved will not be allowed.

Confirmed closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer for the following working day.

### **10-1.16.2 CONTINGENCY PLAN**

The Contractor shall prepare a contingency plan for reopening closures to public traffic. The Contractor shall submit the contingency plan for a given operation to the Engineer within one working day of the Engineer's request.

### **10-1.16.3 LATE REOPENING OF CLOSURES**

If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in Section 8-1.06, "Suspensions," of the Standard Specifications. The Contractor shall not make any further closures until the Engineer has accepted a work plan, submitted by the Contractor, that will insure that future closures will be reopened to public traffic at the specified time. The Engineer will have 2 working days to accept or reject the Contractor's proposed work plan. The Contractor will not be entitled to any compensation for the suspension of work resulting from the late reopening of closures.

For each 30-minute interval, or fraction thereof past the time specified to reopen the closure, the City will deduct \$200 per interval from moneys due or that may become due the Contractor under the Contract.

### **10-1.16.4 REOPENING OF UNFINISHED ROADWAYS**

Lane reopening shall only be permitted when the roadway surfacing is established in a safe and passable condition for vehicular, bicycle and pedestrian traffic. A compacted aggregate or compacted asphalt grindings or ground asphalt pavement surface may be permissible for reopening of traffic for durations up to 48 hours as approved by the Engineer, excluding weekend periods. The surface shall be suitably, watered, leveled, compacted, signed, swept and maintained by the Contractor and the Contractor assumes liability for claims resulting from loose material.

### **10-1.16.5 PAYMENT**

The Contractor shall notify the Engineer of any delay in the Contractor's operations due to the following conditions, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of those conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling of forces, equipment and plant, time or payment adjustments shall be determined in conformance with the provisions in Section 8-1.07 "Delays" of the Standard Specifications:

- A. The Contractor's proposed Closure Schedule is denied and his planned closures are within the time frame allowed for closures in "Maintaining Traffic" of these Special Provisions, except that the Contractor will not be entitled to any compensation for amendments to the Closure Schedule that are not approved.
- B. The Contractor is denied a confirmed closure.

Should the Engineer direct the Contractor to remove a closure prior to the time designated in the approved Closure Schedule, any delay to the Contractor's schedule due to removal of the closure will be considered a delay and time or payment adjustments shall be determined in conformance with the provisions in Section 8-1.07 "Delays" of the Standard Specifications.

Full compensation for conforming to the provisions of this section shall be considered as included in the Contract lump sum price paid for "Traffic Control System," and no additional compensation will be allowed.

### **10-1.17 TRAFFIC CONTROL SYSTEM**

A traffic control system shall consist of closing traffic lanes in conformance with the details shown on the plans, the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications, the provisions in "Maintaining Traffic," "Closure Requirements and Conditions," and "Construction Area Signs," of these Special Provisions.

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

Any existing traffic stripes, pavement marking and pavement markers that are obliterated or removed by the Contractor or as directed by the Engineer shall be reinstalled by the Contractor before the completion of this project. Any conflicting markings shall be completely removed as identifiable pavement markings under daylight or at night, wet or dry conditions.

If components in the traffic control system are displaced or cease to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

During traffic stripe operations and pavement marker placement operations using bituminous adhesive, traffic shall be controlled, at the option of the Contractor, with either stationary or moving lane closures. During other operations, traffic shall be controlled with stationary lane closures.

STATIONARY TYPE LANE CLOSURE: When lane closures are made for work periods only, at the end of each work period, 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 designated 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 on multi lane highways shall be equipped with a Type II flashing arrow sign and radios 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 sign 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.

When flaggers are required, they shall have radios and be in contact with personnel in the work area.

One-way traffic shall be controlled through the project in conformance with the Caltrans Standard Plan T-13, "Traffic Control System for Lane Closure on Two Lane Conventional Highways" and these Special Provisions.

MOVING LANE CLOSURE: Flashing arrow signs used in moving lane closures shall be truck-mounted. Changeable message signs used in moving lane closure operations shall conform to the provisions in "Portable Changeable Message Signs," of the Standard Specifications, except the signs shall be truck-mounted and the full operation height of the bottom of the sign may be less than 7 feet above the ground, but should be as high as practicable.

Flashing arrow signs shall be in the caution display mode when used on 2-lane, 2-way highways.

Truck-mounted attenuators (TMA) for use in moving lane closures shall be any of the following approved models, or equal:

- A. Hexfoam TMA Series 3000, Alpha 1000 TMA Series 1000 and Alpha 2001 TMA Series 2001, manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601-2076, telephone (312) 467-6750
  1. Distributor (northern): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, telephone (800) 884-8274, FAX (916) 387-9734
  2. Distributor (southern): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, telephone (800) 222-8274
- B. Cal T-001 Model 2 or Model 3, manufacturer and distributor: Hexcel Corporation, 11711 Dublin Boulevard, P.O. Box 2312, Dublin, CA 94568, telephone (925) 551-4900
- C. Renco Rengard Model Nos. CAM 8-815 and RAM 8-815, manufacturer and distributor: Renco Inc., 1582 Pflugerville Loop Road, P.O. Box 730, Pflugerville, TX 78660-0730, telephone (800) 654-8182

Each TMA shall be individually identified with the manufacturer's name, address, TMA model number, and a specific serial number. The names and numbers shall each be a minimum ½ inch high and located on the left (street) side at the lower front corner. The TMA shall have a message next to the name and model number in ½ inch high letters which states, "The bottom of this TMA shall be \_\_\_\_\_ inches ± \_\_\_\_\_ inch above the ground at all points for proper impact performance." Any TMA which is damaged or appears to be in poor condition shall not be used unless recertified by the manufacturer. The Engineer shall be the sole judge as to whether used TMAs supplied under this contract need recertification. Each unit shall be certified by the manufacturer to meet the requirements for TMA in conformance with the standards established by the Transportation Laboratory.

Approvals for new TMA designs proposed as equal to the above approved models shall be in conformance with the procedures (including crash testing) established by the Transportation Laboratory. For information regarding submittal of new designs for evaluation contact: Transportation Laboratory, 5900 Folsom Boulevard, Sacramento, California 95819.

New TMAs proposed as equal to approved TMAs or approved TMAs determined by the Engineer to need recertification shall not be used until approved or recertified by the Transportation Laboratory.

Contractor shall submit a traffic control plan to the Engineer for acceptance prior to beginning any construction activities. All such plans shall conform to Section 12, "Temporary Traffic Control," of the Standard Specifications, the Manual of Traffic Control, and these Special Provisions.

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 Standard Specifications, will be paid for as a part of the extra work.

Full compensation for furnishing all labor (including flagging costs), materials (including signs, markings, and markers), tools, equipment, and incidentals and for doing all work involved in "Traffic Control System," including, but not limited to, placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the accepted Traffic Control Plan, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the Contract lump sum price paid for "Traffic Control System," and no additional compensation will be allowed.

Attention is directed to Sections 9-1.16, "Progress Payments," and 9-1.17, "Payment After Contract Acceptance," of the Standard Specifications and these Special Provisions. Payments for the contract item "Traffic Control System" will be made on the basis of the percent of work done on all items of work excluding the item for "Traffic Control System."

The adjustment provisions in Section 4-1.05, "Changes and Extra Work," 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 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 Standard Specifications for increased work and estimated on the same basis in the case of decreased work.

#### **10-1.17.1 TRAFFIC CONTROL PLAN**

The Traffic Control Plan for controlling the traffic and parking, including shoulder closures, detours and lane closures on City roadways, applicable bikeways, pedestrian facilities, and State Highways in conjunction with the work shall be submitted by the Contractor. The Traffic Control Plan shall be consistent with all specific site conditions and work conditions for this project.

Contractor shall submit three (3) copies of a proposed Traffic Control Plan to the City Engineer for review and comments no later than five (5) working days after the pre-construction conference. Construction shall not begin until the traffic control plan has been reviewed and accepted by the City Engineer. The contractor shall allow five (5) working days for review by the City. If revisions are required, as determined by the City Engineer, the Contractor shall revise and resubmit the Traffic Control Plan within five (5) calendar days of receipt of comments and shall allow five (5) working days for review of the revised traffic control plans. Upon acceptance of the Traffic Control Plan by the City Engineer, three (3) additional copies of the traffic control plan, incorporating all the required changes, shall be submitted to the City Engineer. Failure to submit an acceptable traffic control plan shall not in any way delay the start of the contract working days. The Traffic Control Plan shall be prepared and stamped by a Civil Engineer or Traffic Engineer licensed to practice engineering in the State of California. If the Contractor makes significant changes to the accepted Traffic Control Plan, these changes must also be prepared and stamped by a licensed Civil Engineer or Traffic Engineer.

The Traffic Control Plan shall conform to the Plans, Standard Specifications, the California MUTCD dated September 26, 2006, Section 12, "Temporary Traffic Control," of the Standard Specifications, and these Special Provisions.

The Traffic Control Plan shall be accepted by the Engineer prior to the start of construction. The Contractor shall not proceed with any construction until proper traffic control has been provided to the satisfaction of the Engineer. Failure to comply with any specification herein or with direction from the Engineer may result in work stopped until compliance is restored.

Any lost days due to improper traffic control will be charged against the Contractor's allowable working days.

The Contractor's Traffic Control Plan shall include and detail pedestrian access facilities through the construction areas within the Project right of way in accordance with Section 12-4, "Maintaining Traffic" of the Standard Specifications, for review and acceptance by the Engineer.

The Traffic Control Plan shall include preparation of a plan for the work to be performed within the project limits including, but not limited to, all flagging, signs, portable message signs, barricades, temporary striping, cones, pedestrian access facilities and other incidentals associated with, but not limited to, the widening of the roadway, installation of signal poles and conduits and reconstruction of sidewalks.

Acceptance by the City Engineer of the submitted traffic control plan shall in no way relieve the Contractor of his responsibility for any and all safety requirements conforming to the Standard

Specifications, these Special Provisions or others of any public authority having jurisdiction for the safety of persons and property, or to protect them from damage, injury or loss.

Full compensation for conforming to the provisions of this section shall be considered as included in the Contract lump sum price paid for "Traffic Control System," and no additional compensation will be allowed.

#### **10-1.18 FLAGGING COSTS**

The first paragraph of Section 12-1.03, "Construction," of the Standard Specifications is amended in its entirety to read as follows:

Full compensation for furnishing all flaggers, including transporting flaggers, and providing stands, towers, or lights for use of flaggers to provide for passage of public traffic through the work under the provisions in Sections 7-1.03, "Public Convenience," and 7-1.04, "Public Safety," of the Standard Specifications shall be considered as included in the Contract lump sum price paid for "Traffic Control System" and no additional compensation will be allowed.

#### **10-1.19 PORTABLE FLASHING BEACONS**

Portable flashing beacons conforming to the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications shall be furnished, placed and maintained at the locations shown on the plans, as required per the Contractor's accepted Traffic Control Plan and/or directed by the Engineer.

If flashing beacons are displaced or are not in an upright position, from any cause, during the progress of the work, the Contractor shall immediately repair or replace the flashing beacons in their original locations.

Full compensation for furnishing, placing, maintaining, and removing portable flashing beacons as required per the Contractor's accepted Traffic Control Plan and as ordered by the Engineer shall be considered as included in the Contract prices paid for the items of work that require the portable flashing beacons and no separate payment will be made.

#### **10-1.20 BARRICADES**

Barricades shall be furnished, placed and maintained at the locations shown on the plans, specified in the Standard Specifications or in these Special Provisions or where designated by the Engineer. Barricades shall conform to the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

Attention is directed to "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions regarding retroreflective sheeting for barricades.

Construction area sign and marker panels conforming to the provisions in "Construction Area Signs," of the Standard Specifications shall be installed on barricades in a manner determined by the Engineer at the locations shown on the plans.

Sign panels for construction area signs and marker panels installed on barricades shall conform to the provisions in "Stationary-Mounted Signs," of the Standard Specifications.

Full compensation for furnishing all barricades, including, but not limited to installation, maintenance and removal, shall be considered as included in the Contract lump sum price paid for "Traffic Control System" and no additional compensation will be allowed.

#### **10-1.21 TEMPORARY PAVEMENT DELINEATION**

Temporary pavement delineation shall be furnished, placed, maintained, and removed in conformance with the provisions in Section 12-3.01, "General," of the Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as reducing the minimum standards specified in the California Manual of Uniform Traffic Control Devices ("CAMUTCD"), or as relieving the Contractor from the responsibilities specified in Section 7-1.04, "Public Safety," of the Standard Specifications.

##### **10-1.21.1 GENERAL**

Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Lane line or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic.

All work necessary, including required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be

maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

Temporary pavement markers and removable traffic tape, including underlying adhesive, which conflicts with a new traffic pattern or which is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

#### **10-1.21.2 TEMPORARY LANELINE AND CENTERLINE DELINEATION**

Whenever lanelines and centerlines are obliterated, the minimum laneline and centerline delineation to be provided shall be temporary raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary raised pavement markers shall be the same color as the laneline or centerline the markers replace. Temporary raised pavement markers shall be, at the option of the Contractor, one of the temporary pavement markers listed for short term day/night use (14 days or less) or long term day/night use (6 months or less) in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions.

Temporary raised pavement markers shall be placed in conformance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

Temporary laneline or centerline delineation consisting entirely of temporary raised pavement markers placed on longitudinal intervals of not more than 24 feet shall be used on lanes open to public traffic for a maximum of 14 days. Prior to the end of the 14 days, the permanent pavement delineation shall be placed. If the permanent pavement delineation is not placed within the 14 days, additional temporary pavement delineation shall be provided at the Contractor's expense. The additional temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area, as determined by the Engineer.

Where "no passing" centerline pavement delineation is obliterated, the following "no passing" zone signing shall be installed prior to opening the lanes to public traffic. W20-1 (ROAD WORK AHEAD) signs shall be installed from 1,000 feet to 2,000 feet in advance of "no passing" zones. R4-1 (DO NOT PASS) signs shall be installed at the beginning and at every 2,000-foot interval within "no passing" zones. For continuous zones longer than 2 miles, W7-3a or W71(CA) (NEXT \_\_\_\_\_ MILES) signs shall be installed beneath the W20-1 signs installed in advance of "no passing" zones. R4-2 (PASS WITH CARE) signs shall be installed at the end of "no passing" zones. The exact location of "no passing" zone signing will be as determined by the Engineer and shall be maintained in place until permanent "no passing" centerline pavement delineation has been applied. The signing for "no passing" zones shall be removed when no longer required for the direction of public traffic. The signing for "no passing" zones shall conform to the provisions in "Construction Area Signs" of these Special Provisions, except for payment.

#### **10-1.21.3 TEMPORARY EDGELINE DELINEATION**

On multilane roadways (freeways and expressways), whenever edgelines are obliterated and temporary pavement delineation to replace those edgelines is not shown on the plans, the edgeline delineation to be provided for those areas adjacent to lanes open to public traffic shall be as follows:

- A. Temporary pavement delineation for right edgelines shall, at the option of the Contractor, consist of either solid 4-inch wide traffic stripe of the same color as the stripe the temporary edgeline delineation replaces, or traffic cones, portable delineators or channelizers placed at longitudinal intervals not to exceed 30 feet.
- B. Temporary pavement delineation for left edgelines shall, at the option of the Contractor, consist of either solid 4-inch wide traffic stripe of the same color as the stripe the temporary edgeline delineation replaces, traffic cones, portable delineators or channelizers placed at longitudinal intervals not to exceed 30 feet or temporary pavement markers placed at longitudinal intervals of not more than 6 feet. Temporary pavement markers used for temporary left edgeline delineation shall be one of the types of temporary pavement markers listed for short term day/night use (14 days or less) or long term day/night use (6 months or less) in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions.

Whenever edgelines are obliterated on roadways, the edgeline delineation to be provided for that area adjacent to lanes open to public traffic shall consist of, at the option of the Contractor, either solid 4-inch

wide traffic stripe of the same color as the stripe the temporary edgeline delineation replaces or shall consist of traffic cones, portable delineators or channelizers placed at longitudinal intervals not to exceed 30 feet.

Traffic stripe (4-inch wide) placed for temporary edgeline delineation, which will require removal, shall consist of temporary removable construction grade striping and pavement marking tape listed in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions, and shall conform to the requirements "Temporary Traffic Stripe" (Tape) of this Special Provision. Temporary removable construction grade striping and pavement marking tape when used shall be applied in conformance with the manufacturer's recommendations. Where removal of the 4-inch wide traffic stripe will not be required, painted traffic stripe conforming to the provisions of "Temporary Traffic Stripe (Paint)" of these Special Provisions may be used. The quantity of painted traffic stripe used for temporary edgeline delineation will not be included in the quantities of paint traffic stripe to be paid for.

The lateral offset for traffic cones, portable delineators or channelizers used for temporary edgeline delineation shall be determined by the Engineer. If traffic cones or portable delineators are used as temporary pavement delineation for edgelines, the Contractor shall provide personnel to remain at the project site to maintain the cones or delineators during hours of the day that the cones or delineators are in use.

Channelizers used for temporary edgeline delineation shall be the surface mounted type and shall be orange in color. Channelizer bases shall be cemented to the pavement in the same manner provided for cementing pavement markers to pavement in "Pavement Markers" of these Special Provisions, except epoxy adhesive shall not be used to place channelizers on the top layer of pavement. Channelizers shall be, at the Contractor's option, one of the surface mount types 36 inches listed in Section 8-1.03, "Pre-qualified and Tested Signing and Delineation Materials," of these Special Provisions.

Temporary edgeline delineation shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

#### **10-1.21.4 TEMPORARY TRAFFIC STRIPE (TAPE)**

Temporary traffic stripe consisting of removable traffic stripe tape shall be applied at the locations shown on the Contractor's accepting Traffic Control Plans, the project plans, and as directed by the engineer. The temporary traffic stripe tape shall be complete in place at the location shown prior to opening the traveled way to public traffic.

Removable traffic stripe tape shall be the temporary removable traffic stripe tape listed in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions.

Removable traffic stripe tape shall be applied in conformance with the manufacturer's installation instructions and shall be rolled slowly with a rubber tired vehicle or roller to ensure complete contact with the pavement surface. Traffic stripe tape shall be applied straight on tangent alignment and on a true arc on curved alignment. Traffic stripe tape shall not be applied when the air or pavement temperature is less than 50° F, unless the installation procedures to be used are approved by the Engineer, prior to beginning installation of the tape.

When removable traffic stripe tape is specified for temporary left edgeline delineation, temporary pavement markers placed at longitudinal intervals of not more than 6 feet may be used in place of the temporary traffic stripe tape. Temporary pavement markers shall be one of the types of temporary pavement markers listed for long term day/night use (6 months or less) in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions. When temporary pavement markers are used in place of temporary tape traffic stripe, payment for those temporary pavement markers will be made on the basis of the theoretical length of the temporary traffic stripe (tape) required for the left edgeline which the temporary markers replace.

#### **10-1.21.5 TEMPORARY TRAFFIC STRIPE (PAINT)**

Temporary traffic stripe consisting of painted traffic stripe shall be applied and maintained at the locations shown on the Contractor's accepted Traffic Control Plans, the project plans, and as directed by the Engineer. The painted temporary traffic strip shall be complete in place at the location shown prior to opening the traveled way to public traffic. Removal of painted temporary traffic stripe will not be required.

Temporary painted traffic strip shall conform to the provisions in "Paint Traffic Stripes and Pavement Markings" of these Special Provisions, "Traffic Stripes and Pavement Markings," of the Standard Specifications, except for payment. At the option of the Contractor, either one or two coats shall be applied regardless of whether on new or existing pavement.

When painted traffic stripe is specified for temporary left edgeline delineation, temporary pavement markers placed at longitudinal intervals of not more than 6 feet may be used in place of the temporary

painted traffic stripe. Temporary pavement markers will be one of the types of temporary pavement markers listed for long term day/night use (6 months or less) in “Pre-qualified and Tested Signing and Delineation Materials” of these Special Provisions. When temporary reflective pavement markers are used in place of temporary painted traffic stripe, payment for those temporary pavement markers will be made on the basis of the theoretical quantity of temporary traffic stripe (paint) required for the left edgeline the temporary pavement markers replace.

#### **10-1.21.6 TEMPORARY PAVEMENT MARKING (TAPE)**

Temporary pavement marking consisting of removable pavement marking tape shall be applied at the locations shown on the plans. The temporary pavement marking tape shall be complete in place at the location shown, prior to opening the traveled way to public traffic.

Removable pavement marking tape shall be the temporary removable type pavement marking tape listed in “Pre-qualified and Tested Signing and Delineation Materials” of these Special Provisions and shall be applied and removed in conformance with the provisions specified for applying and removing the temporary traffic stripe tape.

#### **10-1.21.7 TEMPORARY PAVEMENT MARKING (PAINT)**

Temporary pavement marking consisting of painted pavement marking shall be applied and maintained at the locations shown on the plans. The painted temporary pavement marking shall be complete in place at the location shown prior to opening the traveled way to public traffic. Removal of painted temporary pavement marking will not be required.

Temporary painted pavement marking shall conform to the provisions in “Traffic Stripes and Pavement Markings,” of the Standard Specifications , except for payment. At the option of the Contractor, either one or 2 coats shall be applied regardless whether on new or existing pavement.

At the Contractor’s option, temporary removable pavement marking tape or permanent pavement marking tape listed in “Pre-qualified and Tested Signing and Delineation Materials” of these Special Provisions may be used instead of painted temporary pavement markings. When pavement marking tape is used, regardless of which type of tape is placed, the tape will be measured and paid for by the square meter as temporary pavement marking (paint).

#### **10-1.21.8 TEMPORARY PAVEMENT MARKERS**

Temporary pavement markers shall be applied at the location shown on the Contractor’s accepted traffic control plan, the project plans and as directed by the Engineer. The pavement markers shall be applied complete in place at the locations shown prior to opening the traveled way to public traffic.

Temporary pavement markers shown on the plans shall be, at the option of the Contractor, one of the temporary pavement markers for long term day/night use (6 months or less) listed in “Pre-qualified and Tested Signing and Delineation Materials” of these Special Provisions.

Temporary pavement markers shall be placed in conformance with the manufacturer’s instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used in areas where removal of the pavement markers will be required.

Where the temporary pavement delineation shown on the plans for lanelines or centerlines consists entirely of a pattern of broken traffic stripe and pavement markers, the Contractor may use groups of the temporary pavement markers for long term day/night use (6 months or less) in place of the temporary traffic stripe tape or painted temporary traffic stripe. The groups of pavement markers shall be spaced as shown on the plans for a similar pattern of permanent traffic line, except pavement markers shown to be placed in the gap between the broken traffic stripe shall be placed as part of the group to delineate the pattern of broken temporary traffic stripe. The kind of laneline and centerline delineation selected by the Contractor shall be continuous within a given location. Payment for those temporary pavement markers used in place of temporary traffic stripe will be made on the basis of the theoretical length of patterns of temporary traffic stripe (tape) or temporary traffic stripe (paint).

Retroreflective pavement markers conforming to the provisions in “Pavement Markers” of these Special Provisions may be used in place of temporary pavement markers for long term day/night use (6 months or less) except to simulate patterns of broken traffic stripe. Placement of the retroreflective pavement markers used for temporary pavement markers shall conform to the provisions in “Pavement Markers” of these Special Provisions except the waiting period provisions before placing the pavement markers on new asphalt concrete surfacing as specified in Section 81-3.03c, “Epoxy Adhesive,” of the Standard Specifications shall not apply and epoxy adhesive shall not be used to place pavement markers in areas where removal of the pavement markers will be required.



#### **10-1.21.9 MEASUREMENT AND PAYMENT**

Full compensation for furnishing, placing, maintaining, and removing the temporary raised pavement markers and stripes, and/or layout (dribble) lines to establish alignment of temporary pavement markers used for temporary lane line and centerline delineation (including the signing specified for "no passing" zones) and for providing equivalent patterns of permanent traffic lines for these areas when required shall be considered as included in the contract price paid for "Traffic Control System" and no additional compensation will be allowed.

Full compensation for furnishing, placing, maintaining and removing temporary pavement delineation, including but not limited to, all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying, maintaining, removing, and repairing temporary pavement delineation, complete in place, as shown on the plans, as shown on the Contractor's accepted Traffic Control Plan, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the Contract lump sum price paid for "Traffic Control System," and no separate payment will be made.

#### **10-1.22 TEMPORARY RAILING**

Temporary railing (Type K) shall be placed at the locations shown on the Contractor's accepted Traffic Control Plan or as shown on the plans, and shall conform to the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

Reflectors on temporary railing (Type K) shall conform to the provisions in "Pre-qualified and Tested Signing and Delineation Materials," of these Special Provisions.

The Contractor's attention is directed to the provisions in "Public Safety," and "General Requirements," elsewhere in these Special Provisions.

Temporary railing (Type K) placed in accordance with the provisions in "Public Safety," of these Special Provisions will not be measured nor paid for.

Full compensation for furnishing all labor, materials (including reinforcement and concrete anchorage devices and terminal sections as required), excavation, backfill, tools, equipment and all incidentals, and for doing all work involved in furnishing, placing, maintaining, repairing, moving, reinstalling at a new location, replacing and removing temporary railing as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the Contract lump sum price paid for "Traffic Control System," and no separate payment will be made.

#### **10-1.23 CHANNELIZERS**

Channelizers shall conform to the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

Channelizers shall conform to the provisions in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions.

When no longer required for the work as determined by the Engineer, channelizers and underlying adhesive used to cement the channelizer bases to the pavement shall be removed. Removed channelizers and adhesive shall become the property of the Contractor and shall be removed from the site of work.

Channelizers placed in accordance with the Contractor's accepted Traffic Control Plan as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the Contract lump sum price paid for, "Traffic Control System" and no additional compensation will be allowed.

#### **10-1.24 TEMPORARY CRASH CUSHION MODULE**

This work shall consist of furnishing, installing, and maintaining sand filled temporary crash cushion modules in groupings or arrays at each location shown on the plans, as specified in these Special Provisions or where designated by the Engineer. The grouping or array of sand filled modules shall form a complete sand filled temporary crash cushion in conformance with the details shown on the plans and these Special Provisions.

Attention is directed to "Public Safety", "General Requirements", and "Temporary Railing" of these Special Provisions.

Whenever the work or the Contractor's operations establishes a fixed obstacle, the exposed fixed obstacle shall be protected with a sand filled temporary crash cushion. The sand filled temporary crash cushion shall be in place prior to opening the lanes adjacent to the fixed obstacle to public traffic.

Sand filled temporary crash cushions shall be maintained in place at each location, including times when work is not actively in progress. Sand filled temporary crash cushions may be removed during a work period for access

to the work provided that the exposed fixed obstacle is 15 feet or more from a lane carrying public traffic and the temporary crash cushion is reset to protect the obstacle prior to the end of the work period in which the fixed obstacle was exposed. When no longer required, as determined by the Engineer, sand filled temporary crash cushions shall be removed from the site of the work.

At the Contractor's option, the modules for use in sand filled temporary crash cushions shall be either Energite III Inertial Modules, Fitch Inertial Modules or Traffix Sand Barrels manufactured after March 31, 1997, or equal:

- A. Energite III and Fitch Inertial Modules, manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601-2076, telephone (312) 467-6750, FAX (800) 770-6755
  1. Distributor (North): Traffic Control Service, Inc., 8585 Thys Court, Sacramento, CA 95828, telephone (800) 884-8274, FAX (916) 387-9734
  2. Distributor (South): Traffic Control Service, Inc., 1881 Betmor Lane, Anaheim, CA 92805, telephone (800) 222-8274, FAX (714) 937-1070
- B. Traffix Sand Barrels, manufactured by Traffix Devices, Inc., 220 Calle Pintoresco, San Clemente, CA 92672, telephone (949) 361-5663, FAX (949) 361-9205
  1. Distributor (North): United Rentals, Inc., 1533 Berger Drive, San Jose, CA 95112, telephone (408) 287-4303, FAX (408) 287-1929
  2. Distributor (South): Statewide Safety & Sign, Inc., P.O. Box 1440, Pismo Beach, CA 93448, telephone (800) 559-7080, FAX (805) 929-5786

Modules contained in each temporary crash cushion shall be of the same type at each location. The color of the modules shall be the standard yellow color, as furnished by the vendor, with black lids. The modules shall exhibit good workmanship free from structural flaws and objectionable surface defects. The modules need not be new. Good used undamaged modules conforming to color and quality of the types specified herein may be utilized. If used Fitch modules requiring a seal are furnished, the top edge of the seal shall be securely fastened to the wall of the module by a continuous strip of heavy duty tape.

Modules shall be filled with sand in conformance with the manufacturer's directions, and to the sand capacity in pounds for each module shown on the plans. Sand for filling the modules shall be clean washed concrete sand of commercial quality. At the time of placing in the modules, the sand shall contain not more than 7 percent water as determined by California Test 226.

Modules damaged due to the Contractor's operations shall be repaired immediately by the Contractor at the Contractor's expense. Modules damaged beyond repair, as determined by the Engineer, due to the Contractor's operations shall be removed and replaced by the Contractor at the Contractor's expense.

Temporary crash cushion modules shall be placed on movable pallets or frames conforming to the dimensions shown on the plans. The pallets or frames shall provide a full bearing base beneath the modules. The modules and supporting pallets or frames shall not be moved by sliding or skidding along the pavement or bridge deck.

A Type R or P marker panel shall be attached to the front of the crash cushion as shown on the plans, when the closest point of the crash cushion array is within 12 feet of the traveled way. The marker panel, when required, shall be firmly fastened to the crash cushion with commercial quality hardware or by other methods determined by the Engineer.

At the completion of the project, temporary crash cushion modules, sand filling, pallets or frames, and marker panels shall become the property of the Contractor and shall be removed from the site of the work. Temporary crash cushion modules shall not be installed in the permanent work.

Temporary crash cushion modules placed in conformance with the provisions in "Public Safety" of these Special Provisions and modules placed in excess of the number specified or shown will not be measured nor paid for.

Repairing modules damaged by public traffic will be paid for as extra work as provided in Section 4-1.05, "Changes and Extra Work," of the Standard Specifications. Modules damaged beyond repair by public traffic, when ordered by the Engineer, shall be removed and replaced immediately by the Contractor. Modules replaced due to damage by public traffic will be paid for as extra work as provided in Section 4-1.05, "Changes and Extra Work," of the Standard Specifications and these temporary crash cushions modules will not be counted for payment in the new position.

If the Engineer orders a lateral move of the sand filled temporary crash cushions, except those placed in conformance with "Public Safety," of these Special Provisions, and the repositioning is not shown on the plans or the Contractor's accepted Traffic Control Plan, moving the sand filled temporary crash cushion will be paid for as extra work as provided in Section 4-1.05, "Changes and Extra Work," of the Standard Specifications and these temporary crash cushion modules will not be counted for payment in the new position.

Temporary crash cushion modules as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the Contract lump sum price paid for, "Traffic Control System," and shall include full compensation for furnishing all labor, materials (sand, pallets or frames and marker panels), tools, equipment, and incidentals, and for doing all work involved in

installing, maintaining, moving, resetting and removing, when no longer required (including those damaged by public traffic) the temporary crash cushion modules and no additional compensation will be allowed.

#### **10-1.25 CLEARING, GRUBBING AND REMOVAL**

This work shall consist of clearing, grubbing and removing existing vegetation, gravel, dirt, sod and other objectionable material, as necessary to prepare the work area for further excavation, grading or resurfacing.

Clearing and grubbing work shall conform to the provisions in "Clearing and Grubbing," of the Standard Specifications and these Special Provisions. Clearing and grubbing shall be performed only within the excavation limits and embankment slope lines. Existing vegetation, outside the areas to be cleared and grubbed, shall be protected from the Contractor's operations unless specifically shown on the plans to be removed.

Attention is directed to "Existing Facilities" of these Special Provisions regarding removal of existing surfacing, obstructions and objects.

Nothing herein shall be construed as relieving the Contractor of his responsibility for final cleanup of the highway as provided in "Cleanup," of the Standard Specifications.

This work shall consist of removing objectionable material, including existing miscellaneous concrete and asphalt areas, gravel, dirt, sod and planter materials, from within the limits of the project as specified. The limits of clearing and grubbing shall be of sufficient area and depth to complete the work as shown on the plans or described in these Special Provisions, and may include excavation and grading as necessary to complete the work.

Work shall also include removal and disposal of existing weeds, brush and other unsuitable material within and along the edge of pavement, and trimming of trees as needed for operation of equipment. Contractor shall allow seven (7) days after spray of weeds within or at edges of pavement to ensure successful eradication prior to chip, scrub and/or cape scrub seal operations. If unsuccessful, Contractor shall respray.

All striping, markings or pavement markers within areas to receive HMA replacement or overlay shall be removed and disposed of as part of the contract items of work involved. If, in the opinion of the Engineer, the pavement surface has been damaged as a result of pavement marker removal, the Contractor shall repair said damage in a manner acceptable to the Engineer at the Contractor's expense.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in clearing and removal, including, but not limited to, cutting, uprooting, sawcutting, excavation, disposal and backfill as shown on the plans, as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer, shall be considered as included in the prices paid for the various contract items of work requiring clearing, grubbing, and removal and no additional compensation will be allowed.

#### **10-1.26 EXISTING FACILITIES**

This work shall consist of removing existing facilities and structures which interfere with construction in the specified work area as shown on the plans and as specified in these Special Provisions. Attention is directed to Section 15, "Existing Facilities" of the Standard Specifications and these Special Provisions.

##### **10-1.26.1 REMOVE ASPHALT CONCRETE**

Existing asphalt concrete surfacing, and underlying base material shall be removed as needed, as shown on the plans and in conformance with these Special Provisions.

Attention is directed to the provisions in "Clearing and Grubbing," and "Buried Man-Made Objects," of the Standard Specifications and these Special Provisions.

That portion of the asphalt concrete area to be removed abutting asphalt concrete to remain in place shall be cut on neat lines with a power-driven saw before removing the surfacing, unless approved by the Engineer.

Surfacing and base shall be removed without damage to surfacing that is to remain in place. Damage to pavement which is to remain in place shall be repaired to a condition satisfactory to the Engineer or the damaged pavement shall be removed and replaced with new asphalt concrete if ordered by the Engineer. Repairing or removing and replacing pavement damaged outside the limits of pavement to be replaced shall be at the Contractor's expense and will not be measured nor paid for.

Removed materials shall be disposed of outside the highway right of way.

The material remaining in place, after removing surfacing and base to the required depth, shall be graded to a plane, watered, and compacted as deemed necessary by the Engineer.

Areas of the base material which are low as a result of over excavation shall be filled, at the Contractor's expense, with asphalt concrete.

The exact limits of asphalt concrete surfacing to be removed and replaced, as shown on the plans, will be determined by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing asphalt concrete, including, but not limited to, sawcutting, disposal, excavation and backfill as shown on the plans, as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer, shall be considered as included in the prices paid for the various contract items of work requiring asphalt concrete removal and no additional compensation will be allowed.

#### **10-1.26.2 REMOVE CONCRETE**

Existing concrete, shown on the plans to be removed shall be completely removed and disposed of in accordance with "Removing Concrete" of the Standard Specifications and these Special Provisions.

Attention is directed to the provisions in "Clearing and Grubbing," and "Buried Man-Made Objects," of the Standard Specifications and these Special Provisions.

Adjacent facilities damaged during concrete removal shall be repaired to a condition satisfactory to the Engineer or shall be removed and replaced if ordered by the Engineer. Repairing or removing and replacing damaged facilities shall be at the Contractor's expense and no additional compensation will be allowed. Attention is directed to hand stacked granite walls that may abut portions of the concrete to be removed. Care shall be taken in sawcutting and working next these walls and any damage to the walls shall be repaired at the Contractor's expense.

Where concrete adjacent to stone retaining walls is to be removed, the concrete must be saw cut 6 inches from the wall or the base of the curb perpendicular to the street. The concrete can then be removed using hand tools in order to eliminate the potential for damage to the stone retaining walls.

Concrete shall be completely removed and disposed of outside the highway right of way.

Depressions left after concrete removal shall be immediately backfilled with sand cement slurry or Class 2 Aggregate Base and compacted sufficiently to obtain an unyielding surface.

Removal of concrete shall include removal of sidewalks, curbs, gutters, driveways and miscellaneous concrete curbs as shown on the plans to be removed.

Reinforcing or other steel may be encountered in portions of the concrete. No additional compensation will be allowed for the removal of concrete containing reinforcing or steel.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, sawcutting, disposal, excavation and backfill as shown on the plans, as specified the Standard Specifications and these Special Provisions and as directed by the Engineer, shall be considered as included in the prices paid for the various contract items of work requiring concrete removal and no additional compensation will be allowed.

#### **10-1.26.3 REMOVE/RELOCATE SIGN**

Existing signs, posts and sign hardware, shown on the plans to be removed shall be carefully removed and salvaged (where shown to be reused) in accordance with the requirements of the Standard Specifications and these Special Provisions.

Concrete footings for signs, and sign posts deemed unusable by the Engineer, shall be removed and disposed of outside the highway right of way in accordance with the provisions of the Standard Specifications, the project plans and these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in sign removal, including, but not limited to removal, salvaging, excavation, hauling and disposal, and backfilling, as shown on the plans, as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer, shall be considered as included in the prices paid for the various contract items of work requiring sign removal or relocation and no additional compensation will be allowed.

#### **10-1.26.4 REMOVE AND/OR SALVAGE MISCELLANEOUS ITEMS**

Miscellaneous items shown on the plans to be removed or salvaged, including, but not limited to valve boxes, sprinklers, posts and signs will be completely removed and disposed of or salvaged for re-use as directed by the Engineer. No separate payment shall be made for the miscellaneous items to be removed unless specified and listed in the Bid Schedule. Such items shall be considered as included in the prices paid for the various contract items of work requiring item removal and no additional compensation will be allowed.

#### **10-1.26.5 RESET UTILITY COVER TO GRADE**

Utility cover boxes and manhole frames located in new concrete areas shall be reset to grade in accordance with the requirements of the Standard Specifications and these Special Provisions.

Existing boxes and frames shall be protected during demolition operations and carefully removed and salvaged for reuse as directed by the Engineer.

Boxes and frames shall be properly supported and reset to the proposed finish grade as part of the concrete reconstruction work.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved, including, but not limited to, removal, excavation, backfill, and resetting utility covers and manhole frames in new concrete, shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

#### **10-1.27 WATERING**

Watering shall conform to the provisions in Section 17, "Watering," of the Standard Specifications and these Special Provisions.

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

#### **10-1.28 EARTHWORK**

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these Special Provisions.

Surplus excavated material shall become the property of the Contractor and shall be disposed of in conformance with the provisions in "Contractor-Property Owner Agreement," of the Standard Specifications.

The Contractor's attention is directed to "Surplus Material," and "Deficiency Material," of the Standard Specifications.

Where a portion of the existing pavement surfacing is to be removed, the outline of the area to be removed shall be cut on a neat line with a power-driven saw to a minimum depth of 0.25-foot before removing the surfacing. If sawcut pavement is damaged before paving, it is the Contractor's responsibility, at his expense, to re-cut and remove any damaged portion before paving. Full compensation for cutting the existing surfacing shall be considered as included in the various contract items of work involved and no additional compensation will be allowed.

Graded areas shall be watered and compacted in accordance with the Standard Specifications, City Improvement Standards and as directed by the Engineer. Subbase sections for sidewalk, curb ramps, curb and gutter, driveways, roadway shoulders and asphalt concrete pavement shall be compacted to 95% relative compaction to a minimum depth of six inches.

##### **10-1.28.1 ROADWAY EXCAVATION**

Roadway excavation shall conform to the provisions in Section 19-2, "Roadway Excavation," of the Standard Specifications and shall include all work associated with grading for the roadway improvements, grading for sidewalk, curb, gutter and curb ramps, grading earth ditches, and the grading to provide smooth transitions for conform areas.

In addition to the provisions of the Standard Specifications, roadway excavation shall include excavation, grading, and embankment construction necessary to construct roadway widening and sidewalk subgrades, vegetated swales, and slopes, in accordance with the requirements of Section 19, "Earthwork," of the Standard Specifications and these Special Provisions..

Relative compaction of subgrade shall conform to all the provisions in Section 19-5 "Compaction" of the Standard Specifications. Payment for compaction of earthwork shall be considered as included in the various items of work requiring compaction and no additional compensation will be allowed.

If the Contractor elects to excavate and replace subgrade/base material to facilitate compaction, full compensation for that work will be considered as included in the contract item of work requiring the compaction of earthwork and no separate payment will be made.

Removed materials shall be properly disposed of outside the highway right of way unless otherwise designated on the plans or approved by the Engineer.

The material remaining in place, after removing surfacing and base to the required depth, shall be graded to a plane, watered, and compacted.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, excavation, stockpiling, loading, transporting, compacting, disposal, and all grading as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the prices paid for the various contract items of work requiring roadway excavation and no additional compensation shall be allowed.

### **10-1.28.2 TEMPORARY SHORING**

Temporary shoring will be necessary for any work required where the required excavation/trenching exceeds 5 feet in depth. If excavation/trenching exceeds 5 feet in depth, the Contractor shall be responsible for the design, installation, and maintenance of the temporary shoring system. The temporary shoring system shall be prepared and signed by an engineer who is registered as a Civil Engineer with the State of California.

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

All bracing and shoring shall comply with rules, orders and regulations of the California Division of Industrial Safety (D.I.S.). Trenching less than 5 feet in depth will require the Contractor to secure the appropriate D.I.S. permit and evidence of said permit shall be provided to the Engineer upon request.

The Contractor shall submit three (3) copies of the proposed temporary shoring system plan to the engineer a minimum of five (5) working days prior to the pre-construction conference. If excavation/trenching exceeds 5 feet in depth, the contractor shall not start construction of items of work requiring shoring before the temporary shoring plan has been reviewed and accepted by the Engineer.

The Contractor shall allow five (5) working days for the Engineer's review. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the temporary shoring system plan within five (5) calendar days of receipt of the Engineer's comments and shall allow five (5) working days for the Engineer to review the revisions. Upon acceptance of the temporary shoring system plan by the Engineer, three (3) additional copies of the temporary shoring system plan, incorporating all the required changes, shall be submitted to the Engineer. Failure to submit an acceptable temporary shoring system plan shall not in any way delay the start of the contract working days. If the Contractor makes significant changes to the accepted temporary shoring system plan, these changes must also be prepared and stamped by a licensed Civil Engineer.

Full compensation for temporary shoring, temporary shoring plans, for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in "Temporary Shoring," complete in place, as shown on the Contractor's accepted temporary shoring system, as shown on the plans, as specified in these Special Provisions and as directed by the Engineer shall be considered as included in the various contract items of work requiring the excavation or trenching exceeding 5 feet and no additional compensation will be allowed.

### **10-1.29 AGGREGATE BASE**

Aggregate base shall be Class 2, (3/4 inch) maximum grading, and shall conform to the provisions in Section 26, "Aggregate Bases," of the Standard Specifications and these Special Provisions. Aggregate base shall be processed to 95% relative compaction.

Do not store reclaimed asphalt concrete or aggregate base with reclaimed asphalt concrete within 100 feet measured horizontally of any culvert, watercourse, or bridge.

Aggregate base shall not contain volcanic cinder material.

Aggregate base shall have at least 80% of the rock having two or more fractured surfaces evident.

Aggregate base shall be placed to the lines, dimensions, and grades shown on the Plans or as directed by the Engineer.

Where existing aggregate base is shown on the plans to be remain in place, the material shall be sufficiently watered and compacted to obtain an unyielding surface, to the relative compaction as shown on the plans. If the existing base material is found to be unsuitable, in the opinion of the Engineer, it shall be replaced with new aggregate base in conformance with the provisions and payment details of this section. Payment for compaction of existing base to remain in place shall be considered as included in the various contract items of work requiring the compaction and no additional compensation will be allowed.

Aggregate base may be used in place of or in addition to reclaimed asphalt grindings as needed and as directed by the Engineer, in order to establish suitable road subgrade or facilitate construction of shoulder backing areas as shown on the plans.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the installation of aggregate base, including, but not limited to, placing, grading, excavating, and compacting aggregate base as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the price paid for "Aggregate Base" and no additional compensation shall be allowed.

### **10-1.30 GRIND ASPHALT CONCRETE PAVEMENT**

Existing asphalt concrete pavement shall be ground at the locations and to the dimensions shown on the plans, including "digouts", taper grind areas, mill and compact in place and complete roadway HMA removal and replacement. Grinding of asphalt concrete pavement shall be performed by the cold planing method. Planing of the asphalt concrete pavement shall not be done by the heater planing method.

Any adjoining sections of asphalt concrete that become loose after grinding shall be removed and disposed of by the Contractor at the Contractor's sole expense.

Cold planing machines shall be equipped with the cutter head not less than 30-inches in width and shall be operated so as not to produce fumes or smoke. The cold planing machine shall be capable of planing the pavement without requiring the use of a heating device to soften the pavement during or prior to the planing operation.

The depth, width and shape of the cut shall be indicated on the typical cross-sections, details, plans or as directed by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross-sections and details. The outside lines of the planed area shall be neat and uniform. Planing asphalt concrete pavement operations shall be performed without damage to the surfacing to remain in place.

Following planing operations, a drop-off of more than 0.15-foot will not be allowed at any time between adjacent lanes open to public traffic.

When transverse joints are planed in the pavement at conform lines; no drop-off shall remain between the existing pavement and planed area when the pavement is opened to public traffic. If asphalt concrete has not been placed to the level of existing pavement before the pavement is to be opened public traffic, a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapers on a slope of 30:1, or flatter, to the level of the planed area.

Asphalt concrete for temporary tapers shall be constructed of commercial quality asphalt concrete or cold mix asphalt concrete and may be spread and compacted by any method that will produce a smooth riding surface. Temporary asphalt concrete tapers shall be maintained continuously and when no longer needed completely removed, including the removal of all loose material from the underlying surface, before placing the permanent surfacing. Such removed material shall be disposed of outside the highway right-of-way..

Operations shall be scheduled such that not more than 3 days shall elapse between the time when transverse joints are planed in the pavement at the conform lines and the permanent surfacing is placed at such conform lines.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be removed and disposed of outside the right-of-way.

Removal operations of cold-planed material shall be concurrent with planing operations and follow within 50 feet of the planer, unless otherwise directed by the Engineer. The Contractor shall provide sediment control measures to prevent sediment from entering the storm drain system.

The Contractor's attention is directed to "General Requirements" and "Cooperation" of these Special Provisions and the Project Plans for the order required for various items of work. The concrete curb and gutter shall be constructed prior to any final grading and paving operations for the street sections and the new pavement structural section shall be constructed prior to grinding of the existing pavement.

Grind asphalt concrete areas will be measured per square yard for the actual area of surface ground irrespective of the number of passes required to obtain the depth shown on the plans.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved including, but not limited to, grinding, disposal, sediment control measures, furnishing asphalt concrete for and constructing, maintaining, removing and disposing of temporary asphalt concrete tapers, shall be considered as included in the prices paid for the various contract items of work requiring asphalt concrete grinding and no additional compensation will be allowed.

### **10-1.31 DRAINAGE INLET RETROFIT**

This work includes installing and retrofitting existing storm drainage inlets with a new drainage inlet frame and grate, complete in place as shown on the plans, and shall conform to the provisions of the Standard Specifications and these Special Provisions.

Drainage inlet frames shall be constructed to the dimensions shown on the plans or as directed by the Engineer. Existing frames, surround and supporting risers shall be completely removed, sawcut, hammered and demolished as needed to install a new frame assembly. New frames shall be set to grade and supported in concrete gutters or concrete borders as shown on the plans. Concrete supports shall be transitioned and retrofit as necessary to conform new drainage inlet opening to existing inlet boxes and structures.

The drainage inlet grate shall conform to the improvement plans, provisions in Section 75, "Miscellaneous Metal," of the Standard Specifications and these Special Provisions. The drainage inlet grate shall be bicycle safe type 18-9X conforming to the specifications of the Standard Plans, or as approved by the Engineer.

Surplus excavated material shall become the property of the Contractor and shall be removed and disposed of outside of the highway right of way in conformance with the provisions in "Surplus Material," of the Standard Specifications.

Full compensation for furnishing all labor, materials, including pipe, tools, equipment, and incidentals, and for doing all the work involved in the installation of drainage inlets, including, but not limited to excavation, disposal, backfill, compaction, forming, reinforcement, construction, finishing and installation of frames, grates and collars as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be included in the contract unit price paid per for "Drainage Inlet Retrofit Frame and Grate (Type)" and no additional compensation will be allowed.

#### **10-1.32 MINOR CONCRETE**

Concrete sidewalk, curb, gutters, driveways, curb ramps and other minor concrete shown on the plans shall conform to the provisions in Section 73, "Concrete Curbs and Sidewalk," and Section 90 "Concrete" of the Standard Specifications and these Special Provisions. The Contractors attention is directed to Section 52 "Reinforcement" of the Standard Specifications and these Special Provisions for requirements regarding reinforcement bars as shown on the plans.

Aggregate for minor concrete shall be 1" maximum grading unless otherwise specified and shall conform to the combined aggregate grading limits in "Combined Aggregate Gradation," of the Standard Specifications.

For textured, stamped and colored concrete surfaces, aggregate must comply with the grading requirements for fine aggregate in "Fine Aggregate Gradation," of the Standard Specifications.

Concrete for all minor concrete work shall be "six sack" concrete properly prepared at a mixing plant.

Concrete shall be placed at the locations shown on the plans, struck off and compacted until a layer of mortar is brought to the surface. The concrete shall be screeded to the required grade and cross section and floated to a uniform surface.

Whenever new concrete curb, gutter and sidewalk adjoins existing, the existing concrete vertical face shall be doweled 4-inches deep with 12 inch long, grade 60, #4 rebar. Abutting sidewalk shall be doweled mid-section with a minimum of two dowels. Abutting curb and gutter ends shall be doweled twice, 18 inches apart, centered on the curb and gutter section. If the dowels were not set with the existing concrete, the penetrating portion of the dowel shall be coated with two-part epoxy in conformance with Caltrans Standard Specifications Section 95-1.

All concrete surfaces shall be broom finished unless specified as stamped or textured concrete. Surfaces to be used by pedestrian traffic shall be broomed transversely to the line of traffic. All other surfaces shall be broomed longitudinally unless otherwise specified.

Existing painted concrete curbs that are replaced shall be repainted with two coats of paint per the manufacturer's recommendations. Curbs of median islands in the center of the roadway shall be painted yellow and median island curbs on the roadway edges shall be white or red as shown on the plans and as directed by the Engineer. Attention is directed to "Painting Concrete" of the Standard Specifications.

The contract price paid per square foot for "Minor Concrete (Sidewalk/Curb Ramp/Median) shall include all the work involved in constructing sidewalks, curb ramps, and raised medians, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer. For payment purposes, Sidewalk/Curb Ramp work shall include all that walkable portion of the curb ramp behind the back of curb. Attached retaining curb shall be considered part of the ramp square footage and combination curb and gutter shall be paid separately, as described herein.

The contract price paid per square foot for "Minor Concrete (Driveway) shall include all the work involved in constructing commercial driveways, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer. For payment purposes, Driveway work shall include all of the driveway, including the transitions to the sidewalk grade, from the back of curb to the back of the driveway. Combination curb and gutter shall be paid separately, as described herein.

The contract price paid per linear foot for "Minor Concrete (Curb and Gutter) shall include all the work involved in constructing concrete combination curb and gutters, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in the installation of minor concrete including, but not limited to: subgrade preparation; forming and constructing sidewalks, curb ramps, curbs, gutters, valley gutters, medians and crosswalks; and concrete finishing, grooving and stamping, shall be included in the contract price paid for "Minor Concrete (Type)" and no additional compensation will be allowed.



**10-1.33 DETECTABLE WARNING SURFACE**

Detectable warning surfaces shall be installed at the curb ramp locations shown on the plans and as directed by the Engineer, in accordance with the Standard Specifications and these Special Provisions. Curb ramp detectable warning surface shall consist of raised truncated domes in conformance with the details shown on the plans and the Standard Plans.

The detectable warning surface shall be prefabricated. The standard color of the detectable warning surface shall be Federal Yellow. As shown on the plans and primarily in the downtown core area, detectable warning surfaces shall be colored Brick Red.

Prefabricated detectable warning surface shall be in conformance with the requirements established by the Department of General Services, Division of State Architect and be attached in conformance with the manufacturer's recommendations.

The finished surfaces of the detectable warning surface shall be free from blemishes. The manufacturer shall provide a written 5-year warranty for prefabricated detectable warning surfaces, guaranteeing replacement when there is defect in the dome shape, color fastness, sound-on-cane acoustic quality, resilience, or attachment. The warranty period shall begin upon acceptance of the contract.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in the installation of detectable warning surfaces including, but not limited to; setting prefabricated warning surface into wet concrete, finishing and grooving concrete around warning surface border, and protecting the surface during construction operations shall be included in the contract price paid for each "Detectable Warning Surface" and no additional compensation will be allowed.

**10-1.34 HOT MIX ASPHALT (HMA)**

Hot Mix Asphalt (HMA) shall be Type A, installed using the Standard Construction Process, and shall conform to the provisions in "Hot Mix Asphalt," of the Standard Specifications and these Special Provisions.

The grade of asphalt binder to be mixed with aggregate for Type A HMA shall be Grade PG 64-16 conforming to the provisions in "Asphalt Binders," of the Standard Specifications.

Aggregate used for Type A HMA shall conform to the 1/2 inch maximum grading specified in Section 39-2.02B(4), "Aggregates," of the Standard Specifications for all structural section replacement areas, as designated on the plans.

The asphalt content of the asphalt mixture will be determined in conformance with the requirements in California Test 379, or in conformance with the requirements in California Test 382.

Paint binder (tack coat) shall be applied to existing surfaces to be surfaced and between layers of HMA, except when eliminated by the Engineer, and shall be applied to all vertical surfaces of existing pavement, curb and gutter, and construction joints in the surfacing against which additional material is to be placed and to other surfaces as designated by the Engineer.

Paint binder (tack coat) shall be paving asphalt conforming to the provisions in Section 39-1.02B, "Tack Coat," and Section 92, "Asphalts," of the Standard Specifications. The grade of paving asphalt to be used as paint binder will be determined by the Engineer.

Paint binder (tack coat) shall be applied in the gallon per square yard range limits specified for the surfaces to receive asphalt concrete in the tables below. The exact application rate within the range will be determined by the Engineer.

Application Rates for Paint Binder (Tack Coat) on HMA	
Type of surface to receive paint binder (tack coat)	Paving Asphalt gal/sq yd
Dense, compact surfaces, between layers, and on PCCP	0.01 – 0.02
Open textured, or dry, aged surfaces	0.02 – 0.06

HMA shall be spread and compacted in the number of layers of the thicknesses indicated in the following table:

Total Thickness Shown on Plans <sup>a</sup>	No. of Layers	Top Layer Thickness (foot)		Next Lower Layer Thickness (foot)		All Other Lower Layer Thickness (foot)	
		Min.	Max.	Min.	Max.	Min.	Max.
0.20-foot or less	1	—	—	—	—	—	—
0.25-foot	2b	0.12	0.13	0.12	0.13	—	—
0.30-0.40 foot	2	0.15	0.20	0.15	0.25	—	—
0.45-foot or more	c	0.15	0.20	0.15	0.25	0.15	0.40

- 
- a. When pavement reinforcing fabric is shown to be placed between layers of HMA, the thickness of asphalt concrete above the pavement reinforcing fabric shall be considered to be the "Total Thickness Shown on Plans" for the purpose of spreading and compacting the HMA above the pavement reinforcing fabric.
  - b. At the option of the Contractor, one layer 0.25-foot thick may be placed.
  - c. At least 2 layers shall be placed if total thickness is 0.45-foot. At least 3 layers shall be placed if total thickness is more than 0.45-foot and less than 0.90-foot. At least 4 layers shall be placed if total thickness is 0.90-foot or more.

HMA base shall be spread and compacted in one or more layers. Each layer of HMA base shall be not less than 0.20-foot nor more than 0.40-foot in compacted thickness, except that where the total thickness of HMA to be placed over HMA base is 0.20-foot or less, the layer of HMA base below the HMA shall not exceed 0.25-foot.

A layer shall not be placed over a layer which exceeds 0.25-foot in compacted thickness until the temperature of the layer which exceeds 0.25-foot in compacted thickness is less than 160° F at mid depth.

HMA shall be placed to the lines, dimensions, and grades shown on the plans or as directed by the Engineer. No allowance will be made for HMA placed outside those dimensions unless otherwise ordered by the Engineer. Areas of the base material which are low as a result of over excavation shall be filled, at the Contractor's expense, with HMA.

Full compensation for furnishing all labor, materials (including asphaltic emulsions, liquid asphalts, asphalts, and aggregate), tools, equipment, and incidentals, and for performing all the work involved in placing hot mix asphalt, complete in place including application of a prime coat or paint binder (tack coat) as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, included in the contract price paid per square yard for "each paving classification as listed below and no additional compensation will be allowed.

#### **10-1.35 RECLAIM ASPHALT CONCRETE PAVEMENT W/ HMA OVERLAY**

This work shall consist of grinding existing asphalt concrete surfacing and compacting the resulting loose material in place to form an asphalt concrete base prior to final paving. Attention is directed to "Grind Asphalt Concrete Pavement" and "HMA" of these Special Provisions and the Standard Specifications.

Existing asphalt concrete surfacing shall be ground to the limits and depth shown on the plans or as directed by the Engineer. Grinding material shall be reclaimed and processed by sorting or additionally pulverizing as necessary to achieve a maximum size of 1½". Loose material exceeding 1½" in the greatest dimension will be pulverized to less than 1½" or removed and disposed of in conformance with the provisions in Section 7 1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications. The resulting reclaimed material shall be free from organic matter and other deleterious substances and shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base.

The material remaining in place shall be shaped and graded to match the lines, grades and cross sections as shown on the plans or as directed by the Engineer, watered, and compacted. Localized bumps, depressions and ruts shall be eliminated. The finished surface of the remaining material shall not extend above the grade established by the Engineer.

Hot Mix Asphalt overlay shall be placed over the prepared base material to the dimensions shown on the plans and shall conform to the provisions in "Hot Mix Asphalt (HMA)" of these Special Provisions, except for payment.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved including, but not limited to grinding, processing, shaping, grading, watering and compacting shall be included in the contract square yard price paid for "Reclaim AC Pavement (Depth) w/ HMA Overlay(Depth)" as shown on the plans, as specified in these Special Provisions and as directed by the Engineer and no additional compensation will be allowed.

#### **10-1.36 REMOVE AND REPLACE HMA**

This work shall consist of removing existing asphalt concrete surfacing and underlying base material as needed, and replacing the removed structural section with new asphalt concrete as shown on the plans and in conformance with these special provisions.

Existing asphalt concrete and underlying base material removed during a work period shall be replaced before the time the lane is to be opened to public traffic, or otherwise stabilized and established in a safe and passable condition, in conformance with the provisions in "Maintaining Traffic" of these special provisions, unless approved by the Engineer.

The outline of the area to be removed shall be cut on neat lines with a power-driven saw to a depth matching the depth of the replacement section, before removing the surfacing, unless approved by the Engineer. If the

surface is to be totally removed by cold planning, the Engineer may eliminate the saw-cutting before removing the surface.

Surfacing and base shall be removed without damage to surfacing that is to remain in place. Damage to pavement which is to remain in place shall be repaired to a condition satisfactory to the Engineer or the damaged pavement shall be removed and replaced with new asphalt concrete if ordered by the Engineer. Repairing or removing and replacing pavement damaged outside the limits of pavement to be replaced shall be at the Contractor's expense and will not be measured nor paid for.

Removed materials shall be disposed of outside the right-of-way.

The material remaining in place, after removing surfacing and base to the required depth, shall be graded to a plane, watered, and compacted. The finished surface of the remaining material shall not extend above the grade established by the Engineer.

Hot Mix Asphalt shall be placed over the prepared base material or underlying pavement not removed and shall conform to the provisions in "Hot Mix Asphalt (HMA)" of these Special Provisions, except for payment.

The exact limits of asphalt concrete surfacing to be removed and replaced, as shown on the plans, will be determined by the Engineer. The quantity of removal and replacement to be paid for will be calculated on the basis of the dimensions shown on the plans adjusted by the amount of any change ordered by the Engineer.

Full compensation for furnishing all labor, materials (including asphaltic emulsions, liquid asphalts, asphalts, and aggregate), tools, equipment, and incidentals, and for performing all the work involved in removing and replacing hot mix asphalt, complete in place including sawcutting existing asphalt concrete, application of prime coat or paint binder (tack coat), and compacting the existing base, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, shall be included in the contract price paid per square yard for "Remove and Replace HMA (Depth of Removal)" and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials (including asphaltic emulsions, liquid asphalts, asphalts, and aggregate), tools, equipment, and incidentals, and for performing all the work involved in removing and replacing hot mix asphalt and adding a leveling course to create a raised intersection, complete in place including sawcutting existing asphalt concrete, application of prime coat or paint binder (tack coat), and compacting the existing base, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, shall be included in the contract price paid per square yard for "Raised Intersection (Depth)" and no additional compensation will be allowed.

If the aggregates for the HMA did not meet the "Contract Compliance" requirements for Sand Equivalent or gradation and if the Contractor requests the material be accepted on the basis of a penalty, in conformance with the provisions in the Section 39 2.02, "Materials," of the Standard Specifications, and the Engineer approves the request, the penalty shall be \$3.50 per cubic yard.

#### **10-1.37 SHOULDER BACKING**

Shoulder backing shall consist of the installation of reclaimed asphalt grindings, adjacent to the edge of the new pavement to the thicknesses and widths as shown on the plans. Installation and compaction shall be performed in accordance with the provisions in "Aggregate Base," of these Special Provisions.

Attention is directed to "Remove and Replace HMA" and "Remove Asphalt Concrete" of these Special Provisions for the requirements of grinding existing asphalt concrete pavement.

Asphalt concrete grindings from taper grinds and asphalt concrete removal shall be reclaimed for use as shoulder backing by sorting or processing to a size of not more than 2" in their largest dimension. Grindings greater than 2" shall be reprocessed to a smaller size or disposed of outside the highway right of way in conformance with the provisions in "Surplus Material," of the Standard Specifications.

Suitable reclaimed asphalt concrete grindings shall be placed at the locations shown on the plans, to a depth of 2" or as otherwise needed to bring roadway shoulders flush with pavement edges. Grindings shall be sufficiently watered and compacted to obtain an unyielding surface.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in the installation of shoulder backing, including, but not limited to, processing, placing, grading, excavating, and compacting reclaimed asphalt grindings for use as shoulder backing as shown on the plans, as specified in the Standard Specifications, the Special Provisions, and as directed by the Engineer shall be included in the contract price paid per square yard for "Shoulder Backing" and no additional compensation will be allowed.

#### **10-1.38 ADJUST VALVE COVER TO GRADE**

Frames and covers of existing valve cover enclosures shall be salvaged and reused or replaced as indicated on the plans or as directed by the Engineer. Enclosure boxes will be adjusted to grade in accordance with "Frames, Covers, Grates, and Manholes" of the Standard Specifications, the City of Grass Valley Standard Detail ST-28 "Adjust Utility Cover/Manhole to Grade" and these Special Provisions.

The Contractor shall accurately locate and record the location of all valve covers to be adjusted to grade and shall furnish the Engineer a copy of said record prior to paving. Contractor is responsible for protecting utilities per Section 5-1.36 "Property and Facility Preservation" of the Standard Specifications. Utilities include but are not limited to electrical vaults, telephone boxes, water meters, and water valves.

For utilities within overlay areas, all utility boxes must be exposed within 24 hours of paving, and the structures adjusted to grade within 72 hours of being covered by overlay.

For utilities within asphalt concrete replacement areas, adjustment may not be necessary if the existing cover is properly set to the proposed finish grade and the Engineer and Contractor agree that conforming to the existing cover would result in a better end product. Contractor shall protect the existing utility during resurfacing operations.

For utilities in areas of concrete improvements to be reconstructed, care shall be taken to protect the utility during construction and adjust the utility to finished grade (if different from existing grade).

Each of the respective utility companies shall retain the ability to decrease the amount of a contract item of work or eliminate in its entirety.

Contractor shall provide at least 48 hours advance notice to each respective owner of castings to be adjusted to grade.

Waste materials generated while adjusting the water valve box frame and cover to grade shall be completely removed and disposed of in accordance with "Surplus Material" of the Standard Specifications.

Concrete used for collars shall conform to the provisions in "Minor Concrete" of the Standard Specifications. Portland Cement Concrete shall be Class A, conforming to the provisions of "Concrete" of the Standard Specifications.

Valve covers adjusted to grade will be measured and paid for as units from actual count, complete and in place. Only those utility covers that require excavation and readjustment after asphalt concrete paving shall be paid for. Payment for covers that are conformed to or simply reset to grade in advance of concrete replacement shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved including, but not limited to, excavation, lowering, raising to grade, backfill, concrete and hot mix asphalt shall be included in the contract unit price for "Adjust Valve Cover to Grade" as shown on the plans, as specified in these Special Provisions and as directed by the Engineer and no additional compensation will be allowed.

#### **10-1.39 ADJUST MANHOLE COVER TO GRADE**

Frames and covers of existing manholes shall be salvaged and reused or replaced as indicated on the plans or as directed by the Engineer. Manhole frames will be adjusted to grade in accordance with "Frames, Covers, Grates, and Manholes" of the Standard Specifications, the City of Grass Valley Standard Detail ST-28 "Adjust Utility Cover/Manhole to Grade" and these Special Provisions.

The Contractor shall accurately locate and record the location of all manhole frames to be raised to grade and shall furnish the Engineer a copy of said record prior to resurfacing the street.

Prior to removal of an existing manhole frame, a platform shall be placed in the manhole above the top of the sewer or storm drain. The platform shall remain in place until all work on the manhole has been completed and the asphalt concrete has been placed around the manhole. Once adjustment of the manhole is complete, all dirt and debris shall be removed from the platform and the invert of the manhole.

Trimming of manhole cones (tapered section) will not be permitted.

All sections of the manhole grade rings shall be set in cement mortar and all joints smoothly grouted inside and out. The top of the completed manhole shall contain at least one 3-inch grade adjustment ring.

All manhole frames and covers shall be adjusted to grade after placement of the finish course of asphalt concrete.

Existing grade adjustment rings removed in the adjustment of manhole frames shall become the property of the Contractor and, if undamaged and thoroughly cleaned of mortar, may be reused in the work.

Waste materials generated while adjusting the manhole frames and covers to grade shall be disposed of outside the right-of-way.

Concrete used for collars and bases shall conform to the provisions in "Minor Concrete," of the Standard Specifications. Portland Cement Concrete shall be Class A, conforming to the provisions of Section 90, "Concrete," of the Standard Specifications.

Manhole frame and covers salvaged and adjusted to grade or replaced and adjusted to grade will be measured and paid for as units from actual count, complete and in place. Manhole frame and covers that do not require adjustment to grade at the direction of the Engineer, and are simply conformed to as part of resurfacing operations, shall not be paid for.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved, including, but not limited to, excavation, lowering, raising to grade, backfill, concrete, grade rings, mortar

and hot mix asphalt shall be included in the contract unit price for "Adjust Manhole Cover to Grade" as shown on the plans, as specified in these Special Provisions and as directed by the Engineer and no additional compensation will be allowed.

#### **10-1.40 OBJECT MARKER AND ROADSIDE SIGN**

Roadside signs shall be furnished and installed at the locations shown on the plans or where designated by the Engineer and in conformance with the provisions in "Roadside Signs," of the Standard Specifications and these Special Provisions.

Sign posts shall be a 2" X 2" square metal tube conforming to the standard specifications for cold rolled carbon sheet steel, commercial quality, ASTM A-446 or hot rolled carbon steel sheet, structural quality, ASTM A-570-90 and ASTM A-653-94 structural grade 50.

The finished posts shall be straight and shall have a smooth uniform finish. All holes and ends shall be free from burrs and the ends shall be cut square. Permissible variation in the straightness is one-sixteenth of an inch in three feet. The square tubes shall have holes that are seven-sixteenths plus or minus one sixty-fourth inches diameter on one (1) inch centers, on all four sides for the entire length of the pole. The holes shall be on the centerline of each side in true alignment and opposite to each other directly and diagonally. All posts shall be cut in such a manner to ensure hole alignment between anchors and sleeves when driven into the ground.

Square tubes shall be installed into a sleeve of the same material. A 27-inch long anchor sleeve shall be embedded in Class B/Class 3, 5-sack concrete that is placed in an excavated hole a minimum of 30-inches deep and 6-inches in diameter. Two holes of the sleeve shall remain showing above the finished grade, with all holes below grade taped closed. No material other than the square post shall intrude into the sleeve. The square signpost inside the sleeve shall move freely in the vertical direction after installation.

All posts shall be long enough such that the lowest hanging sign mounted on the post is a minimum of seven feet above the finish grade or walkway, if located in a sidewalk.

Certain signs may be shown on the plans to be salvaged and relocated. Sign and sign hardware that are free of significant scratches, dents and blemishes may be carefully removed and salvaged for reuse. Existing sign posts are assumed to require replacement although posts meeting the above specifications that are straight and of suitable condition and length and can be carefully removed, may be salvaged for reuse, as approved by the Engineer.

The contract price paid for each roadside sign shall be considered to consist of the complete sign assembly including, post, footing, primary sign panel and any additional sign plaques attached to the same post as shown on the plans or as directed by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals including but not limited to, sign panels, post(s), epoxy and hardware, and for doing all work involved in furnishing and installing object markers, complete in place, as shown on the plans, as specified in the Standard Specifications, the Standard Plans, these Special Provisions, and as directed by the Engineer shall be included in the contract unit price paid for "Object Marker" and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals including but not limited to, sign panels, post(s), braces, brackets, lag screws, washers, and hardware, and for doing all work involved in furnishing and installing roadside signs, complete in place, including installation of sign panels, as shown on the plans, as specified in the Standard Specifications, the Standard Plans, these Special Provisions, and as directed by the Engineer shall be included in the contract unit price paid for "Roadside Sign" and no additional compensation will be allowed.

#### **10-1.41 THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKING**

Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84, "Traffic Stripes and Pavement Markings," of the Standard 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 traffic stripes and pavement markings shall conform to the requirements in ASTM Designation: D 6359-99. White thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 250 mcd m<sup>-2</sup> lx<sup>-1</sup>. Yellow thermoplastic traffic stripes and pavement markings shall have a minimum initial retroreflectivity of 150 mcd m<sup>-2</sup> lx<sup>-1</sup>.

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.

Thermoplastic material for traffic stripes shall be applied at a minimum rate of 0.20-lb/ft. The minimum application rate is based on a solid stripe of 4 inches in width. Thermoplastic traffic stripes shall be applied at the minimum thickness of 0.059-inch. Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

At the option of the Contractor, permanent traffic striping and pavement marking tape conforming to the provisions in "Pre-qualified and Tested Signing and Delineation Materials" of these Special Provisions may be placed instead of the thermoplastic traffic stripes and pavement markings specified herein. Permanent tape, if used, shall be installed in conformance with the manufacturer's specifications. If permanent tape is placed instead of thermoplastic traffic stripes and pavement markings, the tape will be measured and paid for by the linear foot as thermoplastic traffic stripe and by the square foot as thermoplastic pavement marking.

Thermoplastic traffic stripes will be measured by the linear foot along the line of the traffic stripes, without deductions for gaps in broken traffic stripes. Deductions will be made at cross streets and driveways as applicable. A double traffic stripe, consisting of two 4-inch wide yellow stripes, shall be measured and paid for as one traffic stripe. A striped median island or two-way left turn lane shall be measured and paid for as two separate double traffic stripes.

Where existing pavement delineation is to be covered or obliterated by the Contractor's work or where the existing striping alignment and marking placement is shown to be substantially modified, the Contractor shall demarcate the proposed layout prior to placement of permanent striping and marking. The Contractor shall notify the Engineer in advance of beginning layout work and shall spot, track or outline the proposed delineation for field acceptance by the Engineer.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying thermoplastic traffic stripes complete in place, including establishing alignment for stripes and layout work, as shown on the plans, as specified in the Standard Specifications and the Special Provisions, and as directed by the Engineer shall be included in the contract price paid per linear foot for "Thermoplastic Traffic Stripe," and no additional compensation will be allowed.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying thermoplastic traffic markings complete in place, as shown on the plans, as specified in the Standard Specifications and the Special Provisions, and as directed by the Engineer shall be included in the contract price paid per square foot for "Thermoplastic Traffic Markings," and no additional compensation will be allowed.

#### **10-1.42 FINISHING ROADWAY**

Finishing roadway shall conform to the provisions in Section 22, "Finishing Roadway," of the Standard Specifications except for the method of payment.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in finishing roadway, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions and as directed by the Engineer will be considered as included in the Contract prices for various items of work requiring roadway finishing and no additional compensation will be allowed.

#### **10-1.43 NOTIFICATION AND SCHEDULING**

The Contractor shall deliver a "NOTICE" to all residents and businesses of properties adjacent to the project streets and those on connecting streets that have no other means of accessing their properties but through the project or are otherwise adversely affected by the scheduled project operations. The Contractor will provide a standard "NOTICE" form in sufficient numbers to permit distribution to all homes and businesses within a 500 foot radius of the project site. The Contractor will complete the "NOTICE" forms by entering the name of the firm, local and toll free telephone number, date of issuance, and shall indicate on the notice street closures, traffic control measure or outages that are expected to be in place.

"NOTICE" forms shall be issued to the affected properties no later than forty-eight (48) hours prior to the work. The Contractor shall be responsible for removing any "NOTICES" that were not removed by the resident or business after all work is completed by the Contractor or as directed by the Engineer. Any costs associated with towing of vehicles in the way of construction shall be borne by the Contractor. "NOTICE" shall not be left in mailboxes, per Section PO 11.2.1 of the Domestic Mail Manual (DMM). The Contractor shall be held liable for any fines.

The Contractor shall coordinate with the Engineer to notify the Police Department, Fire Department, Ambulance Service, Waste Management, Post Office, Durham Transportation, and Gold Country Stage forty-eight (48) hours prior to any lane closure. Notification may be in conjunction with the scheduling requirements of the "SCHEDULING" portion of the Standard Specifications. Particular attention shall be given to the construction of adequate facilities on any street to permit the passing of emergency vehicles.

None of the provisions specified herein shall be construed to restrict or prohibit, at any time, the prosecution of items of work which will not interfere with the use of existing streets.

Full compensation for all work associated with furnishing, distributing and removal, as required, of all notices; for contacting and coordinating with applicable agencies, schools, etc; and for all incidentals of work required within this "Notification and Scheduling" section will be considered as included in the contract prices paid for various items of work and no additional compensation will be allowed.

# NOTICE

Date Delivered: \_\_\_\_\_

Dear Property Owner:

In the interest of minimizing the inconvenience caused by the 2020 ANNUAL STREET REHABILITATION PROJECT, we are providing you at least 48 hours notice that the following work is proposed to be done in the vicinity of your property or affecting access to your property beginning on \_\_\_\_\_ from \_\_\_\_\_ a.m./p.m. to \_\_\_\_\_ a.m./p.m.:

\_\_\_\_\_ Concrete Work

\_\_\_\_\_ Traffic Striping

\_\_\_\_\_ Paving

\_\_\_\_\_ Other

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

We appreciate your patience and cooperation while this work is underway.

Please call (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ to contact the Contractor if you have any questions or wish additional information regarding this work, or contact the City of Grass Valley Engineering Division at (530) 274-4352.

\_\_\_\_\_  
Contractor's Name



#### **10-1.44 RECORD DRAWINGS**

The Contractor shall keep accurate records on a set of project prints (24" x 36") of all additions and deletions of the work, and all of the changes in location, elevation, and character of the work not otherwise shown or noted on the contract plans. The City will furnish three (3) sets of full size prints for the "Record Drawings" plans at no cost to the Contractor.

"Record Drawings" construction plans shall be provided to the City after completion of the project. Two (2) copies shall be provided with changes to the original contract work shown in red color. The Contractor shall transmit these "Record Drawings" plans to the Engineer for approval. Details to be shown on the "Record Drawings" plans shall include, but not be limited to, type, quantity, and location of pipe runs, location and elevations of facilities, and any other modifications, additions or adjustments to any other facilities in the project.

"Record Drawings" construction plans shall be signed and dated by the Contractor or the Subcontractor that actually constructed the facility. In addition, company names of the Contractor and Subcontractors shall be added to the title sheet.

The cost of record keeping to provide the information for these "Record Drawings" plans and all work associated with preparing accurate "Record Drawings" construction plans shall be considered as included in the prices paid for the various Contract items of work involved and no additional compensation will be allowed.

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## **APPENDIX A – CONSTRUCTION CONTRACT**

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