

WARNING: ALL INDIVIDUALS INTERESTED IN BIDDING ON THIS PROJECT MUST OBTAIN THE FINAL PLANS AND SPECIFICATIONS FROM THE DEPARTMENT MANAGING THE PROJECT OR AS OTHERWISE STATED IN THE ADVERTISEMENT FOR BIDS FOR THE PROJECT. DO NOT USE THE PLANS AND SPECIFICATIONS POSTED ON THE CLERK OF THE BOARD'S WEBSITE FOR BIDDING ON THIS PROJECT.

NOTICE TO BIDDERS AND SPECIAL PROVISIONS FOR CONSTRUCTION ON

LINDEN AVENUE AND OTHER ROADS

Various Limits

LENGTH: 1.08 Miles
WORK ORDER: TX1796
AREA: Rialto
ROAD NO.: Various (See Plan)

For use in connection with the following publications of the State of California, Department of Transportation:

1. California Department of Transportation (Caltrans) 2015 Standard Specifications, including the Caltrans 2015 Revised Standard Specifications (Revisions through July 21, 2017), unless specified otherwise in these Special Provisions.
2. Caltrans Standard Plans dated 2018 (Revisions through October 15, 2021), unless specified otherwise in these Special Provisions.
3. Labor Surcharge and Equipment Rental Rates effective on the date work is accomplished.

**SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS
-- TRANSPORTATION --**



The Notice to Bidders and Special Provisions, prepared for
construction on

LINDEN AVENUE AND OTHER ROADS

Various Limits

LENGTH: 1.08 Miles
WORK ORDER: TX1796
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ROAD NO.: Various (See Plan)

have been recommended for approval under the direction of the following:

Brendon P. Biggs, P.E.
Director of Public Works

Date:

have been prepared by or under the direction of the following Registered Engineers:

Chris Nguyen, P.E.
Interim Engineering Manager
Transportation Design Division

Date:



Jeremy D. Johnson, P.E.
Engineering Manager
Traffic Division

Date:



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NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN that the Board of Supervisors of the San Bernardino County, State of California, will receive sealed proposals until

10:00 A.M., THURSDAY, XXXXXXXX XX, 20XX

in the building of:

San Bernardino County Department of Public Works
Front Reception Desk
825 East 3rd Street
San Bernardino, CA 92415-0835

PLEASE NOTE: All bidders and subcontractors, including, but not limited to persons or entities that deliver ready-mix concrete, must be registered with: 1) the Department of Industrial Relations (with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)); and 2) All bidders are required to register with the County's ePro system prior to the date and time to receive sealed proposals or they will be disqualified. The lowest responsive and responsible bidder and its subcontractors must also be registered with the Department of Industrial Relations at the time of award of the contract and must remain registered throughout the term of the contract pursuant to Labor Code section 1771.1. For more information on the requirements of Labor Code section 1771.1, please see <http://www.dir.ca.gov/Public-Works/SB854.html>.

Bids (also referred to as "proposals") in response to this solicitation can be submitted through the San Bernardino County Electronic Procurement Network (ePro) <https://epro.sbcounty.gov/epro/> (however, if the bid is submitted in ePro, the bidder's security described herein must still be submitted in person in a sealed envelope prior to the proposal opening date and time) or in person at the San Bernardino County Department of Public Works at which time they will be transmitted, publicly opened and declared via video and teleconference via gotoc.com using meeting ID 434-769-549. See the flyer available under the bid posting on ePRO for further login information for the following project:

LINDEN AVENUE AND OTHER ROADS Various Limits

LENGTH: 1.08 Miles

W.O.: TX1796

AREA: Rialto

ROAD NO.: Various (See Plan)

The work, in general, consists of cold plane and overlay, glasspave 50, leveling course, reconstruct ADA ramps, curb and gutter, cross gutter and sidewalk, replace dike, install detectable warning surface, remove trees, remove and reinstall fences, blockwall, paint traffic stripes and pavement markings and doing other work appurtenant thereto.

This project requires a **Class A** contractor's license issued by the California Contractors State Licensing Board. The Contractor must maintain this license from contract award through contract acceptance. All contractors, including any out-of-state contractors/subcontractors,

must comply with all applicable laws and regulations of the State of California at the time of bid and award.

A non-mandatory pre-bid meeting is scheduled for

10:00 A.M., WEDNESDAY, XXXXXXXX XX, 20XX

To be held via video and teleconference via goto.com using meeting ID 434-769-549. See the flyer available under the bid posting on ePRO for further login information. Handouts from the Pre-bid meeting will be post on ePRO shortly after the Pre-Bid meeting. **All bidders and interested small businesses are encouraged to attend this meeting.**

This meeting is to inform bidders of project requirements and subcontractors of subcontracting and material supply opportunities. Bidder's attendance at this meeting is not mandatory, but all bidders are encouraged to attend this meeting.

NOTICE: BIDDERS MUST OBTAIN BIDDING DOCUMENTS AND PREPARE THEIR BIDS ON FORMS OBTAINED DIRECTLY FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS OR FROM THE SAN BERNARDINO COUNTY ELECTRONIC PROCUREMENT NETWORK (ePRO) <https://epro.sbcounty.gov/epro/>. BIDS PREPARED ON FORMS OBTAINED FROM OTHER SOURCES WILL NOT BE ACCEPTED. BIDDERS MUST BE LISTED ON THE OFFICIAL PLAN HOLDERS LIST AT THE TIME BIDS ARE PUBLICLY OPENED. BIDS RECEIVED FROM BIDDERS WHO ARE NOT LISTED ON THE OFFICIAL PLAN HOLDERS LIST WILL NOT BE ACCEPTED.

Bids shall be prepared in accordance with these Special Provisions and the following:

1. Caltrans 2015 Standard Specifications, including the Caltrans 2015 Revised Standard Specifications (Revisions through July 21, 2017), unless specified otherwise in these Special Provisions.
2. Caltrans Standard Plans dated 2018 (Revisions through October 15, 2021), unless specified otherwise in these Special Provisions.
3. Labor Surcharge and Equipment Rental Rates effective on the date work is accomplished.

These publications are published by Caltrans and may be reviewed at the following website: <http://www.dot.ca.gov/des/oe/construction-contract-standards.html>.

The bids must also be accompanied by cash, cashier's check, certified check, or bidder's bond executed by an admitted surety insurer, made payable to the San Bernardino County in the amount of at least ten percent of the amount of the bid given as a guarantee that the bidder will enter into a contract. The contract shall be signed by the successful bidder and returned **within 10 days**, and the contract bonds, copy of insurance policies, and Certificates of Insurance, with documents to verify any self-insurance coverage shall be provided **within 10 days**, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution.

The Engineer will issue two (2) Notices to Proceed, the first being a Notice to Proceed with Submittals, and the second being a Notice to Proceed with Construction. The Contractor shall begin construction work **within 15 days** after the Notice to Proceed with Construction (excluding Saturday, Sunday, and holidays). Pursuant to Section 1-1.07, "DEFINITIONS", of the Standard Specifications, "day" means **"24 consecutive hours running from midnight to midnight; calendar day"**.

The Plans and Special Provisions may be obtained at no cost by visiting <http://epro.sbcounty.gov\bso>

With the purchase, a return address must be furnished which the purchaser thereby agrees is sufficient to reach him/her. Please note that, upon payment of the purchase price, the purchased copy of the plans and Special Provisions become the property of the purchaser and are not to be returned to the County for refund.

QUESTIONS: Bidders must submit all questions in writing, by mail, fax, or e-mail. The deadline for bidder questions is **5:00 P.M. on FRIDAY, XXXXXXXX XX, 20XX**

BONDS: The successful bidder will be required to furnish a Labor and Materials Bond and a Faithful Performance Bond, each in a penal sum equal to one hundred percent of the contract price.

Notice is hereby given that the successful bidder who is awarded the contract may avail itself to Public Contract Code section 22300 which allows substitute securities to be deposited in lieu of retention payments withheld to insure performance.

ePRO: Attention is directed to Section 2, "Proposal Requirements and Conditions" regarding the San Bernardino County's Electronic Procurement Network (ePro) system. **THIS SYSTEM REQUIRES NEW REGISTRATION FOR ALL VENDORS DOING BUSINESS WITH THE COUNTY.**

EQUAL EMPLOYMENT OPPORTUNITY: During the term of the Agreement, Contractor shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, sexual orientation, age, or military and veteran status. Contractor shall comply with Executive Orders 11246, 11375, 11625, 12148, 12432, 12250, 13672, Title VI and Title VII of the Civil Rights Act of 1964, the California Fair Housing and Employment Act and other applicable Federal, State of California and County laws and regulations and policies relating to equal employment and contracting opportunities, including laws and regulations hereafter enacted.

This contract is subject to the State of California contract nondiscrimination and compliance requirements pursuant to Government Code section 12990.

EMERGING SMALL BUSINESS ENTERPRISE PROGRAM: Contractors are encouraged to participate in the San Bernardino County Emerging Small Business Enterprise (ESBE) Program. Questions regarding the ESBE Program should be directed to the Department of Public Works, Contracts Division at (909) 387-7920.

CONFLICT OF INTEREST AND FORMER COUNTY OFFICIALS: Attention is directed to the Conflict of Interest and Former County Officials requirements in the special provisions.

REPORT BID RIGGING: Please report any suspected bid rigging, bidder collusion, and other fraudulent activities in order for the County to identify and investigate highway construction contract fraud and abuse. You may report such activities by calling the Department's Contracts Division phone number at (909) 387-7920.

PREVAILING WAGES: Pursuant to section 1773 of the Labor Code, the general prevailing rates of wages in the San Bernardino County have been determined and are listed in the State of California Department of Industrial Relations Director's General Prevailing Wage Determinations (<https://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>). In addition, these wages are set forth in the General Prevailing Wage Rates included in these Special Provisions. The Contractor and subcontractors shall not pay less than the prevailing wage. Copies of the prevailing wage rates are also on file at the San Bernardino County Department of Public Works Contracts Division office (address identified above) and shall be made available to any interested party on request. A copy of the determination of the Director of prevailing rate of per diem wages shall be posted at each job site. More specifically, the Contractor shall post the general prevailing wage rates at a prominent place at the job site (Labor Code section 1773.2).

Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

LABOR CODE REQUIREMENTS REGARDING REGISTRATION AS CONTRACTOR OR SUBCONTRACTOR REQUIRED PRIOR TO BID PROPOSAL SUBMISSION: Contractor shall comply with Labor Code section 1771.1, including, but not limited to, the following requirements: (1) no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)); (2) no contractor or subcontractor may be awarded a contract for public work or perform work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5; (3) this Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations; (4) Contractor shall post job site notices regarding compliance monitoring and enforcement by the Department of Industrial Relations; and (5) Contractor must submit certified payroll at least monthly to the Labor Commissioner in a format prescribed by the Labor Commissioner.

As provided in Labor Code section 1771.1:

(a) 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.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h) (1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100) for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1).

A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j) (1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor

punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

LABOR CODE REQUIREMENTS FOR ENTITIES HAULING OR DELIVERING READY-MIXED CONCRETE: Adherence to the prevailing wage requirements found in Labor Code section 1720.9 for the hauling and delivery of ready-mixed concrete is required. This includes, but is not limited to, a requirement for the person or entity that delivers ready-mixed concrete to register with the Department of Industrial Relations (DIR) as specified in Labor Code section 1725.5. For more information, please see the DIR website: <http://www.dir.ca.gov/>.

IRAN CONTRACTING ACT OF 2010 (Public Contract Code section 2200 et seq.) (Applicable only to Contracts of One Million Dollars (\$1,000,000) or More): In accordance with Public Contract Code section 2201(a), the bidder certifies that at the time the bid is submitted, the bidder signing the bid is not identified on a list created pursuant to subdivision (b) of Public Contract Code section 2203 as a person (as defined in Public Contract Code section 2202(e)) engaging in investment activities in Iran described in subdivision (a) of Public Contract Code section 2202.5, or as a person described in subdivision (b) of Public Contract Code section 2202.5, as applicable.

PAYMENT BY ELECTRONIC FUND TRANSFER: Contractor shall accept all payments from County via electronic funds transfer (EFT) directly deposited into the Contractor's designated checking or other banking account. Contractor shall promptly comply with directions and accurately complete forms provided by County required to process EFT payments.

BRENDON BIGGS, P.E., DIRECTOR
DEPARTMENT OF PUBLIC WORKS

By: 
ANDY SILAO, P.E., Chief
Contracts Division

DATE: _____

**SAN BERNARDINO COUNTY
SPECIAL PROVISIONS FOR CONSTRUCTION ON
LINDEN AVENUE AND OTHER ROADS
Various Limits**

LENGTH: 1.08 Miles
WORK ORDER: TX1796
AREA: Rialto
ROAD NO.: Various (See Plan)

ORGANIZATION

Special provisions are under headings that correspond with the main-section headings of the Caltrans Standard Specifications. A main-section heading is a heading shown in the table of contents of the Standard Specifications.

Each special provision begins with a revision clause that describes or introduces a revision to the Standard Specifications.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the Standard Specifications.

DIVISION I GENERAL PROVISIONS

1 GENERAL

Add the following paragraph to section 1-1.01, "GENERAL":

The Notice to Bidders is incorporated into these Special Provisions by this reference.

Add the following paragraphs to section 1-1.01, "GENERAL":

The work embraced herein shall be done in accordance with:

- 1) Caltrans 2015 Standard Specifications, including the Caltrans 2015 Revised Standard Specifications (Revisions through July 21, 2017), unless specified otherwise in these Special Provisions;
- 2) Caltrans Standard Plans dated 2018 (Revisions through October 15, 2021), unless specified otherwise in these Special Provisions;
- 3) Project Plans and these Special Provisions;
- 4) The Contract; and
- 5) All other documents identified in the Contract.

Both the Standard Specifications and the Standard Plans are published by the State of California, Department of Transportation (Caltrans) and may be reviewed at the following website: http://www.dot.ca.gov/hq/esc/oe/construction_standards.html.

In case of a conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

Amendments to the 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. Whenever either the term "Standard Specifications is amended" is used in the Special Provisions, the indented text or table following the 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.

Whenever in these Special Provisions the term section is used in an introductory instruction, it shall be understood to mean and refer to the section of the Standard Specifications unless otherwise specified. The special provision introductory instructions begin with the words "Delete," "Replace," or "Add," and appear as bold text, centered in the page.

Add the following paragraphs to section 1-1.07B, "Glossary":

Whenever in the Standard Specifications the following terms are used, they shall be understood to mean and refer to the following:

1. Department – The San Bernardino County.
2. Office Engineer, Engineer or Director -- The Director of the Department of Public Works acting either directly or through properly authorized agents, engineer, assistants, inspectors and superintendents acting severally within the scope of the particular duties delegated to them.
3. Attorney General -- The San Bernardino County Board of Supervisors.
4. Laboratory -- Any laboratory authorized by the Department of Public Works to test materials and work involved in the contract.
5. Liquidated Damages -- In accordance with Section 8-1.10 of the Standard Specifications, the amount prescribed in Section 8 of the Special Provisions to be paid to the County pursuant to the indicated conditions.
6. Engineer's Estimate -- The list of estimated quantities of work to be performed as contained in the contract documents.
7. State - The San Bernardino County.
8. Awarding Authority or Department - Means the County Board of Supervisors or any department or special district recommending to the Purchasing Agent or the County Board that a contract be awarded.
9. Consultant - Means person(s), sole proprietorships, partnerships, associations, joint ventures, corporations, institutions or other entities who provide expert, professional assistance to the County under a contract.
10. Contract - Means an agreement between two parties consisting of an offer and an acceptance resulting from solicitation of bids or proposals, in which each party commits to stipulated prices, terms and conditions, or materials or services.
11. Contractor - Means any person, sole proprietorship, partnership, association, corporation, joint venture, institution or other entity which is a party to a contract.
12. Minority – Means the same as defined in Public Contract Code section 2051(c).
13. Small Business Concern – Means a small business as defined by Section 3 of the Small Business Act and relevant regulations found in Title 13 Part 121 of the CFR.

14. Procurement - Includes the acquisition of material, supplies, goods equipment, systems, construction and services through both formal (including competitive bids) and informal transactions which result in purchase orders and/or contracts.
15. Public Works Contract - Is an agreement to perform the work described in Public Contract Code section 22002.
16. Purchase - Means a method of procurement which results in an order for materials, supplies, goods, equipment, systems or services.
17. Purchase Order - Is defined as a form of contract which is used to order supplies, equipment, goods, systems or services. These are either unilateral, or one signature in nature, subject to performance by a vendor to form a contractual obligation.
18. Purchasing Agent - Means the Director of the Purchasing Department.
19. Bidder/Proposer - Means any person or entity making an offer or proposal to provide goods and/or services to the County.
20. Subcontractor - Means an individual or business firm contracting to perform part or all of another's contract.
21. Bid Item List – Means the schedule of items found in the Proposal pages starting on P-1 of these Special Provisions.
22. Bid book – Means the Proposal pages starting on P-1 of these Special Provisions.
23. Estimated Cost – Is the estimated cost of the project.
24. Holiday – Holidays shown in the following table:

Holidays	
Holiday	Date observed
Every Sunday	Every Sunday
New Year's Day	January 1st
Birthday of Martin Luther King, Jr.	3rd Monday in January
Washington's Birthday	3rd Monday in February
Memorial Day	Last Monday in May
Juneteenth	June 19th
Independence Day	July 4th
Labor Day	1st Monday in September
Columbus Day	2nd Monday in October
Veterans Day	November 11th
Thanksgiving Day	4th Thursday in November
Day after Thanksgiving Day	Day after Thanksgiving Day
Christmas Day Eve	December 24th
Christmas Day	December 25th
New Year's Day Eve	December 31st

If a holiday falls on a Sunday the next weekday that is not a holiday will be taken as a holiday.

If a holiday falls on a Saturday the previous weekday that is not a holiday will be taken as a holiday.

The Proposal, including all required forms, must be signed by the bidder or an authorized representative of bidder. PROPOSALS THAT ARE NOT SIGNED WILL BE DEEMED NONRESPONSIVE AND REJECTED.

Replace the 6th paragraph of section 2-1.04, “Pre-bid Outreach Meeting,” with:

The Department may hold a single pre-bid meeting for more than one contract. Sign the sign-in sheet for the contract you intend to bid on. If you are bidding on multiple contracts, sign each sign-in sheet for each contract you intend to bid on. The sign-in sheets, with the names of all companies in attendance at each pre-bid meeting, will be made available through ePro and/or the Department for all bidders to view.

Replace section 2-1.06A, “General,” with:

2-1.06A General

The Proposal, which includes the Bid Item List, can be found in the Special Provisions and on the San Bernardino County Electronic Procurement Network (<https://epro.sbcountry.gov/epro/>) as described further herein, and shall be used.

Replace section 2-1.06B, “Supplemental Project Information,” with:

2-1.06B Supplemental Project Information

The County makes supplemental information available as specified in these Special Provisions.

If supplemental project information is available for inspection, bidders may view it by phoning in a request. The Contracts Division phone number is (909) 387-7920. Make your request at least 7 days before viewing. Include in your request:

1. Project title
2. Work order number
3. Viewing date
4. Contact information, including telephone number

The supplemental information may be available to interested parties at the following address:

San Bernardino County Department of Public Works
Contracts Division
825 East 3rd Street, Room 147
San Bernardino, CA 92415-0835

Replace section 2-1.10, “SUBCONTRACTOR LIST,” with:

2-1.10 SUBCONTRACTOR LIST

On the Subcontractor List form, list each subcontractor to perform work in an amount in excess of 1/2 of 1 percent of the total bid or \$10,000, whichever is greater (Pub Cont Code § 4100 et seq.).

For each subcontractor listed, the Subcontractor List form must show:

1. Business name and the location of its place of business.
2. California contractor license number for a non-federal-aid contract.
3. Department of Industrial Relations public works contractor registration number.

4. The portion of work it will perform. The prime contractor shall list only one subcontractor for each portion as is defined by the prime contractor in his or her bid.

Delete section 2-1.12, "DISADVANTAGED BUSINESS ENTERPRISES."

Delete section 2-1.15, "DISABLED VETERAN BUSINESS ENTERPRISES."

**Delete section 2-1.18, "SMALL BUSINESS AND NON-SMALL BUSINESS
SUBCONTRACTOR PREFERENCES."**

Delete section 2-1.27, "CALIFORNIA COMPANIES."

**Delete section 2-1.31, "OPT OUT OF PAYMENT ADJUSTMENTS FOR PRICE INDEX
FLUCTUATIONS."**

**Add the following paragraphs to section 2-1.33, "BID DOCUMENT COMPLETION AND
SUBMITTAL":**

ePRO

Bids must be received by the designated date and time. An electronic bid can be submitted through the San Bernardino County Electronic Procurement Network (ePro) <https://epro.sbcounty.gov/epro/>. Submittals in ePro will be opened from the system's "encrypted lock box" and evaluated as stated in this solicitation. If the bid is submitted through ePro, the bid may also be withdrawn OR retrieved, adjusted, and re-submitted by the bidder at any time prior to the scheduled deadline for submission of the bid. Paper responses will also be accepted at the location identified in the solicitation and can be withdrawn at any time prior to the scheduled deadline for submission of the bid. If the bid is submitted through ePro, the bidder acknowledges that its electronic signature is legally binding. **All bidders must register with the ePro system prior to the date and time to receive the bid or they will be disqualified. Late or incomplete bids will be considered non responsive.** A "complete" bid is defined as a bidder's submittal that includes all bid documents (i.e., the bid / proposal, bidder's security in a separately sealed envelope, and any other bid documents required for the project). System-related issues in ePro shall be directed to Vendor support at ePro.Vendors@buyspeed.com or at (855) 800-5046. For procurement questions involving ePro, please contact the Purchasing Department at (909) 387-2060. **NOTE: If sending the bid or bid bond to the Public Works Department in a mail envelope (i.e. U.S. Postal Office, Federal Express, etc.) please enclose the bid and/or bond inside the mail envelope in a separately sealed envelope bearing the title of the project, the name of the bidder, and marked "Bid Proposal and/or Bid Bond". All mail, including Priority and Express Mail, sent via the U.S. Postal Service is received by the County's mail room then distributed to the Public Works Department. This can cause a delay in the receipt of bids. The County is not responsible for any delays caused by mail service to a different County location. It is Bidder's responsibility to ensure bids and bid bonds are received at the Public Works Department, 825 East 3rd Street, Front Reception Desk, San Bernardino, CA, on or before the time set for opening of bids.**

REQUIRED LISTING OF SUBCONTRACTORS

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

Delete section 2-1.33A, "General."

Delete section 2-1.33B, "Bid Form Submittal Schedules."

Replace section 2-1.34, "BIDDER'S SECURITY," with:

2-1.34 PROPOSAL GUARANTY

- All bids/proposals shall be presented either under sealed cover or submitted through the San Bernardino County Electronic Procurement Network (ePro) and accompanied by one of the following forms of bidder's security:

Cash, a cashier's check, a certified check, or a bidder's bond executed by an admitted surety insurer, made payable to the San Bernardino County.
- The security shall be in an amount equal to at least 10 percent of the amount of bid. A bid / proposal will not be considered unless it is accompanied by one of the forms of bidder's security, in accordance with what is stated below.
- The bidder's bond shall conform to the bond form labeled as "Bid Bond" in the "Proposal" section of these Special Provisions, and shall be properly filled out and executed. The "Bid Bond" form provided in the "Proposal" section of these Special Provisions may be used. Upon request, copies of the "Bid Bond" forms may be obtained from the Department.

If the bid is submitted through the ePro, bidder shall scan the bid security (bid bond) and submit the scanned copy with the bid submittal in ePro. **In addition, bidder shall mail or submit in person the original bid security, in a separate sealed envelope labeled "Bid Bond" with the title of the work and the name of the bidder clearly marked on the outside, to: Department of Public Works, 325 E. 3rd Street, Front Reception, San Bernardino, California, 92415-0835. Any mailed or submitted bid security must be received on or before the time set for the opening of the bids.**

Any bid/proposal that fails to include an original paper submission of the bidder's security in a separately sealed mailed or otherwise submitted envelope shall be considered nonresponsive. Bidder's attention is directed to Section 2-1.33, "ePro," of these Special Provisions for further details.

Delete the 1st paragraph of section 2-1.40, "BID WITHDRAWAL."

Replace section 2-1.43, "BID OPENING," with:

2-1.43 PUBLIC OPENING OF THE BID

Bids (both paper and ePro) will be opened and read aloud publicly at the place and time set for the opening of bids in the Notice to Bidders or as revised in an Addendum. All bids submitted to the Public Works Department in sealed envelopes will be opened and read. All bids submitted in the ePro system will be opened from the system's "encrypted lock box" and read. The bid summary sheet referencing both paper bids and ePro bids will be available through ePro and/or the Public Works Department for all bidders to view.

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 future public works contracts.

Replace any references in section 2-1.46, "DEPARTMENT'S DECISION ON BID," to "Department" with "Board of Supervisors (or if informally bid, with the Chief Executive Officer)."

Add the following paragraphs to section 2-1.46, "DEPARTMENT'S DECISION ON BID":
Proposals shall be rejected if they have been transferred to another bidder, or if they show any alteration of form, additions not called for or if they are conditional or incomplete bids. Proposals may be rejected if there are erasures or irregularities of any kind.

Bidders that fail to include an executed Noncollusion Declaration shall be considered nonresponsive.

Replace section 2-1.47, "BID RELIEF," with:

2-1.47 BID RELIEF

The County may grant bid relief under Pub Cont Code § 5100 et seq. Submit any request for bid relief to the Department.

3 CONTRACT AWARD AND EXECUTION

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

Delete 1st and 3rd paragraph of section 3-1.02A, "General."

Replace 3-1.02B, "Tied Bids," with:

3-1.02B Tied Bids

The Department breaks a tied bid with a coin toss.

Add the following paragraph to section 3-1.03, "CONTRACTOR REGISTRATION":

LABOR CODE REQUIREMENTS REGARDING REGISTRATION AS CONTRACTOR OR SUBCONTRACTOR REQUIRED PRIOR TO BID PROPOSAL SUBMISSION: Contractor shall comply with Labor Code section 1771.1, including, but not limited to, the following requirements: (1) no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)); (2) no contractor or subcontractor may be awarded a contract for public work or perform work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5; (3) this Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations; (4) Contractor shall post job site notices regarding compliance monitoring and enforcement by the Department of Industrial Relations; and (5) Contractor must submit certified payroll at least monthly to the Labor Commissioner in a format prescribed by the Labor Commissioner.

As provided in Labor Code section 1771.1:

(a) 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.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h) (1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100) for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j) (1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of with either of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work

performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Replace section 3-1.04, “CONTRACT AWARD,” with:

3-1.04 CONTRACT AWARD

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. The award, if made, will be made within 60 days after the opening of the proposals. This period will be subject to extension for such further period as may be agreed upon in writing between the Department and the bidder concerned.

Bid Protest: Any bidder submitting a bid to the County for this Project may file a protest of the County’s proposed award of the contract for this Project, provided that each and all of the following are complied with:

1. The bid protest is in writing.
2. The bid protest is submitted to and received by the Department of Public Works, 825 E. Third Street., Room 147, San Bernardino, CA 92415 **before 4:00 p.m. of the sixth (6th) business day following the bid opening.** Failure to timely submit a written protest shall constitute grounds for the County’s denial of the bid protest without consideration of the grounds stated in the bid protest and a waiver of the right to protest. Untimely protests will not be accepted or considered.
3. The written bid protest shall set forth in detail, all grounds for the bid protest (including without limitation all facts, supporting documentation, legal authorities and argument in support of the grounds for the bid protest), the form of relief required and the legal basis for such relief. Any grounds not set forth in the bid protest shall be deemed waived. All factual contentions must be supported by competent, admissible and credible evidence. The bid protests shall include the name of the project manager and the name and Work Order number of the bid Project. Any bid protest not conforming to the foregoing shall be rejected as invalid.

If a valid protest is timely filed and complies with the above requirements, the Department shall review and evaluate the bid protest. All bidders, including the protesting bidder, shall have three business days to respond to the Department and to provide any information requested by the Department. The Department shall respond to the protesting bidder and state the Department’s findings regarding the bid protest. The Department Director’s decision shall be final, unless overturned by the Board of Supervisors.

Replace section 3-1.05, “CONTRACT BONDS (Pub Cont Code §§ 10221 AND 10222),” with:

3-1.05 CONTRACT BONDS

Both the payment bond and the performance bond shall be in a sum equal to the total contract amount. The bond provider must be an admitted surety insurer (Code of Civil Procedure section 995.311) authorized to do business in the State of California.

Delete section 3-1.07, "INSURANCE POLICIES."

Delete section 3-1.08, "SMALL BUSINESS PARTICIPATION REPORT."

Delete section 3-1.11, "PAYEE DATA RECORD."

Delete section 3-1.13, "FORM FHWA-1273."

Replace section 3-1.18, "CONTRACT EXECUTION," with:

3-1.18 CONTRACT EXECUTION

The contract, along with the performance and payment bonds, copies of insurance policies, certificates of insurance, documents to verify any self-insurance coverage, and any other requested documents, shall be filled out appropriately and signed by the successful bidder and returned within 10 days (excluding Saturday, Sunday and holidays) after receiving those documents for execution.

Failure of the lowest responsible bidder, the second lowest responsible bidder, or the third lowest responsible bidder to execute the contract and file acceptable bonds as provided herein shall be just cause for the forfeiture of the proposal guaranty. The successful bidder may file with the County a written notice, signed by the bidder or the bidder's authorized representative, specifying that the bidder will refuse to execute the contract if it is presented. The filing of this notice shall have the same force and effect as the failure of the bidder to execute the contract and furnish acceptable bonds within the time hereinbefore prescribed.

Add section 3-1.20, "CONFLICT OF INTEREST," which reads:

3-1.20 CONFLICT OF INTEREST

Contractor shall make all reasonable efforts to ensure that no County officer or employee, whose position in the County enables him/her to influence any award of this contract or any competing offer, shall have any direct or indirect financial interest resulting from the award of this contract or shall have any relationship to the Contractor or officer or employee of the Contractor.

Add section 3-1.21, "FORMER COUNTY OFFICIALS," which reads:

3-1.21 FORMER COUNTY OFFICIALS

Contractor must provide information on former San Bernardino County Administrative officials (as defined below) who were employed by or represent their business. The information provided must include a list of former County Administrative Officials who terminated County employment within the last five years and who are now officers, principals, partners, associates or members of the business.

This information should also include the employment and/or representative capacity and the dates these individuals began employment with or representation of their business. For purposes of this section, "County Administrative Official" is defined as a member of the Board of Supervisors or such officer's staff, group head, assistant department or group head, or any employee in the Exempt Group, Management Unit or Safety Management Unit.

Failure to provide this information may result in the proposal being deemed non-responsive.

Add section 3-1.22, "SAN BERNARDINO COUNTY EQUAL EMPLOYMENT OPPORTUNITY PROGRAM," which reads:

3-1.22 SAN BERNARDINO COUNTY EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

During the term of the Contract, Contractor shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, sexual orientation, age, or military and veteran status. Contractor shall comply with Executive Orders 11246, 11375, 11625, 12138, 12432, 12250, 13672, Title VI & VII of the Civil Rights Act of 1964, the California Fair Housing and Employment Act and other applicable Federal, State of California and County laws and regulations and policies relating to equal employment and contracting opportunities, including laws and regulations hereafter enacted.

Add section 3-1.23, "REFERENCE CHECKS," which reads

3-1.23 REFERENCE CHECKS

Reference checks may be performed on the apparent low bidder, and if performed, the apparent low bidder shall be required to submit a list of references upon request.

Add section 3-1.23, "IRAN CONTRACTING ACT OF 2010," which reads:

3-1.23 IRAN CONTRACTING ACT OF 2010 (Public Contract Code section 2200 et seq.) (Applicable only to Contracts of One Million Dollars (\$1,000,000) or More):

In accordance with Public Contract Code section 2204(a), the Contractor certifies that at the time the Contract is signed, the Contractor signing the Contract is not identified on a list created pursuant to subdivision (b) of Public Contract Code section 2203 as a person (as defined in Public Contract Code section 2202(e)) engaging in investment activities in Iran described in subdivision (a) of Public Contract Code section 2202.5, or as a person described in subdivision (b) of Public Contract Code section 2202.5, as applicable.

Contractors are cautioned that making a false certification may subject the Contractor to civil penalties, termination of existing contract, and ineligibility to bid on a contract for a period of three (3) years in accordance with Public Contract Code section 2205.

4 SCOPE OF WORK

Add the following paragraph to Section 4-1.03, "WORK DESCRIPTION":

The work, in general, consists of cold plane and overlay, glasspave 50, leveling course, reconstruct ADA ramps, curb and gutter, cross gutter and sidewalk, replace dike, install detectable warning surface, remove trees, remove and reinstall fences, blockwall, paint traffic stripes and pavement markings and doing other work appurtenant thereto.

Replace section 4-1.06A, "General," with:

4-1.06A General

a. Differing Site Conditions

1. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work

provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.

2. Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.
4. No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

b. Suspensions of Work Ordered by the Engineer

1. If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
2. Upon receipt, the Engineer will evaluate the contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the Engineer's determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
4. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

c. Significant Changes in the Character of Work

1. The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.
2. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause

such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the Engineer may determine to be fair and equitable.

3. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
4. The term "significant change" shall be construed to apply only to the following circumstances:
 - a. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - b. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

Replace "Change Order" at each occurrence in section 4-1.05, "CHANGES AND EXTRA WORK," with "Change Order or Contract Amendments."

Delete section 4-1.07 "VALUE ENGINEERING."

5 CONTROL OF WORK

Delete the phrase "including VECs" at the end of item 1.1 in the 7th paragraph of section 5-1.09A, "General."

Add to section 5-1.09A, "General," the following paragraphs:

The San Bernardino County will promote the formation of a "Partnering" relationship with the Contractor in order to effectively complete the contract to the benefit of both parties. The purpose of this relationship will be to maintain cooperative communication and mutually resolve conflicts at the lowest possible management level.

The County's share of such costs will be reimbursed to the Contractor in a change order written by the Engineer. The establishment of a "Partnering" relationship will not change or modify the terms and conditions of the contract and will not relieve either party of the legal requirements of the contract.

Further, nothing contained in this provision shall be construed as creating a joint venture, partnership, or employment arrangement between the parties hereto, nor shall either party

have the rights, power or authority to create an obligation or duty, expressed or implied, on behalf of the other party hereto.

Replace section 5-1.12, "ASSIGNMENT," with:

5-1.12 ASSIGNMENT

The performance of the Contract or any Contract part may be assigned only with prior written consent from the County. To request consent, submit your request in writing to the Department Engineer. The County does not consent to any requested assignment that would relieve you or your surety of the responsibility to complete the work or any part of the work.

If you assign the right to receive Contract payments, the County accepts the assignment upon the Engineer's receipt of a written request. Assigned payments remain subject to deductions and withholds described in the Contract. The Department may use withheld payments for work completion whether the payments are assigned or not.

Add to section 5-1.13A, "General," the following paragraphs:

Contractor must comply with section 5-1.13, "Subcontracting," of the Standard Specifications, Section 2, "Bidding" of these Special Provisions and Section 2, "Contract Award And Execution, Equal Employment Opportunity Program, Conflict Of Interest And Former County Officials" of these Special Provisions.

Each subcontract must comply with the Contract and any lower tier subcontract that may in turn be made must comply with the Contract, including but not limited to Section 7, "Legal Relations and Responsibility to the Public," of these Special Provisions. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

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/dir/Labor_law/DLSE/Debar.html.

Delete section 5-1.13B, "Disadvantaged Business Enterprises."

Delete section 5-1.13C, "Disabled Veteran Business Enterprises."

Delete section 5-1.13D, "Non-Small Businesses."

Add the following paragraphs to section 5-1.20B(1), "General":

A copy of the PLACs are included in these Special Provisions.

The contractor shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

CDFW personnel may enter the project site at any time to verify compliance with the Agreement.

Replace the phrase “3. Structure name and number, if any” in section 5-1.23A, “General,” with “Project name, structure or road number.”

Delete all of the paragraphs in section 5-1.27E, “Change Order Bills,” with the exception of the 1st paragraph.

Add the following paragraphs to section 5-1.36A, “General”:

High Risk Facility Notification:

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

Replace 2nd paragraph of section 5-1.36A, “General,” with:

Contractor must notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least 2 working days, but not more than 14 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:

Underground Service Alert of Southern California (USA) at 811 or 1-800-422-4133

Add the following paragraphs to section 5-1.36C(1), “General”:

Attention is directed to other obstructions as follows:

AGENCY CONTACTS

The following utility/municipal agencies have facilities within the limits of the subject project:

<u>AGENCY</u>	<u>CONTACT</u>	<u>ADDRESS / PHONE / CELL</u>
AT&T	Randy Seabert rs3424@att.com	3073 Adams St. Riverside, CA 92504 (951) 359-2511
City of Rialto	Stephanee Valencia Stephanee.Valencia@veolia.com	325 W. Rialto Avenue Rialto, CA 92376

		(909) 546-3301 / (909) 301-1338
Fontana Water Company	Carlo Morales cjmorales@sgvwater.com	15966 Arrow Route Fontana, CA 92335 (909) 201-7375
Kinder Morgan Energy Partners	Rommel Rodriguez rodriguezr@kindermorgan.com	2359 S. Riverside Avenue Bloomington, CA 92316 (951) 712-8842
Southern California Edison	Jeff Hudson Jeffrey.Hudson@sce.com	7951 Redwood Avenue Fontana, CA 92335 (909) 357-6523 / (909) 549-5345 Emergency: (800) 611-1911
Southern California Gas	Geary Ambers GAmbers@SoCalGas.com	1981 W. Lugonia Avenue Redlands, CA 92374 (909) 393-7955 Emergency: (800) 427-2200
Spectrum	Hector Barba Hector.Barba@charter.com	7337 Central Avenue Riverside, CA 92504 (951) 406-1610
West Valley Water District	Rosa Gutierrez rgutierrez@wvwd.org	855 W. Base Line Road Rialto, CA 92377 (909) 875-1322 x-327

The initial written utility notification and preliminary plans were sent to utility agencies on October 30, 2019, and contact has continued at various times since.

UTILITY RELOCATIONS

The following utilities will be relocated:

<u>AGENCY</u>	<u>APPROXIMATE LOCATION</u>	<u>DETAILS</u>
Any Agency	<ul style="list-style-type: none"> Throughout Project 	<ul style="list-style-type: none"> If necessary, Contractor shall provide 2 working day window, per agency, during construction for unforeseen conflicts requiring relocation. Any unused days may be used by another agency, if necessary.

UTILITY PROTECTION

Protection of the following utility facilities will require coordination with the contractor's operations:

<u>AGENCY</u>	<u>APPROXIMATE LOCATION</u>	<u>DETAILS</u>
AT&T	<ul style="list-style-type: none"> Linden Ave – Underground conduit and cable, west side, from Casmalia St to 105' south of Vineyard Ave with crossings at various locations. Linden Ave – Overhead cable, west side, from 105' south of Vineyard Ave to Banyan St with crossings at various locations. Bohnert Ave – Overhead cable crossing Linden Ave, north of centerline. Cedar Ave – Overhead cable, west side, from 500' south of Banyan St to Banyan St. Bohnert Ave – Overhead cable crossing Cedar Ave, north of centerline. 	<ul style="list-style-type: none"> Contractor to locate and protect in place.
City of Rialto	<ul style="list-style-type: none"> Linden Ave – 8" sewer line, east of centerline, from Casmalia St to Banyan St. Cedar Ave – 24" waterline, west of centerline, from 500' south of Bohnert Ave to Bohnert Ave. 	<ul style="list-style-type: none"> Contractor to locate and protect in place. Contractor to adjust sewer manholes per City of Rialto Std. Nos. SS-201-0 and SS-202-0 Contractor to adjust valve cans to final grade, if adjustable.
Fontana Water Company	<ul style="list-style-type: none"> Linden Ave – 31" waterline, approximately 26' west of centerline, from Casmalia St to north of Bohnert Ave. Linden Ave – 25" waterline, approximately 22' west of centerline, from Casmalia St to Bohnert Ave. Linden Ave – 43" waterline, approximately 8' west of centerline, from Casmalia St to north of Banyan St. Bohnert Ave – 25" waterline, approximately 10' south of centerline, west of Linden Ave centerline. Fire hydrants, valve cans, service lines, water meters and other appurtenant structures 	<ul style="list-style-type: none"> Contractor to locate and protect in place. Contractor to adjust valve cans to final grade, if adjustable.

Kinder Morgan Energy Partners	<p>located throughout project.</p> <ul style="list-style-type: none"> Linden Ave – 8" HP petroleum pipeline, east of centerline, from Casmalia St to north of Banyan St. 	<ul style="list-style-type: none"> Contractor to locate and protect in place. Contractor to notify KM Right of Way Specialist, Rommel Rodriguez at least two weeks prior to start of any work done near KM's pipeline. (951) 712-8842, rodriguezR@kindermorgan.com
Southern California Edison	<ul style="list-style-type: none"> Linden Ave –12kV aerial lines, east side, from Casmalia St to north of Banyan St with crossings at various locations. Linden Ave – 12kV underground lines crossing approximately 85' north of Casmalia St centerline. Linden Ave – 12kV underground lines, from approximately 75' north of Casmalia St centerline to Casmalia St. Linden Ave – 12kV underground crossing approximately 185' south of Norwood St (west). Linden Ave – 12kV underground crossing approximately 238' north of Norwood St (east). Cedar Ave –12kV aerial line, west side, from 500' south of Bohnert Ave to north of Bohnert Ave with crossings at various locations. Bohnert Ave – 12kV aerial lines, north side, crossing Linden Ave and Cedar Ave. 	<ul style="list-style-type: none"> Contractor to locate and protect in place.
Southern California Gas	<ul style="list-style-type: none"> Linden Ave – 4" gas line, east of centerline, from Casmalia St to north of Banyan St with 2" mainline crossings at Casmalia, Norwood, Bohnert and Banyan. Cedar Ave – 3" gas line, east of centerline, from 500' south of Bohnert Ave to 150' south of Bohnert Ave. Cedar Ave – 3" gas line, west side, from 150' south of Bohnert Ave to Bohnert Ave Bohnert Ave – 4" gas line, 	<ul style="list-style-type: none"> Contractor to locate and protect in place. Contractor to adjust valve cans to final grade, if adjustable.

	<p>south of centerline, crossing Cedar Ave.</p>	
Spectrum	<ul style="list-style-type: none"> • Linden Ave – Aerial lines, east side, from 375' north of Casmalia St to north of Banyan St with crossings at various locations. • Cedar Ave – Aerial lines, west side, from 500' south of Bohnert Ave to north side of Bohnert Ave. • Cedar Ave – Underground cable, east side, from 500' south of Bohnert Ave to south side of Bohnert Ave, then easterly along south side of Bohnert Ave. • Bohnert Ave – Underground cable, north side, from 300' west of Cedar Ave, then northerly along west side of Cedar Ave north of Bohnert Ave. 	<ul style="list-style-type: none"> • Contractor to locate and protect in place.
West Valley Water District	<ul style="list-style-type: none"> • Linden Ave – 12" ACP waterline, west of centerline, from Casmalia St to Banyan St. • Linden Ave – Abandoned 4" PVC waterline, west side and west of 12" ACP waterline, from Bohnert Ave to Banyan St. • Norwood Ave (west) – 8" PVC waterline crossing Linden Ave. • Norwood Ave (east) – 10" waterline crossing Linden Ave. • Bohnert Ave – 12" PVC/8" ACP waterline crossing Linden Ave. • Banyan St – 8" PVC waterline crossing Linden. • Linden Ave – 8" ACP waterline crossing Linden Ave, approximately 100' south of Banyan St. • Cedar Ave – 12" ACP waterline, east of centerline, from 500' south of Bohnert Ave to north of Bohnert Ave. • Bohnert Ave – 8" ACP waterline, south of centerline, crossing Cedar Ave. • Fire hydrants, valve cans, service lines, water meters and other appurtenant structures 	<ul style="list-style-type: none"> • Contractor to locate and protect in place. • Contractor to adjust valve cans to final grade, if adjustable.

	located throughout project.	
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HIGH RISK UTILITIES

The following utility facilities are “**HIGH RISK**” facilities:

<u>AGENCY</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>
Kinder Morgan Energy Partners	<ul style="list-style-type: none"> Linden Avenue – east side from Casmalia St to Banyan St 	<ul style="list-style-type: none"> 8” HP petroleum line Contractor to locate and protect in place

The contractor shall notify all listed utility companies **two weeks** prior to start of work.

The contractor is to notify Underground Service Alert at 1-800-227-2600, 48 hours prior to any construction operations in order for utilities to mark and identify location of existing facilities.

Special precaution shall be taken by the Contractor to protect existing utilities that may not be noticeably visible while working in the road shoulder areas.

Throughout the project, utility poles, fire hydrants, water meters, gas meters, water valves and gas valves will be located in the construction area. If applicable, the Contractor shall perform his grading operations around these and construct embankment using pneumatic tampers to achieve the required compaction.

The Contractor shall protect existing manholes in place and costs therefor shall be considered as included in the prices paid for pulverization, milling, removal of existing pavement, etc. No prior arrangements have been made with utility owners to lower, raise, or otherwise adjust existing manholes. It is the Contractor's responsibility to make such arrangements and adjustments, at no additional cost to the Department. Where utility owners do not participate in such arrangements, and finished grade of proposed pavement is above existing manholes, said manholes shall be marked and paved over.

The Contractor shall protect existing valve cans in place and adjust those that are adjustable to finished grade during paving operations. The Contractor shall be solely responsible for coordinating valve can adjustments with utility owners, at no additional cost to the Department. Where valve cans cannot be adjusted, and utility owners do not participate in coordinating adjustments, and finished grade is above existing valve cans, said valve cans shall be marked and paved over.

During construction operations, all County-owned signs shall be relocated to clear the way for the Contractor's operations. When construction is complete, the County-owned signs shall be installed in final position as designated by the Engineer.

Existing guideposts (paddles) that interfere with construction shall be removed and disposed of.

All existing sprinklers in conflict with construction shall be relocated, removed and/or capped to clear construction.

If required during construction operations, existing mailboxes shall be moved as necessary to clear the way for the Contractor's operations, but at all times shall be accessible for delivery. During construction the mailboxes shall either be installed on posts set in the ground or they may be installed on temporary supports approved by the Engineer.

The space around the posts and post concrete anchors shall be backfilled with suitable earthy material. The backfill material shall be placed in layers approximately 0.33 foot thick and each layer shall be moistened and thoroughly compacted to a relative compaction of not less than 90 percent.

The face of mailbox shall be within 0 to 6 inches from face of curb, asphalt concrete dike or edge of pavement.

Surplus removed materials shall be disposed of outside the highway right-of-way in accordance with Section 14-10, "Solid Waste Disposal and Recycling" of the Standard Specifications. Attention is directed to prevailing wage provisions pertaining to hauling "trash" and/or "recyclable" materials.

Contractor shall salvage and reuse existing mailboxes, newspaper boxes, posts and mounts.

When construction is complete the mailboxes shall be installed in final position and posts shall be in a buried concrete anchor of minor concrete or commercially available posthole concrete not less than 6 inches in width from the outside of post and 1.5 feet in depth from the finished ground surface.

Contractor shall replace in kind existing mailboxes. Existing newspaper boxes, posts and mounts shall be salvaged and reused.

New mailboxes shall be fastened to the existing posts and mounts.

Replaced existing mailboxes shall become the property of the Contractor and shall be disposed of.

When construction is complete the mailboxes shall be installed in final position and posts shall be in a buried concrete anchor of minor concrete or commercially available posthole concrete not less than 6 inches in width from the outside of post and 1.5 feet in depth from the finished ground surface.

Contractor shall replace in kind existing mailboxes, newspaper boxes, posts and mounts.

Replaced existing mailboxes, newspaper boxes, posts and mounts shall become the property of the Contractor and shall be disposed of.

When construction is complete the mailboxes shall be installed in final position and posts shall be in a buried concrete anchor of minor concrete or commercially available posthole concrete not less than 6 inches in width from the outside of post and 1.5 feet in depth from the finished ground surface.

The contract unit price paid to remove and cap sprinklers shall be included in the **various contract items of work** and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work necessary in relocating the

sprinklers, complete in place, and disposing of surplus material and no additional compensation will be allowed therefor.

Full compensation for conforming to the requirements of this section, not otherwise provided for, including furnishing all labor, materials, tools, equipment and incidentals, including utility adjustments to grade, providing utility windows and coordination, and for doing all work involved shall be considered as included in the contract prices paid for the various items of work and no additional compensation will be allowed therefore.

Replace the 3rd paragraph of section 5-1.36C(3), “Nonhighway Facility Rearrangement,” with:

Supplemental Work – The rearrangement of utilities is anticipated work within the scope of the project.

Supplemental Work - Utilities consists of rearranging the (currently none). If other necessary underground infrastructure rearrangement is not described in the Contract, the Engineer may order you to perform the work. This other rearrangement is change order work.

The exact location and depth of the (currently none) is not known. It is anticipated that (currently none) may be damaged by Contractor's operations.

Additional work falling within the scope and character of the existing contract items is considered as normal to the progress of construction and is addressed under section 4-1.05, “Changes and Extra Work,” of the Standard Specifications.

If the Contractor is delayed in the completion of the contract work as a direct result of the work described under Supplemental Work - Utilities, Contractor must submit a request for information (RFI) to request a delay-related time adjustment. The County may make a time adjustment under Section 8-1.07B, “Time Adjustments,” of the Standard Specifications. The County does not make a payment adjustment for delays in the completion of the contract work as a direct result of the work described under Supplemental Work – Utilities.

Payment for Supplemental Work – Utilities is calculated under section 9-1.04, "Force Account," of the Standard Specifications and is cumulative over the duration of the contract.

Bidders must include the Contract Amount printed on the Bid Sheet in the proposal for "Supplemental Work - Utilities" as their bid for this contract item. The amount shown is purely arbitrary and no guarantee is given or implied that any payments will be made.

Delete section 5-1.39C (2), “Plant Establishment Period of 3 Years or More.”

Revise the phrase “2. Bar to arbitration (Pub Cont Code § 10240.2)” in the fourth paragraph of section 5-1.43A, “General,” with:

Bar to pursue the claim in a court of law.

Replace section 5-1.43E, “Alternative Dispute Resolution,” with the following:

5-1.43E Dispute Resolution for Claims subject to Public Contract Code sections 9204, 20104, 20104.2, 20104.4 and/or 20104.6.

Claims between the County and the Contractor shall be resolved in accordance with Public Contract Code section 9204 (which is a new law and applies to all public works contracts entered on or after January 1, 2017), as well as Public Contract Code sections 20104, 20104.2, 20104.4 and 20104.6 (if applicable), provided, however, that Public Contract Code section

20104.2(a) shall not supersede the requirements of the Contract Documents with respect to the Contractor's notification to the County of such claim or extend the time for giving of such notice as provided in the Contract Documents. The entire text of Public Contract Code sections 9204, 20104, 20104.2, 20104.4 and 20104.6 is incorporated herein and found at the end of these Special Provisions.

Please note that pursuant to Public Contract Code section 9204(c)(1), a "claim" means the following:

a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following: (A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project. (B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled. (C) Payment of an amount that is disputed by the public entity.

Add section 5-1.43G, "Civil Action," which reads:

5-1.43G Civil Action

Any dispute which cannot be resolved between the Parties by first following the applicable and required potential claims and dispute resolution provisions stated in this section 5-1.43, may then be resolved through litigation in a court of competent jurisdiction of the State of California.

IMPORTANT: BEFORE CONTRACTOR MAY FILE A LAWSUIT AGAINST COUNTY, CONTRACTOR SHALL FIRST COMPLY WITH THE GOVERNMENT CLAIMS ACT, CALIFORNIA GOVERNMENT CODE SECTION 900 ET SEQ., INCLUDING, BUT NOT LIMITED TO, THE REQUIREMENT THAT CONTRACTOR PREPARE AND FILE A TIMELY CLAIM THAT SATISFIES THE GOVERNMENT CLAIMS ACT WITH THE FOLLOWING COUNTY DEPARTMENT:

San Bernardino County

Risk Management Division

222 W. Hospitality Lane, 3rd Floor

San Bernardino, California 92415-0016

A copy of the County's standard claim form may be accessed at the Risk Management Division during normal business hours, or may be downloaded at http://countyline.sbcounty.gov/riskmanagement/_content/forms/claim_against_county.pdf.

Venue for any such litigation concerning this Project or Agreement shall be in the Superior Court of California, San Bernardino County, San Bernardino District and Contractor agrees to incorporate this provision into all subcontracts.

Each Party hereby waives any law or rule of court that would allow them to request or demand a change of venue. If any third party brings an action or claim concerning this Contract, the

Parties hereto agree to use their best efforts to obtain a change of venue to the Superior Court of California, San Bernardino County, San Bernardino District.

AA

6 CONTROL OF MATERIALS

Delete section 6-1.04, "BUY AMERICA."

Add the following paragraph to section 6-1.01, "GENERAL":

Contractor must comply with Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

Add the following paragraph to section 6-2.01, "GENERAL":

All materials required to complete the work under this contract shall be furnished by the Contractor.

Replace section 6-2.01C, "Authorized Material Lists," with:

6-3.05K Prequalified And Tested Materials For Traffic Control Devices

Contractor must comply with section 6-3.01, "SPECIFIC BRAND OR TRADE NAME AND SUBSTITUTION," of the Standard Specifications and these Special Provisions.

The Department maintains a trade name list of approved prequalified and tested signing and delineation materials and products. Approval of prequalified and tested products and materials shall not preclude the Engineer from sampling and testing any of the signing and delineation materials or products at any time. Contractor may use a product that is equal to or better than the specified brand or trade name if authorized.

Materials and products will be considered for addition to said approved prequalified and tested list if the manufacturer of the material or product submits to the Traffic Division a sample of the material or product. The sample shall be sufficient to permit performance of all required tests. Approval of such materials or products will be dependent upon a determination as to compliance with the specifications and any test the Department may elect to perform.

Said list of approved prequalified and tested signing and delineation materials and products cover the following traffic control devices:

MATERIAL

Pavement markers, reflective and non-reflective
Temporary pavement markers
Striping and pavement marking tape
Flexible delineators and markers
Channelizers
Sign sheeting materials
Railing and barrier delineators
Traffic cones and reflective cone sleeves

A certificate of Compliance shall be furnished as specified in Section 6-3.05E, "Certificates of Compliance," of the Standard Specifications for signing and delineation products. Said certificate shall also certify that the signing and delineation product conforms to the prequalified testing and approval of the Department of Public Works, Traffic Division and were manufactured in accordance with the approved quality control program.

The Approved Prequalified and Tested Signing and Delineation Materials (also referred to as the "Authorized Materials List" or "Pre-Qualified Products List") are as follows:

PAVEMENT MARKERS, PERMANENT TYPE

Reflective pavement markers:

- Apex (4x4)
- Ray-O-Lite, Models SS, RS, and AA (4x4)
- Stimsonite 88 (4x4)

Reflective pavement markers with abrasion resistant surface:

- Stimsonite 911 (4x4)
- Stimsonite 944 SB (2x4) - formerly model 947
- Stimsonite 948 (2.3x4.7)

Non-reflective pavement markers for use with epoxy or bituminous adhesive:

- Apex Universal, Ceramic
- Ferro Corporation, Permark (ceramic)
- Highway Ceramics Inc., Ceramic
- Safety Signs Inc. "Safety Dot" Model SD4 (Polyester)
- Traffic Control Signs Co., Titan, TM40V/Y (Polyester)

Non-reflective pavement markers for use only with bituminous adhesive:

- Edco, Models A 1107, AY 1108 (ABS)
- Valterra Products - P20-2000W and P20-2001Y (ABS)

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary pavement markers for long-term day/night use (6 months or less):

- Astro Optics Model TPM (4x4)
- Flex-O-Lite Model RCM (4x4)
- Stimsonite 66 (4x4)
- Stimsonite 66GB (Grabber Bottom) (4x4)
- Swareflex 35573558 (4x4)

Temporary pavement markers for short-term day/night use (14 days or less):

- Astro Optics Model TPM (4x4)
- Davidson T.O.M. (Flexible)
- Flex-O-Lite Model (RCM) (4x4)
- Stimsonite Model 66 (4x4)
- Stimsonite 66GB (Grabber Bottom) (4x4)
- Swareflex Model 30023004 (4x4)
- Swareflex Model 35573558 (4x4)
- Valterra Products 12801281 Series (Flexible)
- 3M Scotch-Lane A200 Pavement Marking System

Temporary pavement markers for short-term day/night use (14 days and less) at seal coat locations:

Davidson T.R.P.M. with Reflexite PC-1000 Sheeting
Valterra Products - 12801281 Series with Reflexite PC-1000 Sheeting

STRIPING AND PAVEMENT MARKING MATERIAL, PERMANENT

Permanent traffic striping and pavement marking tape:

Brite-Line Series 1000
Swarco Industries "Director"
3M Stamark Brand Pliant Polymer Grade Series 5730
3M Stamark Brand Bisymmetric 1.75 Grade Series 5750 (For use on low-volume roadways only)

Temporary removable construction grade striping and pavement marking tape:

Advanced Traffic Marking ATM Series 200
3M Stamark Brand, Detour Grade, Series 5710
Swarco Industries "Director 2"

Temporary non-removable construction grade striping tape:

3M Scotch Lane Brand Construction Grade, Series 1600

ROADSIDE DELINEATORS

One-piece drivable flexible type (48")

All West Plastics "Flexi-Guide 400"
Carsonite Curve-Flex CFRM-400
Carsonite Roadmarker CRM-375
FlexStake H-D
Polyform, Inc., "Vista-Flex"

Non-drivable flexible type (48") (For special use only)

Carsonite "Impactor" with 18" soil anchor
Carsonite "Survivor" with 18" U-Channel anchor
Safe-Hit with 8" pavement anchor (SH248-GPR and SHAI-08-PI)
Safe-Hit with 18" soil anchor (SHA5-15C-GL)
Safe-Hit with 18" soil anchor (SH248-GPR and SHA#-18C-PL)
Uticom, U-Post, Series 1200 (Formerly Dura-Hit Mod. PC-5049)

Surface mount flexible type (48")

FlexStake Surface Mount H-D

CHANNELIZERS

Surface mount type (36")

Carsonite "Survivor" Model SMD-353
Carsonite "Super Duck" (Flat SDF-436)(Round SDR-336)
Carsonite Super Duck II "The Channelizer"
FlexStake Surface Mount H-D
The Line Connection "Dura-Post"
Repo, Models 300 and 400
Safe-Hit Guide Post with glue down base (SH236SMA)

TRAFFIC CONES

Highway Safety Products 28"
Radiator Specialty Company 28"
Roadmarker Company "Stacker" 42"
Bent Manufacturing Co., "T-Top" 42"

TYPE "K" OBJECT MARKER (18")

Carsonite Models SMD 615 and SMD 615-A
Repo, Models 300 and 400
Safe-Hit Model SH718SMA

TYPE "K-4" OBJECT MARKER (24")

Carsonite, Super Duck II
The Line Connection, "Dura-Post"
Repo, Models 300 and 400
Safe-Hit

CONCRETE MEDIAN BARRIER DELINEATOR

Impactable Type

All West Plastics "Flexi-Guide 235"
Duraflex Corp. "Flexi 2020"
Davidson Portable Concrete Barrier Marker (Model 42)
Reflexite Barrier Mount Delineator (Model 661, 662)

Non-impactable Type

Astro-Optics JD Series
Stimsonite 967

BARRIER DELINEATOR (16" GLUE DOWN TYPE)

Safe-Hit

GUARDRAIL DELINEATOR (27" NAIL ON TYPE)

Carsonite Guardrail Delineator Post (CFGR 427)
Safe-Hit 27-inch Guardrail Delineator
All West Plastics "Flexi-Guide" 327

METAL BEAM GUARDRAIL DELINEATOR

Duraflex Corp. "Railrider"

REFLECTIVE SHEETING FOR TEMPORARY CHANNELIZERS, DELINEATORS AND TRAFFIC CONES

3M High Intensity
Reflexite PC 1000 (Metalized Polycarbonate)
Reflexite AP-1000 (Metalized Polyester)
Seibulite ULG (Ultralite Grade)

SIGNING MATERIALS –The following Retro-reflective Sheeting Materials are Acceptable for use on County Maintained Road System Signs:

Regulatory Signs (Exclude STOP signs and Parking Signs):

T6500, ASTM D 4956-01, Type IV.

Stop Signs:

DG3, ASTM D 4956-09, Type XI.

Warning Signs (Exclude School Signs):

T6501, ASTM D 4956-01, Type IV.

School Warning Signs:

FYG, ASTM D 4956-01, Type IX.

Guide Signs:

T6501, ASTM D 4956-01, Type IV.

Construction Signs:

FDG, ASTM D 4956-01, Type IX.

Signs Utilizing Super Engineering Grade (e.g. No Parking Sign):

ASTM D 4956-01, Type II

Signs Utilizing Engineering Grade:

ASTM D 4956-01, Type I

SIGNING MATERIALS LEGEND:

ASTM = American Standard for Testing Materials

DG = Diamond Grade

LDP = Long Distance Performance

FDG = Fluorescent Diamond Grade

FYG = Fluorescent Yellow Green

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Add the following paragraphs to section 7-1.02I(2), "Nondiscrimination":

Contractor must comply with section 7-1.02I (2), "Nondiscrimination" of the Standard Specifications, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein.

During the term of the Contract, Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, sexual orientation, age, or military and veteran status. Contractor shall comply with Executive Orders 11246, 11375, 11625, 12138, 12432, 12250, 13672, Title VI & VII of the Civil Rights Act of 1964, the California Fair Housing and Employment Act and other applicable Federal, State of California

and County laws and regulations and policies relating to equal employment and contracting opportunities, including laws and regulations hereafter enacted. Contractor shall include the nondiscrimination and compliance provisions of this paragraph in all subcontracts to perform work under the contract.

Replace the 2nd and 3rd paragraph of section 7-1.02K (2), "Wages," with:

Pursuant to section 1773 of the Labor Code, the general prevailing rates of wages in the San Bernardino County have been determined and are listed in the State of California Department of Industrial Relations Director's General Prevailing Wage Determinations (<https://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>). In addition, these wages are set forth in the General Prevailing Wage Rates included in these Special Provisions. The Contractor and subcontractors shall not pay less than the prevailing wage. Copies of the prevailing wage rates are also on file at the San Bernardino County Department of Public Works Contracts Division office (address identified above) and shall be made available to any interested party on request. A copy of the determination of the Director of prevailing rate of per diem wages shall be posted at each job site. More specifically, the Contractor shall post the general prevailing wage rates at a prominent place at the job site (Labor Code section 1773.2).

Future effective general prevailing wage rates, which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

The Contractor shall post the general prevailing wage rates at a prominent place at the job site (Labor Code section 1773.2).

LABOR CODE REQUIREMENTS REGARDING REGISTRATION AS CONTRACTOR OR SUBCONTRACTOR REQUIRED PRIOR TO BID PROPOSAL SUBMISSION: Contractor shall comply with Labor Code section 1771.1, including, but not limited to, the following requirements: (1) no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)); (2) no contractor or subcontractor may be awarded a contract for public work or perform work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5; (3) this Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations; (4) Contractor shall post job site notices regarding compliance monitoring and enforcement by the Department of Industrial Relations; and (5) Contractor must submit certified payroll at least monthly to the Labor Commissioner in a format prescribed by the Labor Commissioner.

As provided in Labor Code section 1771.1:

(a) 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.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h) (1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100) for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may

waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j) (1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 of this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed

by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

LABOR CODE REQUIREMENTS FOR ENTITIES HAULING OR DELIVERING READY-MIXED CONCRETE: Adherence to the prevailing wage requirements found in Labor Code section 1720.9 for the hauling and delivery of ready-mixed concrete is required. This includes, but is not limited to, a requirement for the person or entity that delivers ready-mixed concrete to register with the Department of Industrial Relations (DIR) as specified in Labor Code section 1725.5. For more information, please see the DIR website: <http://www.dir.ca.gov/>.

Replace the paragraphs in section 7-1.02K (3), "Certified Payroll Records (Labor Code § 1776)," with the following:

Keep accurate payroll records.

Submit a copy of your certified payroll records, weekly, including those of subcontractors. Include:

1. Each employee's:

- 1.1. Full name
- 1.2. Address
- 1.3. Social security number
- 1.4. Work classification
- 1.5. Straight time and overtime hours worked each day and week
- 1.6. Actual wages paid for each day to each:
 - 1.6.1. Journeyman

- 1.6.2. Apprentice
- 1.6.3. Worker
- 1.6.4. Other employee you employ for the work
- 1.7. Pay rate
- 1.8. Itemized deductions made
- 1.9. Check number issued

2. Apprentices and the apprentice-to-journeyman ratio

Each certified payroll record must include a Statement of Compliance form signed under penalty of perjury that declares:

1. Information contained in the payroll record is true, correct, and complete
2. Employer has complied with the requirements of sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project
3. Wage rates paid are at least those required by the Contract

The Department allows the use of a form with identical wording as the Statement of Compliance form provided by the Department.

Submitted certified payrolls for hauling and delivering ready-mixed concrete must be accompanied by a written time record. The time record must include:

1. Truck driver's full name and address
2. Name and address of the factory or batching plant
3. Time the concrete was loaded at the factory or batching plant
4. Time the truck returned to the factory or batching plant
5. Truck driver's signature certifying under penalty of perjury that the information contained in this written time record is true and correct

Make certified payroll records available for inspection at all reasonable hours at your main office on the following basis:

1. Upon the employee's request or upon request of the employee's authorized representative, make available for inspection a certified copy of the employee's payroll record.
2. Refer the public's requests for certified payroll records to the Department. Upon the public's request, the Department makes available for inspection or furnishes copies of your certified payroll records. Do not give the public access to the records at your main office.

Make all payroll records available for inspection and copying or furnish a copy upon request of a representative of the:

1. Department
2. Division of Labor Standards Enforcement of the Department of Industrial Relations
3. Division of Apprenticeship Standards of the Department of Industrial Relations

Furnish the Department the location of the records. Include the street address, city, and county. Furnish the Department a notification of a location and address change within 5 business days of the change.

Comply with a request for the records within 10 days after you receive a written request. If you do not comply within this period, the Department withholds from progress payments a \$100 penalty for each day or part of a day for each worker until you comply. You are not assessed this penalty for a subcontractor's failure to comply with Labor Code § 1776.

The Department withholds from progress payments for delinquent or inadequate records (Labor Code § 1771.5). If you have not submitted an adequate record by the month's 15th day for the period ending on or before the 1st of that month, the Department withholds up to 10 percent of the monthly progress estimate, exclusive of mobilization. The Department does not withhold more than \$10,000 or less than \$1,000.

Certified payroll records are required to be submitted weekly to the Engineer during the term of construction.

Contractor and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement) pursuant to Labor Code section 1771.1 identified herein.

Failure to meet the requirements above will subject the contractor to sanctions/withholding of contract payments as allowed by law for any delinquent or inadequate certified payroll records. Payroll violations are required to be reported to the State of California and/or federal government.

Add the following paragraph to section 7-1.02K (5), "Working Hours":

The normal construction working hours are 7:00 A.M. to 4:00 P.M., Monday through Friday, excluding holidays. The Contractor must request and receive prior written approval (at least 24 hours in advance) from the Engineer to work beyond or outside of these normal working hours. If the Contractor works beyond or outside of these normal working hours without requesting and receiving prior written approval from the Engineer, then any overtime or other costs incurred by the County (for example, County inspector costs) resulting from the Contractor's working beyond or outside of these normal working hours may be deducted from the progress payments that are due the Contractor. The County's decision to approve or disapprove the Contractor working beyond or outside of the normal working hours is at the sole discretion of the Engineer.

Replace items 1, 3 and 4 in the list in the 22nd paragraph of section 7-1.04, "PUBLIC SAFETY," with:

1. Excavations: Where the near edge of the excavation is within 15 feet from the edge of an open traffic lane except:
 - a. Trenches less than 1-foot wide for irrigation pipe or electrical conduit, or excavations less than 1-foot in diameter;
 - b. Excavations parallel to the lane for the purpose of pavement widening or reconstruction; and/or

- c. Excavations within temporary traffic control zones that do not extend beyond a single daylight period, for these zones alternative barrier systems should be considered.
3. Storage areas: When material or equipment is stored within 12 feet of the edge of an open traffic lane and the storage is not otherwise prohibited by the Contract
4. Height differentials: When construction operations create a height differential greater than 1 foot within 15 feet of the edge of traffic lane

Add the following sentences to the 17th paragraph of section 7-1.04, "PUBLIC SAFETY":

Do not move or temporarily suspend anything over pedestrians unless the pedestrians are protected. The Contractor must furnish, erect and maintain those fences, Type K temporary railing, barricades, lights, signs and other devices and take such other protective measures that are necessary to prevent accidents or damage or injury to the public, especially pedestrians who travel through the work zone area. Where no other means of pedestrian passage through construction area is available, the Contractor must provide detours for pedestrian travel. A drawing of the proposed pedestrian detour with all signage, barricades, fencing, delineators, etc. as necessary for safe pedestrian travel through or around the work zone area must be submitted to the Engineer as part of the Traffic Control Plan as specified in the Traffic Control System section of these Special Provisions.

Replace the 23rd paragraph of section 7-1.04, "PUBLIC SAFETY," with:

Where lanes are adjacent to the area where the work is being performed or equipment is operated, including shoulders, the adjacent lane must be closed under any of the following conditions unless otherwise provided in the Standard Specifications and these Special Provisions:

1. Work is off the traveled way but within 6 feet of the edge of the traveled way, and the approach speed is greater than 45 miles per hour
2. Work is off the traveled way but within 3 feet of the edge of the traveled way, and the approach speed is less than 45 miles per hour

Add the following sentences to the 25th paragraph of section 7-1.04, "PUBLIC SAFETY":

Type K temporary railing must conform to the provisions in Section 12-3.08, "Type K Temporary Railing," of the Standard Specifications. Type K temporary railing, conforming to the details shown on Standard Plans T3A and T3B or approved equal by the Engineer may be used.

The locations of Type K temporary railing shall be shown on Traffic Control Plans for review and approval by the Engineer. The Contractor must comply with the Traffic Control System section elsewhere in these Special Provisions.

Contractor may propose to the Engineer an alternative to the use of Type K temporary railing and/or crash cushions in areas where the use of these devices is anticipated to be for a relatively short period of time but no more than five working days. Approval of the Engineer for the use of the proposed alternatives shall not relieve the contractor from being solely responsible for any damages resulting from the use of these alternatives in accordance with section 7-1.05A "General" of these Special Provisions.

Reflectors on Type K temporary railing must conform to the provisions in “Prequalified and Tested Materials for Traffic Control Devices” of these Special Provisions. Temporary crash cushion modules must conform to the specifications in section 12-3.15, “TEMPORARY CRASH CUSHION MODULE” of the Standard Specifications.

Add the following paragraph between the 26th and 27th paragraphs of section 7-1.04, “PUBLIC SAFETY”:

Open trenches left open overnight must be protected by Type K temporary railing or other approved temporary traffic barrier as determined by the Engineer.

Replace section 7-1.05A, “General,” with:

7-1.05A General

Indemnification – To the fullest extent possible permitted by law, Contractor assumes liability for and agrees, at the Contractor’s sole cost and expense, to promptly and fully indemnify, defend (with counsel reasonably approved by County) (even if the allegations are false, fraudulent, or groundless), and hold harmless the County and its authorized officers, employees, agents and volunteers (Indemnitees) from and against any and all claims (including claims against the County seeking compensation for labor performed or materials used or furnished to be used in the work or alleged to have been furnished on the project, including all incidental or consequential damages resulting to the County from such claims), allegations, actions, suits, arbitrations, administrative proceedings, regulatory proceedings, or other legal proceedings, demands, losses, costs, damages, judgments, liens, stop notices, penalties, anticipated losses of revenue and/or liability, and expenses (including, but not limited to, any fees of accountants, attorneys, experts or other professionals, or investigation expenses) arising out of, resulting from, or in any way (either directly or indirectly) related to the contract, the work, the project or any breach of the Contract by Contractor (or any of its officers, agents, employees, subcontractors, or any person performing any of the work, or from any cause whatsoever, including the acts, errors or omissions of any person and for any costs or expenses incurred by the Indemnitees on account of any claim except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The Contractor’s indemnification obligation applies to the Indemnitee’s “passive” negligence but does not apply to the Indemnitee’s “sole” or “active” negligence or “willful misconduct” within the meaning of Civil Code section 2782 provided such “active” negligence or “willful misconduct” is determined by agreement of the parties or by findings of a court. In instances where an Indemnitee’s “active” negligence accounts for only a percentage of the liability for the claim involved, the obligation of the Contractor will be for that entire percentage of liability for the claim not attributable to the “active” negligence or “willful misconduct” of the Indemnitees. The County shall be consulted with regard to any proposed settlement.

The duty of the Contractor to indemnify and hold harmless the Indemnitees includes the separate and independent duty to defend the Indemnitees, which duty arises immediately upon receipt by Contractor of the tender of any claim from the County. The Contractor’s obligation to defend the County shall be at Contractor’s sole expense, and not be excused because of the Contractor’s inability to evaluate liability or because the Contractor evaluates

liability and determines that the Contractor is not liable. The duty to defend shall apply whether or not a claim has merit or is meritless, or which involves claims or allegations that any or all of the Indemnitees were actively, passively, or concurrently negligent, or which otherwise asserts that the Indemnitees are responsible, in whole or in part, for any claim. The Contractor shall respond within thirty (30) calendar days to the tender of any claim for defense and/or indemnity by the County, unless the County agrees in writing to an extension of this time. The defense provided to the Indemnitees by Contractor shall be by well qualified, adequately insured, and experienced legal counsel acceptable to the County Counsel.

It is the intent of the parties to the Contract that the Contractor and its subcontractors of all tiers shall provide the Indemnitees with the broadest defense and indemnity permitted by law. In the event that any of the defense, indemnity, or hold harmless provisions are found to be ambiguous, or in conflict with one another, it is the parties' intent that the broadest and most expansive interpretation in favor of providing defense and/or indemnity to the Indemnitees be given effect.

Contractor shall ensure, by written subcontract agreement, that each of Contractor's subcontractors of every tier shall protect, defend, indemnify and hold harmless the Indemnitees with respect to all claims arising out, in connection with, or in any way related to each such subcontractor's work in the same manner in which Contractor is required to protect, defend, indemnify, and hold the Indemnitees harmless. In the event Contractor fails to obtain such defense and indemnity obligations from its subcontractors as required herein, Contractor agrees to be fully responsible to the Indemnitees according to the terms of this Section.

Contractor's indemnification and defense obligations set forth in this Section are separate and independent from the insurance requirements and do not limit, in any way, the applicability, scope, or obligations set forth in such insurance requirements. The purchase of insurance by the Contractor with respect to the obligations required herein shall in no event be construed as fulfillment or discharge of such obligations.

Contractor's obligations under this Section are binding on Contractor's and its subcontractors' successors, heirs and assigns and shall survive the completion of the work or termination of the Contractor's performance of the work.

Replace section 7-1.06 with:

7-1.06 INSURANCE

Additional Insured – All policies, except for the Workers' Compensation, Errors and Omissions and Professional Liability policies, shall contain endorsements naming the **San Bernardino County** (a separate, legal public entity), and the **San Bernardino County Flood Control District** (a separate, legal public entity), collectively referred to in this section as the **County**, and all of their officers, employees, agents and volunteers as additional insureds with respect to liabilities arising out of the performance of services hereunder.

The additional insured endorsements shall not limit the scope of coverage for the County as well as any other entities named herein to vicarious liability but shall allow coverage for the County as well as any other entities named herein to the full extent provided by the policy. Such additional insured coverage shall be at least as broad as Additional Insured (Form B) endorsement form ISO, CG 201011 85.

Waiver of Subrogation Rights – The Contractor shall require the carriers of required coverages to waive all rights of subrogation against the County, its officers, employees, agents, volunteers, contractors and subcontractors, as well as any other entities named herein. All general or auto liability insurance coverage provided shall not prohibit the Contractor and Contractor's employees or agents from waiving the right of subrogation prior to a loss or claim. The Contractor hereby waives all rights of subrogation against the County as well as any other entities named herein.

Policies Primary and Non-Contributory – All policies required herein are to be primary and non-contributory with any insurance or self-insurance programs carried or administered by the County or any other entities named herein.

Severability of Interests – The Contractor agrees to ensure that coverage provided to meet these requirements is applicable separately to each insured and there will be no cross liability exclusions that preclude coverage for suits between the Contractor and the County or between the County and any other insured or additional insured under the policy.

Proof of Coverage – The Contractor shall furnish Certificates of Insurance to the County Department administering the contract evidencing the insurance coverage at the time the contract is executed, additional endorsements, as required shall be provided prior to the commencement of performance of services hereunder, which certificates shall provide that such insurance shall not be terminated or expire without thirty (30) days written notice to the Department, and Contractor shall maintain such insurance from the time Contractor commences performance of services hereunder until the completion of such services. Within fifteen (15) days of the commencement of this contract, the Contractor shall furnish a copy of the Declarations page for all applicable policies and will provide complete certified copies of the policies and endorsements immediately upon request.

Acceptability of Insurance Carrier – Unless otherwise approved by Risk Management, insurance shall be written by insurers authorized to do business in the State of California and must have a minimum Best's Insurance Guide rating of "A-" and minimum Financial Size Category of "VII" according to A. M. Best Company, Inc., website <http://www.ambest.com/>.

Deductibles and Self-Insured Retention – Any and all deductibles or self-insured retentions in excess of \$10,000 shall be declared to and approved by Risk Management.

Failure to Procure Coverage – In the event that any policy of insurance required under this contract does not comply with the requirements, is not procured or is canceled and not replaced, the County has the right but not the obligation or duty to cancel the contract or obtain insurance if it deems necessary and any premiums paid by the County will be promptly reimbursed by the Contractor or County payments to the Contractor will be reduced to pay for County purchased insurance.

Insurance Review – Insurance requirements are subject to periodic review by the County. The Director of Risk Management or designee is authorized, but not required, to reduce, waive or suspend any insurance requirements, whenever Risk Management determines that any of the required insurance is not available, is unreasonably priced, or is not needed to protect the interests of the County. In addition, if the Department of Risk Management determines that heretofore unreasonably priced or unavailable types of insurance coverage or coverage limits

become reasonably priced or available, the Director of Risk Management or designee is authorized, but not required, to change the above insurance requirements to require additional types of insurance coverage or higher coverage limits, provided that any such change is reasonable in light of past claims against the County, inflation, or any other item reasonably related to the County's risk.

Any change requiring additional types of insurance coverage or higher coverage limits must be made by amendment to this contract. Contractor agrees to execute any such amendment within thirty (30) days of receipt.

Any failure, actual or alleged, on the part of the County to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of the County.

The Contractor agrees to provide insurance set forth in accordance with the requirements herein. If the Contractor uses existing coverage to comply with these requirements and that coverage does not meet the specified requirements, the Contractor agrees to amend, supplement or endorse the existing coverage to do so.

Without in anyway affecting the indemnity herein provided and in addition thereto, the Contractor shall secure and maintain throughout the contract term the following types of insurance with limits as shown:

Workers' Compensation/Employers Liability – A program of Workers' Compensation insurance or a state-approved self-insurance program in an amount and form to meet all applicable requirements of the Labor Code of the State of California, including Employer's Liability with \$250,000 limits covering all persons including volunteers providing services on behalf of the Contractor and all risks to such persons under this contract.

If Contractor has no employees, it may certify or warrant to the County that it does not currently have any employees or individuals who are defined as "employees" under the Labor Code and the requirement for Workers' Compensation coverage will be waived by the County's Director of Risk Management.

With respect to Contractors that are non-profit corporations organized under California or Federal Law, volunteers for such entities are required to be covered by Workers' Compensation insurance.

Commercial/General Liability Insurance – The Contractor shall carry General Liability Insurance covering all operations performed by or on behalf of the Contractor providing coverage for bodily injury and property damage with minimum combined single limits, per occurrence, as follows:

CONTRACT AMOUNT	MINIMUM COVERAGE
Less than \$1,000,000	\$1,000,000
\$1,000,000 to \$3,000,000	\$3,000,000
\$3,000,000 to \$5,000,000	\$5,000,000
Over \$5,000,000	\$10,000,000

The policy coverage shall include:

- (a) Premises operations and mobile equipment.
- (b) Products and completed operations.
- (c) Broad form property damage (including completed operations).
- (d) Explosion, collapse and underground hazards.
- (e) Personal injury.

- (f) Contractual liability.
- (g) Two million dollars (\$2,000,000) general aggregate limit.

Automobile Liability Insurance – Primary insurance coverage shall be written on ISO Business Auto coverage form for all owned, hired and non-owned automobiles or symbol 1 (any auto). The policy shall have minimum combined single limit for bodily injury and property damage, per occurrence, as follows:

CONTRACT AMOUNT	MINIMUM COVERAGE
Less than \$1,000,000	\$1,000,000
\$1,000,000 to \$3,000,000	\$3,000,000
\$3,000,000 to \$5,000,000	\$5,000,000
Over \$5,000,000	\$10,000,000

If the Contractor is transporting one or more non-employee passengers in performance of contract services, the automobile liability policy shall have a combined single limit of two million dollars (\$2,000,000) for bodily injury and property damage per occurrence.

If the Contractor owns no autos, a non-owned auto endorsement to the General Liability policy described above is acceptable.

Umbrella Liability Insurance – An umbrella (over primary) or excess policy may be used to comply with limits or other primary coverage requirements. When used, the umbrella policy shall apply to bodily injury/property damage, personal injury, advertising injury and shall include a “dropdown” provision providing primary coverage for any liability not covered by the primary policy. The coverage shall also apply to automobile liability.

Course of Construction/Installation Property Insurance – A policy providing all risk, including theft coverage for all properties and materials to be used on the project. The insurance policy shall not have any coinsurance penalty.

Continuing Products/Completed Operations Liability Insurance – A policy with a limit of not less than five million dollars (\$5,000,000) for each occurrence for at least three years following substantial completion of the work on projects over one million dollars (\$1,000,000).

Subcontractor Insurance Requirements – The Contractor agrees to require all parties or subcontractors, including architects or others it hires or contracts with related to the performance of this contract to provide insurance covering the contracted operations with the basic requirements and the insurance specifications for all contracts as delineated herein, (including waiver of subrogation rights) and naming the County as well as any other entities named herein as additional insureds. The Contractor agrees to monitor and review all such coverage and assumes all responsibility ensuring that such coverage is provided as required herein.

Delete section 7-1.07B, “Seal Coat Claims.”

Delete section 7-1.11, “FEDERAL LAWS FOR FEDERAL-AID CONTRACTS.”

AA

Replace section 8-1.02, "SCHEDULE" with:

8-1.02 PROGRESS SCHEDULE

After contract award, and prior to construction, the Contractor shall submit to the Engineer a baseline progress schedule as part of the pre-construction submittals. The Contractor shall furnish the schedule in both printed and electronic (Microsoft Excel or equivalent) format. If the Contractor cannot furnish the schedule in Microsoft Excel format, then another format approved by the Engineer shall be used. The schedule shall show the construction activities (including the controlling activity(ies)), order in which the Contractor proposes to carry out the work, the dates on which the Contractor will start the several salient features of the work (including procurement of materials, plant, and equipment), and the contemplated dates for completing those salient features. The progress schedules submitted shall be consistent in all respects with the time and order of work requirements of the contract.

Progress schedule updates are also required to be submitted during construction, within 10 working days of the Engineer's written request. Failure of the Contractor to submit progress schedule updates within the required time frame may result in the withholding of progress payments.

Replace 1st paragraph of section 8-1.03, "PRECONSTRUCTION CONFERENCE," with:

After contract award, and prior to construction, a pre-construction conference / meeting will be held at a time and location determined by the 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, utilities, submittals, and all essential matters pertaining to the prosecution of 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 subcontractors.

Replace 8-1.04A, "General," with:

8-1.04A General

After contract award, and prior to the pre-construction conference, the Engineer will issue a Notice to Proceed with Submittals to the Contractor, and the Contractor shall then begin submitting all required submittals necessary to begin work, as listed below. Failure to provide the required submittals within the time frame specified in the Notice to Proceed with Submittals may subject the Contractor to being charged working days for each and every day after the submittal due date.

Prior to construction, the following submittals are required:

1. Approved baseline progress schedule
2. Approved Statement of Compliance with Sections 1509 and 1510 of the CalOSHA Construction Safety Orders
3. Approved Fire Safety Plan
4. Approved Notice to Residents, in English and Spanish
5. Approved Notice of Materials to be Used
6. Approved Subcontracting Request
7. Approved Staging Area

8. Approved Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Plan (WPCP)
9. All other required environmental submittals.
10. Approved Traffic Control Plan
11. Valid proof of approved permits, if applicable
12. List of personnel assigned to the project
13. Emergency contact list
14. List of Equipment to be Used, which will include a description of each piece of equipment, the name and model number of each piece of equipment, and a unique ID number for each piece of equipment, which will be stenciled on each piece of equipment.
15. Any other pre-construction submittals deemed necessary by the Engineer.

Replace 8-1.04B, "Standard Start," with:

8-1.04B Standard Start

After the pre-construction conference and prior to construction, the Engineer will issue the Notice to Proceed with Construction to the Contractor. The Contractor shall begin construction work within 15 days (excluding Saturdays, Sundays, and holidays) after the Notice to Proceed with Construction. The Notice to Proceed with Construction is at the sole discretion of the County. The First Working Day Designated will be the date of the Notice to Proceed with Construction or the date of beginning construction work, whichever is later. In no case will the First Working Day Designated be later than 15 days after the Notice to Proceed with Construction, excluding Saturdays, Sundays, and holidays. The Department does not adjust time for starting before the First Working Day.

The Contractor shall diligently prosecute the work to completion before the expiration of

NINETY

(90)

WORKING DAYS

starting with the First Working Day Designated. (Refer to the definition of "Working Day" in section 1-1.07B of these Special Provisions.) However, as provided in section 8-1.04A, the failure by Contractor to provide the required submittals identified in the Notice to Proceed with Submittals within the time frame specified in the Notice to Proceed with Submittals may subject the Contractor to being charged working days for each day and every day after the submittal due date.

Replace 8-1.10A, "General", with:

8-1.10A General

The Department specifies liquidated damages (Pub Cont Code § 10226). Liquidated damages, if any, accrue starting on the 1st day after the expiration of the working days through the day of Contract acceptance except as specified in sections 8-1.10B and 8-1.10C.

The Department withholds liquidated damages before the accrual date if the anticipated liquidated damages may exceed the value of the remaining work.

The Contractor shall pay the County the sum of

FOUR THOUSANDS AND EIGHT HUNDREDS DOLLARS (\$4,800) PER DAY

for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above.

AA

9 PAYMENT

Replace section 9-1.02C, “Final Pay Item Quantities,” with:

9-1.02C Final Pay Items

When an item of work is designated as (F) or (S-F) in the Bid Sheet, the estimated quantity for that item of work shall be the final pay quantity, unless the dimensions of any portion of that item are revised by the Engineer, for the item or any portion of the item is eliminated. If the dimensions of any portion of the item are revised, and the revisions result in an increase or decrease in the estimated quantity of that item of work, the final pay quantity for the item will be revised in the amount represented by the changes in the dimensions, except as otherwise provided for minor structures in Section 51-7.01D, "Payment." If a final pay item is eliminated, the estimated quantity for the item will be eliminated. If a portion of a final pay item is eliminated, the final pay quantity will be revised to the amount represented by the eliminated portion of the item of work.

Delete Section 9-1.02D, “Quantities of Aggregate and Other Roadway Materials.”

Delete the 11th, 12th, 13th, and 14th paragraphs in section 9-1.03, "PAYMENT SCOPE."

Replace the reference in the 16th paragraph to “Pub Cont Code §§ 10262 and 10262.5” in section 9-1.03, “PAYMENT SCOPE,” with “Business and Professions Code section 7108.5.”

Delete section 9-1.07 “PAYMENT ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS.”

Add the following paragraphs to section 9-1.16, “PROGRESS PAYMENTS”:

PAYMENTS – Attention is directed to the provisions in this Section 9-1.16, “Progress Payments,” and Section 9-1.16E, “Withholds,” of the Standard Specifications and these Special Provisions.

County and Contractor acknowledge and agree that Public Contract Code section 7201 applies to all contracts entered into on or after January 1, 2012, between a public entity and an original contractor, between an original contractor and a subcontractor, and between all subcontractors thereunder relating to the construction of any public work of improvement. Pursuant to Public Contract Code section 7201 the County will retain **5%** of the payments made to Contractor and total retention proceeds withheld by County shall not exceed **5%** of

the contract price. However, this limitation does not apply to amounts retained by County in the event of a good faith dispute or as required by law. Contractor shall also comply with Public Contract Code section 7201 in its retention of payments/contract amount to subcontractors.

The retention will be held for 35 days following the recordation of the Notice of Completion, at which time the County Auditor will issue a warrant for the withheld funds.

Contractor shall accept all payments from County via electronic funds transfer (EFT) directly deposited into the Contractor's designated checking or other banking account. Contractor shall promptly comply with directions and accurately complete forms provided by County required to process EFT payments.

Contractor may upon written request, and at their expense deposit substitute securities found in Government Code section 16430 as authorized by the Public Contract Code section 22300 in lieu of retention monies withheld to insure performance.

Partial payment for materials that are furnished but are not incorporated in the work may be made to the Contractor at the sole discretion of the Engineer.

The provisions of Public Contract Code section 20104.50, cited immediately below and at the end of these Special Provisions, dealing with the modification, performance, and payment of public works contracts are incorporated herein.

20104.50.

(a)(1) It is the intent of the Legislature in enacting this section to require all local governments to pay their contractors on time so that these contractors can meet their own obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is, instead, a matter of statewide concern. (2) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

(b) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

(c) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

(1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

(2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the contractor as soon as practicable, but not later than seven days, after receipt. A

request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

(d) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subdivision €.

(e) For purposes of this article:

(1) A "local agency" includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

(2) A "progress payment" includes all payments due contractors, except that portion of the final payment designated by the contract as retention earnings.

(3) A payment request shall be considered properly executed if funds are available for payment of the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

(f) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

Delete the 2nd sentence in section 9-1.16D(1), "General."

Delete reference to "Pub Cont Code § 10261.5" in section 9-1.16E(1), "General."

Replace "may" with "shall" in the 1st sentence of section 9-1.16E(4), "Stop Notice Withholds."

Delete section 9-1.16F, "Retentions."

Replace 9-1.17D(1), "General," with:

9-1.17D(1) Final Payment and Claims - After acceptance by the Director, the Engineer will make a proposed final estimate in writing of the total amount payable to the Contractor, including therein an itemization of said amount, segregated as to contract item quantities, extra work and any other basis for payments, and shall also show therein all deductions made or to be made for prior payments and amounts to be kept or retained under the provisions of the contract. All prior estimates and payments shall be subject to correction in the proposed final estimate. The Contractor shall submit written approval of the proposed final estimate or a written statement of claims as provided below.

On the Contractor's approval, or if he files no claim, the Engineer will issue a final estimate in writing in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the County will pay the entire sum so found to be due. Such final estimate and payment thereon shall be conclusive and binding against both parties to the contract on all

questions relating to the amount of work done and the compensation payable therefor, except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

If the Contractor files a claim(s), the Engineer will issue a semifinal estimate in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the County will pay the sum so found to be due. Such semifinal estimate any payment thereon shall be conclusive and binding against both parties to the contract on all questions relating to the amount of work done and the compensation payable therefor, except insofar as affected by the claim(s) filed within the time and in the manner required hereunder and except as otherwise provided in Sections 9-1.03C, "Records," and 9-1.09, "Clerical Errors."

For additional claims procedures and rights under the Public Contract Code, please see 5-1.43E, "Dispute Resolution for Claims subject to Public Contract Code sections 9204, 20104, 20104.2, 20104.4 and/or 20104.6," of these Special Provisions.

The Contractor shall keep full and complete records of the costs and additional time incurred for any work for which a claim for additional compensation is made. The Engineer or any designated claim investigator or auditor shall have access to these records and any other records as may be required by the Engineer to determine the facts or contentions involved in the claims. Failure to permit access to such records shall be sufficient cause for denying the claims.

Any claim for overhead type expenses or costs shall be supported by an audit report of an independent Certified Public Accountant. Any such overhead claim shall also be subject to audit by the County at its discretion.

Any costs or expenses incurred by the County in reviewing or auditing any claims that are not supported by the Contractor's cost accounting or other records shall be deemed to be damages incurred by the County within the meaning of the California False Claims Act.

Delete section 9-1.17D(2)(a), "General."

Replace the 5th paragraph in section 9-1.17D(3) with:

Failure to comply with the claim procedures described in the Contract Documents is a bar to pursue the claim in a court of law.

Replace "30" with "31" in the 1st sentence of section 9-1.17(D)(1), "General."

Delete section 9-1.22, "Arbitration," in its entirety and replace with the following:

9-1.22 CIVIL ACTION

See Section 5-1.43G, "Civil Action" of these Special Provisions.

DIVISION II – GENERAL CONSTRUCTION

10-1.01 ORDER OF WORK

Order of work shall conform to the provisions in Section 8, "Prosecution and Progress," of the Standard Specifications and these Special Provisions.

First Order of Work: The Contractor shall obtain encroachment permit from the **City of Rialto** set up Portable Changeable Message Signs at the City Jurisdiction and locations specified in these Special Provisions and as designated by the Engineer.

Attention is directed to section **“Portable Changeable Message Signs”** and **“Permits”** elsewhere in these special provisions.

Second Order of Work: A nesting bird survey shall be conducted 3 days prior to construction within the project location. If an active bird nest is located, a buffer will be established (size of buffer will be depended of specified found to be nesting at the direction of the biologist) in all directions, and this area shall not be disturbed until the nest becomes inactive.

The Contractor shall provide EMD with a project schedule showing the dates of work for various street segments, so our biologists can time their surveys appropriately.

Third Order of Work: The Contractor shall request the County Surveyors for horizontal and vertical control staking according to grades and elevations shown on the plan; and County Surveyors to conduct a monument review survey to facilitate preservation of existing monumentation. **The survey shall be requested at least two (2) weeks prior to construction of work.**

Fourth Order of Work: The Contractor shall post sidewalk closure signs at least two (2) days prior to the closure dates at ramp closure locations as stipulated in the Special Conditions of the Traffic Control System section elsewhere in these Special Provisions. Signs shall advise pedestrians of anticipated closure dates.

Fifth Order of Work: The Contractor shall submit a Construction Phasing Plan for the entire project limits, detailing the proposed construction and staging for approval by the Engineer at least two (2) weeks (10 working days) prior to the start of construction.

Sixth Order of Work – Attention is directed to section, “Quality Control Program (QCP)” whereby the Contractor is required to submit their QCP for approval by the Engineer.

Contractor’s attention is directed to sections “Quality Control Program”, “Portable Changeable Message Sign”, “Traffic Control System”, “Environmental Mitigation Measures” and “Permits” elsewhere in these Special Provisions.

Full compensation for conforming to the requirements of this section, including any additional mobilizing or demobilizing costs, other work or labor, materials, tools, equipment, and incidentals, not otherwise provided for, shall be considered as included in the prices paid for **various items of work** and no additional compensation will be allowed therefor.

10-1.02 SUPPLEMENTAL WORK AT FORCE ACCOUNT (UNFORESEEN UTILITY CONFLICT AND SUBGRADE STABILIZATION)

This work shall consist of extra work, related to specified items of work, necessary to address unforeseen position, location, and/or dimensions of existing underground utilities. Extra work addressed under the provisions of this section will be work as determined by the Engineer to be necessary to the completion of specified construction within the functional range, scope, and intent of the contract.

Utility Conflict

Extra work to address subsurface or latent physical utility conditions that differ materially from those indicated in the contract; or unknown utility physical conditions of an unusual nature, differing from those initially encountered and generally recognized as inherent in the work provided for in the contract will be addressed in accordance with Section 4-1.06, "Differing Site Conditions", of the Standard Specifications.

Subgrade Stabilization

If in the event, yielding or unfirmed subgrade soil condition were discovered in some or specific streets during the milling operation, the work shall be suspended temporarily and the Contractor shall notify the Engineer immediately. The Engineer shall investigate, assess, evaluate and determine as to whether extra work is required to address the subgrade condition. If determined by the Engineer that extra work is required, Contractor shall submit to the Engineer for his approval the best possible solution or alternative solution to stabilize the subgrade. **The Engineer has the sole discretion to accept or reject such extra work.**

Additional work falling within the scope and character of the existing contract items shall be considered as normal to the progress of construction and will be addressed in accordance with Section 4-1.05, "Changes and Extra Work", of the Standard Specifications.

If the Contractor is delayed in the completion of the contract work as a direct result of the work described in this section, an extension of time as provided in the fifth paragraph of Section 8-1.07, "Delays", of the Standard Specifications, will be granted.

Compensation for work performed under this section, and calculated as prescribed in Section 9-1.04, "Force Account Payment", of the Standard Specifications will be cumulative over the duration of the contract.

Prospective bidders shall include the Contract Amount printed in the proposal for "Supplemental Work At Force Account (Unforeseen Utility Conflict and Subgrade Stabilization)" as their bid for this contract item. The amount shown is purely arbitrary and no guarantee is given or implied that any payments will be made.

Furnishing all labor, equipment, material, tools and incidentals and doing all work determined by the Engineer to fall under this section shall be considered to be included in Force Account made for **Supplemental Work At Force Account (Unforeseen Utility Conflict and Subgrade Stabilization)**, and no separate payment will be made therefor.

10-1.03 WATER POLLUTION CONTROL PROGRAM (WPCP)

Water Pollution Control work shall conform to the provisions in Section 13-2, "Water Pollution Control Program," of the Standard Specifications, and these special provisions and the Construction Contractor's Guide and Specifications of the Caltrans Storm Water Quality Handbook (Handbook), and addenda thereto issued up to and including the date of advertisement of the project. The Handbooks may also be downloaded from the Storm Water Quality Manuals and Handbooks website at the following web site:

<http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>

The Water Pollution Control Program template can be downloaded from the following web site:

<http://www.dot.ca.gov/hq/construc/stormwater/>

Areas where pollutant discharge must be eliminated shall include, but not be limited to, spoil and stockpile areas, all staging areas, and pulverized areas created in connection with work under this contract, whether or not said areas are within the delineated project limits.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising, amending, implementation and removal of the WPCP as specified in the Standard Specifications, the Handbook, and these special provisions, shall be included in the contract lump sum price paid for **Water Pollution Control Program** and no additional compensation will be allowed therefor.

This **Water Pollution Control Program** will be paid as percentage of total item based on development and approval of the WPCP (15%), weekly inspections reports (70% divided by number of weeks of project), and final documentation submittal (15%). Payment will be withheld for failure to submit weekly inspection forms and will not be retro-paid when submitted.

10-1.04 ENVIRONMENTAL MITIGATION MEASURES

This work shall consist of furnishing all labor, materials, tools, equipment and incidentals; and performing all work necessary to comply with existing laws, codes, regulations, and/or permits related to Environmental Mitigation Measures and these special provisions. There are no permits required for this project.

Environmental Mitigation Measures must comply with section 5-1.20B "Permits, Licenses Agreements and Certifications," section 14-10, "Solid Waste Disposal and Recycling" and section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

Any additional permits as may be necessary due to activities outside of contractors control shall be obtained by the County at no expense to the contractor

The Contractor shall comply with the following mitigation measures:

EMD Ecological Resources Specialists completed an evaluation of the proposed Project; the evaluation included a literature review and reconnaissance field survey on February 9, 2021. The project area is located in an urban, residential and commercial location where the principle vegetation type consists of non-native ornamental trees and shrubs commonly planted on developed parcels. Although the project location has residential and other urban type developments, the potential exists for sensitive species to occur within or nearby the project site. A review of the California Natural Diversity Database (CNDDB, attachment 3) was performed. While it revealed that the Devore quadrangle contains several federally and State listed endangered or threatened species, it has been determined that the project site cannot support these species, as it is highly disturbed due to development. As a consequence of the limited nature of the road work we have determined that project related activities will not directly impact any sensitive habitat and/or species. However, to ensure no impacts to species the following actions should be taken;

Biological Resources Conditions

1. If work occurs during the nesting bird season (March 15 – September 1), a pre-construction nesting bird survey must be conducted no more than three days prior to the start of work.
2. If active nests are detected, appropriate avoidance buffers will be established and work activities within the vicinity of the nest will be monitored.
3. All staging areas will be surveyed and cleared by a biologist prior to equipment staging.

Cultural Resources Evaluation

A site visit and records search were conducted by EMD Cultural Resources Specialist; no significant or potentially significant architectural, historical, and/or archaeological features were identified during the archaeological and built environment field survey of the proposed Project's area of potential effect/study area or in the South-Central Coastal Information Center (SCCIC) records search. As a result of the findings, no project-specific avoidance or minimization measures were recommended. However, standard cultural resource compliance conditions as listed in the *Cultural Resources Conditions* paragraph are applicable and recommended for implementation during construction/ground disturbing activities associated with this project.

Cultural Resources Conditions

1. Should prehistoric or historic archaeological resources be encountered during construction, the evaluation of any such resource should proceed in accordance with all appropriate federal state, and local guidelines. Specifically, all work must be halted in the immediate vicinity of the cultural resource found until a qualified archaeologist can assess the significance of the resource.
2. If human remains are encountered during construction, then the San Bernardino County Coroner's Office MUST be contacted in accordance with state law within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other agency involved. The Coroner's Office may be contacted at the Coroner's Division, County of San Bernardino, 175 S. Lena Road, San Bernardino, CA. Tel: (909) 387-2978.

ENVIRONMENTAL DETERMINATION

In compliance with the California Environmental Quality Act (CEQA), Environmental Management Division staff has reviewed the proposed project.

The Proposed Project qualifies for a Class 1 Categorical Exemption, "Existing Facilities" under Section 15301(c) of the CEQA guidelines. Class 1 consists of the "operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use." Class 1 (c) exemption is specific to "existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities." The project also qualifies for a Class 2 Categorical Exemption, "Replacement or reconstruction" under Section 15302(c) "Replacement or reconstruction of existing utility systems and or facilities involving negligible or no expansion of capacity."

General Conditions

1. All work, including equipment staging, will remain on disturbed areas. No new work outside disturbed areas or existing rights-of-way (i.e. existing shoulder-to-shoulder and/or curb-to-curb) will be performed without further environmental evaluations.
2. Material staging area shall be clearly delineated in order to keep equipment and trucks within existing disturbed areas. Further, project related vehicle access, maintenance activities, and equipment storage shall be restricted to established roads, designated access roads, maintenance right-of-ways, and designated storage, staging, and parking areas. Off-road traffic outside of these designated areas shall be prohibited.
3. Standard best management practices shall be implemented during all maintenance activities, especially those pertaining to dust control, erosion control, and stormwater pollution prevention. If equipment is parked overnight then a drip pan, or some other form of protection, shall be placed under the vehicle in order to contain any drips, leaks, and or spills. All food and maintenance trash shall be removed from the site daily. Please contact EMD, at (909) 387-7897, with any questions.

Full compensation for conforming to the requirements of this section, not otherwise provided for, including furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved shall be considered as included in the prices paid for the **various items of work** and no additional compensation will be allowed therefore.

10-1.05 DUST CONTROL

This work, Dust Control, shall consist of all operations necessary to control fugitive dust arising from construction operations, and due to any disturbance of natural ground covers resulting therefrom, in compliance with governing CWA and NPDES requirements and shall conform to the provisions in Section 10-5, "Dust Control," of the Standard Specifications and these Special Provisions.

During construction, the construction contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed, to prevent excessive amounts of dust and the spread of invasive wind dispersed seeds. The construction contractor shall ensure that all material stockpiled is sufficiently contained using water or other palliatives to prevent excessive amounts of dust, and the spread of invasive wind dispersed seeds.

No stream water may be used in construction, such as in dust control. All construction water shall be from developed sources.

The Contractor shall furnish adequate dust control measures as provided in Section 10-5, "Dust Control," of the Standard Specifications and these Special Provisions during normal non-work hours (e.g., nights, weekends, or holidays) encompassed within working days authorized in the contract and executed contract change orders, at no additional cost to the Department. Additional dust control required during suspensions of work directed by the Engineer, for reasons stated in Section 8-1.06, "Suspension," for which the Engineer authorizes extension of "Time of Completion" will be paid for as extra work as provided in Section 4-1.05. "Changes and Extra Work," of the Standard Specifications. .

Full compensation for conforming to the requirements of AQMD, including furnishing all labor, water, materials, tools, equipment and incidentals shall be considered as included in the prices paid for various contract items of work and no additional compensation will be allowed therefor.

10-1.06 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization," of the Standard Specifications.

The contract lump sum price paid for **Mobilization** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in mobilization as specified herein. No additional compensation will be allowed for additional mobilization / demobilization costs due to weather days or loss of production due to cold weather.

10-1.07 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 furnish, erect and maintain these fences, temporary railing (Type K), barricades, lights signs and other devices and take such other protective measures that are necessary to prevent accidents or damage or injury to the public, especially pedestrians who travel through the work zone area. Where no other means of pedestrian passage through construction area is available, the Contractor shall provide detours for pedestrian travel.

When applicable, the California MUTCD latest edition Figure 6H-28 "Sidewalk Detour or Diversion" Typical Application 28 and Figure 6H-29 "Crosswalk Closures and Pedestrian Detours" Typical Application 29 as included in the green sheets may be used and referenced as part of the project's Traffic Control Plan.

If above referenced CA MUTCD typical applications are deviated from due to project field conditions, or as required by the engineer, the Contractor shall prepare a pedestrian traffic control plan and submit to the Engineer for review and approval. The pedestrian traffic control plan shall detail any pedestrian detour with all signage, barricades, fencing, delineators, etc. as necessary for safe pedestrian travel through or around the work zone area in conformance with the California Manual on Uniform Traffic Control Devices (CA MUTCD) – Part 6 (latest edition) – Temporary Traffic Control sections 6D.01 "Pedestrian Considerations" and section 6D.02 "Accessibility Considerations". Refer to additional Traffic Control Plan requirements as specified in the Traffic Control System section of these Special Provisions. Nothing in these Special Provisions is to be construed as to reduce the minimum standards in the CA MUTCD

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:

- 1) Excavations – The near edge of the excavation is 15 feet or less from the edge of the lane, except:

- a) Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - b) Excavations less than 1 foot deep.
 - c) Trenches less than 1-foot wide for irrigation pipe or electrical conduit, or excavations less than 1-foot in diameter.
 - d) Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - e) Excavations protected by side slopes, where the slope is equal to or less than 1:4 (vertical:horizontal)
 - f) Excavations protected by existing barrier or railing.
 - g) Excavations within temporary traffic control zones that do not extend beyond a single daylight period, for these zones alternative barrier systems should be considered.
- 2) 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.
- 3) 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 2015 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 15.33 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 1-foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15.33 feet minimum offset cannot be achieved, the temporary railing shall be installed on the 10:1 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.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.20, "Temporary Railing (Type K)," of the Standard Specifications. Temporary railing (Type K), conforming to the details shown on Standard Plans T3A and T3B or approved equal by the Engineer may be used.

The sixth paragraph of Section 12-3.20C(1), "General" of the Standard Specifications is amended to read:

Install a reflector on the top or face of the rail of each rail unit placed within 10 feet of a traffic lane as directed by the Engineer. Apply adhesive for mounting the reflector under the reflector manufacturer's instructions.

Reflectors on temporary railing (Type K) shall conform to the provisions in "Approved Traffic Products" 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 mph)	Work Areas
Over 45 mph	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45 mph	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, temporary railing, or barrier. 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 traffic lane, however, the Contractor shall not reduce the width of an existing lane to less than 11 feet without written approval from the Engineer.

When work is not in progress on trench or other excavation that requires closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be the same as specified for the lane closure.

Open trenches left open overnight shall be protected by temporary railing (Type K) or other approved temporary traffic barrier as determined by the Engineer.

The locations of temporary railing (Type K) shall be shown on Traffic Control Plans for review and approval by the Engineer. Attention is directed to the Traffic Control System section elsewhere in these special provisions.

Contractor may propose to the Engineer an alternative to the use of temporary railing (Type K) and/or crash cushions in areas where the use of these devices is anticipated to be for a relatively short period of time but no more than five working days. Approval of the Engineer for the use of the proposed alternatives shall not relieve the Contractor from being solely responsible for any damages resulting from the use of these alternatives in accordance with Section 7-1.05A "INDEMNIFICATION" of the Standard Specifications and these Special Provisions.

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

Full compensation for conforming to the requirements of Section 7-1.04, "Public Safety," and the requirements of these special provisions, including furnishing all labor and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the contract price paid for **Traffic Control System** and no additional compensation will be allowed therefor.

10-1.08 TRAFFIC CONTROL SYSTEM

A. GENERAL:

This work shall consist of all operations necessary to conduct construction operations in a safe manner relative to public traffic, and shall conform to the requirements in Section "Temporary Pavement Delineation" of these Special Provisions, and those in Section 7-1.03, "Public Convenience," Section 7-1.04, "Public Safety," and Section 12, "Temporary Traffic Control," of the Standard Specifications. Nothing in these Special Provisions shall be construed as relieving the Contractor from his responsibility as provided in said Section 7-1.04 of the Standard Specifications.

The requirements of this section, titled "General" shall apply to all projects except as modified below in Section B, "Special Conditions," or as otherwise approved by the Engineer.

Construction that interferes with public traffic shall be performed only between 7:00 A.M., and 4:00 P.M., except that which is required under Sections 7-1.03, "Public Convenience," and 7-1.04, "Public Safety," of the Standard Specifications, as modified below in Section B, or as approved by the Engineer.

The Contractor shall submit a Traffic Control Plan for the entire project limits, including intersections, detailing the proposed construction staging and traffic control for approval by the Engineer at least two weeks (10 working days) prior to the start of construction. The Traffic Control Plan shall not include any intersection closures or detours. The Traffic Control Plan shall comply with the California Manual on Uniform Traffic Control Devices (CA MUTCD) – Part 6 (latest edition) - Temporary Traffic Control. Nothing in these Special Provisions is to be construed as to reduce the minimum standards in the CA MUTCD.

When applicable, the 2018 Caltrans "Temporary Traffic Control Systems" Standard Plans as included in the green sheets may be used and referenced as part of the project's Traffic Control Plan. A flashing arrow sign will be required on all lane closures and, if determined by the Engineer, will be required on shoulder closures as well.

When applicable, the Traffic Control Plan for shoulder closures may be as shown on the "Shoulder Closure" detail of 2018 Standard Plan T10, in the List of Standard and Special Drawings (Green Pages). The spacing dimensions on the "Shoulder Closure" detail may be modified as determined by the Engineer. The traffic control plan for night time shoulder closures shall also include flashing beacons.

At any given time during active construction when the number of lanes is reduced from existing conditions for both directions of travel, active construction work zones shall be limited to the number of locations and delays to motorist in time as indicated below in section B or as determined by the Engineer.

Existing turn lanes for left and/or right turns, when present at intersections, shall remain open and operational; or when existing turn lanes are removed, temporary turn lanes shall be provided for turn movements.

If the Engineer determines that the Contractor's operations are resulting in unacceptable traffic delays, the Engineer reserves the right to implement alternate traffic plans. Specific details are as indicated below in section B unless otherwise directed by the Engineer.

The Contractor shall coordinate with local residents and businesses to provide ingress and egress for properties adjacent to the project for the convenience of local residents and businesses in carrying out their personal and business activities. Convenient access for mail,

other delivery services, and trash services shall be included in the definition of “personal and business activities.”

The Contractor shall prepare a “Notice to Residents,” and distribute copies of said notice to properties that are adjacent to and / or are directly impacted by the project, as determined by the Engineer. The notice shall use the “Notice to Residents” template attached in the List of Standard and Special Drawings (Green Pages). The notice shall be placed on the door of said properties a minimum of seven (7) days before the Contractor begins work. The notice shall be in both English and Spanish (back side).

It is the Contractor’s responsibility to have roads clear of interfering vehicles prior to the start of work and during work. The Contractor is responsible for notifying affected residents and businesses of the work schedule. Such notification would include placing notices (as stated above), making verbal contact, and furnishing and placing temporary “No Parking” signs 48 hours prior to the start of work, as well as notifying the California Highway Patrol 24 hours prior to such posting, such that interfering vehicles or objects may be towed or otherwise removed, if necessary. With regards to towing, the applicable County Code Sections are **52.0118, 52.0132, and 53.081.**

Section 12-1.04, “Payment,” of the Standard Specifications is superseded by the following:

The cost of furnishing all flaggers, including transporting flaggers to provide for passage of public traffic through the work under the provisions in Section 7-1.03, “Public Convenience,” and Section 7-1.04, “Public Safety,” of the Standard Specifications, and elsewhere in these Special Provisions, will be borne solely by the Contractor.

If determined by the Engineer that additional flaggers are required during construction activities, Contractor shall provide flaggers at no additional cost to the County.

The Contractor shall furnish, install, maintain, move, remove, and dispose of all signs, lights, flares, barricades, and other facilities for the convenience and safety of the public, as required by these Special Provisions and Section 7-1.03, Section 7-1.04, and Section 12 of the Standard Specifications.

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

When temporary lane configuration changes are allowed to facilitate that day’s construction activity, the Contractor, unless otherwise directed by the Engineer, shall restore lane configurations to pre-construction conditions at the end of the workday or during periods when active construction is not taking place.

B. SPECIAL CONDITIONS:

I. During Construction Activities

Construction on Linden Avenue, Cedar Avenue, Arbeth Street, Brampton Avenue, Casmalia Street, Cheshire Street, Fillmore Avenue, Idylwild Court and Mesa Street shall be performed on Monday through Friday only (7:00 A.M. to 4:00 P.M.) for the duration of the project.

In order to minimize impacts to school traffic, the Contractor is advised that working hours may need to be adjusted. The Contractor shall coordinate

operating hours for construction activities jointly with the Engineer and all the school affected in the area. The point of contact for the schools can be found in the section "Coordination" elsewhere in these Special Provisions.

The Contractor shall adhere to the operating hour restrictions as determined and as directed by the Engineer.

On Linden Avenue, public traffic shall be permitted to pass through construction operations at all times on a minimum of one 11-foot graded and compacted or paved lane to be used by both directions of travel if flaggers are used. In order to control traffic, additional flaggers shall be required at any interesting street or streets in between locations where flaggers have the traffic queued for paving operations.

On Cedar Ave, and all other impacted Streets and Intersections public traffic shall be permitted to pass through construction operations at all times on a minimum of one 11' foot graded and compacted or paved lane to be used by both directions of travel if flaggers are used. In order to control traffic, additional flaggers shall be required at any intersecting street or streets in between locations where flaggers have the traffic queued for paving operations.

At any given time when the number of lanes on Linden Avenue, and Cedar Avenue are reduced to one lane for both directions of travel, construction work zones shall be limited to one location per street for both directions of travel and delays to motorist shall be limited to 10 minutes in time or as otherwise specified in these Special Provisions or approved by the Engineer.

Pedestrian safety; The Contractor shall provide passage for pedestrians through construction areas, or provide a detour where applicable. Work that interferes with existing sidewalks or crosswalks at intersections shall be conducted so as to minimize impacts to pedestrian traffic.

In cases where a detour or an alternate pedestrian access cannot be provided, the Contractor shall be allowed to close sidewalk ramp areas where approved by the Engineer. The Contractor shall post sidewalk closure signs at these ramp locations at least two (2) days prior to the closure dates. Signs shall advise pedestrians of anticipated closure dates. Attention is also directed to the Public Safety section of these Special Provisions.

In cases where existing paved road widths are less than 24 feet, the Contractor may be allowed to utilize graded and compacted lane(s) as approved by the Engineer.

II. During Non-construction activities

On Linden Avenue, and Cedar Avenue and all other impacted Streets and Intersections; the Contractor must provide two 11-foot graded and compacted or paved lanes, one for each direction of travel for use by public traffic overnight and when construction operations are not actively in progress. The full width of a graded and compacted or paved traveled way shall be open for use by public traffic overnight and when construction operations are not actively in progress.

The Contractor shall stage his construction operations accordingly in order to meet the above stated requirements.

C. MEASUREMENT AND PAYMENT:

The contract lump sum price paid for **Traffic Control System** shall include full compensation for furnishing all labor, materials (including, but not limited to, all traffic control components), tools, equipment, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, and replacing and disposing of the components of the traffic control system, as shown on the plans, and as specified in the Standard Specifications and these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing, placing/installing, maintaining, relocating as necessary, removing and disposing of the Advance Warning signs including payment for permits, is included in the contract lump sum price paid for **Traffic Control System**, and no additional compensation will be allowed therefor.

Full compensation for conforming to the requirements of these Special Provisions and those in Section 7-1.03, "Public Convenience," Section 7-1.04, "Public Safety," and Section 12, "Temporary Traffic Control," of the Standard Specifications, including furnishing all labor, materials (including all traffic control components), tools, equipment, and incidentals, shall be considered as included in the contract lump sum price paid for **Traffic Control System**, and no additional compensation will be allowed therefor.

Full compensation for furnishing, erecting, maintaining, and removing any additional construction area signs and other traffic control components including AWSs the Engineer may deem necessary shall be considered as included in the various contract items of work, and no additional compensation will be allowed therefor.

Full compensation for furnishing, installing, distributing, and removing the "Notice to Residents" shall be considered as included in the various contract items of work, and no additional compensation will be allowed therefor.

Full compensation for traffic control staging is included in the contract lump sum price paid for **Traffic Control System** and no additional compensation will be allowed therefor.

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 components ordered by the Engineer beyond those called for in the referenced standards will be made as provided in Section 9-1.04, "Force Account," of the Standard Specifications. No adjustment will be made for decreases.

10-1.09 TEMPORARY PAVEMENT DELINEATION

This work, Temporary Pavement Delineation, shall consist of installing, maintaining, and removing temporary striping, pavement markings, channelizers, cones, and other devices necessary to the safe movement of public traffic through the project area and shall conform to the provisions in Section 12-6, "Temporary Pavement Delineation," of the 2015 Standard Specifications, the California Manual on Uniform Traffic Control Devices – part 6 (latest edition - published by the State Department of Transportation), and these Special Provisions.

Nothing in these special provisions shall be construed as relieving the Contractor from its responsibility as provided in Section 7-1.04, "Public Safety," of the 2015 Standard Specifications.

It is recognized that some conditions may prevail under which the Contractor and other agencies may share in responsibilities for the public safety being affected by the work under this contract. It is, however, agreed among the parties that necessary renewal, connection to, and replacement of effective traffic controls normally applied to the pavement shall fall within the Contractor's sole liability.

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. Laneline or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic.

On multilane roadways, edgeline delineation shall be provided at all times for traveled ways open to public traffic.

The Contractor shall perform all work necessary, including any required lines or marks, to establish the alignment of temporary pavement delineation. 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 type tape 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.

TEMPORARY LANELINE AND CENTERLINE DELINEATION - Whenever lanelines and centerlines are obliterated, the minimum laneline and centerline delineation to be provided shall be temporary reflective raised pavement markers. The spacing requirements for temporary pavement markers shall comply with CA MUTCD 2014, Section 6F.79. The temporary reflective raised pavement markers shall be the same color as the laneline or centerline the markers replace. Temporary reflective 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 "Prequalified and Tested Signing and Delineation Materials" elsewhere in these special provisions.

Temporary reflective raised pavement markers shall be placed in accordance 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 reflective raised pavement markers shall be used on lanes opened 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, the Contractor shall provide, at his expense, additional temporary pavement delineation. 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 ahead 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, W7-3aP “NEXT ____ MILES” signs shall be installed beneath the W20-1 signs installed ahead 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 requirements in Section 12-3.11, “Construction Area Signs,” of the 2015 Standard and Specifications.

Full compensation for furnishing, placing, maintaining and removing the temporary reflective raised pavement markers, used for temporary laneline and centerline delineation (including the signing specified for “no passing” zones) and for providing equivalent patterns of permanent traffic lines for such areas when required; shall be considered as included in the lump sum contract price paid for **Traffic Control System** and no separate payment will be made therefor.

TEMPORARY EDGELINE DELINEATION - Whenever edgelines are obliterated the temporary pavement delineation to replace those 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 shall consist of traffic cones, portable delineators or channelizers placed at longitudinal intervals not to exceed 100 feet.

The lateral offset for traffic cones, portable delineators or channelizers used for temporary edgeline delineation shall be as 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 job site to maintain the cones or delineators during all hours of the day that they are in use.

Channelizers used for temporary edgeline delineation shall be 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 the section of these special provisions entitled, “Pavement Markers,” except epoxy adhesive shall not be used to place channelizers on the top layer of pavement. Channelizers shall be, at the Contractor’s opinion, one of the surface mount types (36”) listed in “Prequalified and Tested Signing and Delineation Materials” elsewhere in these special provisions.

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

Full compensation for furnishing, placing, maintaining and removing the temporary edgeline delineation shall be considered as included in the lump sum price paid for **Traffic Control System** and no separate payment will be made therefor.

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 business days before beginning any work using the devices or within 2 business 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/policy_guide/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 business days before beginning any work using the devices or within 2 business 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/

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 lump sum price paid for **Traffic Control System** and no separate payment will be made therefor.

10-1.10 TRAFFIC CONTROL DEVICE

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 demonstrably 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 business days before beginning any work using the devices or within 2 business 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/policy_guide/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 business days before beginning any work using the devices or within 2 business 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/

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 lump sum price paid for **Traffic Control System** and no additional compensation will be allowed therefor.

10-1.11 PORTABLE CHANGEABLE MESSAGE SIGNS

Portable Changeable Message Signs shall conform to the provisions in Sections 12-3.32 "Portable Changeable Message Signs" of the Standard Specifications.

This work shall consist of furnishing, placing, maintaining, relocating as necessary, and removing Portable Changeable Message Signs (PCMS). The purpose of the PCMS is to provide drivers with advanced warning and up to date information on the traffic conditions during construction. Contractor shall coordinate the placement of the PCMSs and the information shown on the boards with the Engineer.

The PCMS shall be installed as the First Order of Work and shall occur two (2) weeks prior to the start of construction. Contractor shall provide a minimum of six (6) message signs.

Attention is directed to section entitled "Permits" elsewhere in the Special Provisions.

The location of the PCMS shall be determined by the Contractor in accordance with the specifications herein for review and approval by the Engineer. The boards shall be maintained and relocated if necessary as determined by the Engineer during construction. Recommended locations for the message boards are:

- 1- At the intersection of Linden Avenue and Banyan Street
- 2- At the intersection of Cedar Avenue and Bohnert Avenue
- 3- At Casmalia Street, EB N. Arrowhead Avenue
- 4- At Casmalia Street, WB Cactus Avenue
- 5- At the intersection of Mesa Avenue and Cactus Avenue
- 6- At W Cheshire Street, EB N. Arrowhead Avenue

of the Temporary traffic controls, regulatory, warning and guide signs have a higher priority than the PCMS. The PCMS shall be placed where they can be easily identified with the corresponding project. If the placement of PCMS conflicts with the newly installed higher priority signs, such as the temporary traffic control devices or other priority devices, the PCMS shall be relocated by the Contractor at no extra cost to the County.

Due to public safety concerns, the PCMS shall not be allowed at the following locations:

- a) On the front, back, adjacent to or around any traffic control device, including traffic signs, traffic control device posts or structures, and
- b) At key decision points where a driver's attention is more appropriately focused on traffic control devices, roadway geometry, or traffic conditions. These locations include but are not limited to, stop or yield signs, and areas of limited sight distances.

PCMS shall be removed at the completion of the project.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing, placing, maintaining, relocating as necessary, and removing the PCMS, is included in the contract unit price paid for **Portable Changeable Message Sign** and no additional compensation will be allowed therefor.

10-1.12 REMOVE CHAIN LINK FENCE AND WOOD FENCE

This work shall consist of **removal and disposal** of existing fences and gates of various kind as tabulated below and as shown on the plans, these Special Provisions and as designated by the Engineer and shall conform to the provisions in Sections 15, "Existing Highway Facilities," and Section 16, "Clearing and Grubbing" of the Standard Specifications and these Special Provisions.

As directed by the Engineer, all existing fence that should remain in place shall be protected in place. Any damages thereof due to negligence of the Contractor during the operation shall be repaired or replaced in kind immediately at his own expense.

As directed by the Engineer, existing fences and gates as called out or shown on the plan shall be removed. However, fences and gates, which are to remain in place, may be temporarily removed and reconstructed where necessary for construction. Where fences and gates are removed, tension shall be maintained in the portions that remain. Removed fences and gates that are not to be reconstructed shall be disposed of. Fences that need to be removed which extends to the next post shall be removed and disposed of; payments, however, shall be included in the various items of work and no additional compensation shall be allowed therefor.

The voids left by removal of fence post footings shall be backfilled with material free from any deleterious material and compacted to 95% of maximum density.

Removed fences and gates including their footings and mow strip (where the angular track is installed) shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions in Section 711.13 of the Standard Specifications.

At locations where fences are removed, a temporary fence or similar shall be provided until the proposed improvements are completed.

The contract lump sum price paid for **Remove Chain Link Fence (At 6399 Fillmore Avenue)** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, dispose double swing gate and for doing all the work involved in removing and disposing various fences as described above including its footings, columns and reconstructing as shown on the plans and as specified in the Standard Specifications and these Special Provisions, and as determined by the Engineer.

The contract lump sum price paid for **Remove Wood Fence (At 6399 Fillmore Avenue)** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, dispose double swing gate and for doing all the work involved in removing and disposing various fences as described above including its footings and columns and reconstructing as shown on the plans and as specified in the Standard Specifications and these Special Provisions, and as determined by the Engineer.

10-1.13 REMOVE FENCE (BLOCKWALL)

This work shall consist of **removal and disposal** of existing block wall as shown on the plans, these Special Provisions and as designated by the Engineer and shall conform to the provisions in Sections 15, "Existing Highway Facilities," and Section 16, "Clearing and Grubbing" of the Standard Specifications and these Special Provisions.

As directed by the Engineer, all existing block wall that should remain in place shall be protected in place. Any damages thereof due to negligence of the Contractor during the operation shall be repaired or replaced in kind immediately at his own expense.

At locations where fences are removed, a temporary fence or similar shall be provided until the proposed improvements are completed.

As directed by the Engineer, existing block wall as called out or shown on the plan shall be removed. However, block wall which is to remain in place, may be temporarily removed and reconstructed where necessary for construction. Removed block wall that is not to be reconstructed shall be disposed of, payment however, shall be included in the various items of work and no additional compensation shall be allowed thereof.

The voids left by removal of block wall footings shall be backfilled with material free from any deleterious material and compacted to 95% of maximum density.

The contract lump sum paid for **Remove Block Wall (At 6399 Fillmore Avenue)** shall include full compensation for furnishing all labor, materials, tools, equipment, footing and incidentals, and for doing all the work involved in removing and disposing block wall fence including its footings, block walls, retaining curbs, mow strip of any kind and columns as shown on the plans and as specified in the Standard Specifications and these Special Provisions, and as determined by the Engineer.

10-1.14 TEMPORARY CHAIN LINK FENCE AND GATE

Temporary chain link fence shall be CL-6, furnished, erected, and maintained shown on the plans, as specified in these Special Provisions, and as directed by the Engineer.

In regards to the installation of temporary fences, attention is directed to the section entitled "Order of Work", elsewhere in these Special Provisions.

The location of temporary fences in the construction are approximate. The exact locations shall be determined by the Engineer. Except as otherwise specified in this section, temporary fences shall conform to the plan details and the specifications for permanent fences of similar character as provided in Section 80, "Fences", of the Standard Specifications. Portable Security Fences per LACDPW Standard Plan 6002-1 (Modified) or approved equivalent maybe used as designated by the Engineer.

Materials may be used providing such materials are good, sound and suitable for the purpose intended. Materials may be commercial quality providing the dimensions and sizes of said materials are equal to, or greater than, the dimensions and sizes shown on the plans or specified by the Specification.

Temporary chain link fences shall be 5-feet high. Posts shall be metal.

Galvanizing and painting of steel items will not required.

Concrete footings for the metal posts will not be required, except at corners or angles to resist uneven tension. Rigid angle supports may be substituted at these points, at the Contractor's option.

Temporary fences that are damaged for any cause during the progress of the work shall be repaired or replaced by the Contractor at his expense within the same working day that said damage is identified.

When no longer required for the work as determined by the Engineer, temporary fences shall be removed. Removed facilities shall become the property of the Contractor and shall be removed from the site of work.

The temporary fence shall be measured and paid in the contract lump sum price in the same manner specified for permanent fences of similar character as provided in Section 80, "Fences," of the Standard Specifications.

Full compensation for installing, maintaining and removing Temporary Chain Link Fence will be considered as included in the contract lump sum price paid for **Temporary Chain Link Fence & Gate** and no additional compensation will be allowed therefor.

10-1.15 REMOVE ASPHALT CONCRETE DIKE

This work shall consist of removing portions of existing asphalt concrete dike where shown on the plans and shall conform to the provisions of Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions.

Prior to removing the dike the outside edge of the asphalt concrete to remain in place shall be cut to a neat line. The cut shall be a minimum depth of 0.17-foot.

The dike shall be removed in such a manner so that the surfacing which is to remain in place is not damaged.

The removed dike shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions in Section 5-1.20B(4), "Contractor-Property Owner Agreement", Section 14-10, "Solid Waste Disposal and Recycling", and Section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

The contract unit price paid per linear foot for **Remove Asphalt Concrete Dike** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work necessary to remove and dispose of or otherwise handle existing asphalt concrete dike as shown on the plans, and as specified in the Standard Specifications and these Special Provisions.

10-1.16 REMOVE ASPHALT CONCRETE SURFACING

This work shall consist of removing existing bituminous surfacing within the limits shown on the plans and marked in the field by the Engineer, and shall conform to the provisions in Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions.

Existing bituminous surfacing shown on the plans to be removed, shall be removed, to an approximate depth of 6 inches below the grade of the existing surface. Resulting holes and depressions shall be backfilled to the lines and grades established by the Engineer with native material selected from excavation.

The Contractor shall test traffic striping and pavement-marking material prior to removal. If the materials contain hazardous materials, appropriate handling and disposal will be required.

The removed surfacing materials shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions Section 14-10, "Solid Waste Disposal and Recycling", and Section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

Existing asphalt surfacing shall be saw cut to a neat, true line and removed where shown on the plans. The locations of cut lines shown on the plans are approximate only; the exact locations will be determined by the Engineer. The outline of the surfacing to be removed shall be cut with a power-driven saw to a depth of not less than 0.15-foot before removing the surfacing. Surfacing 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.

The contract unit price paid per square yard for **Remove Asphalt Concrete Surfacing** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in saw cutting and removing asphalt concrete surfacing and asphalt concrete dikes, including hauling and disposing of surfacing outside the highway right of way or hauling and placing surfacing in embankments, as shown on the plans, as specified in the Standard Specifications and these Special Provisions.

10-1.17 RESET ROADSIDE SIGN

This work, Reset Roadside Signs, shall consist of the relocation of existing roadside signs to maintain communication to public traffic that has existed prior to new construction, and replacement of components of signing facilities consistent with this intent, and shall conform to the provisions of Section 15, "Existing Facilities," Section 82-3, "Roadside Signs," and Section 82-9, "Existing Roadside Signs and Markers," of the Standard Specifications and these Special Provisions.

Relocated signs shall be installed in accordance with the horizontal and vertical dimensions specified on CA MUTCD 2014, Fig 2A-2 (CA) and County Standard Plan 303a, 303b and shall be reset on the same day as removal.

Existing wood posts shall, upon being reset, have two holes drilled, as designated by the Engineer, to create a "breakaway" feature.

The intent is that signs will be relocated as units, including posts and hardware. Should the posts, hardware, or sign panels be determined, by the Engineer, to be unsuitable the following shall apply:

1. Sign panels will be furnished by the County and installed by the Contractor at no additional cost to the County.
2. Hardware, such as back braces, nuts and bolts, etc. shall be furnished by the Contractor, as incidental to the proposed relocation and no additional payment will be made therefor.
3. If existing posts are determined, by the Engineer, to be unusable; new posts meeting the Engineer's specifications shall be furnished and installed by the Contractor. Compensation therefor will be calculated by the Engineer at force account, and added to the payments for **Reset Roadside Sign**, at a proportionate rate.
4. Installation of new sign panels (County furnished) onto existing posts or old sign panels onto new posts shall be considered as incidental to the preservation of public safety and convenience, and no payment beyond that calculated by the Engineer for **Reset Roadside Sign** will be made therefor.

The Engineer will determine final location for roadside signs. Any interim, or temporary, positioning of signs necessary to conduct construction without exposing the public to danger or liability, shall be considered to be incidental to the Contractor's operations, and will not be separately compensated.

The contract unit price paid for **Reset Roadside Sign** shall include, subject to the aforesaid exceptions, furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work to relocate existing roadside signs (including but not limited to – stop signs, street name signs, regulatory signs, and bus signs) as necessary for safe construction of the project, and payments therefor will be made in accordance with units counted and documented by the Engineer.

10-1.18 **RELOCATE MAILBOX**

This work shall consist of removing, salvaging, maintaining function in temporary locations, and repairing and resetting of existing letter and newspaper boxes as shown on the plans, conforming to applicable subsections of Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions. For the purposes of this section, letterboxes and newspaper boxes shall be defined as existing facilities. Activities in support of the work specified herein shall conform to the provisions in Section 15-1.01, "General," section 14-10, "Solid Waste Disposal and Recycling" and section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

During construction operations, the mailboxes shall be moved as necessary to clear the way for the Contractor's operations, but at all times shall be accessible for delivery. During construction the mailboxes shall either be installed on posts set in the ground or they may be installed on temporary supports approved by the Engineer.

When construction is complete the mailboxes shall be installed in final position on new redwood posts.

The mailbox shall be reset and concreted in place with face of mailbox within 0 to 6 inches from face of curb or asphalt concrete dike.

Redwood posts shall conform to the requirements for signposts in Section 82-3.02C, "Wood Posts," of the Standard Specifications.

The space around the posts shall be backfilled with native soil. The backfill material shall be placed in layers approximately 0.33-foot thick and each layer shall be moistened and thoroughly compacted.

Existing posts and mounts shall be disposed of.

Groups of mailboxes on single-post or multi-post supports shall be provided with a redwood plank as a supporting cross member on or between posts.

A multiple-box installation shall consist of two boxes installed on a single post. Each multi-box installation shall be considered as two units for payment purposes.

Newspaper boxes on individual posts will be considered as mailboxes for measurement and payment.

Newspaper boxes attached to existing mailbox posts shall be removed and fastened to the new mailbox posts and no separate payment will be made therefor.

Existing metal or iron letter and newspaper box posts shall be salvaged and reused. Permanent installation shall be in a buried concrete anchor of minor concrete or commercially available posthole concrete not less than 1.0 foot in diameter and 1.5 feet in depth from the finished ground surface. Soil surrounding each post anchor shall be compacted consistent with contract requirements for the area. Resetting of metal or iron posts shall be considered as included in the contract price paid for Reset Mailboxes, and no additional compensation will be allowed therefor.

The contract unit price paid for **Relocate Mailbox** shall include furnishing all labor, materials (including posts, planks, fasteners, and hardware), tools, equipment and incidentals, and for doing all the work to remove, maintain function in temporary location during construction, and reset letterboxes and newspaper boxes and dispose of excess and unsuitable components, all as shown on the plans, and as specified in the Standard Specifications and these Special Provisions.

10-1.19 COLD PLANE ASPHALT CONCRETE PAVEMENT

Existing asphalt concrete pavement shall be cold planed at the locations and to the dimensions indicated on the plans and shall conform to the following provisions.

The provisions of Section 42-3, "Grinding", of the Standard Specifications shall not apply.

Planing asphalt concrete shall be performed by the cold planing method. Planing of the asphalt concrete pavement shall not be done by the heater planing method. Cold planing machines 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.

Cold planing machines shall be operated so as not to produce fumes or smoke. Cold planing machines shall be capable of producing a planed surface with no grooves greater than 3/8-inch in width and 3/16-inch in depth, and shall be operated at a speed and in a manner to produce such a surface. The noise level produced by the combined planing operation shall not exceed 86 dBA at a distance of 50 feet at right angles to the direction of travel.

The depth, width and shape of the cut shall be as indicated in these special provisions and on the typical cross sections. Planing shall be performed in a manner to produce a straight cross slope between a minimum 0.08-foot depth of cut at the centerline established by the Engineer and a minimum 0.08-foot depth of cut at the outside edge as dimensioned on the typical cross-section. Areas between these boundaries, where the existing surface is below this specified plane (i.e., transversely bridged by the planer) shall not be planed. At conform lines (meet lines at intersections), transverse cuts shall be made to a minimum of 0.08-foot below the existing surface. The outside lines of the paved area shall be neat and uniform. Following the 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.

Planed widths of pavement shall be continuous except for intersections at cross streets where the planing shall be carried around the corners and through the conform lines.

Where transverse joints are planed in the pavement at conform lines, no drop-off greater than 0.10-foot shall remain between the existing pavement and the planed area when the pavement is opened to public traffic. If asphalt concrete has not been placed to the level of the existing pavement before the pavement is to be opened to public traffic, a temporary asphalt concrete transition shall be constructed. Asphalt concrete for a temporary transition shall be placed to the level of the existing pavement and tapered on a slope of 30:1 or flatter to the level of the planed area.

Asphalt concrete for temporary transitions shall be commercial quality "hot" or "cold" mix and shall be spread and compacted by any method that will produce a smooth riding surface. Temporary asphalt concrete transitions shall be completely removed, including the removal of loose material from the underlying surface, before commencing subsequent restoration or paving operations. Such removed material shall be disposed of outside the highway right of way in accordance with the provisions in Section 5-1.20B(4), "Contractor-Property Agreement", Section 14-10, "Solid Waste Disposal and Recycling", and Section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

The material planed from the roadway surface, including material deposited in existing or improved gutters or on the adjacent traveled way, shall be removed and disposed of outside the highway right of way in accordance with the provisions in section 14-10, "Solid Waste Disposal and Recycling" and section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications. Removal of the cold planed material shall be concurrent with the planing operations and follow within 50 feet of the planer, unless otherwise directed by the Engineer.

Cold plane asphalt concrete will be measured by the square yard. The quantity to be paid for will be the actual area of surface cold planed irrespective of the number of passes required to obtain the specified depth of cut. Low areas in existing pavement, bridged by the cold planer when adjacent cuts meet the specified minimum depth, will not be deducted from the measured areas.

The contract unit price paid per square yard for **Cold Plane Asphalt Concrete Pavement** shall include full compensation for furnishing all labor, materials including asphalt concrete for temporary transitions, tools, equipment and incidentals, and for doing all the work involved in cold planing and disposing of planed material; and constructing, maintaining, removing and disposing of temporary transitions, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.20 MICRO MILLING ASPHALT CONCRETE PAVEMENT

This work shall consist of micro milling existing asphalt concrete pavement at the locations and to the dimension indicated on the plans and shall conform to these Special Provisions, Standards Specifications, and as directed by the Engineer.

GENERAL

Micro-milling shall consist of the cold milling of existing asphalt concrete pavement with a milling machine equipped with a cutting drum specifically designed and constructed for micro-milling.

MILLING MACHINES

Milling machines shall conform to the following:

- a) Be equipped with a micro-milling drum with tungsten-carbide-tipped cutting teeth spaced no greater than 1/4 inch apart on center. The configuration of the teeth shall be such that the deviation in elevation between any 2 teeth does not exceed 1/16 inch.
- b) Asphalt concrete pavement to a tolerance of + 1/8 inch.
- c) Be equipped with an automatic grade control system operating in "profile" mode. The system shall be either:
 - I. a 30-foot-long paving machine ski with spring-loaded feet attached to the bottom on not more than 1.5-foot increments, such that the feet rise and fall over small irregularities on the pavement surface. The upper part of the ski shall be one piece and of such construction that it will not flex or bend by more than 1/8 inch at either end when supported off the grade by a fixture located at its center of gravity. The grade control system shall be referenced off the center of the ski, with skis mounted on each side of the milling machine such that the ski's longitudinal center is even with the center of the milling machine's cutting drum; or,
 - II. a sonic averaging system with automated controls. Each corner of the the milling machine shall be equipped with sonic grade averaging and slope sensors. The system shall feature plug-in connections, internal cable routing, capable of controlling each side of the milling machine, and a separate control box for the operator.
- d) Be equipped with a Tier V or higher engine compliant with the regulations of the California Air Resources Board.
- e) The Contractor shall meet the above-stipulated requirements for micro-milling machines prior to commencing construction and seek approval by the Engineer.

MILLING OPERATIONS

Milling operations shall progress from the low side of each roadway barrel or lane and progress towards the high side. Each successive pass of the milling machine shall meet the line and grade of the previous pass. The speed of the milling machine shall be maintained at a rate which results in a uniform pavement texture.

Micro-milling shall result in a grid-patterned textured pavement surface with longitudinal ridges approximately the same distance apart as the cutting teeth. The ridges shall be consistent in depth, width, and profile. The distance between the top of each ridge and the adjacent valleys shall not exceed 1/8 inch.

The resulting profile and cross slope of the milled pavement surface shall be such that a 12-foot long straightedge laid perpendicular or parallel to the centerline will not allow a shim with a width of 1 inch and a thickness of 3/16 inch to pass under the straightedge at any point except at breaks in profile grade or cross slope.

Milled pavement surfaces which do not conform to the requirements above shall be corrected by the Contractor. The Contractor shall prepare and submit to the Engineer for approval a correction plan prior to initiating corrective action.

During milling operations, the cutter teeth shall be regularly checked and replaced as necessary to maintain the tolerances specified in 900-2.

WORK SITE MAINTENANCE

A self-loading motorized street sweeper equipped with both brooms and a vacuum system, and a functional water spray system shall immediately follow the milling machine. Sweeping shall continue until loose millings have been completely removed and as requested by the Engineer. The Contractor shall maintain the micro-milled surface until the surface treatment is applied.

DISPOSAL OF MILLINGS

Millings shall be considered the property of the Contractor and shall be disposed of by the Contractor. The Contractor shall notify the Engineer a minimum of 2 Working Days prior to the start of milling operations of the disposal location.

Before commencing subsequent restoration or paving operations, the micro-milled material, loose material from the roadway surface, including material deposited in existing or improved gutters or on the adjacent traveled way, shall be removed and disposed of outside the highway right of way in accordance with the provisions in section 14-10, "Solid Waste Disposal and Recycling" and section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

PAYMENT & MEASUREMENT

Micro milling asphalt concrete will be measured by the square yard. The quantity to be paid for will be the actual area of surface cold planed irrespective of the number of passes required to obtain the specified depth of cut. Low areas in existing pavement, bridged by the cold planer when adjacent cuts meet the specified minimum depth, will not be deducted from the measured areas.

The contract unit price paid per square yard for **Micro Milling** shall include full compensation for furnishing all labor, materials including asphalt concrete for temporary transitions, tools, equipment and incidentals, and for doing all the work involved in micro milling and disposing of micro milling material; and constructing, maintaining, removing and disposing of temporary transitions, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

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

10-1.21 MICRO-SURFACINGS

This work applies to Micro-Surfacing consisting of a mixture of a micro-surfacing emulsion, water, additives, mineral filler, and aggregate on the pavement and shall conform to the provisions of section, 37-3.03, "Micro-Surfacings" of the 2018 Standard Specifications, these Special Provisions and as directed by the Engineer.

SUBMITTALS

At least 15 days before starting placement of micro-surfacing, submit:

1. Samples for:
 - 1.1. Micro-surfacing, two 1-quart wide mouth plastic containers with screw top lid of micro-surfacing emulsion
2. Micro-surfacing emulsion data as follows:
 - 2.1. Supplier and Type/Grade of asphaltic emulsion
 - 2.2. Type of micro-surfacing emulsion
 - 2.3. Copy of the specified test results for micro-surfacing emulsion
3. 50 lb of aggregate
4. Aggregate test results for the followings:
 - 4.1. Gradation
 - 4.2. Los Angeles Rattler
 - 4.3. Percent of crushed particles
 - 4.4. Sand equivalent
 - 4.5. Durability

At least 10 days before starting placement of micro-surfacing, submit a laboratory report of test results and the proposed mix design from an authorized laboratory. The authorized laboratory must sign the laboratory report and mix design.

The report must include:

1. Test results used in the mix design compared with specification requirements
2. Proportions based on the dry weight of aggregate, including ranges, for:
 - 2.1. Aggregate
 - 2.2. Water
 - 2.3. Additives
 - 2.4. Mineral filler
 - 2.5. Micro-surfacing emulsion residual asphalt content
3. Recommended changes to the proportions based on heating the mixture to 100 degrees F and mixing for 60 seconds, if atmospheric temperatures during application will be 90 degrees F or above, for:
 - 3.1. Water
 - 3.2. Additives
 - 3.3. Mineral filler
4. Quantitative moisture effects on the aggregate's unit weight determined under ASTM C29M

If the mix design consists of the same materials covered by a previous laboratory report, you may submit the previous laboratory report that must include material testing data performed within the previous 12 months for authorization.

If you change any of the materials in the mix design, submit a new mix design and laboratory report at least 10 days before starting micro-surfacing work.

Submit an SDS (Safety Data Sheet) and certificate of compliance for each shipment of asphaltic emulsion to the job site.

The certificate of compliance must include:

1. Shipment number and shipment date

2. Source refinery, consignee, and destination
3. Type and description of material with specific gravity and quantity
4. Contract or purchase order number
5. Signature by the manufacturer of the material and a statement that the material complies with the Contract

If no certificate of compliance is submitted, do not use asphaltic emulsion until authorized.

MATERIALS

Micro-surfacing Emulsions

A micro-surfacing emulsion must be a homogeneous mixture of asphalt, an elastomeric polymer and an emulsifier solution, Grade CQS1H.

Add an elastomeric polymer modifier to asphalt or emulsifier solution before emulsification. An elastomeric polymer solid must be a minimum of 3 percent by weight of the micro-surfacing emulsion's residual asphalt.

A micro-surfacing emulsion must comply with the requirements shown in the following table:

Micro-surfacing Emulsion Requirements		
Quality characteristic	Test method	Requirement
Tests on emulsion:		
Saybolt Furol Viscosity at 25 °C (Saybolt Furol seconds)	AASHTO T 59	15–90
Sieve test (%)	AASHTO T 59	0.30
Storage stability, 1 day (max, %)	AASHTO T 59	0–1
Settlement ^a , 5 days (max, %)	ASTM D244	5
Residue by evaporation (min, %)	California Test 331	62
Tests on residue by evaporation:		
Penetration at 25 °C	AASHTO T 49	40–90
Softening point (min, °C)	AASHTO T 53	57
pH (max)	ASTM E70	6.7

^aSettlement test on emulsion is not required if used within 48 hours of shipment.

Aggregate

Aggregate must comply with the quality characteristic requirements shown in the following table:

Aggregate Requirements		
Quality characteristic	Test method	Requirement
Los Angeles Rattler loss (max, %) At 500 revolutions	California Test 211 ^a	35
Percent of crushed particles (min, %)	California Test 205	95
Durability (min)	California Test 229	65
Sand equivalent (min)	California Test 217	
Type II		65
Type III		65

^aCalifornia Test 211 must be performed on the source aggregate before crushing.

The aggregate supplier must certify that the crushed aggregate being used on the project is manufactured from the source aggregate complying with the LA rattler requirements.

Aggregate Gradation:

Aggregate must be rock dust. Aggregate must be free from vegetable matter, deleterious substances, caked or clay lumps, and oversized particles.

Aggregate for micro-surfacing must comply with the gradations shown in the following table:

Aggregate Gradation				
Quality characteristic	Test method	Requirements		Stockpile Tolerance
Gradation (% passing by weight) Sieve size:	California Test 202	Type II	Type III	
3/8"		100	100	
No. 4		94–100	74–9	± 5%
No. 8		65–88	48–70	± 5%
No. 16		41–75	28–50	± 5%
No. 30		23–50	19–34	± 5%
No. 200		5–15	5–15	± 2%

If test results for aggregate gradation do not comply with the specifications, you may remove the micro-surfacing represented by the test results or blend additional aggregate with the stockpile material to bring it into compliance. Materials used in blending must meet the required aggregate quality test specifications before blending and must be blended in a manner to produce a consistent gradation. Aggregate blending may require a new mix design.

Mineral Fillers

If a mineral filler is used, it must be type I or type II Portland cement. A mineral filler used during mix design must be used during production.

General

Additional water must not cause separation of the micro-surfacing emulsion from the aggregate before placement.

You may use an additive that does not adversely affect the micro-surfacing.

Micro-Surfacing Mix Designs:

The micro-surfacing mix design must have the material proportion limits shown in the following table:

Micro-surfacing Mix Design Proportion Limits

Material	Proportion limits
Micro-surfacing emulsion asphalt residual content (% of dry weight of aggregate)	5.5–10.5
Water and additives	As Required
Mineral filler (% of dry weight of aggregate)	0–3

The micro-surfacing mix design must comply with the requirements shown in the following table:

Micro-surfacing Mix Design Requirements

Quality characteristics	Test method ^a	Requirement
Wet cohesion	Technical Bulletin 139	
At 30 minutes (set) (min, kg-cm)		12
At 60 minutes (traffic) (min, kg-cm)		20
Excess asphalt (max, g/m ²)	Technical Bulletin 109	540
Wet stripping (min, %)	Technical Bulletin 114	90
Wet track abrasion loss	Technical Bulletin 100	
6-day soak (max, g/m ²)		810
Displacement	Technical Bulletin 141	5
Lateral (max, %)		2.10
Specific gravity after 1000 cycles of 57 kg (max)		
Classification compatibility (min, grade points)	Technical Bulletin 144	(AAA, BAA) 11
Mix time at 25 °C (min)	Technical Bulletin 113	Controllable to 120 seconds

^aTest methods are by the International Slurry Surfacing Association.

QUALITY ASSURANCE

General

Your authorized laboratory must be able to perform International Slurry Surfacing Association tests and mix design.

QUALITY CONTROL

Submit quality control test results for the quality characteristics within the reporting times allowance after sampling shown in the following table:

Micro-Surfacing Emulsion

Quality characteristic	Test method	Minimum sampling and testing frequency	Sampling location
Tests on emulsion:			
Saybolt Furol Viscosity, at 25°C (Saybolt Furol seconds)	AASHTO T 59	Minimum 1 per day per delivery truck	Delivery truck
Storage stability, 1 day (max, %) ^a			
Sieve test (max, %)			

Residue by evaporation (min, %)	California Test 331	Minimum 1 per day per delivery truck	Delivery truck
Tests on residue from evaporation test:			
Penetration at 25 °C	AASHTO T 49	Minimum 1 per day per delivery truck	Delivery truck
Softening point (min, °C)	AASHTO T 53		

^aStorage stability test will be run if the storage exceeds 48 hours

Aggregate

For aggregate, the authorized laboratory must perform sampling and testing at the specified frequency and location for the following quality characteristics:

Aggregate Quality Control

Quality characteristic	Test method	Minimum sampling and testing frequency	Location of sampling
Los Angeles Rattler loss (max, %) At 500 revolutions	California Test 211	1st day of production	See California Test 125
Percent of crushed particles (min, %)	AASHTO T 335	1st day of production	See California Test 125
Sand equivalent (min)	California Test 217	1 per working stockpile per day	See California Test 125
Resistance of fine aggregate to degradation by abrasion in the Micro-Deval Apparatus (% loss by weight)	ASTM D 428	1 per working stockpile per day	See California Test 125
Gradation (% passing by weight)	California Test 202	1 per working stockpile per day ^b	See California Test 125
Moisture content, from field stockpile (%)	AASHTO T 255 ^a	1 per working stockpile per day	See California Test 125

^aTest aggregate moisture at field stockpile every 2 hours if you are unable to maintain the moisture content to within a maximum daily variation of ± 0.5 percent.

^bAn aggregate gradation test represents 300 tons or 1 day's production, whichever is less.

Quality Control Test Reporting Requirements

Quality characteristic	Maximum reporting time allowance
Los Angeles Rattler loss (max, %)	2 business days
Percent of crushed particles (min, %)	2 business days
Durability (min)	2 business days
Resistance of fine aggregate to degradation by abrasion in the MicroDeval Apparatus (% loss by weight)	2 business days

Gradation (% passing by weight)	48 hours
Sand equivalent (min)	48 hours
Moisture content (%)	48 hours

Within 3 days after taking micro-surfacing emulsion quality control samples, submit the authorized laboratory's test results.

An aggregate sand equivalent test represents 300 tons or 1 day's production, whichever is less.

County Acceptance

Micro-surfacing acceptance is based on:

1. Visual inspection for the following:
 - 1.1. Uniform surface texture throughout the work limits.
 - 1.2. Marks in the surface:
 - 1.2.1. Up to 4 marks in the completed micro-surfacing surface that are up to 1 inch wide and up to 6 inches long per 1000 square feet of micro-surfacing placed.
 - 1.2.2. No marks in the completed micro-surfacing surface that are over 1 inch wide or 6 inches long.
 - 1.3. Excessive raveling consisting of the separation of the aggregate from the micro-surfacing emulsion.
 - 1.4. Bleeding consists of the occurrence of a film of micro-surfacing.
 - 1.5. Delaminating of micro-surfacing from the existing pavement.
 - 1.6. Rutting or wash-boarding.

CONSTRUCTION

General

Before applying micro-surfacing, cover manholes, valve and monument covers, grates, and other exposed facilities located within the area of application using plastic or oil resistant construction paper secured by tape or adhesive to the facility being covered. Reference the covered facilities with enough control points to relocate the facilities after application of the micro-surfacing.

Proportioning

Proportion micro-surfacing ingredients in compliance with the authorized mix design.

Field conditions may require adjustments to the proportions within the authorized mix design during construction.

Tack Coats

The contractor must coat the pavement surface with an asphaltic emulsion mixed with additional water before applying a micro-surfacing. The maximum ratio of water to

asphaltic emulsion must be 2 to 1. Apply the tack coat at a rate from 0.08 to 0.15 gal/sq yd. The exact rate must be authorized.

The contractor shall determine the grade of slow-setting or quick setting asphaltic emulsion to be used.

MIXING AND SPREADING EQUIPMENT

General

Mixing and spreading equipment for micro-surfacing must proportion the asphaltic emulsions, water, aggregate, and any additives by volume and mix them in continuous pug mill mixers.

Introduce emulsions into the mixer with a positive displacement pump. If you use a variable-rate pump, the adjusting unit must be sealed in its calibrated position.

Introduce water into the mixer through a meter that measures gallons.

Choose a truck mounted mixer-spreader or continuous self-loading mixer spreader.

Truck Mounted Mixer Spreaders

Truck mounted mixer spreaders must comply with:

1. Rotating and reciprocating equipment must be covered with metal guards.
2. Proportion aggregate using a belt feeder with an adjustable cutoff gate. The Engineer verifies the height of the gate opening.
3. Belt feeder must have a depth monitor device. The depth monitor device must automatically shut down power to the belt feeder when the aggregate depth is less than 70 percent of the target depth.
4. Separate monitor device must detect the revolutions of the belt feeder. This device must automatically shut down power to the belt feeder if it detects no revolutions. If the belt feeder is an integral part of the equipment's drive chain, the monitor device is not required.
5. Aggregate belt feeder must be connected directly to the drive on the emulsion pump. The aggregate feeder drive shaft must have a revolution counter reading the nearest 0.10 revolution for micro-surfacing.
6. Emulsion storage must be equipped with a device that automatically shuts down power to the emulsion pump and aggregate belt feeder when the level of stored emulsion is lowered. To allow for normal fluctuations, there may be a delay of 3 seconds between detection of low emulsion storage levels or low aggregate depths and automatic power shut down.
7. Emulsion storage must be located immediately before the emulsion pump.
8. Emulsion storage tank must have a temperature indicator at the pump suction level. The indicator must be accurate to ± 5 degrees F.
9. No-flow and revolution warning devices must be in working condition. Low-flow indicators must be visible while walking alongside the equipment.

Continuous Self-Loading Mixer Spreaders

Continuous self-loading mixer spreaders must be automatically sequenced and self-propelled. The mixing machine must deliver each material to a double shafted mixer

and discharge the mixed material on a continuous flow basis. The mixing machines must have sufficient storage capacity to maintain a continuous supply of material to the proportioning controls. The mixing machine operators must have full control of forward and reverse speeds during placement.

Spreader Boxes

The spreader boxes used to spread micro-surfacing must be:

1. Capable of spreading the micro-surfacing a minimum of 12 feet wide and preventing the loss of micro-surfacing.
2. Equipped with flexible rubber belting on each side. The belting must contact the pavement to prevent the loss of micro-surfacing from the box.
3. Equipped to uniformly apply the micro-surfacing on superelevated sections and shoulder slopes. Micro-surfacing spreader box must be equipped with reversible motor driven augers.
4. Equipped with a series of strike-off devices at its rear.
 - 4.1. The leading strike off device must be:
 - 4.1.1. Fabricated of a suitable material such as steel or stiff rubber
 - 4.1.2. Designed to maintain close contact with the pavement during spreading
 - 4.1.3. Capable of obtaining the specified thickness
 - 4.1.4. Capable of being adjusted to the various pavement cross sections
 - 4.2. The final strike-off device must be:
 - 4.2.1. Fabricated of flexible material that produces a uniform texture in the finished surface
 - 4.2.2. Cleaned daily and changed if longitudinal scouring occurs in the micro-surfacing
5. Clean and free of micro-surfacing at the start of each work shift.

Shoulder Equipment

Spread the micro-surfacing on shoulders with a device such as an edge box that forms clean and straight joints and edges.

Equipment Calibration

Equipment calibration must comply with the *MPQP*. Notify the Engineer at least 5 business days before calibrating.

If the Department authorizes a truck or continuous mixer spreader, its calibration is valid for 6 months provided you:

1. Use the same truck or continuous mixer spreader verified with a unique identifying number
2. Use the same materials in compliance with the authorized mix design
3. Do not perform any repair or alteration to the proportioning systems

Calibrate the adjustable cut-off gate settings of each truck or continuous mixer spreader on the project to achieve the correct delivery rate of aggregate and emulsion per revolution of the aggregate feeder under the *MPQP*.

Checks must be performed for each aggregate source using an authorized vehicle scale.

Individual checks of the aggregate belt feeder's delivery rate to the pug mill mixer must not vary more than 2 percent from the average of 3 runs of at least 3 tons each.

Before using a variable-rate emulsion pump, the pump must be calibrated and sealed in the calibrated condition under the *MPQP*.

Individual checks of the emulsion pump's delivery rate to the pug mill mixer must not vary more than 2 percent from the average of 3 runs of at least 500 gal each.

SURFACE PREPARATION

Immediately before applying micro-surfacing, clean the surface to receive micro-surfacing by removing any extraneous material affecting adhesion of the micro-surfacing with the existing surface. Use self-propelled power brooms or other methods such as flushing to clean the existing pavement.

Placement

General

If truck-mounted mixer-spreaders are used, keep at least 2 operational spreaders at the job site during placement.

Spread micro-surfacing uniformly and do not spot, re-handle, or shift the mixture. However, in areas inaccessible to spreading equipment, spread the micro-surfacing mixtures with hand tools or other authorized methods. If placing with hand tools, lightly dampen the area first.

You may fog the roadway surface with water ahead of the spreader box. The fog spray must be adjusted for pavement:

1. Temperature
2. Surface texture
3. Dryness

You determine the application rates for micro-surfacing and the Engineer authorizes the application rates. Spread within 10 percent of authorized rate.

The mixtures must be uniform and homogeneous after spreading, and there must not be separation of the emulsion and aggregate after setting.

Repair Wheel Path Depressions

If repairing wheel path depressions is shown in plans, fill wheel path depressions and irregularities with micro-surfacing material before spreading micro-surfacing. If the depressions are less than 0.04 foot deep, fill with a scratch course. If the depressions are 0.04 foot deep or more, fill the depressions using a wheel path depression box.

Spread scratch courses by adjusting the steel strike-off of a scratch course box until it is directly in contact with the pavement surface.

Scratch Course Boxes

Spread the scratch courses with the same type of spreader box used to spread micro-surfacing except use an adjustable steel strike-off device instead of a final strike-off device.

Wheel Path Depression Boxes

Each wheel path depression box must have adjustable strike-off device between 5 and 6 feet wide to regulate depth. The wheel path depression box must also have devices such as hydraulic augers capable of:

1. Moving the mixed material from the rear to the front of the filling chamber
2. Guiding larger aggregate into the deeper section of the wheel path depression
3. Forcing the finer material towards the outer edges of the spreader box

Spread micro-surfacing with a wheel path depression box leaving a slight crown at the surface. Use multiple applications to fill depressions more than 0.12 foot deep. Do not apply more than 0.12 foot in a single application.

Allow traffic to compact each filled wheel path depression for a minimum of 12 hours before placing additional micro-surfacing.

Micro-surfacing Pavement Surfaces

The micro-surfacing spread rates must be within the ranges shown in the following table:

Micro-surfacing type	Application range (lb of dry aggregate/sq yd)
Type II	10-20
Type III ^a	20-32
Type III ^b	30-32

^aOver asphalt concrete pavement

^bOver concrete pavement and concrete bridge decks

Within 2 hours after placement, micro-surfacings must be set enough to allow traffic without pilot cars. Protect the micro-surfacings from damage until it has set and will not adhere or be picked up by vehicles tires. Micro-surfacings must not exhibit distress from traffic such as bleeding, raveling, separation or other distresses.

Test Strips

If micro-surfacing placement will require more than 1 day, you must construct a test strip. The test strip must be:

1. From 300 to 450 feet long
2. The same as the full production micro-surfacing
3. On 1 of the application courses specified at an authorized location
4. At the same time of day or night the full production micro-surfacing is to be applied

If multiple application courses are specified, you may construct test strips over 2 days or nights.

The Engineer evaluates the test strip after traffic has used it for 12 hours. If the Engineer determines the mix design or placement procedure is unacceptable, make modifications and construct a new test strip for the Engineer's evaluation.

Weather Conditions

Only place micro-surfacing if both the pavement and air temperatures are at least 50 degrees F and rising. The expected high temperature must be at least 65 degrees F within 24 hours after placement.

Do not place micro-surfacing if rain is imminent or the air temperature is expected to be below 36 degrees F within 24 hours after placement.

Joints

Transverse and longitudinal joints must be:

1. Uniform
2. Straight
3. Neat in appearance
4. Without material buildup
5. Without uncovered areas

Transverse joints must be butt-type joints.

Prevent double placement at transverse joints over previously placed micro-surfacing.

Place longitudinal joints:

1. On centerlines, lane lines, edge lines, or shoulder lines
2. With overlaps not more than 4 inches

You may request other longitudinal joint patterns if they do not adversely affect the micro-surfacing.

The maximum difference between the pavement surface and the bottom edge of a 12-foot straightedge placed perpendicular to the longitudinal joint must be 0.04 foot.

Finished Surfaces

Finished micro-surfacing must be smooth and free of irregularities such as scratch or tear marks. You may leave up to 4 marks that are up to 1 inch wide and 6 inches long per 75 linear feet of micro-surfacing placed. Do not leave any marks that are over 1 inch wide or 6 inches long.

Maintenance Sweeping

Sweep the micro-surfacing 24 hours after placement without damaging the micro-surfacing. For 4 days afterwards, sweep the micro-surfacing daily unless determined otherwise by the Engineer.

Repair of Early Distress

The micro-surfacing must not show bleeding, raveling, separation, or other distresses for 15 days after placing. If bleeding, raveling, delaminating, rutting, or wash-boarding occurs after placing the micro-surfacing, make repairs using an authorized method.

MEASUREMENT AND PAYMENT

The payment quantity for micro-surfacing is the weight determined by combining the weights of the aggregate and micro-surfacing emulsion. The payment quantity for micro-surfacing does not include the weights of added water, mineral filler, and additives. Said added water, mineral filler, and additives shall be included in the payment for the **various contract items of work** and no other compensation will be allowed therefor.

Full compensation for conforming to the requirements of this section, including any additional mobilizing or demobilizing costs, other work or labor, materials, tools, equipment, and incidentals, not otherwise provided for, shall be considered as included in the prices paid for **various items of work** and no additional compensation will be allowed therefor.

The contract unit price paid per ton for **Micro-Surfacing (Type II)** shall include full compensation for furnishing all labor, equipment, materials, tools, equipment and incidentals, and for doing all work involved in micro-surfacing, complete in place, as shown on the plans, and as specified in the Standard Specifications, these Special Provision, and as directed by the Engineer.

10-1.22 SCRUB SEAL

1. DEFINITION:

A seal coats using a polymer modified rejuvenating asphaltic emulsion and scrubbing the emulsion with a scrub broom to fill cracks and voids in the pavement.

Rejuvenating scrub seal coat includes:

1. Preparing pavement surface
2. Applying polymer modified rejuvenating asphaltic emulsion and scrubbing the emulsion sealer with a scrub broom.
3. Applying screenings
4. Rolling the screenings
5. Sweeping and disposing of excess screenings

2. CONSTRUCTION:

2.1.1. Preparation Of Existing Pavement:

The Contractor shall prepare the surfaces to be sealed prior to application of the seal coat.

Manhole covers, utility vaults and the surfaces of other utility facilities, survey monuments and benchmarks, shall be covered using a material approved by the Engineer. The material and procedure shall result in no adherence of the seal coat to the facility and no stripping of the seal coat from the adjacent pavement.

Thermoplastic striping and pavement markings, raised pavement markers, and raised pavement marker adhesive shall be removed.

Immediately before applying the asphalt rejuvenating agent, the surface to be sealed shall be clean and dry. Cleaning shall be performed by sweeping, flushing or other means necessary to remove all loose particles of paving, all dirt and all other extraneous material.

2.1.2. Asphalt Rejuvenating Emulsion (ARE) Application:

2.1.2.1. General:

ARE shall be applied by distributor trucks conforming to section 3.1.1. ARE may be applied with a wand to small or inaccessible areas if so approved by the Engineer. ARE shall not be applied when weather conditions are unsuitable. ARE shall not be applied until sufficient screenings are on hand to immediately cover the ARE, when the atmospheric temperature is below 65°F or above 110°F, or when the pavement temperature is below 80°F.

The Contractor shall schedule ARE application such that the ARE sets or “breaks” (turns from brown to black) before the atmospheric temperature falls below 50°F, the pavement temperature drops below 60°F, and before the time the lane is to be opened to traffic.

Application of emulsion shall be discontinued sufficiently early in the day to permit the termination of traffic control prior to darkness. Emulsion shall be applied to only one designated traffic lane at a time, and the entire width of the lane shall be covered in one operation.

Emulsion shall not be applied a greater distance than can be immediately covered by screenings, unless otherwise permitted by the Engineer.

ARE shall be a minimum of 10°F at the time of application.

2.1.2.2. Application Rate:

ARE shall be applied at a rate of 0.22 to 0.40 gallons per square yard. The initial rate of application shall be 0.30 gallons per square yard. The Contractor may propose a different initial rate of application. The Contractor shall apply ARE to 100-foot test strips, as requested by the Engineer, to determine and verify the final rate of application. The initial and final rate of application, and any adjustments thereto during placement, shall be subject to approval by the Engineer. The distribution of ARE shall not vary more than 15 percent transversely nor more than 10 percent longitudinally from the rate of application approved by the Engineer as determined by California Test 339. After application, ARE shall be free of streaks and voids, and shall provide uniform coverage.

2.1.2.3. Scrubbing:

Immediately following application, ARE shall be scrubbed into the existing pavement surface with a scrub broom conforming to Section 3.1.2. Scrubbing shall fill cracks and voids, force the ARE into the existing pavement surface, and distribute the ARE uniformly over the roadway cross section.

2.1.2.4. ARE Termination:

ARE application shall be terminated on building paper or other similar material approved by the Engineer. Building paper shall be spread over the entire ARE application width. Building paper shall also be placed over the treated surface for a sufficient length at the beginning of a spread to avoid spraying existing pavement or previously placed screenings and so that the nozzles are spreading properly when the uncovered surface is reached. The building paper shall then be removed and disposed of in a manner satisfactory to the Engineer.

2.1.3. Spreading of Screenings:

Screenings shall be uniformly spread by a chip spreader conforming to Section 3.1.4. Spreading shall begin immediately following scrubbing. The spreading rate shall be from 18 to 30 pounds per square yard. The initial rate of spreading shall be 24 pounds per square yard. The Contractor may propose a different initial rate of spreading to the Engineer. The Contractor shall spread screenings on 100-foot test strips as requested by the Engineer to determine and verify the final rate of spreading. The spreading rate shall be adjusted up or down so that no bleed through occurs during rolling. The initial and final rate of spreading, and any adjustments made during spreading, shall be subject to approval by the Engineer.

The joint between adjacent applications of screenings shall coincide with the line between designated traffic lanes.

Operating the chip spreader at speeds which cause the chips to roll over after striking the bituminous covered surface will not be permitted.

The transverse termination of screenings shall be complete and any excess screenings shall be removed from the surface prior to resuming operations.

Stockpiling of screenings prior to placing will be permitted; however, any contamination resulting during storage or from reloading operations will be cause for rejection.

Screenings shall be surface damp at the time of application, but excess water on the aggregate surface will not be permitted. Screenings shall be re-dampened in the haul trucks prior to delivery to the chip spreader when so directed by the Engineer.

ARE shall be covered with screenings before setting or "breaking" of the ARE occurs.

After the screenings have been spread, piles, ridges or uneven distribution shall be carefully removed to ensure against permanent ridges, bumps or depressions in the finished surface. Additional screenings shall be spread in whatever quantities may be required to prevent picking up by the rollers or traffic, after which the surface shall be rolled.

2.1.4. Finishing:

Finishing shall consist of rolling and sweeping.

2.1.4.1. Rolling:

Initial rolling shall consist of one complete coverage and shall begin immediately behind the chip spreader. ARE and screenings shall not be spread more than 2,500 feet ahead of completion of initial rolling operations. Secondary rolling shall begin immediately after completion of the initial rolling. The amount of secondary rolling shall be sufficient to adequately seat the screenings and in no case shall be less than 2 complete coverages.

2.1.4.2. Sweeping:

When sweeping is required adjacent to curbs, gutters, dikes, berms, railings or other barriers which would prevent loose screenings from being swept completely off the roadway, the sweepers shall also be capable of removing the loose screenings from the surface. In addition to the sweepers required for maintaining previously placed screenings, at each location where screenings are to be spread, a minimum of 3 self-propelled brooms shall be available prior to the start of spreading the screenings.

Sweeping shall be performed in such a manner that the screenings set in the asphalt rejuvenating emulsion will not be displaced.

The exact time of sweeping will be determined by the Engineer. As a minimum, sweeping will be required as follows:

- a) On 2-lane two-way roadways, from 2 hours to 4 hours after traffic controlled with pilot cars has been routed on the seal coat.
- b) On multilane roadways, from 2 hours to 4 hours after screenings have been placed.
- c) In addition to previous sweeping, immediately prior to opening any lane to public traffic, not controlled with pilot cars.
- d) As a first order of work on the morning following application of screenings, on any lane that has been open to public traffic not controlled with pilot cars.
- e) At the end of the 4 calendar day maintenance period.

3. EQUIPMENT:

3.1.1. Distributor Truck:

Distributor trucks shall be self-propelled and of the pressure-type with insulated tanks. The use of gravity distributors will not be permitted. Spray bars shall have a minimum length of 9 feet and shall be of the full circulating type. The spray bar shall be adjustable to permit positioning at various heights above the surface to be treated. The valves shall be operated by levers so that one or all valves may be quickly opened or closed in one operation.

Distributor trucks shall be equipped with the following:

1. Computerized control system which provides for accurate and rapid determination and control of the amount of emulsion being applied,
2. Heating unit and pump or pumps capable of spraying the asphalt rejuvenating emulsion within 0.03 gal/yd² of the specified application rate,

3. Fully-circulating spray bar capable of applying the asphalt rejuvenating agent uniformly across the roadway without streaks or other distortions,
4. Tachometer,
5. Pressure gauges,
6. Volume measuring devices,
7. Temperature gauges,
8. A hose and nozzle to be used for spraying areas which are inaccessible to the distributor,
9. Bitumeter of the auxiliary wheel type registering speed in feet per minute, and trip and total distance in feet, and
10. Scrub broom conforming with section below.

Cab-controlled valves may be used. The valves which control the flow from nozzles shall act positively so as to provide a uniform unbroken spread of bituminous material on the surface.

Distributor trucks shall be capable of uniformly applying emulsion, in controlled amounts, ranging from 0.02 gallon to 1 gallon per square yard of surface and with a range of pressure from 25 psi to 75 psi. If a spray bar extension is used to cover a greater width, it shall be of the full-circulating type.

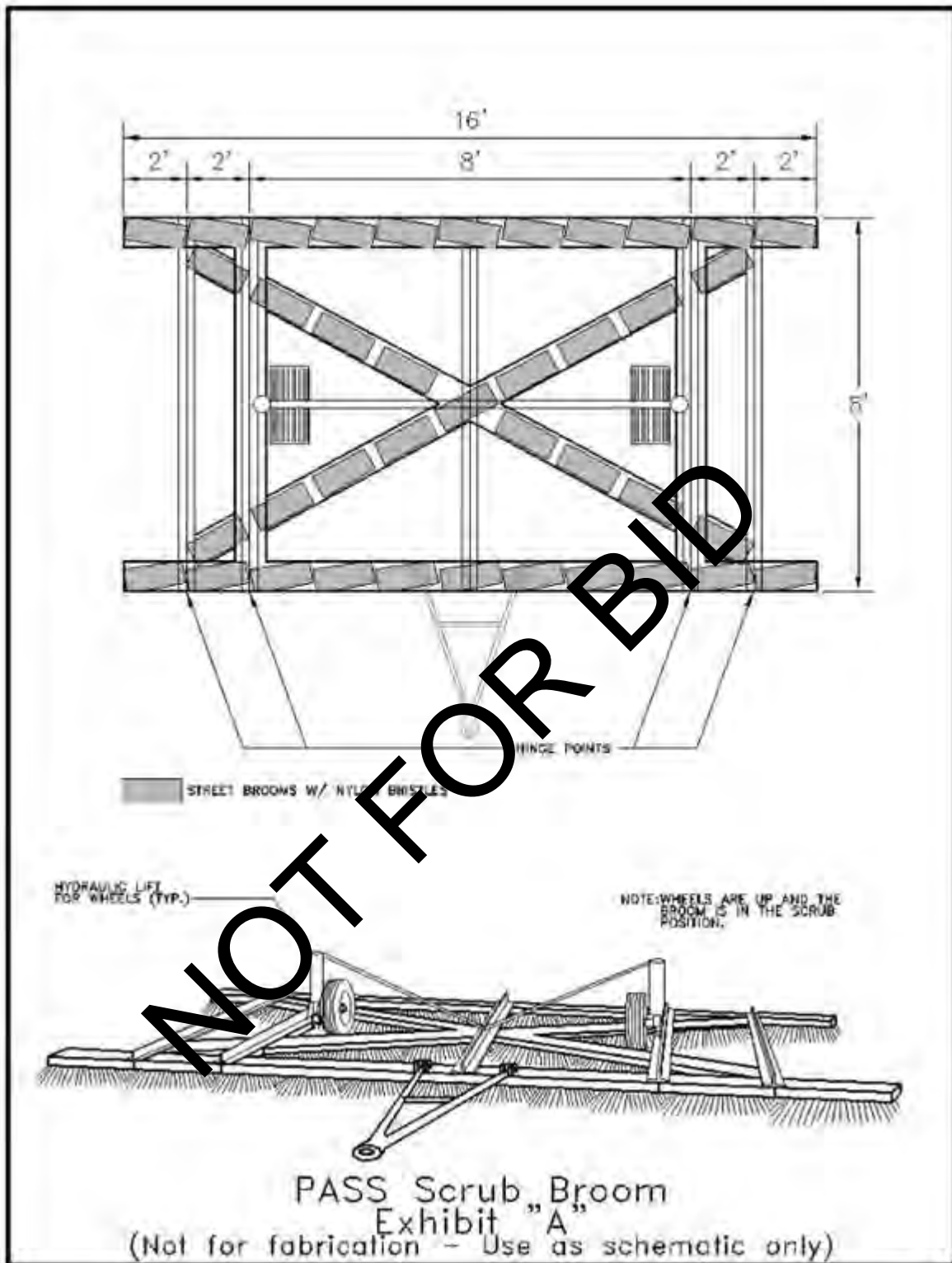
Distributor and booster tanks shall be so maintained at all times as to prevent dripping of bituminous material from any part of the equipment.

3.1.2. Scrub Brooms:

Scrub brooms shall be composed of a rigid steel frame with hydraulically operated street brooms attached. The main body of the frame shall be a minimum of 8 feet wide by 8 feet long. The minimum frame width shall be 16 feet. The maximum transverse width of the frame at any point shall not exceed 4 feet. The nearest and furthest members, paralleling the back of the distributor truck and the diagonal members shall be equipped with street brooms. The leading member and the trailing member shall have broom heads angled at 15 degrees off the centerline of the supporting member. The diagonal members shall have broom heads attached in line with the centerline of the supporting member. Each individual street broom attached to the scrub broom assembly shall be 9 1/2 inches wide x 8 inches high x 16 inches long and shall have stiff nylon bristles. Bristle height shall be maintained at a minimum of 5 inches. The scrub broom may be equipped with hinged wing assemblies which shall not to exceed 4 feet per side including diagonals, and shall be equipped with street brooms.

The weight of the broom assembly shall be such that it does not remove the asphalt rejuvenating emulsion from the roadway surface.

The scrub broom frame shall be attached to and pulled by the distributor truck. The distributor truck shall be equipped with the means to mechanically lift the scrub broom off of the roadway surface at intermediate points of completion and remain in the elevated position during transit.



3.1.3. Haul Trucks:

Haul trucks for hauling screenings shall be equipped with the following:

1. Tailgate discharge,
2. Locking device for connecting to the chip spreader,

3. Dump beds designed such that, when fully raised, no downward pressure is exerted on the chip spreader; and that, when dumping into the chip spreader, screenings are not dumped onto the roadway.

3.1.4. Chip Spreaders:

Chip spreaders shall be specifically designed and constructed to spread screenings. Chip spreaders shall be:

1. Self-propelled;
2. Equipped with a locking device for attaching to haul trucks, separate rear receiving and front spreading hoppers, a conveyor system capable of transporting material deposited in the rear hopper to the front hopper, an adjustable width spreading hopper, and a computerized spread rate control system capable of adjusting the spread rate up or down in 1 pound increments;
3. Capable of towing haul trucks during discharge and spreading screenings over an entire traffic lane width in one pass.

3.1.5. Rollers:

Rollers shall be 5-ton, pneumatic tired, oscillating type having a width of not less than 4 feet with pneumatic tires of equal size and diameter having treads satisfactory to the Engineer. Wobble-wheel rollers will not be permitted. The tires shall be spaced so that the gaps between adjacent tires will be covered by the following tires. Rollers shall be self-propelled and reversible. Each roller shall have a separate operator.

Rollers shall be equipped with pads and water systems which prevent sticking of asphalt mixtures to the pneumatic tires. A parting agent, which will not damage the asphalt mixture, as determined by the Engineer, may be used to aid in preventing the sticking of the mixture to the wheels.

The tires shall be inflated to 90 psi, or a lower pressure as designated by the Engineer, and maintained so that the air pressure will not vary more than 5 psi from the designated pressure. Rollers shall be constructed so that the total weight of the roller can be varied to produce an operating weight per tire of not less than 2,000 pounds. The total operating weight of the roller shall be varied as directed by the Engineer.

3.1.6. Sweepers ("Kick Brooms"):

Sweepers shall be self-propelled, equipped with a power driven, pivoting circular broom, and capable of cleaning the existing pavement and removing loose screenings without dislodging screenings set in the asphalt rejuvenating emulsion. Gutter brooms or steel-tined brooms shall not be used.

4. EXECUTION OF THE WORK:

4.1.1. Applying Emulsion:

Apply polymer modified rejuvenating asphaltic emulsion with distributor truck to the areas to receive scrub seal coat within rate range shown in the following table:

Type	Range
Fine 1/4" max	0.20-0.26 gal/sq yd
Medium Fine 5/16" max	0.25-0.32 gal/sq yd
Medium 3/8" max	0.28-0.38 gal/sq yd

The exact rate of application will be determined by the Engineer.

Apply polymer modified rejuvenating asphaltic emulsion at a minimum temperature of 130 degrees F.

Apply polymer modified rejuvenating asphaltic emulsion when the ambient air temperature and the pavement surface temperature is at least 45 degrees F.

Do not apply polymer modified rejuvenating asphaltic emulsion when weather forecasts predict the ambient air temperature will fall below 32 degrees F within 24 hours after application or rain is forecast within 24 hours after application.

Apply polymer modified polymer modified rejuvenating asphaltic emulsion and immediately broom the emulsion to fill cracks and voids with the emulsion scrub broom. Maintain a neat and uniform line at the edge of the limits of the scrub seal application.

4.1.2. Spreading Screenings:

Spread screenings evenly using a mechanical spreader within rate range shown in the following table:

Type	Range
Fine 1/4" max	18-24 lbs/sq yd
Medium Fine 5/16" max	23-27 lbs/sq yd
Medium 3/8" max	25-31 lbs/sq yd

The screening spread rate must be adjusted so that no bleed through occurs during rolling. The exact spread rate will be determined by the Engineer.

5. SUBMITTALS:

At least 10 days before starting seal coat application, submit the name of the authorized laboratory that will be performing quality control testing.

Submit MSDS for each polymer modified rejuvenating asphaltic emulsion ingredient and the polymer modified rejuvenating asphaltic emulsion.

At least 5 days before starting seal coat application, submit the following initial samples and test results:

1. Two- ½ gallon samples of polymer modified rejuvenating asphaltic emulsion in a plastic container from the emulsion supplier.
2. Polymer modified rejuvenating asphaltic emulsion test results for quality characteristics specified in 6.1.1 from supplier of polymer modified rejuvenating asphaltic emulsion.
3. Rejuvenating agent test results for quality characteristics specified in 6.1.1 from the supplier of the polymer modified rejuvenating asphaltic emulsion.
4. 50 lb of screenings

5. Screenings test results for the followings:

- 5.1. Gradation per California Test 202
- 5.2. Los Angeles Rattler per California Test 211
- 5.3. Film stripping per California Test 302
- 5.4. Cleanness value per California Test 227
- 5.5. Percent crushed particles per California Test 205

6. Vialit test result

For each delivery of polymer modified rejuvenating asphaltic emulsion to the job site, submit a certificate of compliance and a copy of the specified test results from the emulsion supplier.

Submit a sample of polymer modified rejuvenating emulsion asphaltic emulsion to the authorized laboratory and the Engineer. Each 1/2-gallon sample must be in a plastic container and submitted in an insulated shipping container.

The County representative shall run testing on the provided materials to verify and accept the provided test results that were initially performed by the authorized laboratory.

6. **QUALITY CONTROL:**

Authorized Testing Laboratory for polymer modified rejuvenating asphaltic emulsion quality control testing must participate in the AASHTO Proficiency Sample Program.

Authorized Testing Laboratory for aggregate quality control testing must be accredited under Caltrans's Independent Assurance Program.

6.1.1. **Polymer Modified Rejuvenating Asphaltic Emulsion:**

For polymer modified asphaltic emulsion samples:

1. Circulate polymer modified asphaltic emulsion in the distributor truck before sampling.
2. Take samples from the distributor truck at mid load or from a sampling tap or thief.
3. Before taking samples, draw and dispose of 1 gallon.
4. Take two 1/2-gallon samples in the presence of the Engineer.

For polymer modified rejuvenating asphaltic emulsion, the Authorized Testing Laboratory must perform quality control sampling and testing at the specified frequency and location for the following quality characteristics.

Polymer Modified Rejuvenating Asphaltic Emulsion

Quality characteristic	Test method	Requirements	Minimum sampling and testing frequency	Sampling location	Maximum reporting time allowance
Test on emulsion					
Viscosity @ 122° F (SFS)	AASHTO T59	50 - 350	1 per 100 tons	Distributor truck	3 business days
Residue, w%, min	AASHTO T59	65			
pH	ASTM E70	2.0-5.0			
Sieve, w%, max	ASTM D244	0.1			
Oil distillate, w%, max	ASTM D244	0.5			
Storage Stability, 24 Hr 25°C, %, max	AASHTO T59	1.0			
Test on Residue Recovered by Evaporation (AASHTO T59)					
Viscosity @ 140°F, (P), max	ASTM D2171 ⁽¹⁾⁽²⁾	5000	1 per 100 tons	Distributor truck	3 business days
Penetration @ 39.2°F, min	ASTM D5	40-70			
MSCR ¹	AASHTO TP 70 MP 19, PG 64-22	Report Only ⁽³⁾			
Elastic Recovery, %, min	T301 ⁽⁴⁾	60			
Test on latex ⁽⁵⁾					
Specific Gravity	ASTM D1475	1.08 – 1.15			
Tensile strength, die C dumbbell, psi, min.	ASTM D412	500			
Swelling in rejuvenating agent, % max.; 48 hours exposure @ 104°F	ASTM D471 ⁽⁶⁾ Modified	40% intact film			
Test on Rejuvenating Agent					
Flash point, COC , °F	ASTM D92	> 380			
Hot Mix Recycling Agent Classification	ASTM D4552	See Table Directly below			

- (1) If it is suspected that a sample may contain solid material, strain the melted sample into the container through a No. 50 (300- μ m) sieve conforming to Specification E 11.
- (2) Use an AI- 200 glass capillary tube to run the test. If the viscosity is 4000 or above use an AI 400 instead.
- (3) Report only. Report "S", "H", "V", or "E" grade based on PG 64-22. Report once per project.
- (4) Elastic Recovery @ 10° C (50° F): Hour glass sides, pull to 20 cm, hold 5 minutes then cut, let sit 1 hour.
- (5) Latex films shall be cured at 75°F and 50% relative humidity for 14 days prior to cutting or molding specimens. Suitable substrate for film formation shall be polyethylene boards, silicone rubber sheeting, glass, or any substrate which produces a cured film of uniform cross-section.
- (6) Latex Testing: Suitable substrate for film formation shall be polyethylene boards, silicone rubber sheeting, glass, or any substrate which produces a cured film of uniform cross-section. Polymer film shall be prepared from latex as follows:
- Resistance to Swelling: Polymer films shall be formed by using a 50 mil drawdown bar and drawing down 50 mils of the latex on polyethylene boards. Films shall be cured for 14 days at 75°F and 50% humidity. Samples for resistance to swelling in rejuvenating agent shall be 1" by 2" rectangles cut from the cured film. Cut at least 3 specimens for each sample to be tested for swelling. Fill 3-8 oz ointment tins with at least a ½" deep of rejuvenating agent. Swelling samples shall be weighed and then placed in the ointment tins on top of the rejuvenating agent. Then, add at least another ½" deep of rejuvenating agent over each of the latex samples. The ointment tins shall be covered and placed in an oven at 104°F for the specified 48 hours \pm 15 minutes. The ointment tins are allowed to cool to 75°F and then the latex films are removed from the tins. Unabsorbed rejuvenating agent is removed from the intact latex film by scraping with a rubber policeman and blotting with paper towels. If the latex film does not remain intact during removal from the tins or while removing the unabsorbed rejuvenating agent the sample shall be rejected. After the rejuvenating agent is removed from the samples they are then weighed. Percent swelling is reported as weight increase of the polymer film; report mass increase as a percent by weight of the original latex film mass upon exposure of films to the recycling agent.

Rejuvenating agent and asphalt and must meet the requirements for the quality characteristics shown in the following table:

Rejuvenating Agent		
Quality characteristic	Test method	Requirements
Test on rejuvenating agent:		
Viscosity, 140F, CST	ASTM D2170	50-175
Flash point, F, COC, min	ASTM D92	380
Saturate, % by weight, max	ASTM D2007	30
Asphaltenes, max	ASTM D2007	1.0
Test on rejuvenating agent RTFOT Residue		
Weight change, %, max	ASTM D2872	6.5
Viscosity ratio, max	ASTM D2170	3

6.1.2. Screenings:

Screenings must have the gradation as determined under California Test 202 in the following table:

**Rejuvenating Scrub Seal Coat Screenings
Gradation**

Sieve sizes	Percentage passing		
	Medium 3/8" max	Medium Fine 5/16" max	Fine 1/4" max
3/4"	--	--	--
1/2"	100	--	--
3/8"	85–100	100	100
No. 4	0–15	0–50	60–85
No. 8	0–5	0–15	0–25
No. 16	--	0–5	0–5
No. 30	--	0–3	0–3
No. 200	0–2	0–2	0–2

For screenings, the Authorized Testing Laboratory must perform sampling and testing at the specified frequency and location for the following quality characteristics

Minimum Quality Control

Quality characteristic	Test method	Minimum sampling and testing frequency	Requirement	Location of sampling	Maximum reporting time allowance
Los Angeles Rattler Loss, %, max Loss at 100 revolutions Loss at 500 revolutions	California Test 211	1st day of production	10 40	See California Test 125	48 hours
Film stripping, %, max	California Test 202	1st day of production	25	See California Test 125	48 hours
Percent crushed particles, %, min	California Test 205	1st day of production	95	See California Test 125	48 hours
Gradation, percentage passing	California Test 202	2 per day	Rejuvenating Scrub Seal Coat Screenings Gradation table under section 6.1.2	See California Test 125	24 hours
Cleanness value, min	California Test 227	2 per day	70	See California Test 125	24 hours

If the results of the aggregate grading for screenings does not meet the gradation specified, the scrub seal coat represented by the test shall be removed. However, if requested in writing by the Contractor and approved by the Engineer, the seal coat may remain in place, and the

Contractor shall pay to the County \$1.75 per ton for the screenings represented by the test and left in place.

If the results of the cleanness value test for screenings is below 80, the scrub seal coat represented by the test shall be removed. However, if requested in writing by the Contractor and approved by the Engineer, scrub seal coat containing screenings with a Cleanness Value below 80, but not less than 75, may remain in place. The Contractor shall pay to the County the amount specified in the following table for the screenings represented by the test and left in place.

Cleanness Value	Payment to County
80 or over	None
79	\$2.00 per ton
77	\$4.00 per ton
75	\$6.00 per ton

When both the aggregate grading and the cleanness value for screenings do not conform to the requirements specified, both payments to the County shall apply. The County may deduct these amounts from any moneys due, or that may become due, the Contractor under the Contract. No single aggregate grading or cleanness value test shall represent more than 300 tons or one day's production, whichever is smaller.

6.1.3. Rejuvenating Scrub Seal Coat:

For rejuvenating scrub seal coat, the Authorized Testing Laboratory must perform sampling and testing at the specified frequency and location for the following quality characteristics:

Minimum Quality Control

Quality characteristic	Test method	Minimum sampling and testing frequency	Requirement	Location of sampling	Maximum reporting time allowance
Polymer modified rejuvenating asphaltic emulsion spread rate, gal/sq yd	California Test 339	2 per day	Target value ± 0.03 gal/sq yd	Pavement surface	24 hours
Chip retention, %	Vialit test method for aggregate in chip seals, French chip	1st day of production	95	Screenings haul Truck	96 hours

For the Vialit test, the polymer modified rejuvenating asphaltic emulsion must be placed within the placement temperature range.

6.1.4. Acceptance Criteria:

Rejuvenating scrub seal coat acceptance is based on:

1. For polymer modified rejuvenating asphaltic emulsion acceptance is based on the County's sampling and testing for compliance with the requirements for the quality characteristics shown in table titled Polymer Modified Rejuvenating Asphaltic Emulsion under Section 6.1.1 in this section.
2. For screenings acceptance is based on the County's sampling and testing for compliance with the requirements shown in the table titled "Rejuvenating Scrub Seal Coat Acceptance Criteria Testing Screenings."
3. If the screenings cleanness value is less than 70, remove the scrub seal represented by the test result or, if you request and the Engineer authorizes, the scrub seal containing screenings with a cleanness value less than 70 but greater than 58 may remain in place. The County deducts payment for scrub seal with a screenings cleanness value between 58 and 70 that remains in place.

7. METHOD OF MEASUREMENT & PACYMENT:

The County deducts the amounts shown on the following table for scrub seal with noncompliant screenings left in place:

Cleanness value	Deduction
65-69	\$2.20 per ton
60-64	\$4.40 per ton
58-59	\$6.60 per ton

The contract unit price paid per square yard for **Scrub Seal** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and placing of the scrub seal, complete in place, including cleaning the surface and protecting the scrub seal until it has set, all as shown on the plans, as specified in these specifications and as directed by the Engineer.

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

10-1.23 EXISTING FACILITIES

The work performed in connection with various existing highway facilities shall conform to the provisions in Section 15, "Existing Facilities," of the Standard Specifications and these Special Provisions.

Full compensation for any work related to various highway facilities shall be considered as included in the **various contract items of work** and no additional compensation will be allowed therefor.

10-1.24 REMOVE CONCRETE

This work shall consist of removal and disposal of existing Portland Cement Concrete within the limits shown on the plans and set in the field by the Engineer, and shall conform to the provisions in Section 15, "Existing Highway Facilities," Section 17-2, "Clearing and Grubbing," and Section 19-1.03D, "Buried Man-Made Objects," of the Standard Specifications and these Special Provisions.

Portions of existing ramp, spandrel, cross gutter, pavement, and sidewalks, curbs, curb and gutters, which interfere with construction shall be removed.

Portion of existing concrete sidewalks shall be saw cut and removed as necessary for installation of the roadside sign post.


Where no joint exists between concrete to be removed and concrete to remain in place, the concrete shall be saw cut in a neat, true line to a minimum of 0.17 foot before concrete is removed. The locations of the cut lines shown on the plans are approximate only; the exact location will be determined by the Engineer.

Removed concrete shall become the property of the Contractor and shall be disposed of in accordance with the provision in Section 5-1.20B(4) "Contractor Property Agreement", Section 14-10, "Solid Waste Disposal and Recycling" and Section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

Attention is directed to section "Miscellaneous Concrete Construction" elsewhere in these Special Provisions.

The concrete sidewalk shall be removed at the direction of the Engineer not more than 10 feet from BCR and ECR to make the concrete sidewalk or ramp ADA compliant.

The contract unit price paid per square yard for **Remove Concrete (Sidewalk, Spandrel, Cross Gutter and Ramp)** shall include, furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing and disposing existing concrete sidewalk, spandrel, cross gutter and ramp and complete in place, as shown on the plan and as directed by the Engineer.

The contract unit price paid per linear feet for **Remove Concrete (Curb and Gutter)** shall include, furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing and disposing existing concrete sidewalk, cross gutter, ramp and spandrel, complete in place, as shown on the plan and as directed by the Engineer. 

10-1.25 CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions in Section 16, "Clearing and Grubbing," of the Standard Specifications and these special provisions.

Vegetation shall be cleared and grubbed only within the excavation and embankment slope lines.

All existing vegetation, outside the areas to be cleared and grubbed, shall be protected from injury or damage resulting from the Contractor's operations.

All activities controlled by the Contractor, except cleanup or other required work, shall be confined within the graded areas of the roadway.

Nothing herein shall be construed as relieving the Contractor of his responsibility for final cleanup of the highway as provided in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

Full compensation for furnishing labor, materials, tools, equipment and incidentals for doing all the work involved in clearing, grubbing vegetation, bushes, tree stumps and backfilling materials shall be considered as included in the contract lump sum price paid for **Clearing and Grubbing** and no additional compensation will be allowed therefor.

10-1.26 WATERING

Watering shall conform to the provisions in Section 10-6, "Watering," of the Standard Specifications.

The contract lump sum price paid for **Develop Water Supply** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals and for doing all the work involved in developing water supply and no additional compensation will be allowed therefor.

10-1.27 EARTHWORK

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these Special Provisions.

The second paragraph (numbered 1 & 2) of Section 19-5.03B, "Relative Compaction (95 percent)," of the Standard Specifications is superseded by the following:

Relative compaction of not less than 90 percent shall be obtained for the layer between 0.5 feet to 1.5 feet below the grading plane for the width of the pavement in excavation and relative compaction of not less than 90 percent shall be obtained throughout embankment.

Excavation and embankment shall be measured to the grading plane and shall not include excavation quantities covered by other bid items. Any work done to obtain the compaction requirements for the areas below the grading plane shall be the responsibility of the contractor and payment for such work shall be considered as included in the contract price paid per cubic yard for **Roadway Excavation** and no additional compensation will be allowed therefore.

No additional payment will be made for any swellage or other potential change in the quantity of subgrade material that is removed or added.

Prior to placing embankment material, the existing ground to receive it shall be scarified to a minimum depth of 1-foot and compacted to a relative compaction of not less than 90 percent. Scarifying existing ground shall be considered as included in the price paid per cubic yard for **various contract items of work** and no additional compensation will be allowed therefore.

Additional earthwork and grading within the construction limits, as shown on the plans, shall be the responsibility of the contractor. Payment for such work shall be considered as included in the price paid for **various contract items of work** and no additional compensation will be allowed therefore.

Surplus excavated/removed material shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions in Section 5-1.20B(4) Contractor-Property Owner Agreement"; Section 14-10, "Solid Waste Disposal and Recycling" and Section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

Attention is directed to Section, "Remove Concrete" and "Remove Asphalt Concrete Surfacing" elsewhere in these Special Provisions.

Full compensation for saw cutting, removing existing surfacing, stockpiling, hauling, placing and/or disposing of the removed materials shall be considered as included in the contract price paid for **various contract items of work** and no additional compensation will be allowed therefor.

Full compensation for furnishing labor, materials, tools, equipment and incidentals for doing all the work involved in roadway excavation, compaction and backfilled materials shall be considered as included in the contract unit price paid per cubic yard for **Roadway Excavation** and no additional compensation will be allowed therefor.

10-1.28 GROUTED ROCK TREATMENT

Grouted Rock Treatment shall be constructed in accordance with Special Drawing No.3 attached elsewhere in these special provisions.

Rock shall be cobblestones with maximum 9" to minimum 6" with one side flat and shall be hand-placement method.

No joints greater than 1 inch between rocks will be acceptable. 4 inch filler rocks will be accepted to maintain the 1 inch joint.

Concrete shall be Minor Concrete with 3/8 inch maximum size of aggregates conforming to the provisions in Section 90, "Portland Cement Concrete" elsewhere in these special provisions.

The contract unit price paid per square yard for **Grouted Rock Treatment** shall be considered to include furnishing all labor, materials (including pea gravel concrete bed and rock), equipment, tools and incidentals, and for doing all work involved in constructing the rock treatment median, complete in place, as shown on the plans, and as specified in the Standard Specifications and these Special Provisions.

10-1.29 LANDSCAPE, SPRINKLER AND IRRIGATION SYSTEM

This work shall consist of replacing sod in kind and also replacing, removing and relocating portions of irrigation systems that conflict with construction and shall conform to the provisions in Section 15, "Existing Facilities"; Section 17-2, "Clearing and Grubbing" and Section 20-10, "Existing Landscape," of Standard Specifications, these Special Provisions and as directed by the Engineer.

Existing sod in conflict with construction shall be removed and replaced in kind or type of grass, as shown on the plan, and as directed by the Engineer. Contractor to water the soil

before placing the sod and all other applicable and necessary landscape work shall conform with Section 20-3.02C(3)E, "Sod" of the Standard Specifications and these special provisions.

All existing sprinklers and irrigation lines in conflict with construction shall be replaced, removed, relocated or capped, only as necessary to clear the way for rough and final grading until the landscaping (includes sprinklers, irrigation lines and sod replacement) is complete.

The removed pipe or fittings shall become the property of the Contractor and shall be disposed of outside highway right of way in accordance with the provisions in Section 14-10, "Solid Waste Disposal and Recycling" and Section 14-11, "Hazardous Waste and Contamination" of the Standard Specifications.

Prior to backfilling, the Contractor shall test the sprinklers and irrigation lines at each and every station to ensure the system is working properly. Any leaks shall be repaired and replaced in kind immediately at the expense of the Contractor. If replacement is necessary, sprinkler heads including new pipe and fitting ranging from ½" to 1" in sizes, shall be Polyvinyl Chloride (PVC) Pipe, Sch 80 conforming to the requirements of ASTM Designation D1785 and these special provisions. The solvent cement and primer for pipe and fitting connections shall be used in accordance with the manufacturer's printed instructions.

Trenches shall be backfilled with native material and compacted as directed by the Engineer.

After installing the sprinkler system, the new lawn or sod shall be cleared of any objectionable material and left clean at the satisfaction of the Engineer. The Contractor shall restore any disturbed landscaping in kind.

This section does not cover any replacement or repair to an existing irrigation controller box that maybe installed either inside or outside the property owner's premises, except, irrigation control valve if present.

The contract lump sum price paid for **Modify Irrigation System** shall include full compensation for furnishing labor, materials, tools, equipment, and incidentals and for doing all the work involved in trenching, cutting, capping, removing, relocating, replacing and installing sod, sprinklers, irrigation lines and/or irrigation control valve with thorough inspection and testing prior to backfill, complete in place, as specified in the Standard Specifications and these special provisions, and as determined by the Engineer.

The contract lump sum price paid for **Remove and Relocate Landscape Rocks** shall include full compensation for furnishing labor, materials, tools, equipment, and incidentals and for doing all the work involved in removing, relocating and replacing Landscape rocks complete in place, as specified in the Standard Specifications and these special provisions, and as determined by the Engineer.

10-1.30 FINISHING ROADWAY

Finishing roadway shall conform to the provisions in Section 22, "Finishing Roadway," Section 4-1.13, "Cleanup," of the Standard Specifications, and these Special Provisions.

Finishing Roadway shall consist of the work necessary to accomplish final cleaning up. Such cleaning up shall involve the entire project, including intersecting streets and driveways, and all

adjacent or nearby properties effected by the project or occupied by the Contractor during performance of the work.

The contract lump sum price paid for **Finishing Roadway** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in developing water supply and no additional compensation will be allowed therefor.



10-1.31 AGGREGATE BASE

Aggregate base shall be Class 2 and shall conform to the provisions in Section 26, "Aggregate Bases," of the Standard Specifications and these special provisions.

Reclaimed material may be substituted for aggregate base. Reclaimed material shall meet the grading and quality requirements for Class 2 aggregate base. Reclaimed material may be used up to 100 percent of the total volume of the aggregate used, under section 26, "Aggregate Bases," of the Standard Specifications.

The contract unit price paid per cubic yard for **Class 2 Aggregate Base** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in hauling and constructing aggregate base, complete in place, as shown on the plans, and as specified in the Standard Specifications, these special provisions, and as directed by the Engineer.

10-1.32 ASPHALT CONCRETE (RAP Optional)

Asphalt concrete shall conform to the provisions in Section 39-2, "Hot Mix Asphalt" of the Standard Specifications and these special provisions.

The Contractor may produce asphalt concrete using reclaimed asphalt pavement (RAP). The Contractor may substitute RAP for a portion of the virgin aggregate in asphalt concrete in an amount not exceeding 15 percent of the asphalt concrete dry aggregate mass.

RAP shall not be used in Open Graded Asphalt Concrete or Rubberized Asphalt Concrete.

RAP shall be processed from asphalt concrete removed from pavement surfaces. RAP shall be stored in stockpiles on smooth surfaces free of debris and organic material. RAP stockpiles shall consist only of homogeneous RAP. The Contractor may process and stockpile RAP throughout the project's life. Processing and stockpiling operations shall prevent material contamination and segregation.

The asphalt concrete shall conform to the following requirements:

1. Asphalt concrete shall be produced at a central mixing plant.
2. The aggregate for asphalt concrete shall conform to the **Type A, 3/4" Maximum Grading PG 70-10 and Asphalt Concrete (Leveling), 3/8" Maximum Grading PG**

64-10 specified in Section 39-2.02B(4)(b), "Aggregate Gradations," of the Standard Specifications.

3. The asphalt binder grade shall be **PG 64-16** for asphalt concrete.
4. If the Contractor does not use RAP, the amount of asphalt binder to be mixed with the aggregate for Type A asphalt concrete will be determined by the Contractor and submitted to the Engineer for approval in accordance with California Test 367 (except Open Graded asphalt concrete) or California Test 368 for Open Graded asphalt concrete using the samples of aggregates furnished by the Contractor in conformance with Section 39-2.01A(4), "Quality Assurance," of the Standard Specifications.
5. If the Contractor uses RAP, the amount of asphalt binder to be mixed with the combined virgin aggregate and RAP will be determined by the Contractor and submitted to the Engineer for approval in accordance with California Test 367 amended by Lab Procedure-9 (LP-9). LP-9 is available at:

<http://www.dot.ca.gov/hq/esc/Translab/ormt/fpmlab.htm>

Whenever in Lab Procedure-9 the terms "Hot Mix Asphalt" and "HMA" are used, they shall be understood to mean and refer to "Asphalt Concrete" and "AC" respectively

At least 5 days before starting production of asphalt concrete using RAP, the Contractor shall submit a proposed asphalt concrete mix design in writing to the Engineer.

Additional asphalt concrete surfacing material shall be placed along the edge of the surfacing at road connections, private drives, 2'-4' slot have adjacent to C&G and AC back of safe pads, areas less than 10 feet wide and those where access with paving machine is not practical or non-machine paving areas shall be hand raked, if necessary, and compacted to form smooth connecting surfaces. Full compensation for furnishing all labor and tools and doing all the work necessary to hand rake said connecting surfaces shall be considered as included in the contract prices paid per ton for the **various contract items** of asphalt concrete surfacing involved and no additional compensation will be allowed therefor.

Immediately in advance of applying paint binder, the roadway shall be free of moisture, loose or extraneous material and the cost of said work shall be considered as included in the contract price per ton for the asphalt concrete involved and no additional compensation will be allowed therefor.

Replace The First Paragraph of Section 39-2.01A(3)(d) "Test Results", with:

For mix design, JMF verification, production start-up, and each 10,000 tons, submit AASHTO T 283 and AASHTO T 324 (Modified) test results electronically to the Engineer.

Add the following as the First Paragraph of Section 39-2.01A(4)(b) "Job Mix Formula Verification", with:

At the Engineer's sole discretion, the Engineer may choose to verify the full Job Mix Formula (JMF), or any portion thereof, or accept the Contractors submitted test results in lieu of

verification testing in accordance with the following sections. In any case, this verification will serve the purposes of this project alone, and shall not be used for any other project.

Remove the paragraphs of Section 39-2.01A(4)(b) "Job Mix Formula Verification", as follows:

Paragraph 9; which starts "You may adjust..."

Paragraph 10; which starts "For each HMA type..."

Paragraph 11; which starts "A verified JMF..."

**Replace Section 39-2.01A(4)(d) "Job Mix Formula Renewal", with:
39-2.01A(4)(d) Reserved**

**Replace Section 39-2.01A(4)(e) "Job Mix Formula Modification", with:
39-2.01A(4)(e) Reserved**

**Replace Section 39-2.01D "Payment" with:
39-2.01D Payment
Reserved**

Replace the second paragraph of Section 39-2.02A(1) "Summary", as follows:
You may, by written request separate from the Job Mix Formula (JMF) submittal, request the Engineer allow you to use a Warm Mix Asphalt (WMA) Technology.

**Remove the first paragraph and table of Section 39-2.02B(4)(b) "Aggregate Gradations".
Remove the second paragraph and table of Section 39-2.02C "Aggregate Gradations".**

A prime/tack coat is required:

- a. Prime Coat shall be applied to the base prior to placing the Hot Mix Asphalt. Prime Coat shall be e-prime or approved equal and will be spread at a rate of 0.15 to 0.35 gal/sy, as directed by the Engineer.
- b. Tack coat shall be applied to existing pavement including planed surfaces, between layers of HMA and vertical surfaces of curbs, gutters, and construction joints. Tack coat must comply with the specifications for asphaltic emulsion in 2015 Caltrans Standard Specifications Section 94, "Asphaltic Emulsion," or asphalt binder in Section 92, "Asphalt Binders." Tack coat shall be spread at a rate of 0.02 to 0.10 gal/sy, as directed by the Engineer.

The price paid for asphalt concrete shall include all costs for prime or tack coat(s) applied to all edges and between layers of asphalt concrete paving or overlay.

Replace Section 39-2.02D "Payment" with:

Quantities of asphalt concrete with/without RAP, will be paid for at the contract price per ton for **Asphalt Concrete (Type A, 3/4" Maximum Grading, PG 70-10)** and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing asphalt concrete complete in place, as shown on the plans, and as specified in the Standard Specifications, these special provisions, and as directed by the Engineer.

Quantities of asphalt concrete with/without RAP, will be paid for at the contract price per ton for **Asphalt Concrete (Leveling) – (Type A, 3/8" Maximum Grading, PG 64-10)** and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing asphalt concrete complete in place, as shown on the plans, and as specified in the Standard Specifications, these special provisions, and as directed by the Engineer.

10-1.33 RUBBERIZED ASPHALT CONCRETE (TYPE G)

Rubberized asphalt concrete shall be Type G and shall conform to the provisions in Section 39-2.03, "Hot Mix Asphalt," of the 2015 Standard Specifications and these special provisions.

The rubberized asphalt concrete shall conform to the following requirements:

1. Rubberized asphalt concrete shall be produced at a central mixing plant using Crumb Rubber Modifier. Terminal Blend is not allowed.
2. RAP material shall not be used.
3. The aggregate for asphalt concrete shall conform to the (Type G, 1/2" Inch) grading specified in Section 39-2.02B(4)(b), "Aggregate Gradations," of the Standard Specifications.
4. The asphalt binder grade shall be PG 64-16.
5. The terms "Hot Mix Asphalt" and "HMA" are used, they shall be understood to mean and refer to "Asphalt Concrete" and "AC" respectively

Additional asphalt concrete surfacing material shall be placed along the edge of the surfacing at road connections and private drives, hand raked, if necessary, and compacted to form smooth connecting surfaces. Full compensation for furnishing all labor and tools and doing all the work necessary to hand rake said connecting surfaces shall be considered as included in the contract prices paid per ton for the various contract items of asphalt concrete surfacing involved and no additional compensation will be allowed therefor.

Immediately in advance of applying paint binder, the roadway shall be free of moisture, loose or extraneous material and the cost of said work shall be considered as included in the contract price per ton for the asphalt concrete involved and no additional compensation will be allowed therefor.

A Tack Coat is required.

Tack Coat shall be applied to existing pavement including planed surfaces, between layers of HMA and vertical surfaces of curbs, gutters, and construction joints. Tack coat must comply with the specifications for asphaltic emulsion in 2015 Caltrans Standard Specifications Section 94, "Asphaltic Emulsion," or asphalt binder in Section 92, "Asphalt Binders." Tack coat shall be spread at a rate of 0.02 to 0.10 gal/sy, as directed by the Engineer.

The price paid for rubberized asphalt concrete will include all costs for tack coat(s) applied to all edges and between layers of asphalt concrete paving or overlay.

In order to preserve the structural integrity of the road, public safety and convenience, the Contractor shall overlay all feathered, milled or cold planed areas or sections of the road immediately within seven (7) working days, as shown on the plans, and as directed by the Engineer.

Quantities of rubberized asphalt concrete will be paid for at the contract price per ton for **Rubberized Asphalt Concrete (Type G, ½" Maximum Grading, PG 64-16)** and shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in constructing rubberized asphalt concrete, complete in place, as shown on the plans, and as specified in the Standard Specifications, these special provisions, and as directed by the Engineer.

10-1.34 GLASS PAVE 50

GENERAL

Description

This work shall consist of furnishing and placing a HS (high strength) elastomeric polymer pre-coated paving mat HMA reinforcement within the pavement structure as shown on the plans or as directed by the Engineer. The paving mat shall provide a moisture barrier/stress relieving membrane and shall be placed beneath asphalt concrete (AC) mix overlay of rubberized hot-mix asphalt (RHMA).

Quality Control

- A) Pre-Construction Conference: Prior to the installation of the paving mat HMA reinforcement, the Contractor shall arrange a meeting at the site with the manufacturer representative and the paving mat installer. The Engineer shall be notified at least 3 days in advance of the time of the meeting. Paving mat installer to provide manufacturer written confirmation that they have been trained on the proper installation of high tensile fiberglass paving mat specified with a minimum of 5 years' experience installing these paving mats.
- B) A manufacturer representative shall be present, at minimum, for the first day of installation of the engineered paving mat and available thereafter upon request by the engineer.

PRODUCT

Material

The reinforcing paving mat to be an elastomer polymer pre-coated, HMA reinforcement with continuous strand 572 Lbs. (50 kN) high strength fiberglass/polyester scrim Paving Mat, such as Glass Pave 50 or equal meeting the following physical properties table (modification of the ASTM test methods prohibited) plus all the additional "In-asphalt" performance requirements. Fiberglass Polyester Paving Mat submitted as "or equals" shall demonstrate that the product – as installed - meets all requirements in the properties table and shall be submitted a minimum of two weeks prior to bid opening. Material must be certified manufactured in the USA.

PHYSICAL PROPERTIES OF FIBERGLASS POLYESTER HS REINFORCING PAVING MAT			
Property	Test Method	Units	MARV*
Index Properties for Quality Control			
Asphalt Retention	ASTM D6140	l/m2 (gal./yd2)	0.46 (0.10)
Mass per unit area	ASTM D5261	g/m2 (oz/yd2)	237 (7.0)
Tensile strength, MD	ASTM D5035 2C-E	kN/m (lbs)	50 min (572)
Tensile Strength, CD	ASTM D5035 2C-E	kN/m (lbs)	50 min (572)
CBR Puncture**	ASTM D6241	N	1779 (400)
Elongation at maximum load, MD	ASTM D5035	percent	<5
Elongation at maximum load, CD	ASTM D5035	percent	<5
Melting point	ASTM D276	°C (°F)	>232 (>450)
Fiberglass reinforcement strand	Max. spacing	inches	<0.25
Fiberglass Pre-Coating Melt Point	ASTM D36	°C (°F)	>232 (>450)
In Asphalt Performance Requirements			
Stress Improvement Factor	TTI Overlay Tester	Vs. Control	≥ 6 ♣
Permeability	FM 5555	cm/sec	< 2.6x10 ⁻¹¹ ☉
Recyclability without screening	AASHTO T283-07	Moisture/Rutting Susceptibility	Pass ■
Recyclability without screening	AASHTO T322-07	Low Temp. Cracking	Pass ■
Protective Pre-Coated Paving Mat	Non-Asphaltic	Elastomeric Polymer	Fully Coated

* MARV=Minimum Average Roll Value: Many international manufacturers report average physical property values, which only provides a 50% level of confidence that the material delivered to the project site meets their product data sheet requirements. Whereas Minimum Average Roll Values (MARV) provides a 97.7% level of confidence the material will meet the published data sheet

** Assess 360° tensile strength symmetry

♣ Using a PG64 hot mix AC with a 12.5mm nominal maximum aggregate size at 32 degrees

☉ Using a 2" thick hot mix AC with a permeability > 2.6 x 10⁻¹¹ cm/sec

■ 30% by weight of RAP was used for both the control RAP and RAP with milled GlasPave

Milling Ability and Recyclability

The material supplier shall provide proof that the paving mat can be milled and the resulting RAP containing the milled paving mat can be recycled (without screening) back into a new mix. Proof of milling ability and recyclability for this RAP shall consist of written documentation

from an independent asphalt recycling plant and/or testing lab., and samples made with 30% RAP containing the recycled paving mat shall pass the AASHTO testing as listed above. Composite interlayers with paving fabrics and other interlayers not pre-coated with elastomeric polymer are not eligible for consideration

Storage and Handling

The paving mat shall be stored per the manufacturer's recommendations in a dry covered condition free from dust, dirt and moisture. The paving mat shall be installed in accordance with the manufacturer's installation guidelines and this specification. Where a conflict exists between the specifications, the more stringent specification will apply. A copy of the manufacturer's specifications shall be provided to the engineer at the pre-construction meeting or no later than five working days prior to installation.

Asphalt Bonding Application

- A) Asphalt binder for application of the mat shall be PG 64 (-10 to -34) or PG 70 (-10 to -34). Higher ambient installation temperatures will require PG 70 (-10 to -34) asphalt binder to reduce the chances of movement and improve stability of the mat under construction traffic. Higher performing "trackless" tack asphalts are also used in some markets in these conditions.
- B) The application rate shall be 0.15 Gal/SY (0.57 l/m²) to 0.17 Gal/SY (0.64 l/m²) on a new pavement surface, 0.17 Gal/SY (0.64 l/m²) to 0.19 Gal/SY (0.72 l/m²) on an aged oxidized surface and 0.2 Gal/SY (0.76 l/m²) to 0.22 Gal/SY (0.83 l/m²) on a milled surface.

EXECUTION

Placement

- A) The surface on which the paving mat is to be placed shall be reasonably free of dirt, water, vegetation or other debris.
- B) When installing on an existing surface, paving mat shall be placed on a drainable surface, and any rutting or low spots in the pavement shall be removed by milling or by adding a leveling course. Potholes and pop-outs shall be properly repaired as directed by the engineer. Cracks exceeding 1/4 inch (6mm) in width shall be filled with suitable crack filler. Crack, pop-out and pothole fillers shall be allowed to cure.
- C) When placing on a smooth / level milled surface, a pneumatic tire roller shall be used to facilitate full adhesion. Smooth / level milled surface is defined as a surface that has no rutting, uneven delaminated areas or longitudinal ridging over 1" high and no groove or sharp vertical surfaces greater than 1/4" (6mm) in depth or width. It is suggested that the milling equipment have no missing "teeth" and that they are properly spaced, and the equipment is operated at a speed slow enough to achieve the smooth /level mill as defined. If this cannot be achieved than a leveling course shall be required.

- D) When placement of the paving mat is on a leveling course the surface shall be allowed to cool sufficiently (<140°F) and stabilize, prior to placement of the precoated high tensile paving mat, to prevent lift-up of paving mat.
- E) Neither the asphalt binder nor the paving mat shall be placed when weather conditions, in the judgment of the engineer or manufacturer's representative, are not suitable. Air and pavement temperature shall be sufficient to allow the tack coat to hold the paving mat in place. The air temperature shall be 50°F (10°C) and rising for placement of the hot asphalt tack coat. When air temperatures exceed 85°F (29.4°C) it is suggested that a 70 (-10 to -34) hot asphalt tack or a trackless tack be used.
- F) Application of the tack coat shall be by a calibrated distributor truck spray bar. Emulsified Asphalt shall not be allowed. Temperature of the tack coat shall be sufficiently high enough to permit uniform spray pattern and shall be above 325° F (163°C).
- G) The target width of the tack coat application shall be the width of the paving mat, plus 4 inches and wide enough to cover the entire width of paving mat overlaps. The tack coat shall be applied only as far in advance of the paving mat installation as is appropriate to ensure a tacky surface at the time of the paving mat placement. Traffic shall not be allowed on the tack coat.
- H) The paving mat shall be placed onto the tack coat with minimum folds or wrinkles and before the tack coat has cooled and lost tackiness. As directed by the engineer or manufacturer's representative, wrinkles or folds greater than 1 inch (25mm) shall be slit and laid flat or pulled out and replaced. In these repaired areas, additional tack coat shall be applied as needed to achieve a sound bond to the substrate. Damaged paving mat shall be removed and replaced, with same per the manufacturer's recommendations, at the contractor's expense.
- I) During hot temperature applications or when excess tack coat bleeds through the paving mat under normal construction traffic causing excessive movement of mat or "pick-up", a trackless tack is preferred way to mitigate this. A pneumatic tire roller with a water/soap spray to cool or broadcasting clean sand or hot mix to create a bond break between the excess tack and the construction equipment tires have been used. If sand is applied, any excess sand shall be removed from the paving mat, using methods other than power brooming, prior to placing the specified AC mix overlay. No other material, such as asphalt release agents or diesel, shall be used for this purpose.
- J) Transverse joint in the paving mat shall be overlapped in the direction of paving 3-5 inches (75 -127 mm) and longitudinal joints shall be overlapped 1-2 inches (25 -50 mm) or as recommended by the manufacturer. Paving mat shall be shingled in around the curve to achieve complete coverage in a curved area as diagramed here:

- On curves with tight radii, cut the GlasGrid product in short sections to reduce or eliminate ripples (Figure 3).



FIGURE 3: Cutting and overlapping GlasGrid around a curve

- K) Brooming, squeegee or pneumatic tire rolling shall be used to remove any air bubbles and to maximize paving mat contact with the pavement surface and shall be done in accordance with the manufacturer's specifications and to the satisfaction of the engineer. When there is difficulty getting adhesion such as windy conditions, placement shall be closer behind the tack application as the wind can create a skim on the asphalt surface quickly. It is also recommended that a pneumatic tire roller (do not use a steel roller) be used to aid in full adhesion of the paving mat into the hot asphalt tack.
- L) No traffic, except necessary construction traffic or emergency vehicles, shall be driven on the paving mat, unless approved by the engineer. If traffic on the paving mat is approved by the engineer, clean sand shall be lightly broadcasted over the paving mat or any exposed uncovered tack coat. Any loose sand shall be removed prior to paving. Care shall be taken to ensure no sudden stops, sharp turning of wheels to prevent damage to the paving mat.
- M) After installing the paving mat, placement of the first lift of the specified AC mix overlay shall closely follow. All areas in which the paving mat has been placed shall be paved during the same day, unless approved otherwise by the engineer or manufacturer's representative.
- N) In the event of rainfall on the paving mat prior to the placement of the first specified AC mix overlay lift, the paving mat shall be allowed to dry before the specified AC mix is placed.
- O) The compacted thickness of the first lift of the specified AC mix overlay on the paving

MEASUREMENT AND PAYMENT:

The contract price paid per square yard for **Glass Pave 50 Mat** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing pave mat, the overlap connecting each piece of material., complete in place, as shown on the plans, as specified in these Special Provisions, and as directed by the Engineer and no other compensation shall be allowed therefore.

10-1.35 ASPHALT CONCRETE (DIKES AND MISCELLANEOUS AREAS)

Asphalt Concrete placed in **dikes and miscellaneous areas** shall conform to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications and these Special Provisions.

Aggregate for asphalt concrete dikes and miscellaneous areas shall conform to the 3/8 inch maximum grading as specified in Section 39-2.02B(4)(b), "Aggregate Gradations", of the Standard Specifications and the amount of asphalt binder shall be increased one percent by weight of the aggregate over the amount of asphalt binder determined for use in asphalt concrete placed on the traveled way.

Asphalt binder grade for A.C. dike shall be **PG 70-10**

Asphalt binder grade for miscellaneous areas shall be **PG 70-10**

Location of asphalt concrete driveways or sidewalks are approximate and therefore Contractor shall notify the Engineer prior to construction.

Asphalt concrete placed in the work is paid separately at the contract price per ton for asphalt concrete of the Type or Types designated in the Engineer's Estimate.

Asphalt Concrete Dike is to be paid for at the contract price per linear foot for **Place 8"** **Asphalt Concrete Dike**, and Place Asphalt Concrete Miscellaneous Areas are to be paid for at contract price per square yard for Place **Asphalt Concrete (Miscellaneous Area)** in addition to the prices paid for the materials involved shall be limited to the variable thickness of asphalt concrete as shown on plans

The above contract prices and payments shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing asphalt concrete dike and placing asphalt concrete (miscellaneous area), complete in place, as shown on the plans and as specified in these Specifications and the Special Provisions, and as directed by the Engineer.

10-1.36 MISCELLANEOUS CONCRETE CONSTRUCTION

Curb & gutter, spandrel, sidewalk, pedestrian ramps, Portland cement concrete pavement and driveways shall conform to the provisions in Section 73, "Concrete Curbs, and Sidewalks" and spandrels" of the Standard Specifications.

The first paragraph in Section 73-1.03B, "Subgrade Preparation," of the Standard Specifications is superseded by the following:

Relative compaction of not less than 95 percent shall be obtained for a minimum depth of 0.50-foot below the grading plane for the width of the traveled way, including cross gutters. Where curb, gutter, sidewalk and pedestrian ramps are to be constructed, the subgrade material shall be compacted to a relative compaction of not less than 90 percent for a minimum depth of 0.50-foot below the grading plane.

After compaction and grading, the subgrade shall be firm, hard, and unyielding.

The constructed curb ramp and/or sidewalk slopes shall be verified using a 4-foot electronic level and shall not exceed the maximum grade as shown on the plans and/or standard drawings. If ramp or sidewalk exceeds the maximum slope allowed, Contractor shall reconstruct the ramp or sidewalk immediately and all expenses thereon shall be solely borne by the Contractor. Prior to any reconstruction work of the ramp or sidewalk, the Contractor shall notify immediately and seek the approval of the Engineer.

Non-Pigmented curing compound shall be used on exposed concrete surfaces other than curb and gutter.

Curb and sidewalk and cross gutter, spandrel, curb and gutter shall be constructed as minor concrete, Curb and sidewalk joints shall be constructed per SPPWC Std 112-2 and in accordance with Section 73-3.03, "Construction" of the Standard Specifications.

Nothing herein shall be construed as relieving the Contractor of his responsibility to conform and meet all the requirements of an ADA compliant ramp or sidewalk.

The contract price paid per cubic yard for **Minor Concrete (Curb and Gutter)** and per cubic yard for **Minor Concrete (Sidewalk, Ramp, Cross Gutter, Spandrel and Driveway)** shall include full compensation for furnishing all labor, materials, tools, equipment, steel bar as prescribed in P10 and P15 of Caltrans standard plans, expansion joints filers, approved joint sealants, bond breaker, backing rod, dowels for curb returns BCR and ECR as shown in the green pages of this special provisions. and incidentals, repairing and sealing cracks, including backfilling, saw cutting. Installation of backing rod, placement of sealant, finishing and grade preparation, complete in place, as shown on the plans, and as specified in the Standard Specifications, these Special Provisions and as directed by the Engineer.

The finishing for the Portland cement concrete pavement shall be by brooming with high profile texture which is perpendicular to the traffic, i.e. transversal direction.

10-1.37 CURB RAMP DETECTABLE WARNING SURFACE

Detectable Warning Surfaces are required at all ramp locations. The Detectable Warning Surface shall be constructed by a cast-in-place ("Wet Set") method or by another method approved by the Engineer in advance. The location and other details for Detectable Warning Surface can be referred to 2018 Caltrans Standard Plan A88A. **A glue down Detectable Warning Surface is not allowed.**

Some or all ADA Ramps depending on the configuration may require one or more surface material of **5' x 3' block of material**. Irregular shape of one or more Detectable Warning Surface shall conform with the plan. Therefore, Contractor's attention is directed to the plan for the actual quantity in square footage and configuration of Detectable Warning Surface material to be used at each ramp location.

The contract price paid per square feet for **ADA Curb Ramp Detectable Warning Surface** shall include furnishing all labor, materials, hardware, tools, equipment and incidentals needed for construction or installation of the detectable warning surface, as specified in these Special Provisions, and no additional compensation will be allowed therefore.

10-1.38 MASONRY BLOCK WALL

This section relates to construction of **Masonry Block Wall at 6399 Fillmore Ave.** The masonry block wall, consisting of a reinforced hollow unit masonry block stem, shall be constructed according to details shown on the plans and in conformance with the provisions of Section 19, "Earthwork," Section 52, "Reinforcement," and Section 90, "Concrete," of the 2015 Standard Specifications and these Special Provisions.

All new masonry units shall match the height, size and color of the existing block wall within said property and shall be approved by the Engineer prior to installation.

Masonry unit stems shall be constructed with joints of mortar. Wall stems shall be constructed with hand laid block. Wall stems shall not be constructed with preassembled panels.

Concrete masonry units shall be hollow, load bearing, lightweight or medium weight class units conforming to the requirements in ASTM Designation: C 90. Standard or open-end units may be used. Open-end units, if used, shall not increase the spacing of the bar reinforcement as shown on the plans.

Regular strength concrete masonry units with $f'm=1500$ psi shall be used and shall have a minimum compressive strength of 1900 psi based on net area.

Expansion joint filler shall conform to the requirements in ASTM Designation: D 1751 or ASTM Designation: D 2000 M2AA 805.

Mortar shall be colored to match the units. Coloring shall be chemically inert, fade resistant mineral oxide or synthetic type.

Cementitious material for wall stems shall conform to the provisions in Section 90-2.02B, "Cementitious Materials," of the 2015 Standard Specifications.

Hydrated lime shall conform to the requirements in ASTM Designation: C 207, Type S.

Mortar sand shall be commercial quality.

Mortar for laying masonry units shall consist, by volume, of one part cementitious material, zero to 0.5 part hydrated lime, and 2.25 to 3 parts mortar sand. Sufficient water shall be added to make a workable mortar. Each batch of mortar shall be accurately measured and thoroughly mixed. Mortar shall be freshly mixed as required. Mortar shall not be re-tempered more than one hour after mixing.

Prepackaged mortar materials and mortar containing admixtures may be used when approved in writing by the Engineer, provided the mortar shall not contain more than 0.05 percent soluble chlorides when tested in conformance with California Test 422 or more than 0.25 percent soluble sulfates, as SO_4 , when tested in conformance with California Test 417.

Before laying masonry units using prepackaged mortar materials or mortar containing admixtures, the Contractor shall submit to the Engineer the proposed sources of the materials together with test data from an independent testing laboratory for mortar tested in conformance with California Test 551. The test data shall be from specimens having a moist cure, except that the sample shall not be immersed in lime water. The average 28-day compressive strength of the mortar shall be not less than 2500 psi.

Aggregate for grout used to fill masonry units shall consist of fine aggregate and coarse aggregate conforming to the provisions in Section 90-2.02C, "Aggregate," of the 2015 Standard Specifications. At least 20 percent of the aggregate shall be coarse aggregate. The Contractor shall determine the grading except that 100 percent of the combined grading shall pass the 1/2-inch sieve.

At the option of the Contractor, grout for filling masonry units may be proportioned either by volume or weight. Grout shall contain only enough water to cause the grout to flow and fill the voids without segregation. The maximum amount of free water shall not exceed 0.7 times the weight of the cementitious material for regular strength masonry. The maximum amount of free water shall not exceed 0.6 times the weight of the cementitious material for high strength masonry.

Grout proportioned by volume for regular strength masonry shall consist of at least one part cementitious material and 4.5 parts aggregate. Grout proportioned by volume for high strength masonry shall consist of at least one part cementitious material and 3.5 parts aggregate. Aggregate volumes shall be based on a loose, air-dry condition.

Grout proportioned by weight for regular strength masonry shall contain not less than 550 pounds of cementitious material per cubic yard. Grout proportioned by weight for high strength masonry shall contain no less than 675 pounds of cementitious material per cubic yard.

Subgrade and structural backfill shall be compacted for block wall foundation.

Reinforced concrete masonry unit wall stems shall be constructed with mortar joints in conformance with the following:

- A. Concrete masonry unit construction shall be true and plumb in the lateral direction and shall conform to the grade shown on the plans in the longitudinal direction. Bond beam units or recesses for horizontal reinforcement shall be provided.
- B. Mortar joints shall be approximately 3/8 inch wide. Walls and cross webs forming cells to be filled with grout shall be full bedded in mortar to prevent leakage of grout. All head and bed joints shall be solidly filled with mortar for a distance in from the face of the wall or unit not less than the thickness of the longitudinal face shells. Head joints shall be shoved tight.
- C. Mortared joints around cells to be filled shall be placed so as to preserve the unobstructed vertical continuity of the grout filling. Any overhanging mortar or other obstruction or debris shall be removed from the inside of such cells.
- D. Reinforcement shall be securely held in position at top and bottom with either wire ties or spacing devices and at intervals not exceeding 192 bar diameters before placing any grout. Wire shall be 16 gage or heavier. Wooden, aluminum, or plastic spacing devices shall not be used.
- E. Splices in vertical reinforcement shall be made only at the locations shown on the plans.
- F. All cells shall be filled solidly with grout. All grout in the cells shall be consolidated at the time of placement by vibrating and reconsolidated after excess moisture has been absorbed but before plasticity is lost. Grout shall not be sliced with a trowel.
- G. Walls shall be constructed in 4-foot maximum height lifts. Grouting of each lift shall be completed before beginning masonry unit construction for the next lift. The top course of each lift shall consist of a bond beam.
- H. A construction joint shall be constructed at the top of the top course to permit placement of the mortar cap. The mix design for the mortar cap shall be as approved by the Engineer.
- I. Construction joints shall be made when the placing of grout, in grout filled cells, is stopped for more than one hour. The construction joint shall be approximately 1/2 inch below the top of the last course filled with grout.
- J. Bond beams shall be continuous. The top of unfilled cells under horizontal bond beams shall be covered with metal or plastic lath.

- K. When fresh masonry joins masonry that is partially or totally set, the contact surface shall be cleaned, roughened, and lightly wetted.
- L. Surfaces of concrete on which the masonry walls are to be constructed shall be roughened and cleaned, exposing the aggregate, and shall be flushed with water and allowed to dry to a surface dry condition immediately before laying the masonry units.
- M. Where cutting of masonry units is necessary, all cuts shall be made with a masonry saw to neat and true lines. Masonry units with cracking or chipping of the finished exposed surfaces will not be acceptable.
- N. Masonry shall be protected in the same manner specified for concrete structures in Section 51-1.03I, "Protecting Concrete," of the 2015 Standard Specifications and these Special Provisions.
- O. During erection, all cells shall be kept dry in inclement weather by covering partially completed walls. The covering shall be waterproof fabric, plastic or paper sheeting, or other approved material. Wooden boards and planks shall not be used as covering materials. The covering shall extend down each side of masonry walls approximately 2 feet.
- P. Splashes, stains, or spots on the exposed faces of the wall shall be removed.

All cells shall be filled with grout.

At the approval of the Engineer, Contractor may use Caltrans Std. Plan B3-7B & B3-&C for Masonry Unit Retaining Wall (Type 6B Wall, 4'-8" max. ht.) to build the wall. However, height of the wall and top of footing elevation, according to the plan and profile, shall govern.

Compensation is paid separately for removal and disposal of block wall, as shown on the plans, and these Special Provisions.

Attention is directed to section, "Remove Block Wall" elsewhere in these special provisions.

The contract lump sum price paid for **Install Block Wall-In-Kind (At 6399 Fillmore Avenue)** shall include full compensation for furnishing labor, materials, tools, equipment, placing rebar, grout and other incidentals and for doing all the work involved in constructing the masonry block wall, caps, landscape tri-pine retaining wall stone, including excavation and backfill, complete in place, as shown on the plans, and as specified in the Engineer's Estimate, 2015 Standard Specifications, these Special Provisions and as designated by the Engineer.

10-1.39 WOOD FENCE

This section relates to installation and painting of 6 foot-high Wood Fence at Residence 6399 Fillmore Avenue, as shown on the plan, and as directed by the Engineer.

Wooden Fence, as shown on the plans, shall conform to the provisions in Section 80, "Fences," of the Standard Specifications, these special provisions and as directed by the Engineer.

Contractor shall field verify, measure and determine the width and height of the existing fence subject for replacement. All wooden fence shall match existing height of 6 feet, consist of S4S planks, top and bottom studs, posts and braces. All posts shall be treated. The post shall be embedded 30 inches in unreinforced concrete measuring 12-inch X 12-inch by three (3) foot deep.

All wooden fence shall be painted with similar color as the existing fence for consistency. The cost of [painting work shall be included under this section.

Where wooden fences meet either existing/new wooden or chain link fences, connections shall be done accordingly and as directed by the Engineer.

The exact location for constructing new fences as shown on the plans shall be determined by the Engineer.

The contract lump sum price paid for **Install Wood Fence-In-Kind (At 6399 Fillmore Avenue)** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing wooden fence and painting, complete in place, as specified in these special provisions.

10-1.40 MARKERS AND DELINEATORS/CHANNELIZERS

Markers and Delineators shall conform to the provisions in Section 82-5, "Markers" and Section 81-2, "Delineators" of the Standard Specifications and in these Special Provisions.

Markers and delineators on flexible posts shall be as specified in "Prequalified and Tested Signing and Delineation Materials," elsewhere in these Special Provisions. Flexible posts shall be made from a flexible white plastic which shall be resistant to impact, ultraviolet light, ozone and hydrocarbons. Flexible posts shall resist stiffening with age and shall be free of burns, discoloration, contamination, and other objectionable marks or defects, which affect appearance or serviceability.

Reflective sheeting for metal and flexible target plates shall be Type VII reflective sheet as specified in "Prequalified and Tested Signing and Delineation Materials," elsewhere in these Special Provisions.

The contract unit price paid for **Object Marker Type L-1 (CA)(OM2-2V)** shall include full compensation for furnishing all labor, materials (including metal posts) tools, equipment and incidentals, and for doing all work involved in furnishing and installing **Object Marker Type L-1 (CA)(OM2-2V)** complete in place as shown on the plans and as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-1.41 PAINT TRAFFIC STRIPES & PAVEMENT MARKINGS

Materials and application for painted traffic stripes (traffic lines) and pavement markings shall conform to the provisions of paint traffic stripes in Section 84-2, "Traffic Stripes and Pavement Markings," of the Standard Specifications.

Traffic stripes and pavement markings shall be white or yellow to match the color of the existing markings as shown on the plans and as determined by the Engineer.

Traffic stripes and pavement markings shall be painted as shown on the plans and/or as determined by the Engineer.

The contract prices paid per linear foot for **Paint 6" Double Yellow Traffic Stripe (2-Coat), Paint 6" Traffic Stripe (2-Coat), and Paint Pavement Marking (2-Coat)** shall include full

compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in applying paint stripes and pavement markings, complete in place, including establishing alignment for stripes and layout work, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

10-1.42 PAVEMENT MARKERS

Pavement markers shall conform to the provisions in Section 81-3, "Pavement Markers," of the Standard Specifications and these Special Provisions.

The Contractor shall install two-way blue retroreflective markers in accordance with Section 81-3 of the Standard Specifications.

Location of the blue retroreflective pavement markers shall be as shown on California MUTCD 2014 Figure 3B-102 (CA), "Examples of Fire Hydrant Location Pavement Markers," included within these Special Provisions and as directed by the Engineer.

The Contractor shall install Type D two way yellow and Type C one way clear retroreflective markers as specified on plans.

Full compensation for furnishing and placing pavement markers shall be considered as included in the contract prices paid for **Pavement Markers (Retroreflective-Blue)**, and **Pavement Marker (Retroreflective – Type D and C)**, no additional compensation will be allowed therefor.

10-1.43 SURVEY MONUMENTS

Attention is directed to Section 78-2, "Survey Monuments", of the Standard Specifications and these Special Provisions.

The Contractor shall request the County Surveyor to conduct a monument review survey at least two (2) weeks prior to the start of construction to facilitate preservation of existing survey monumentation.

The County Surveyor will provide the contractor with locations of survey monuments prior to paving and will file the required pre-construction documentation. Monuments not disturbed or destroyed during normal construction activities which are within 0.20' of the existing surface prior to construction shall be left exposed at the completion of the paving project. The contractor shall install self-adhesive "I.D.Locators", or equivalent markers approved by the engineer, over monuments prior to paving and remove the markers at the completion of the paving.

The County Surveyor will reset or replace any survey monumentation located by the pre-construction survey which is destroyed or disturbed by normal construction activities associated with the project, and file the required documentation.

The Contractor shall preserve and protect in place any established survey monumentation, when it is possible to do so. In areas of pavement removal where monuments are disturbed or damaged during construction, and the monuments have been located and referenced by a

pre-construction survey, the contractor shall remove the damaged monument in its entirety prior to paving. Monuments not disturbed or damaged by construction activities may be left in place.

If any survey monumentation is disturbed or destroyed through negligence of the contractor, or by reason of the Contractor's failure to conform to requirements of this section, the survey monumentation shall be replaced or restored by the County Surveyor at the Contractor's expense.

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

10-1.44 PERMITS

Prior to construction, the Contractor shall obtain and pay for all permits as required for all work involved within **City of Rialto**. The City does not authorize any work within their respective jurisdiction without any permit.

A sample copy of the City of Rialto construction permit application is attached elsewhere in these special provisions for information purposes only.

The Contractor shall conform to all Permits requirements in performance of work on this project.

Full compensation for permit fees and complying with the requirements of Rialto, not otherwise provided for, shall be considered as included in the prices paid for the **various contract items** of work and no additional compensation will be allowed therefor.

10-1.45 COORDINATION

At a minimum the Contractor shall coordinate the construction activities two (2) weeks in advance prior to construction with cities, agencies, and schools below to minimize conflicts with their schedule:

Entity	Types of Conflict	Hours of Conflict	Contact	Phone Number/ E-mail/ Website
Hughbanks Elementary School 2241 N Apple Ave., Rialto, CA 92377	School Buses, Student Drop-Off & Pick-Up	School Hours M-Fri	Dr. Monte Stewart Principal	Phone: (909) 820-7970 E-mail: Website: Hughbanks Elementary School / Homepage (rialto.k12.ca.us)
Trapp Elementary School 2750 Riverside Ave, Rialto, CA 92377	School Buses, Student Drop-Off & Pick-Up	School Hours M-Fri	Berenice Gutierrez Principal	Phone: (909) 820-7911 E-mail: Website: Trapp Elementary School / Homepage

				(rialto.k12.ca.us)
Kolb Middle School 2351 N Spruce Ave, Rialto, CA 92377	School Buses, Student Drop-Off & Pick-Up	School Hours M-Fri	Armando Urteaga Principal	Phone: (909) 820-7849 E-mail: Website: Kolb Middle School / Homepage (rialto.k12.ca.us)
Wilmer Amina Carter High School 2630 N Linden Ave, Rialto, CA 92377	School Buses, Student Drop-Off & Pick-Up	School Hours M-Fri	Greg Anderson Principal	Phone: (909) 854-4100 E-mail: Website: Carter High School / Homepage (rialto.k12.ca.us)

It is the Contractor's responsibility to verify the schedules of the above-mentioned entities to ensure that no conflicts occur with their daily schedules and that the project improvements should either be completed, or the work should be postponed until such a time the work can be completed in its entirety.

Additional contact information of other agencies may be provided to the Contractor during the pre-construction meeting.

Full compensation for conforming to the requirements of this section shall be considered as included in various contract items and no additional compensation will be allowed thereto.

*Permits and Agreements
(Brown Pages)*

inserted here

LIST OF PERMITS AND AGREEMENTS (BROWN PAGES)

CEQA

PEC

Encroachment Permit (Sample Only) – City of Rialto

NOT FOR BID



Interoffice Memo

DATE March 28, 2022

PHONE 387-8109

FROM **ANTHONY PHAM**, P.E., Division Chief
Environmental Management Division

MAIL CODE 0835

TO **CHRIS NGUYEN**, P.E., Division Chief
Transportation Design Division

File: Yard 3/Linden Ave and Other Roads

SUBJECT CEQA REVIEW: LINDEN AVE AND OTHER ROADS (TX1976)

Project Location

The Proposed Project is planned for Linden Avenue; Cedar Avenue; Cashalia Street; Arbeth Street; Cheshire Street; Fillmore Avenue; Mesa Street; Idyllwild Court; and Brampton Avenue in the Rialto area, San Bernardino County, California. (see attached Location Map).

Project Description

San Bernardino County Department of Public Works proposes pulverizing and removing or milling existing asphalt concrete surface, replacing full depth asphalt concrete surface; and overlay milled surfaces; leveling course; remove and replace AC dike; update existing concrete ADA ramps with compliant ramps; place new concrete pedestrian safe space, remove and replace concrete curb and gutter; place new concrete sidewalk; construct new concrete driveway approaches; grading, cold planning, placing detectable warning surfaces; place new pavement striping and markings, replace traffic signs and other work appurtenant thereto. The length of proposed work is approximately 1.1-miles.

The existing area within the project footprint is comprised of asphalt paved roadway, concrete sidewalk within Single Residential (RS) Zoning. Equipment planned for use on this project will included but is not limited to: Asphalt Pulverizer, Loader Truck, Backhoe, Roller, Cold Planer, Concrete Mixer, Jack Hammer and Paver.

No traffic detours or nighttime construction are planned. No utility relocation is anticipated. Construction activities will occur on existing roads, sidewalks and previously disturbed areas. Construction duration is anticipated for approximately 60-days.

County of San Bernardino Development Code 83.01.80(g)(3): exempts noise from temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

Biological Resources Evaluation

EMD Ecological Resources Specialists completed an evaluation of the proposed Project; the evaluation included a literature review and reconnaissance field survey on February 9, 2021. The project area is located in an urban, residential and commercial location where the principle vegetation type consists of non-native ornamental trees and shrubs commonly planted on developed parcels. Although the project location has residential and other urban type developments, the potential exists for sensitive species to occur within or nearby the project site. A review of the California Natural Diversity Database (CNDDB, attachment 3) was performed. While it revealed that the Devore quadrangle contains several federally and State listed endangered or threatened species, it has been determined that the project site cannot support these species, as it is highly disturbed due to development. As a consequence of the limited nature of the road work we have determined that project related activities will not directly impact any sensitive habitat and/or species. However, to ensure no impacts to species the following actions should be taken;

Biological Resources Conditions

1. If work occurs during the nesting bird season (March 15 – September 1), a pre-construction nesting bird survey must be conducted no more than three days prior to the start of work.
2. If active nests are detected, appropriate avoidance buffers will be established and work activities within the vicinity of the nest will be monitored.
3. All staging areas will be surveyed and cleared by a biologist prior to equipment staging.

Cultural Resources Evaluation

A site visit and records search were conducted by EMD Cultural Resources Specialist; no significant or potentially significant architectural, historical, and/or archaeological features were identified during the archaeological and built environment field survey of the proposed Project's area of potential effect/study area or in the South-Central Coastal Information Center (SCCIC) records search. As a result of the findings, no project-specific avoidance or minimization measures were recommended. However, standard cultural resource compliance conditions as listed in the *Cultural Resources Conditions* paragraph are applicable and recommended for implementation during construction/ground-disturbing activities associated with this project.

Cultural Resources Conditions

1. Should prehistoric or historic archaeological resources be encountered during construction, the evaluation of any such resource should proceed in accordance with all appropriate federal, state, and local guidelines. Specifically, all work must be halted in the immediate vicinity of the cultural resource found until a qualified archaeologist can assess the significance of the resource.
2. If human remains are encountered during construction, then the San Bernardino County Coroner's Office MUST be contacted in accordance with state law within 24 hours of the find, and all work should be halted until a clearance is given by that office and any other agency involved. The Coroner's Office may be contacted at the Coroner's Division, County of San Bernardino, 175 S. Lena Road, San Bernardino, CA. Tel: (909) 387-2978.

ENVIRONMENTAL DETERMINATION

In compliance with the California Environmental Quality Act (CEQA), Environmental Management Division staff has reviewed the proposed project.

The Proposed Project qualifies for a Class 1 Categorical Exemption, "Existing Facilities" under Section 15301(c) of the CEQA guidelines. Class 1 consists of the "operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use." Class 1 (c) exemption is specific to "existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities." The project also qualifies for a Class 2 Categorical Exemption, "Replacement or reconstruction" under Section 15302(c) "Replacement or reconstruction of existing utility systems and or facilities involving negligible or no expansion of capacity."

General Conditions

1. All work, including equipment staging, will remain on disturbed areas. No new work outside disturbed areas or existing rights-of-way (i.e. existing shoulder-to-shoulder and/or curb-to-curb) will be performed without further environmental evaluations.

2. Material staging area shall be clearly delineated in order to keep equipment and trucks within existing disturbed areas. Further, project related vehicle access, maintenance activities, and equipment storage shall be restricted to established roads, designated access roads, maintenance right-of-ways, and designated storage, staging, and parking areas. Off-road traffic outside of these designated areas shall be prohibited.
3. Standard best management practices shall be implemented during all maintenance activities, especially those pertaining to dust control, erosion control, and stormwater pollution prevention. If equipment is parked overnight then a drip pan, or some other form of protection, shall be placed under the vehicle in order to contain any drips, leaks, and or spills. All food and maintenance trash shall be removed from the site daily. Please contact EMD, at (909) 387-7897, with any questions.

It is our opinion that the proposed Linden Avenue and Others Roads Project meets the criteria for an exemption under Section 15301(c) and 15302(c) of the CEQA Guidelines. To complete the Categorical Exemption process, I recommend that a Notice of Exemption, together with the required fee, be filed with the Clerk of the Board of Supervisors of the County of San Bernardino. A Notice of Exemption to be filed is included with this IOM.

Should you need further information or have any questions, please contact AJ Gerber, Planner at x78109, who coordinated this review.

HZ:AJ:ms

Attachment: Notice of Exemption
Location Map
Vicinity Map

Notice of Exemption

To: ☐ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: San Bernardino County
Department of Public Works
Environmental Management Division
825 E. Third Street, Room 123
San Bernardino, CA 92415-0835

☒ Clerk of the Board of Supervisors
San Bernardino County
385 North Arrowhead Avenue, Second Floor
San Bernardino, CA 92415-0130

Project Description

Project Title: Linden Avenue and Other Roads Project.
Project Location: The Proposed Project is planned for Linden Ave, Cedar Ave, Casmalia St, Arbeth St, Cheshire St, Fillmore Ave, Mesa St, Idyllwild Ct, and Brampton Way in the Rialto area, San Bernardino County, California. (see attached Project Location Map). **Project Description:** San Bernardino County Department of Public Works proposes general road maintenance and improvements including replacing full depth asphalt concrete surface; mill & overlay; update existing ADA ramps; replace curb and gutter; new sidewalk; new concrete driveway approaches; detect able warning surfaces; new pavement striping and markings, replace traffic signs and other work appurtenant thereto. The length of proposed work is approximately 1.1-miles. Equipment planned for use on this project will included but is not limited to: Asphalt Pulverizer, Loader Truck, Backhoe, Roller, Cold Planer, Concrete Mixer, Jack Hammer and Paver. No traffic detours or nighttime construction are planned. No utility relocation is anticipated. Construction activities will occur on existing roads, sidewalks and previously disturbed areas. Construction duration is anticipated for approximately 60-days.

Anthony Pham, P.E.

Lead Agency Contact Person

(909) 387-8109

Applicant

San Bernardino County Dept of Public Works

825 E. Third Street

Address

San Bernardino, CA 92415-0835

(909) 387-8109

Phone

Representative

AJ Gerber

Name

Same as Applicant

Address

Same as Applicant

Phone

Exempt Status: (check one)

- ☐ Ministerial [Sec. 21080(B)(1); 15268];
☐ Declared Emergency [Sec. 21080(B)(3); 15269(a)];
☐ Emergency Project [Sec. 21080(B)(4); 15269(b)];
☒ Categorical Exemption. State type and section: Class 1 Categorical Exemption Section 15301(c)

Existing Facilities and Class 2, 15302(c) Replacement or Reconstruction

☐ Statutory Exemptions. State code number: _____

☐ Other Exemption: _____

Reasons why project is exempt: The proposed project consist of minor alteration of existing public streets, sidewalks, and gutters. Also, replacement or reconstruction of existing structures and facilities.

Signature Anthony Pham, P.E.

Chief, Environmental Mgmt. Div.

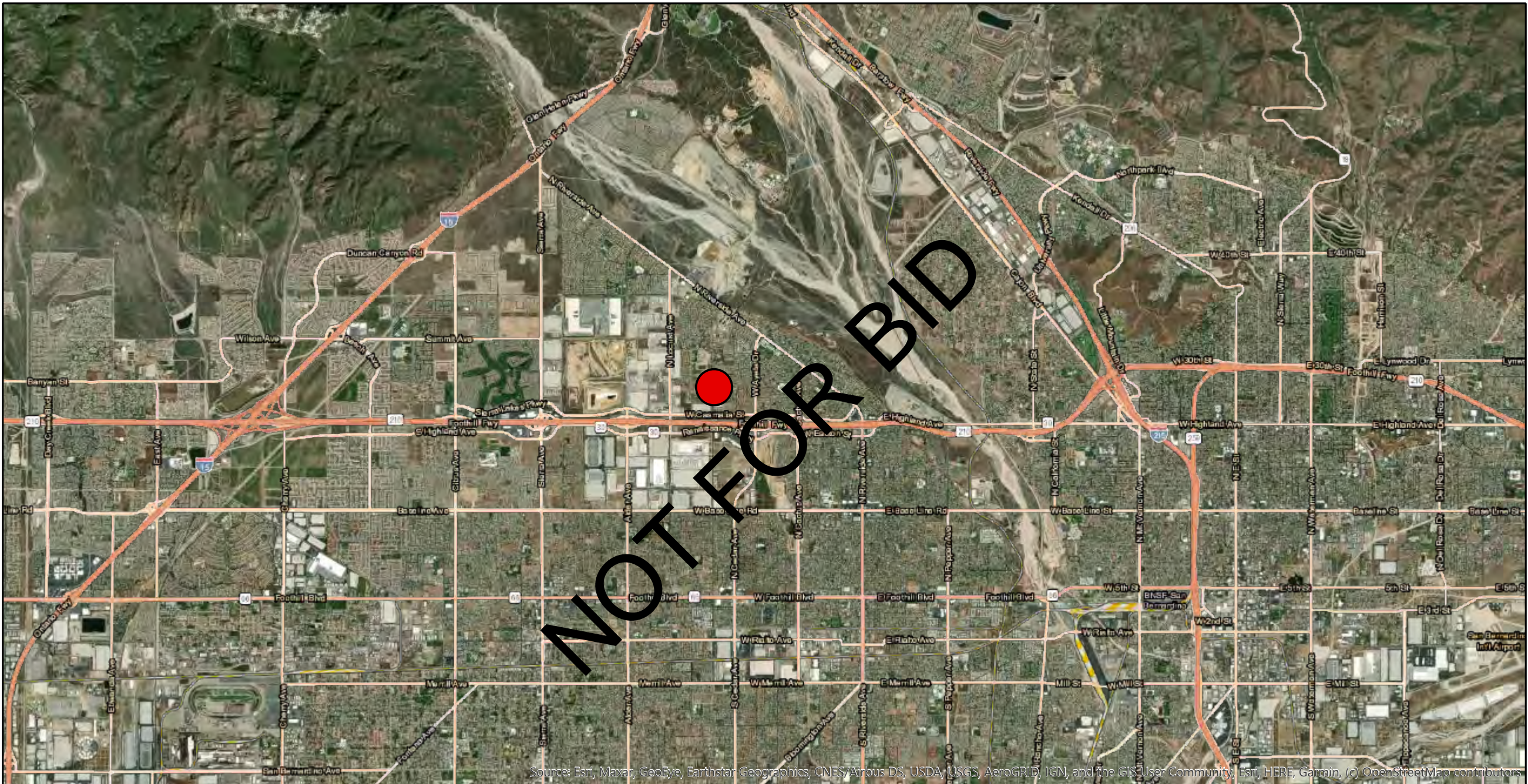
3/28/2022

Title

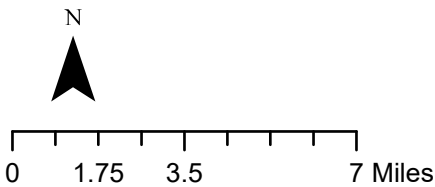
Date

☒ Signed by Lead Agency ☐ Signed by Applicant

Date received for filing at OPR: N/A



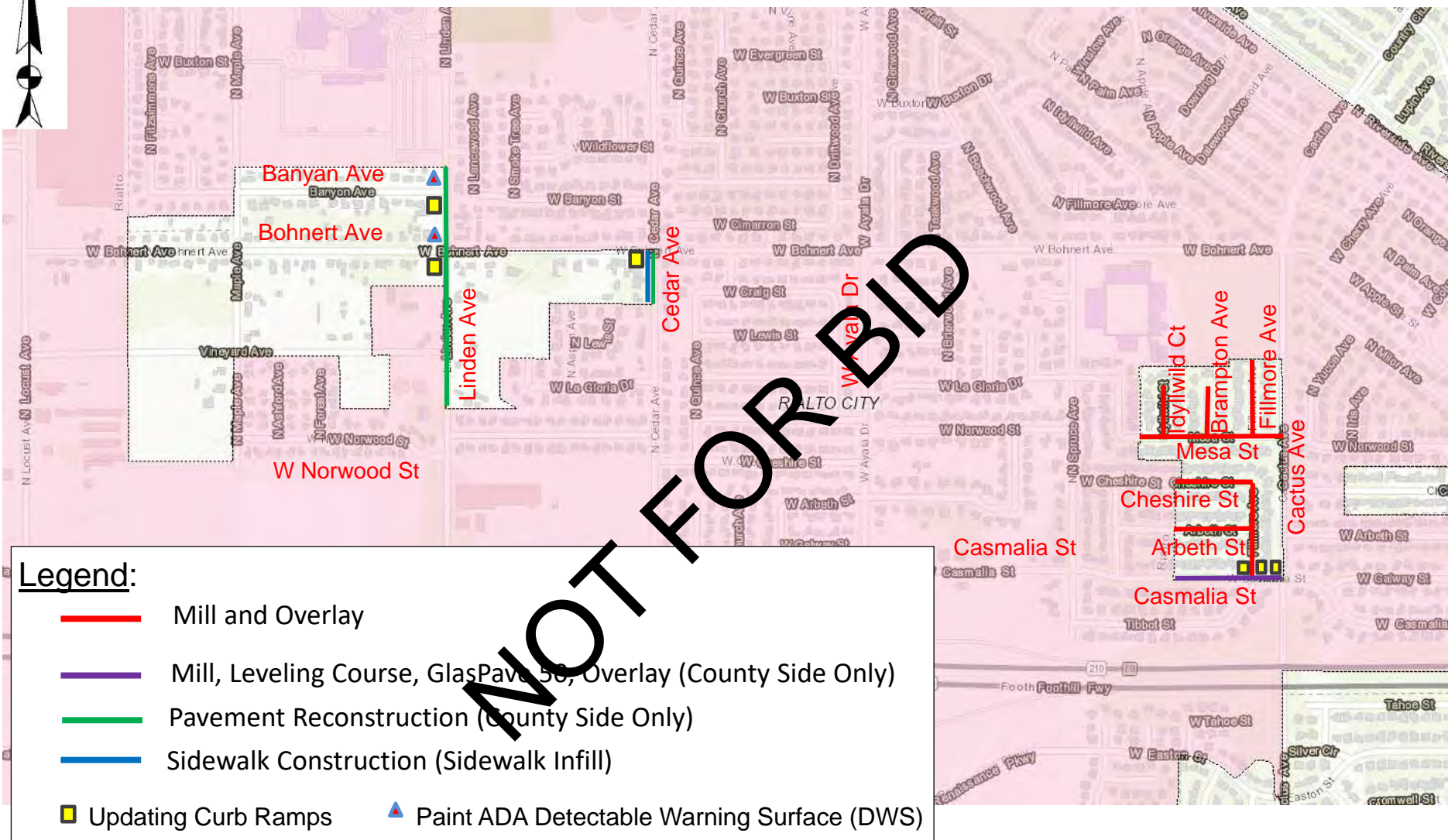
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors



REGIONAL/VICINITY MAP

Linden Ave. and Other Roads (TX1796)





SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS

YARD 3/W.O. TX1796
5TH DISTRICT



LOCATION MAP

**Linden Avenue and Other Roads
Pavement Reconstruction, Mill and Overlay, Leveling Course,
GlasPave 50, Sidewalk Construction, and Update Curb Ramps
with ADA Compliant Ramps**

UNINCORPORATED AREA

TOWNSHIP 1N RANGE 5W SECTION 27
 ROAD NAME Cedar Avenue
 W.O. No. TX1796 PARCEL PEC-3
 A.P.N. 1133-451-30 (ptn)

PERMIT TO ENTER AND CONSTRUCT

Louden, LLC,
 a Nevada Limited Liability Company

Hereby consent(s) to permit the COUNTY OF SAN BERNARDINO, a body corporate and politic of the State of California, its officers, agents and employees and persons under contract with said County and their employees, the privilege and right to enter upon or across the property shown on the map attached hereto and made a part hereof, for construction purposes:

The purpose of this Permit to Enter and Construct is for:

removing portion of asphalt concrete and concrete driveway,
 constructing new concrete driveway approaches,
 constructing concrete driveway to meet existing,
 and other miscellaneous appurtenances thereto.

This Permit to Enter and Construct will become effective upon the written construction contract for the above work and between the County and its contractor becoming effective and will expire upon completion of the construction project known as "Linden Avenue and Others".

DocuSigned by:

Tia Standifer

5/20/2021

Name: Tia Standifer
 Title: Portfolio Director

Date

Name:
 Title:

Date

Name:
 Title:

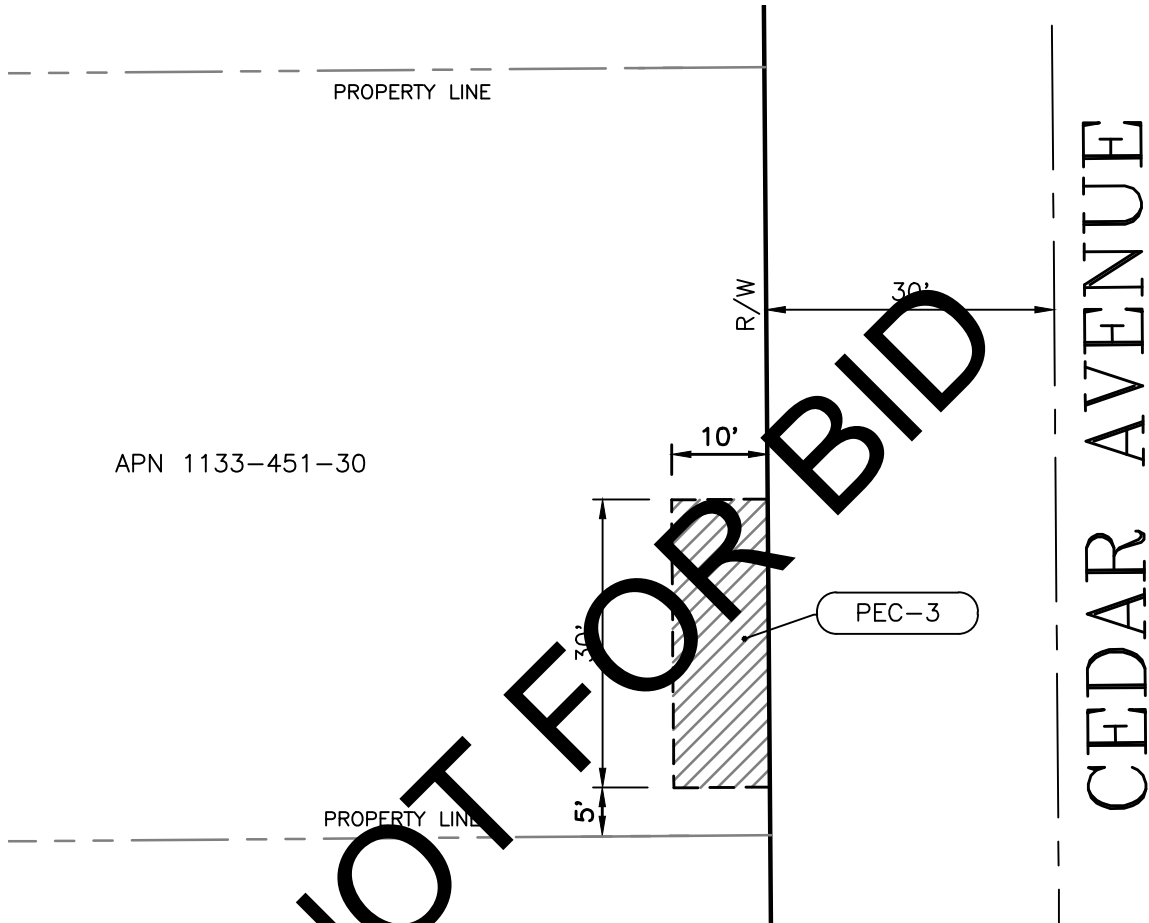
Date

Name:
 Title:

Date

EXHIBIT "A"

Ptn. N1/2, NW1/4, SW1/4, Section 27,
Township 1 North, Range 5 West S.B.M.



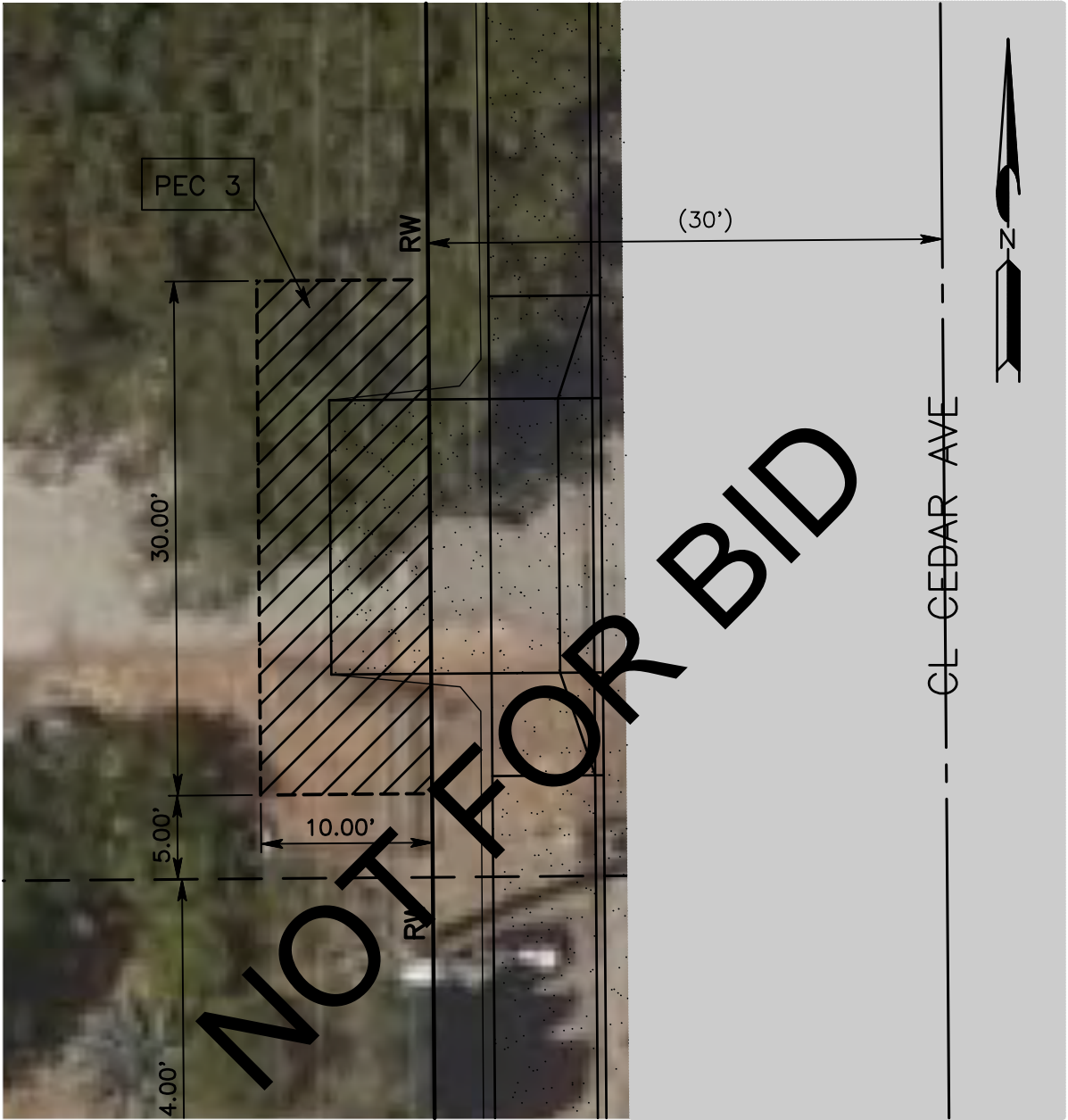
NOTES:
1. This map has been compiled from record data and other available material and does not represent a field survey.

 – Area of Permit to Enter and Construct for Driveway Improvements – 300+/- sq. ft.

County of San Bernardino
Department of Public Works – Transportation

Right-of-Way Plat
CEDAR AVENUE
RIALTO AREA

W.O. No.	Parcel No.	Owner
TX1796	PEC-3	LOUDEN, LLC



APN 113345130

SAN BERNARDINO COUNTY TRANS. DEPT.		LINDEN AVE AND OTHER ROADS PERMIT TO ENTER AND CONSTRUCT COUNTY OF SAN BERNARDINO	PEC 3
	DESIGN DIVISION		TX1796

Recorded in Official Records, County of San Bernardino

4/11/2012

8:00 AM

SG

**DENNIS DRAEGER**
ASSESSOR - RECORDER - CLERK

771 Document Processing Solutions

RECORDING REQUESTED BY:
Prominent Escrow Services, Inc.
Order No. 11-058417
Escrow No. 04-2190-JO
Parcel No. 1133-451-30-0000AND WHEN RECORDED MAIL TO:
mail tax bill to:
LOUDEN, LLC, A NEVADA LIMITED
LIABILITY COMPANY
5440 TRABUCO ROAD # 200
IRVINE, CA 92620

Doc#: 2012-0136923



Titles:	1	Pages:	3
Fees			31.00
Taxes			139.70
Other			0.00
PAID			\$170.70

DTT: 139.70

SPACE ABOVE FOR RECORDER'S USE ONLY

GRANT DEED

Title of Document

**THIS AREA FOR
RECORDER'S
USE ONLY**THIS COVER SHEET ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION
(\$3.00 Additional Recording Fee Applies)

MAIL TAX STATEMENT TO RETURN ADDRESS ABOVE

RECORDING REQUESTED BY:
 Prominent Escrow Services, Inc.
 Order No. 11-058417
 Escrow No. 04-2190-JO
 Parcel No. 1133-451-30-0000

AND WHEN RECORDED MAIL TO:

LOUDEN, LLC, A NEVADA LIMITED
 LIABILITY COMPANY
 5440 TRABUCO ROAD # 200
 IRVINE, CA 92620

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRANT DEED

THE UNDERSIGNED GRANTOR(S) DECLARE(S) THAT DOCUMENTARY TRANSFER TAX IS \$139.70 and CITY \$

- ☒ computed on full value of property conveyed, or
☐ computed on full value less liens or encumbrances remaining at the time of sale.
☐ unincorporated area: ☒ Rialto

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
 THE BANK OF NEW YORK MELLON FKA THE BANK OF NEW YORK AS TRUSTEE FOR THE
 CERTIFICATEHOLDERS OF CWABS, INC., ASSET BACKED CERTIFICATES, SERIES 2004-AB2

hereby GRANT(S) to Louden, LLC, a Nevada Limited Liability Company

the following described real property in the County of San Bernardino State of California:

Property Address: 6138 Cedar Avenue, Rialto Ca 92377
 Please find Attached Legal Description EXHIBIT "A"

The Grantee(s), or purchaser(s), of the property may not resell, record an additional conveyance document, or
 otherwise transfer title to the property within 60 days following the Grantor's Execution of this Deed.

Date March 30, 2012

THE BANK OF NEW YORK MELLON FKA THE
 BANK OF NEW YORK AS TRUSTEE FOR THE
 CERTIFICATEHOLDERS OF CWABS, INC.,
 ASSET BACKED CERTIFICATES, SERIES 2004-
 AB2

By: Bank of America, N.A. Successor by merger to
 BAC Home Loans Servicing, LP, f/k/a Countrywide
 Home Loans Servicing, LP, servicer and attorney in
 fact

Todd Gabert, Assistant Vice President

STATE of Arizona)
) S.S.
 COUNTY of Maricopa)

On March 30, 2012, before me, Shanda Kreuzer Notary Public,

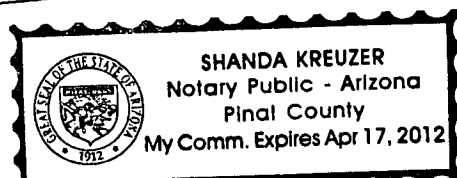
personally appeared Todd Gabert, Assistant Vice President who
 proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within
 instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and
 that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s)
 acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is
 true and correct.

WITNESS my hand and official seal.

Signature

(Seal)



OUR NO. 11-0058417

EXHIBIT "A"

DESCRIPTION: THE LAND REFERRED TO HEREIN IS SITUATED IN THE CITY OF RIALTO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 27, TOWNSHIP 1 NORTH, RANGE 5 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA ACCORDING TO THE OFFICIAL MAP THEREOF, DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 27, WHICH IS 984.84 FEET EAST OF THE WEST 1/4 CORNER THEREOF; THENCE NORTH 89 DEGREES 04' 00" EAST, 330.00 FEET, ALONG SAID NORTH LINE TO THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 27; THENCE SOUTH 0 DEGREES 55' 00" EAST, 330.00 FEET, ALONG THE EAST LINE OF SAID NORTHWEST 1/4 OF THE SOUTHWEST 1/4; THENCE SOUTH 89 DEGREES 04' 00" WEST, 330.00 FEET; THENCE NORTH 0 DEGREES 55' 00" WEST, 330.00 FEET TO THE POINT OF BEGINNING.

EXCEPT THE INTEREST IN THE NORTH 30.00 FEET THEREOF AS CONVEYED TO THE COUNTY OF SAN BERNARDINO FOR HIGHWAY PURPOSES BY THE DEED RECORDED JUNE 1, 1955, IN BOOK 3394, PAGE 165, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.
ALSO EXCEPT THE INTEREST IN THAT PORTION THEREOF INCLUDED WITHIN THE PARCEL OF LAND CONVEYED TO THE COUNTY OF SAN BERNARDINO BY THE DEED RECORDED DECEMBER 7, 1960, IN BOOK 5300, PAGE 358, OFFICIAL RECORDS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 27; THENCE SOUTHERLY ALONG THE EAST LINE OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION, A DISTANCE OF 30.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE CONTINUING SOUTHERLY ALONG SAID EAST LINE OF THE WEST 1/2 OF THE SOUTHWEST 1/4 OF SAID SECTION, TO AN INTERSECTION WITH A LINE THAT IS PARALLEL WITH AND 330.00 FEET, SOUTH OF THE NORTH LINE OF SAID SOUTHWEST 1/4 OF SECTION 27; THENCE WESTERLY ALONG SAID PARALLEL LINE TO AN INTERSECTION WITH A LINE THAT IS PARALLEL WITH AND 30.00 FEET WEST OF SAID EAST LINE OF SAID WEST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 27; THENCE NORTHERLY ALONG SAID PARALLEL LINE TO THE BEGINNING OF A TANGENT CURVE, CURVE TO THE SOUTHWEST AND HAVING A RADIUS OF 20.00 FEET, WHICH CURVE IS ALSO TANGENT TO A LINE THAT IS PARALLEL WITH, AND 30.00 FEET SOUTH OF THE NORTH LINE OF SAID SOUTHWEST 1/4 OF SECTION 27; THENCE NORTHWESTERLY ALONG SAID TANGENT CURVE TO SAID PARALLEL LINES THENCE EASTERLY ALONG SAID PARALLEL LINE TO THE POINT OF BEGINNING.

ALSO EXCEPT THEREFROM THE NORTH 220.00 FEET.

ALSO EXCEPT THEREFROM THE WEST 147.00 FEET.

THE PARCEL OF LAND HEREIN DESCRIBED IS ALSO SHOWN ON LICENSED SURVEYOR'S MAP RECORDED IN BOOK 4, PAGE 62, OF RECORDS OF SURVEY, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

A.P.N. NO.: 1133-451-30-0000

UNINCORPORATED AREA

TOWNSHIP 1N RANGE 5W SECTION 27
ROAD NAME Cedar Avenue
W.O. No. TX1796 PARCEL PEC-4 & PEC-5
A.P.N. 1133-451-29 (ptn)

PERMIT TO ENTER AND CONSTRUCT


Mark Sandefur and Julie Sandefur, as Trustees
of the Mark Sandefur and Julie Sandefur Revocable Living Trust, dated May 5, 2016

Hereby consent(s) to permit the COUNTY OF SAN BERNARDINO, a body corporate and politic of the State of California, its officers, agents and employees and persons under contract with said County and their employees, the privilege and right to enter upon or across the property shown on the map attached hereto and made a part hereof, for construction purposes:


The purpose of this Permit to Enter and Construct is for:

removing portion of asphalt concrete and concrete driveway,
constructing new concrete driveway approaches,
constructing concrete driveway to meet existing,
and other miscellaneous appurtenances thereto.

This Permit to Enter and Construct will become effective upon the written construction contract for the above work and between the County and its contractor becoming effective and will expire upon completion of the construction project known as "Linden Avenue and Others".


Mark Sandefur, Trustee
of the Mark Sandefur and Julie
Sandefur Revocable Living
Trust, dated May 5, 2016

8/10/21
Date


Julie Sandefur, Trustee
of the Mark Sandefur and Julie
Sandefur Revocable Living
Trust, dated May 5, 2016

8-10-21
Date

UNINCORPORATED AREA

TOWNSHIP 1N RANGE 5W SECTION 27
ROAD NAME Casmalia Avenue at Cactus Avenue
W.O. No. TX1796 PARCEL PEC-7
A.P.N. 1133-581-45 (ptn)

PERMIT TO ENTER AND CONSTRUCT

Daniel G. Sanchez

a married man, as his sole and separate property

Hereby consent(s) to permit the COUNTY OF SAN BERNARDINO, a body corporate and politic of the State of California, its officers, agents and employees and persons under contract with said County and their employees, the privilege and right to enter upon or across the property shown on the map attached hereto and made a part hereof, for construction purposes:

The purpose of this Permit to Enter and Construct is for:

relocating existing fencing behind road right-of-way
and other miscellaneous appurtenances thereto.

This Permit to Enter and Construct will become effective upon the written construction contract for the above work and between the County and its contractor becoming effective and will expire upon completion of the construction project known as "Linden Avenue and Others".


Daniel G. Sanchez

8-5-21

Date

Date



**City of Rialto
COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION**

335 W. Rialto Avenue, Rialto, CA 92376
Phone: (909) 421-4999 • Fax: (909) 421-7210

Email Application to: UtilityPermits@rialtoca.gov Website: www.yourrialto.com

ENCROACHMENT PERMIT APPLICATION

Applicant (Name/Company): _____

Address: _____

City/State/Zip _____

Phone: () _____

Email: _____

Contractor (Name/Company): _____

Phone: () _____

Email: _____

Contractor License #: _____ Type: _____ Expiration Date: _____

Rialto Business License: _____ Expiration Date: _____

(Note: This permit is valid until the insurance expiration date.)

Said work to be in conformance with Encroachment Permit General Provisions, applicable City Ordinances, and/or according to City Specifications for such work, and to the satisfaction of the City Engineer.

Permission is requested to open the following street/address: _____ Street

between _____ Street and _____ Street

For the purpose of: _____

For the duration of: ☐ One Day or Less ☐ Two Days ☐ Three or more Days ☐ _____

APPLICANT MUST PROVIDE PROOF OF THE FOLLOWING:

- ☐ 1. Current Business License with the City of Rialto.
- ☐ 2. Certificate of General Liability Insurance, including additional Insurance Endorsements, in the minimum amount of \$1 Million dollars, naming the City of Rialto as additionally insured.
- ☐ 3. Franchise Agreement (As Applicable)
- ☐ 4. Plans/Drawings of work to be performed
- ☐ 5. Traffic Control Plans in conformance with policies, methods and procedures described in the CA MUTCD, CATTCH or WATCH.

NOTE: Applications will not be accepted unless ALL items are provided. If upon review of the permit, it is determined that other conditions are necessary, those conditions will be attached to this permit.

Application fee will be collected at the time of submittal. Inspection fees must be paid prior to the issuance of the permit.

Hours of work are from 7:00 a.m. to 5:00 p.m. Monday through Friday unless otherwise approved by the City Engineer.

Contractor must contact Underground Service Alert at 1 (800) 442-4133 to have utilities marked out before the pre-construction meeting. After approval of the permit, the Contractor will contact the Engineering Division Inspector at (909) 421-7294 and must have a minimum of 48-hours notification prior to scheduling of a pre-construction meeting and construction. All restorations shall be per City Standard. Where applicable, restorations must also abide by City Council approved moratorium requirements.

FEES:	<input type="checkbox"/> Extension \$125.20 + \$378.40 each standard (20 sq. ft.) street work	\$	_____
	<input type="checkbox"/> Standard Street Work \$378.40 (20 sq. ft.) Per Location	\$	_____
	<input type="checkbox"/> Street Work Up to 1,000 Lf \$378.40 + _____	Lf x \$1.80 per Lf =	\$ _____
	<input type="checkbox"/> Street Work Over 1,000 Lf \$2,178.40 + _____	Lf x \$1.20 per Lf =	\$ _____
	<input type="checkbox"/> Street Cut Permit/Inspection Fee	\$	_____
	<input type="checkbox"/> Overtime/Night Inspection	\$	_____

TOTAL \$

Applicant's Signature: _____

Date: _____

Permit Issued By: _____

Date: _____

Restoration Completed by Inspector: _____

Date: _____

Standard and Special Drawings
(Green Pages)

inserted here

LIST OF STANDARD AND SPECIAL DRAWINGS (GREEN PAGES)

NOTICE TO RESIDENTS (English/Spanish)

SAN BERNARDINO COUNTY STANDARDS AND SPECIAL DRAWING

109 (MODIFIED)
115 (MODIFIED)
117 (MODIFIED)
119 (MODIFIED)
303A
303B
312
SPEC DWG 112
SPEC DWG 135B

CALTRANS STANDARD PLANS DATED 2018

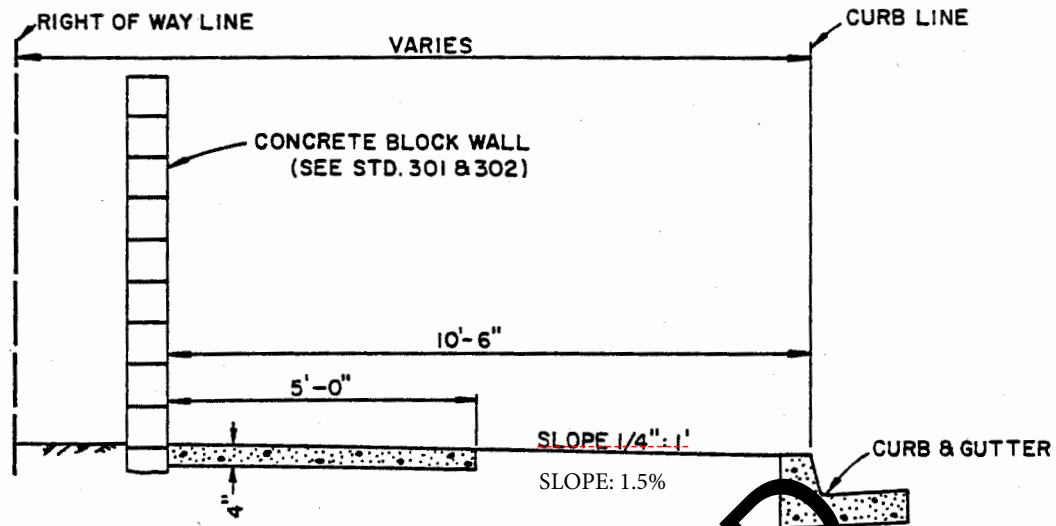
A20A	A20B	A24C	A24D	
A24E	A24F	A88A	B3-7B	B3-7C
T9	T10	T11	T12	13

CALIFORNIA MUTCD DATED 2014

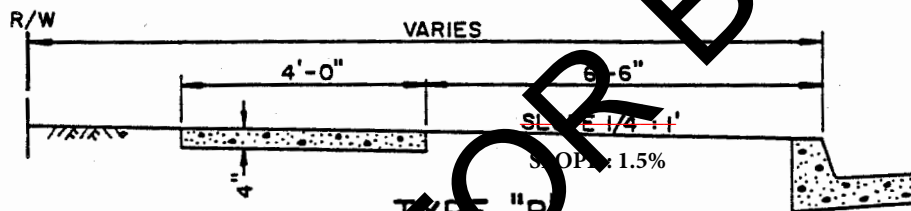
FIG 2A-2(CA)
FIG 2A-3
FIG 2C-13(CA)
FIG 3B-102
FIG 6H-28
FIG 6H-29
Section 6D.01
Section 6D.02

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC) 2009

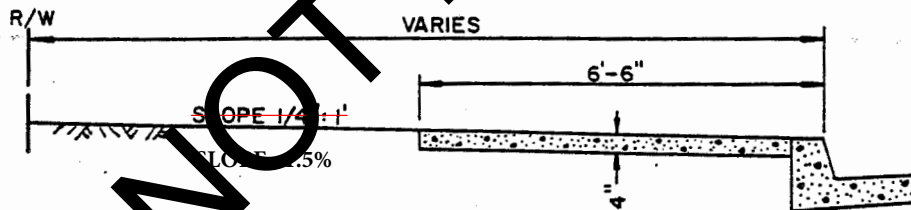
112-2



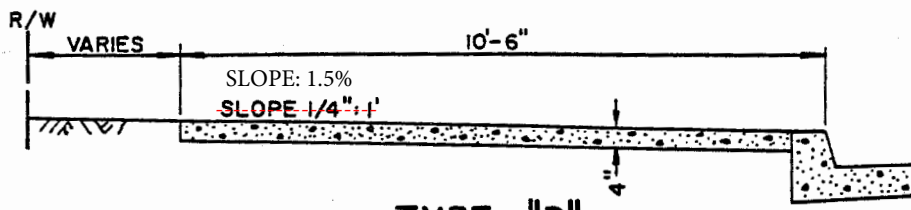
TYPE "A"



TYPE "B"



TYPE "C"



TYPE "D"

1. TYPE "C" SIDEWALKS ADJACENT TO CURB SHALL ONLY BE USED ON LOCAL AND COLLECTOR STREETS AND ONLY UPON APPROVAL OF THE TRANSPORTATION DEPT.
2. SIDEWALK SHALL BE CONSTRUCTED OF CLASS "B" CONCRETE. MINOR CONCRETE
3. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED ON 10' SPACING.
4. SCORING SIDEWALK WILL BE PERMITTED.
5. IN EXPANSIVE SOIL AREAS, REFER TO SECTION 73 OF THE COUNTY SPECIFICATIONS.

San Bernardino County Transportation Department

APP MAR 1975

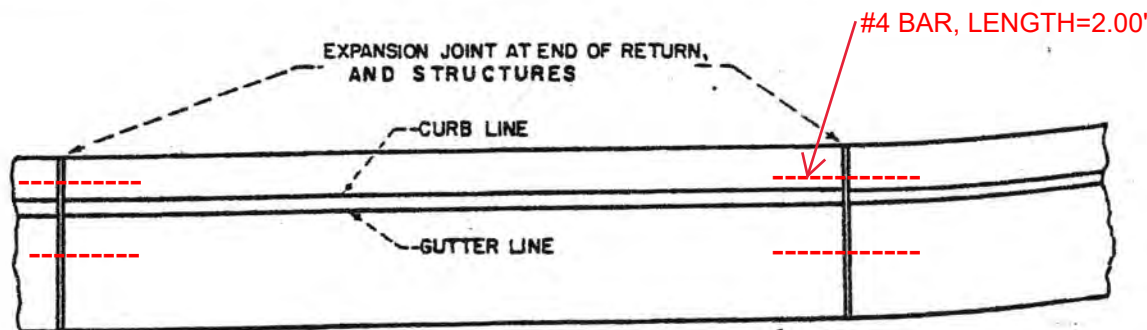
John R. Shone

DIRECTOR OF TRANSPORTATION

SIDEWALK

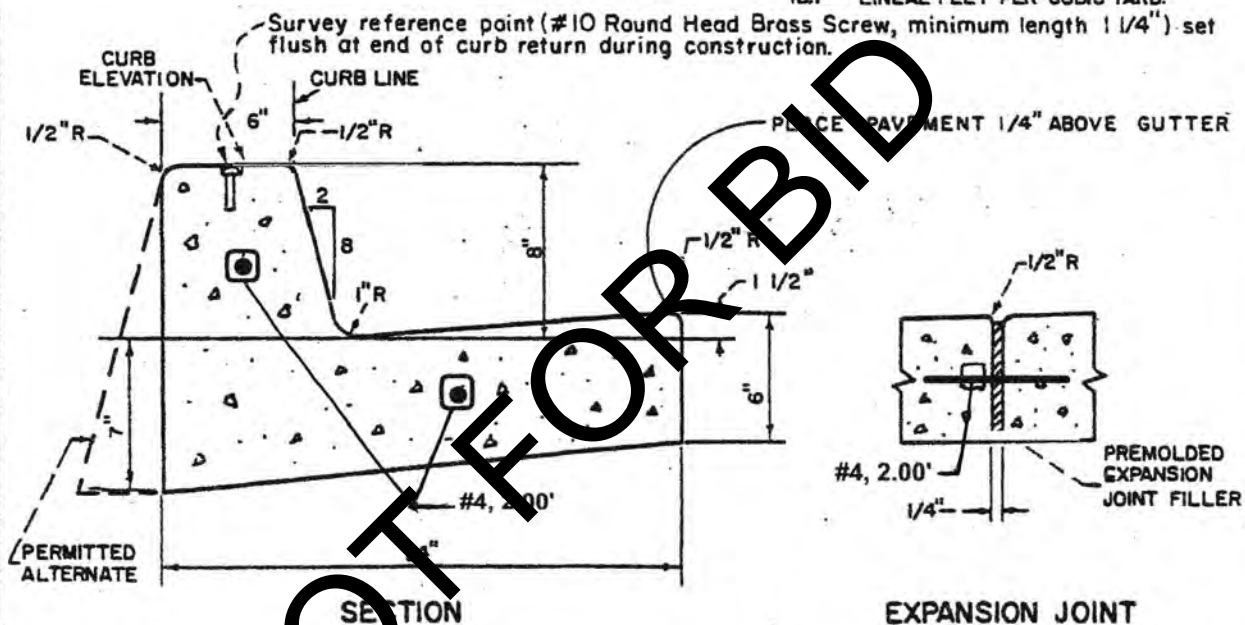
MODIFIED

109



PLAN

0.0535 CUBIC YARDS PER LINEAL FOOT.
18.7 LINEAL FEET PER CUBIC YARD.



NOTES:

1. CURB AND GUTTER SHALL BE CONSTRUCTED MONOLITHICALLY OF CLASS "B" CONCRETE.
2. WIDTHS OF STANDARD STREET SECTIONS SHOWN ON PLANS ARE TO CURB LINE UNLESS OTHERWISE INDICATED.
3. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 10-FOOT INTERVALS, EXCEPT THAT THE INTERVAL SHALL BE VARIED TO ALLOW MATCHING OF JOINTS IN ADJACENT EXISTING IMPROVEMENTS.
4. CURING COMPOUND SHALL BE SPRAYED UNIFORMLY ON EXPOSED SURFACES.
5. WHEN CURB AND GUTTER IS PLACED BY AN EXTRUSION MACHINE MINOR FINISHING MAY BE DONE TO PROVIDE AN ACCEPTABLE FINISH AND THE WEAKENED PLANE JOINTS MAY BE SAWCUT.

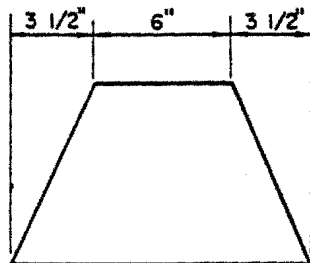
MINOR

(MODIFIED)

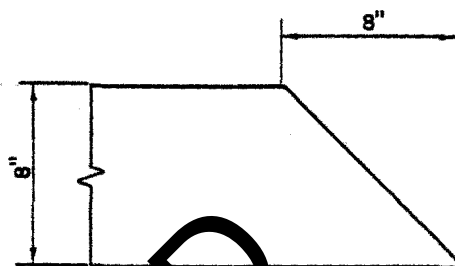
SAN BERNARDINO COUNTY ROAD DEPARTMENT	
REV. V.E.H. 3-74	John R. Shone COUNTY HIGHWAY ENGINEER
REV. V.E.H. 7-76	
Rev. V.E.H. 2-79	

8"
CURB AND GUTTER

115



SECTION



END CUTOFF

8" DIKE

NOT FOR BID

NOTES:

TYPE A

1. DIKE SHALL BE CONSTRUCTED OF ~~TYPE B~~ ASPHALT CONCRETE.
2. PAINT BINDER SHALL BE PLACED ON EXISTING ASPHALT CONCRETE PAVEMENT PRIOR TO THE INSTALLATION OF THE DIKE.

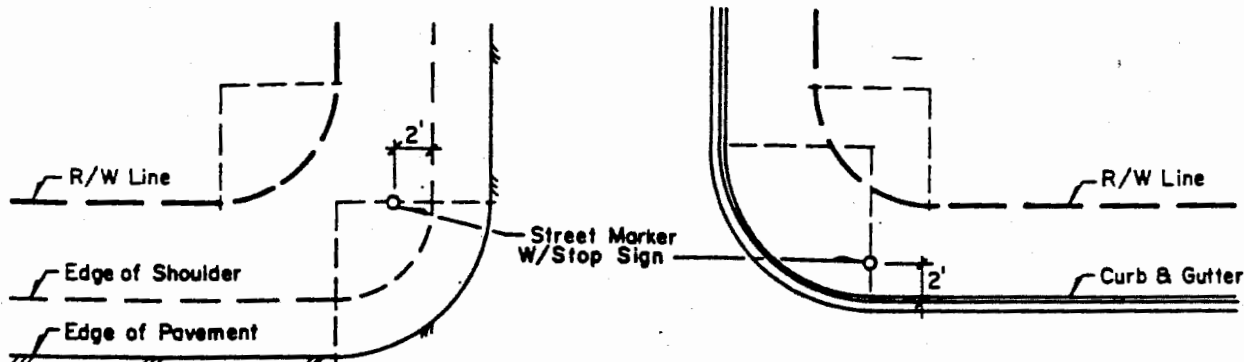
SAN BERNARDINO COUNTY ROAD DEPARTMENT

DATE: F.V.C. 6-65

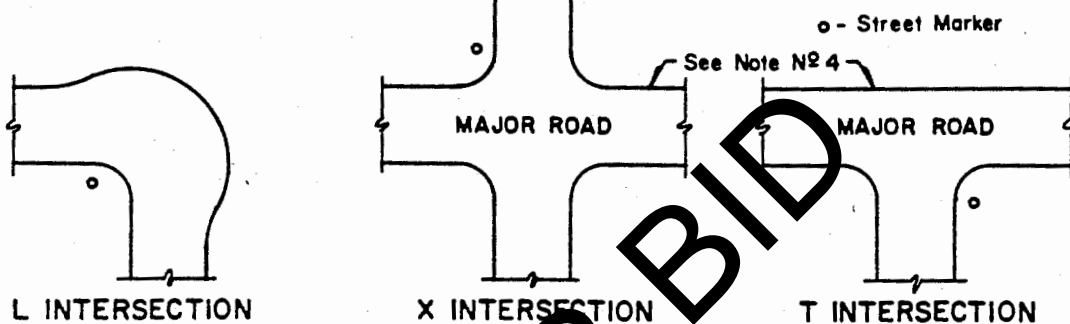
M. A. Nicholas
COUNTY ENGINEER

ASPHALT CONCRETE
DIKE (MODIFIED)

117



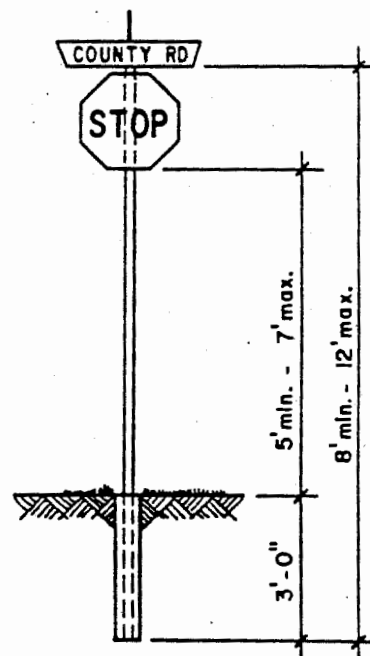
PLAN



TYPICAL LOCATION

NOTES:

1. Marker To Be Set On County Right Of Way.
2. Location Of Marker Shown Is Approximate.
3. Markers To Be Visible For A Distance Of 150 Feet.
4. If Either Road Is Divided Into 4 Lanes Or More (Major Road), Additional Markers Will Be Required.
5. Street Markers Located At Major Roads Will Be Mounted On 12 Foot Posts To Accommodate A Stop Sign.



ELEVATION

SAN BERNARDINO COUNTY TRANS. DEPT.

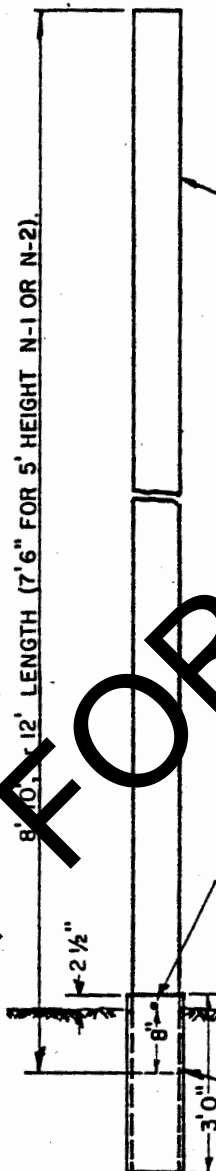
OCT. 5, 1993 v.h.c.
REV. 3/1/94

KEN A. MILLER
Director of Transportation

STREET MARKER

303a

NOT FOR BID



2" SQ. STEEL POST, HOT DIPPED GALVANIZED, 1.25 OZ. COATING (ASTM SPEC. A525).

POST SHALL BE PUNCHED WITH $\frac{3}{8}$ " DIA. HOLES TO ALLOW MOUNTING OF ALL CALIFORNIA STANDARD SIGNS.

DRIVE RIVETS OR BOLT IN CENTER OF POST, APPROX. 1" FROM TOP OF ANCHOR SLEEVE.

GROUND LINE

2 1/2" SQ. STEEL ANCHOR SLEEVE

NOTES:

1. SEE STANDARD NO. 303a FOR MARKER LOCATIONS.
2. POST SHALL BE 2" SQ. STEEL AS SHOWN AND STATED.
3. ANCHOR SLEEVE SHALL BE 2 1/2" SQ. STEEL HOT DIPPED GALVANIZED AFTER FABRICATION (ASTM SPEC. A-123).
4. SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH COUNTY STANDARD 303.

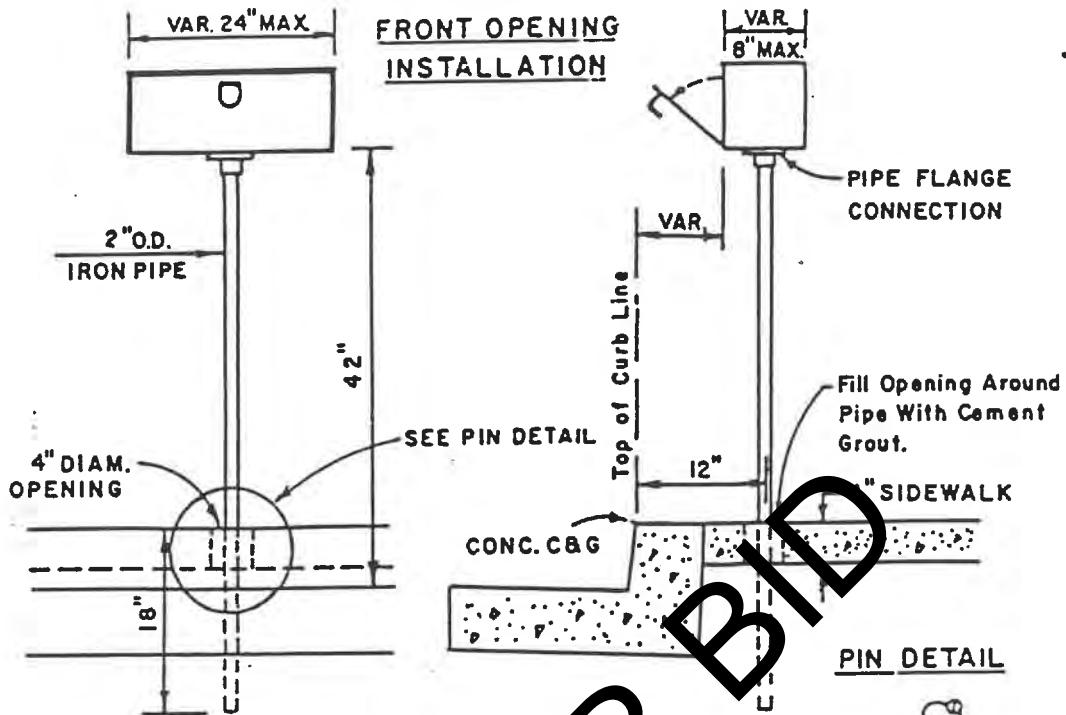
SAN BERNARDINO COUNTY ROAD DEPARTMENT

H.G. 1-71
R.O. 10-81

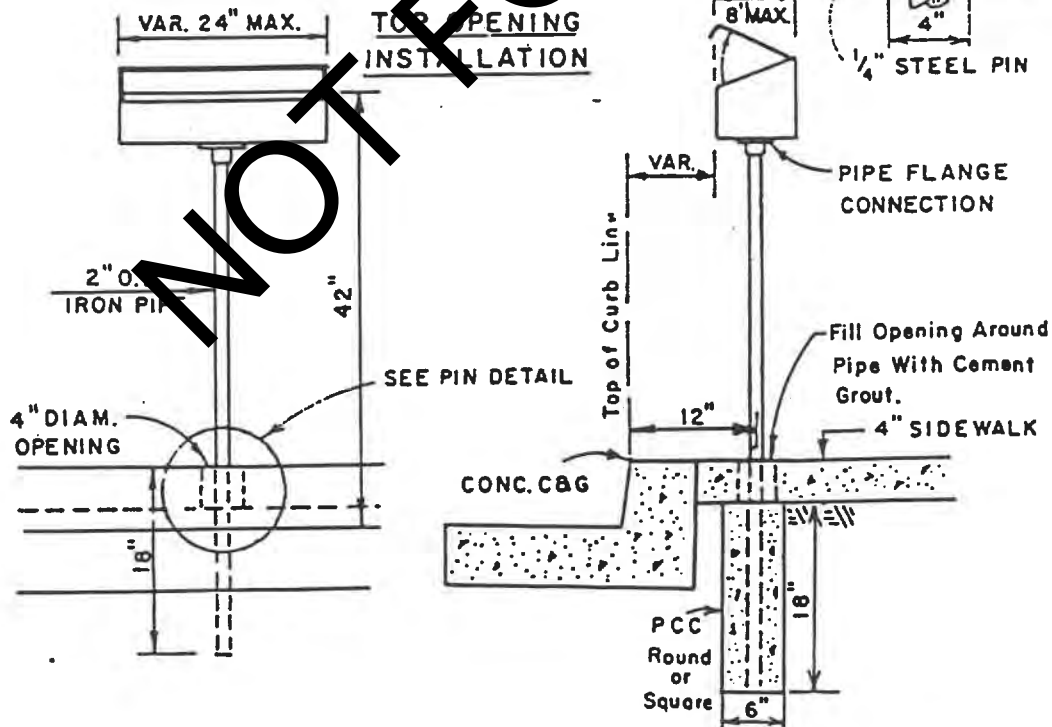
M. A. Nicholas
COUNTY ENGINEER

STREET MARKER
POST INSTALLATION

303 b



NOTE: END OPENING MAILBOX NOT PERMITTED.
FACE OF MAILBOX SHALL NOT EXTEND
PAST TOP OF CURB LINE.



SAN BERNARDINO COUNTY ROAD DEPARTMENT

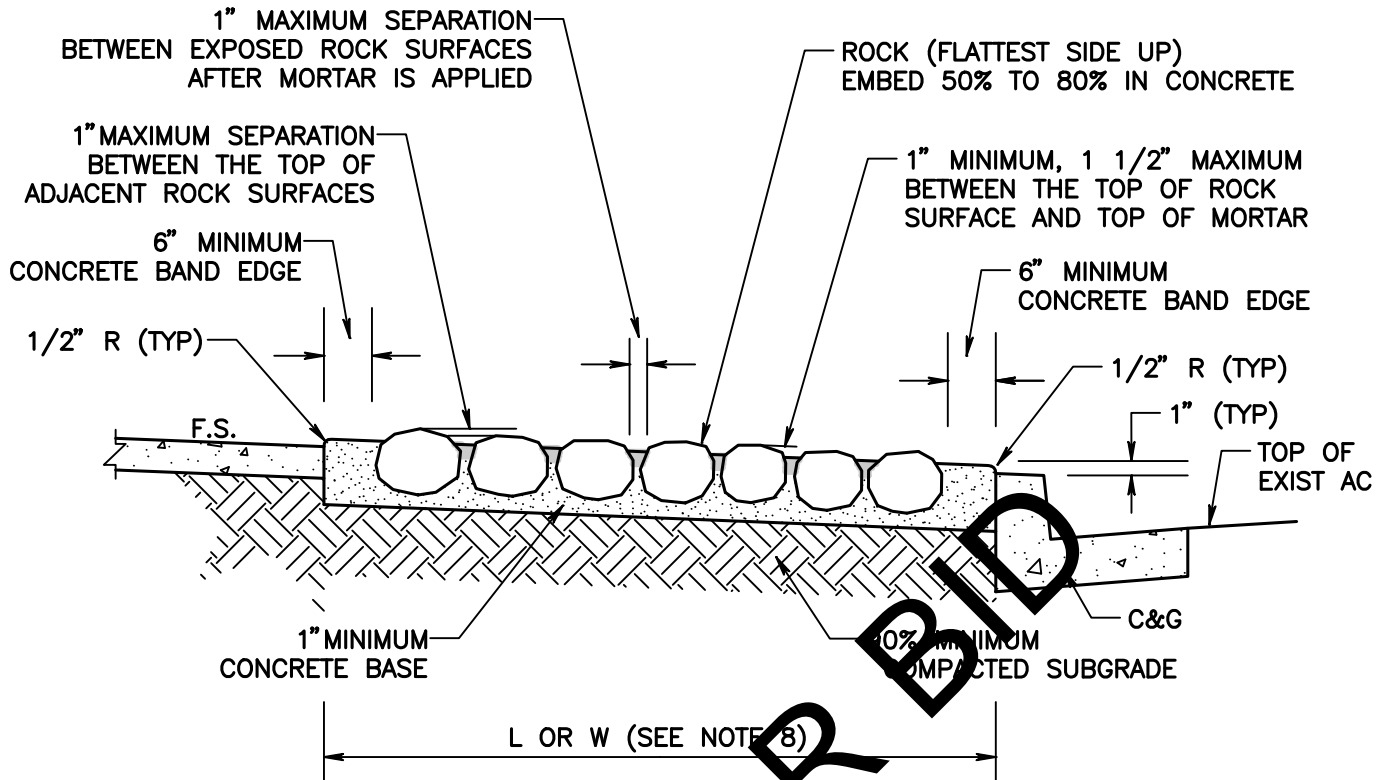
DATE:

12-8-89

Ken A. Miller
DIRECTOR OF TRANSPORTATION

SINGLE MAILBOX
INSTALLATION

312



ROCK BLANKET DETAIL (TYP)

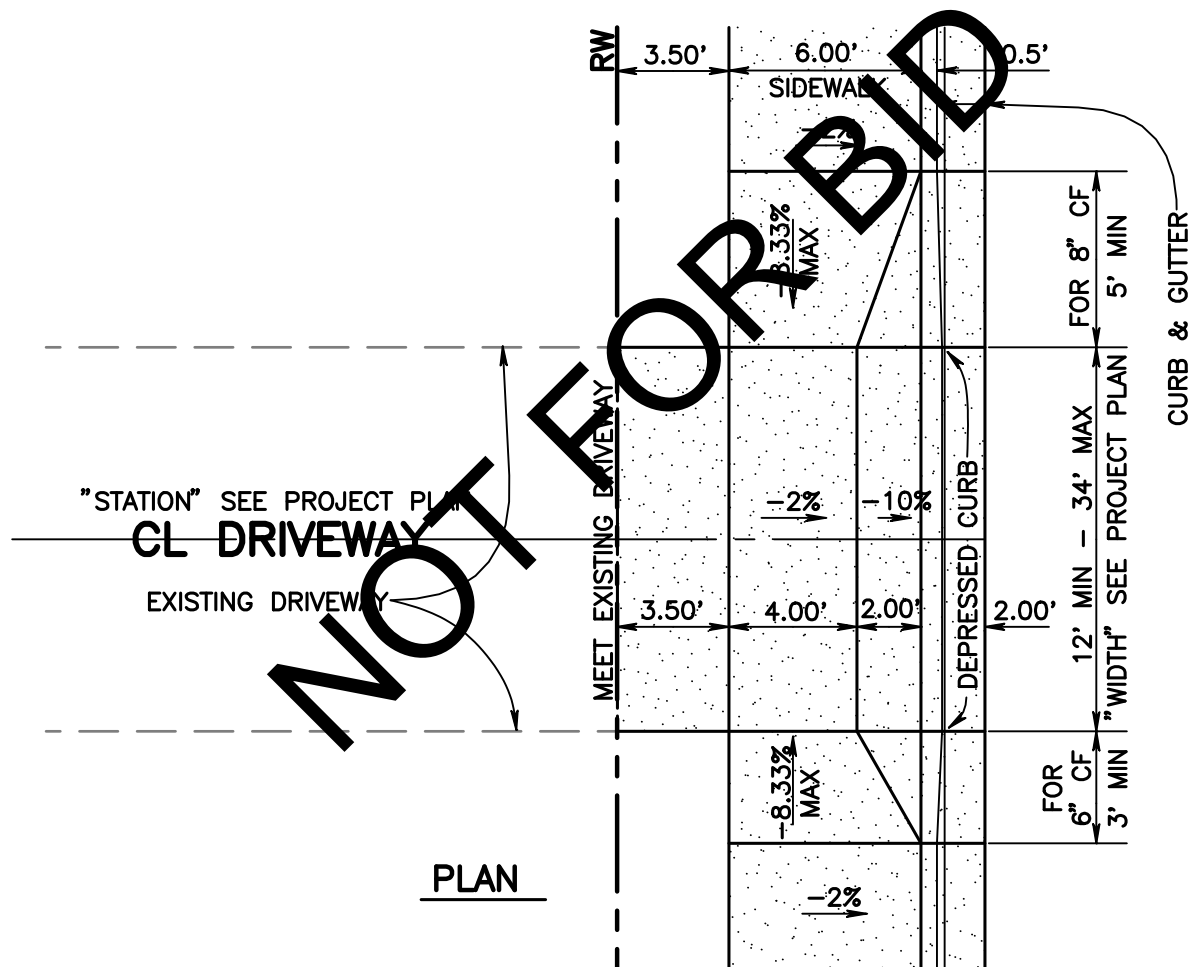
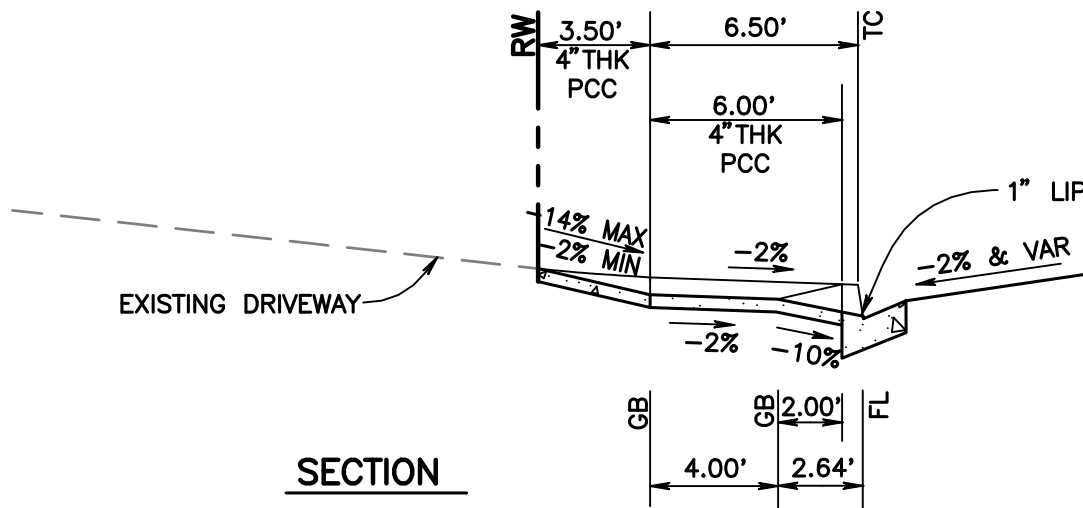
1. ROCK SIZES UNLESS OTHERWISE SPECIFIED SHALL BE: COBBLESTONES MAX 8" TO MIN 6" DIAMETER.
2. FINAL RESTING POSITION OF ALL ROCKS SHALL BE APPROVED BY THE ENGINEER.
3. ROCKS SHALL BE SMOOTH, ROUNDED, FREE OF OBJECTABLE DISFIGURATIONS AND IRON CONTENT AS APPROVED BY THE ENGINEER.
4. CONCRETE SHALL BE MINOR CONCRETE.
5. WIRE BRUSH ALL JOINTS AFTER THE INSTALLATION OF THE ROCKS. AFTER CONCRETE HAS SET, CLEAN THE RESIDUE FROM SURFACES OF ROCKS.
6. NO JOINTS GREATER THAN 1" BETWEEN ROCKS WILL BE ACCEPTABLE. 4" FILLER ROCKS WILL BE ACCEPTED TO MAINTAIN THE 1" JOINT.
7. WHERE ROCK BORDERS TURF AREA, PLACE 1" CONCRETE EDGE BETWEEN BACK OF ROCK AND TURF.
8. FOR LENGTH (L) AND WIDTH (W) DIMENSIONS REFER TO THE CONSTRUCTION PLAN.

SAN BERNARDINO COUNTY TRANS. DEPT.

DESIGN DIVISION

**GROUTED ROCK
TREATMENT**

**SPEC
DWG
112**



NOTE:

1. FOR APPLICABLE NOTES AND DRIVEWAY REQUIREMENTS SEE COUNTY STANDARD 130
2. TO CONSTRUCT A DEPRESSION IN EXISTING CURB AND GUTTER:
 - A) SAW CUT AND REMOVE FOR THE NECESSARY WIDTH
 - B) REMOVE AND RECONSTRUCT TO THE NEAREST JOINT

SAN BERNARDINO COUNTY TRANS. DEPT.

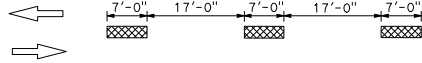
DESIGN DIVISION

DEPRESSED RESIDENTIAL
DRIVEWAY APPROACH

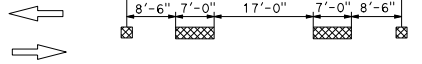
SPEC
DWG
135 B

CENTERLINES (2 LANE HIGHWAYS)

DETAIL 1



DETAIL 2

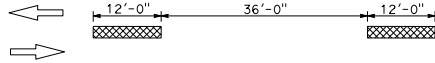
~~DETAIL 3~~

DETAIL 3 DELETED

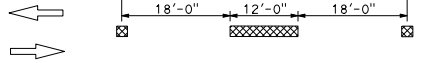
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DETAIL 4 DELETED

DETAIL 5



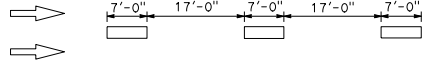
DETAIL 6

~~DETAIL 7~~

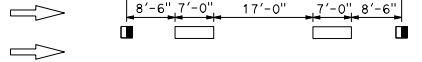
DETAIL 7 DELETED

LANELINES (MULTILANE HIGHWAYS)

DETAIL 8



DETAIL 9



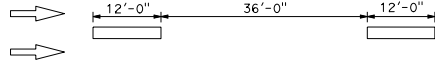
DETAIL 9A

SEE NOTE

~~DETAIL 10~~

DETAIL 10 DELETED

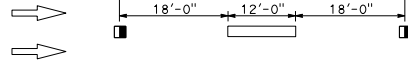
DETAIL 11



LANELINES (Cont)

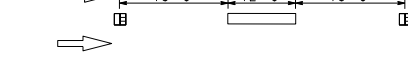
(MULTILANE HIGHWAYS)

DETAIL 12



DETAIL 12A

SEE NOTE

~~DETAIL 13~~

DETAIL 13 DELETED

~~DETAIL 14~~

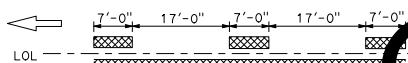
DETAIL 14 DELETED

~~DETAIL 14A~~

DETAIL 14A DELETED

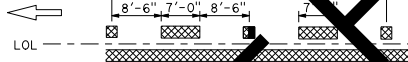
NO PASSING ZONES-ONE DIRECTION

DETAIL 15



LOL

DETAIL 16



LOL

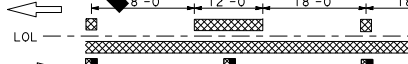
~~DETAIL 17~~

DETAIL 18



LOL

DETAIL 19



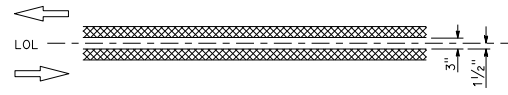
LOL

~~DETAIL 20~~

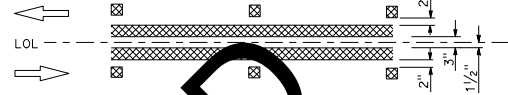
DETAIL 20 DELETED

NO PASSING ZONES-TWO DIRECTION

DETAIL 21



DETAIL 22

~~DETAIL 23~~

DETAIL 23 DELETED

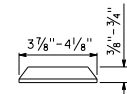
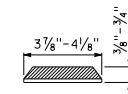
LEGEND

MARKERS

- TYPE C RED-GLASS RETROREFLECTIVE
- TYPE D TWO-WAY YELLOW RETROREFLECTIVE
- TYPE G ONE-WAY CLEAR RETROREFLECTIVE
- TYPE H ONE-WAY YELLOW RETROREFLECTIVE

LINE

- 6" WHITE
- 6" YELLOW



TYPE C AND TYPE D

TYPE G AND TYPE H

RETROREFLECTIVE FACE

 STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

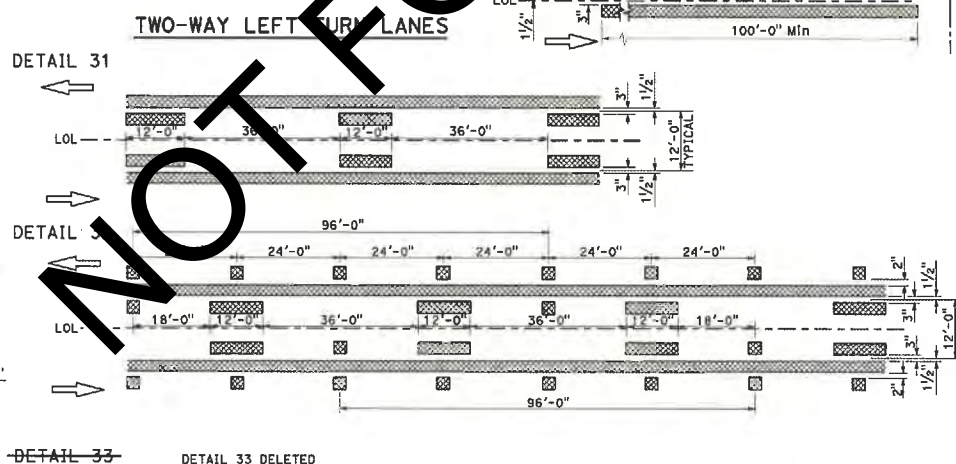
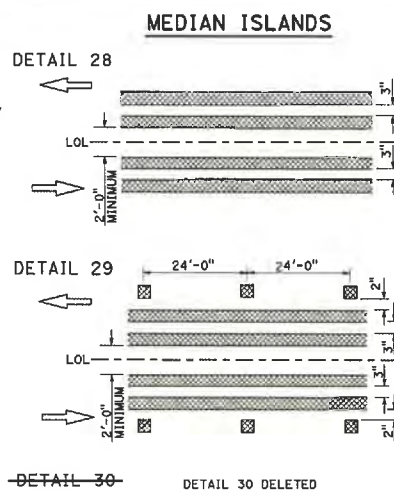
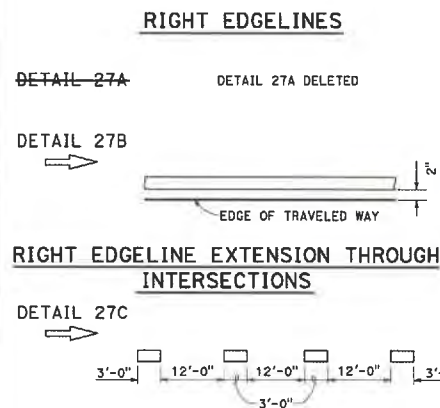
NO SCALE




A20A

DIST	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS


Atifa Ferrouz
 REGISTERED CIVIL ENGINEER
 No. C80402
 EXP. 3-31-19
 CIVIL
 STATE OF CALIFORNIA

May 31, 2018
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
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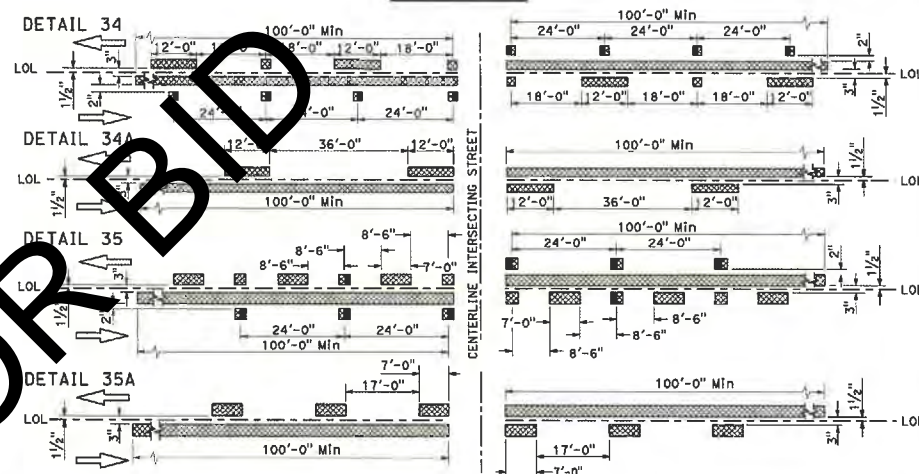


	TYPE D	TWO-WAY YELLOW RETROREFLECTIVE
	TYPE H	ONE-WAY YELLOW RETROREFLECTIVE
	TYPE RY	RED-YELLOW RETROREFLECTIVE

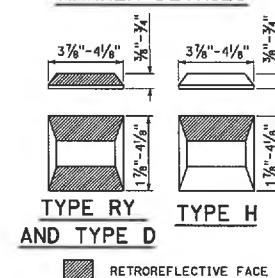
 6" WHITE

 6" YELLOW

INTERSECTION TREATMENTS



MARKER DETAILS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKERS AND TRAFFIC LINES TYPICAL DETAILS

NO SCALE

A 20B

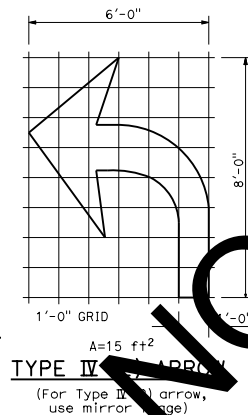
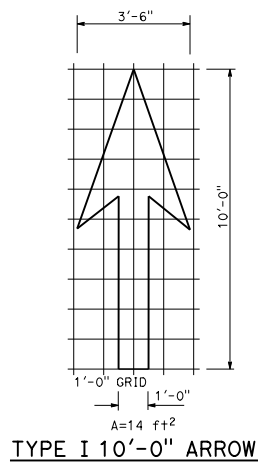
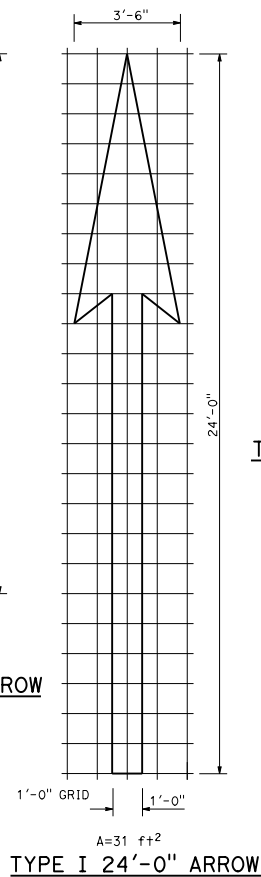
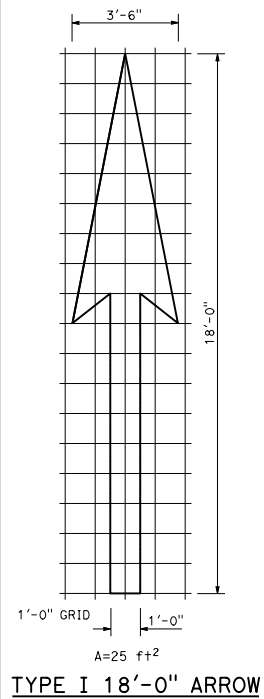
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TO A NO. SHEET

Atifa Ferouz
REGISTERED CIVIL ENGINEER

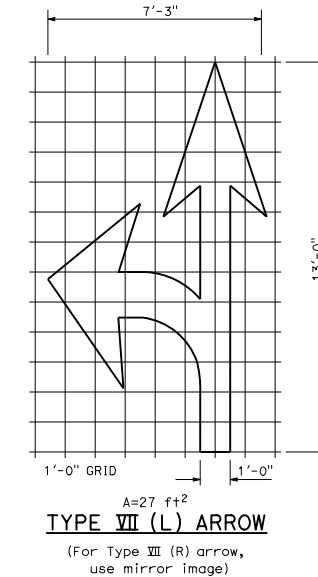
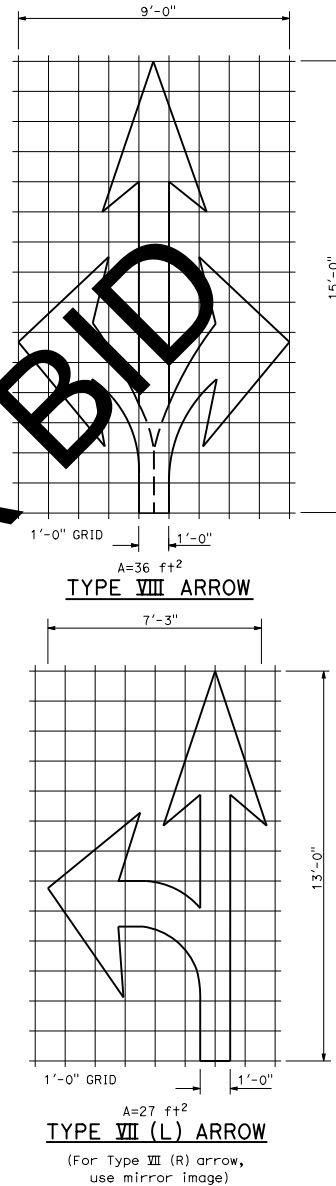
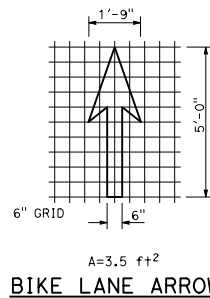
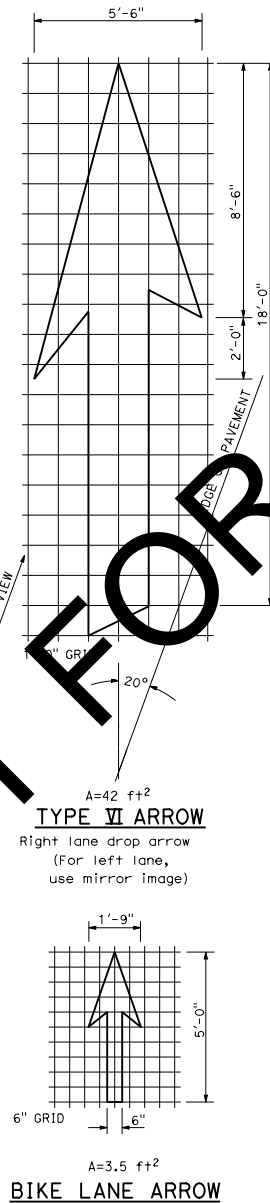
May 31, 2018
PLANS APPROVAL DATE

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Atifa Ferouz
C80402
Exp. 3-31-19
CIVIL
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER

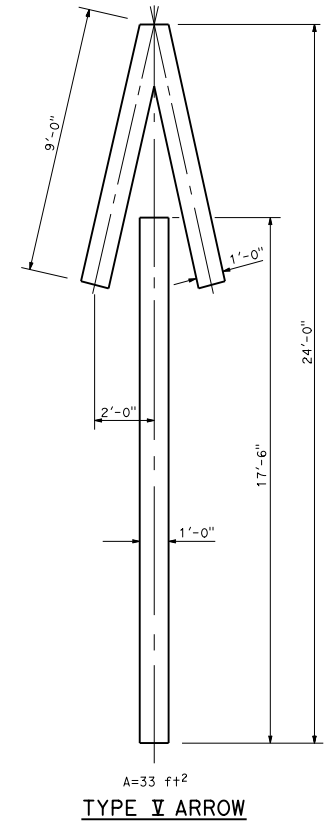


NOTE:
Minor variations in dimensions
may be accepted by the Engineer.



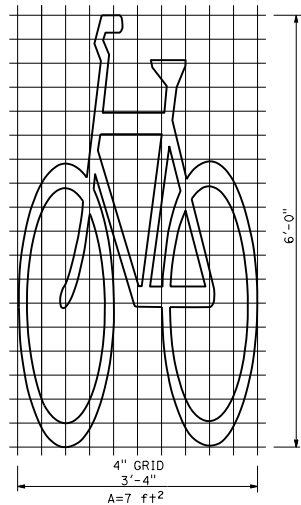
DIS#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
<p>Atifa Farouq REGISTERED CIVIL ENGINEER</p> <p>May 31, 2018 PLANS APPROVAL DATE</p> <p>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</p>					

Atifa Farouq
REGISTERED PROFESSIONAL ENGINEER
No. C80402
Exp. 3-31-19
CIVIL
STATE OF CALIFORNIA

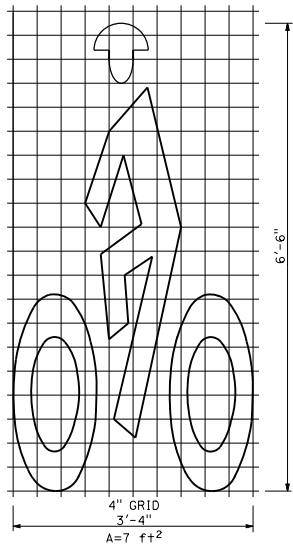


STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

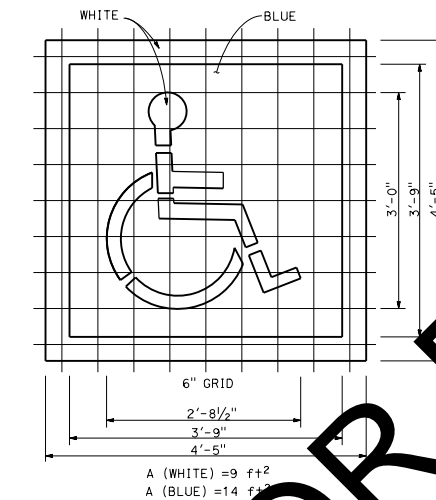
A24A



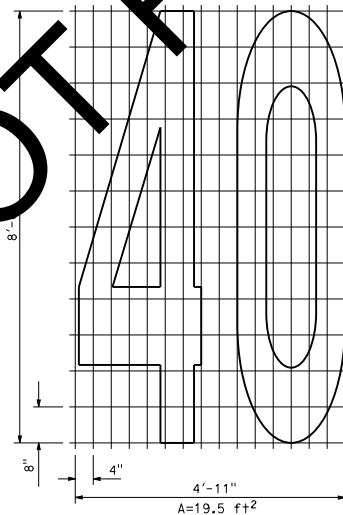
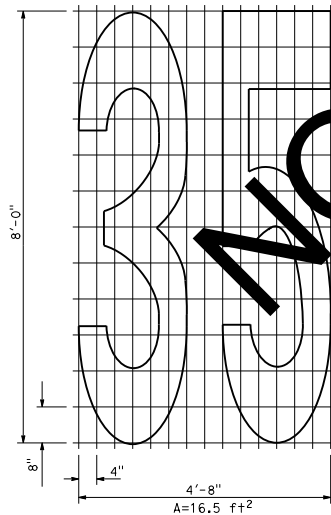
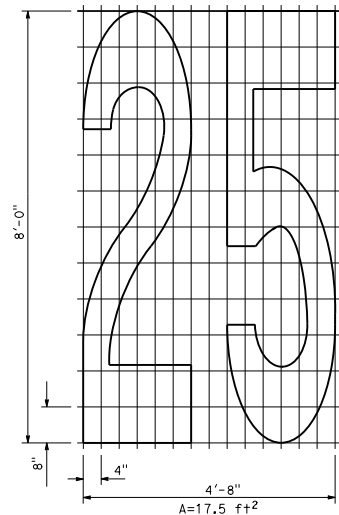
**BIKE LANE SYMBOL
WITHOUT PERSON**



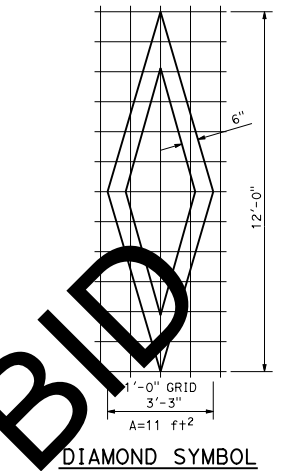
**BIKE LANE SYMBOL
WITH PERSON**



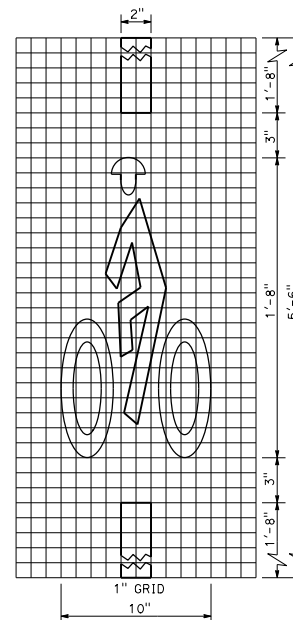
**INTERNATIONAL SYMBOL
OF ACCESSIBILITY (ISA) MARKING**



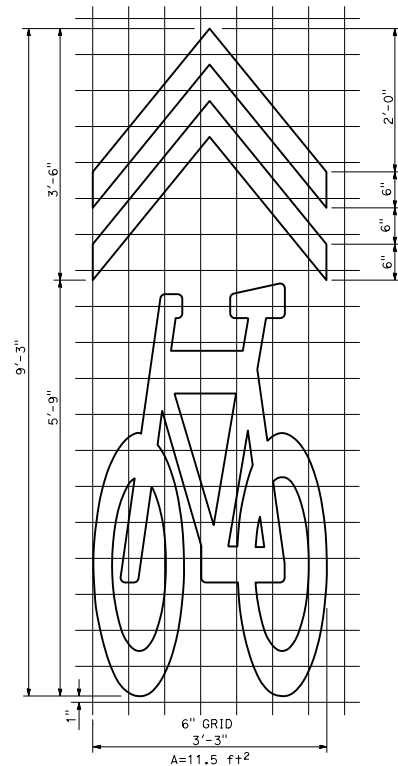
NUMERALS



DIAMOND SYMBOL



**BIKE LOOP
DETECTOR SYMBOL**



SHARED ROADWAY BICYCLE MARKING

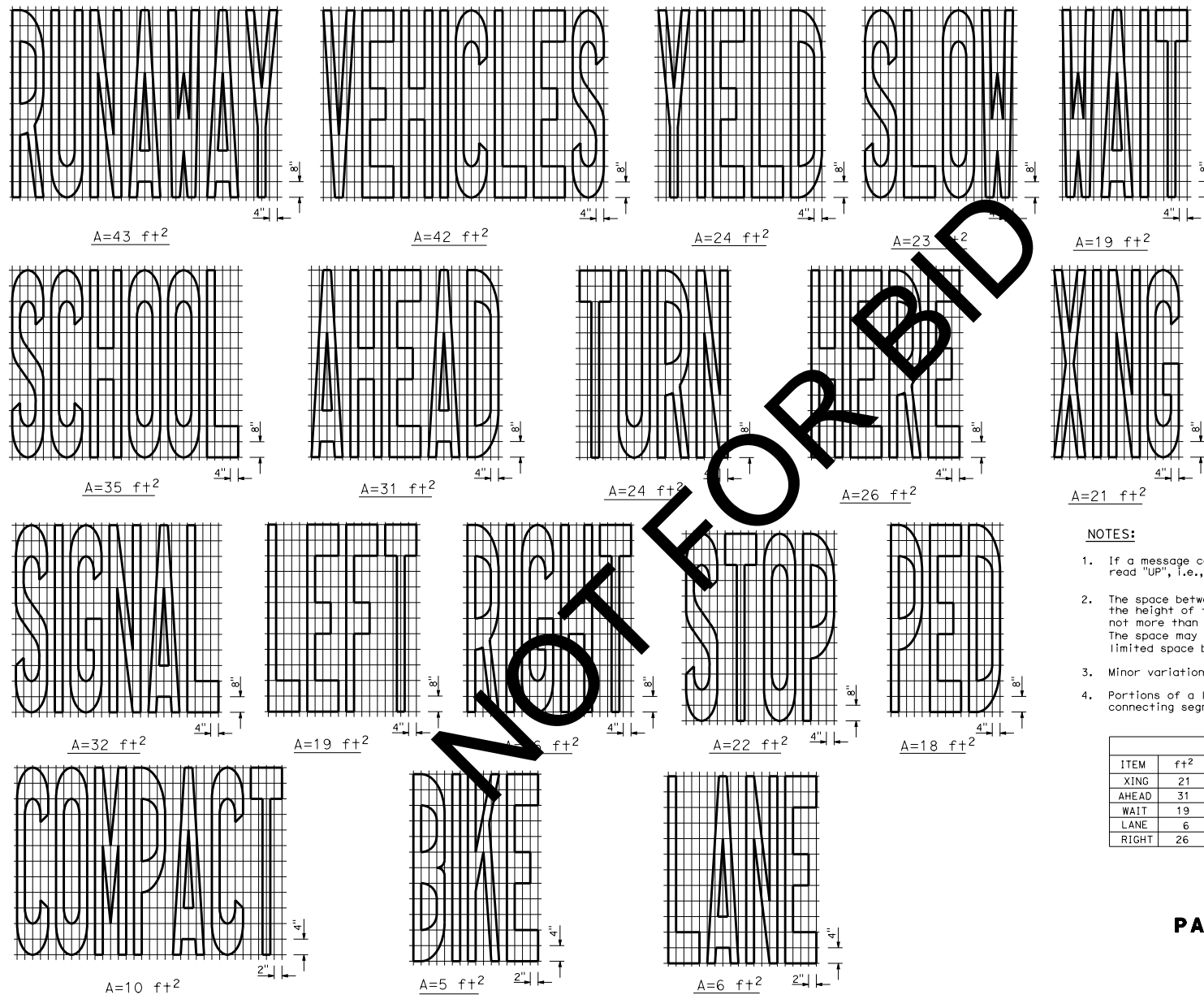
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
SYMBOLS AND NUMERALS**
NO SCALE

A 24C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
<p>Atifa Tesory REGISTERED CIVIL ENGINEER</p> <p>May 31, 2018 PLANS APPROVAL DATE</p> <p>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</p>				
<p>Atifa Forouz No. C80402 Exp. 3-31-19 CIVIL STATE OF CALIFORNIA</p>				

NOTE:

Minor variations in dimensions may be accepted by the Engineer.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Atifa Ferouz
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 PLANS APPROVAL DATE
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Atifa Ferouz
 No. C80402
 Exp. 3-31-19
 CIVIL
 STATE OF CALIFORNIA

NOTES:

1. If a message consists of more than one word, it must read "UP", i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

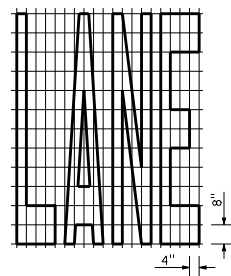
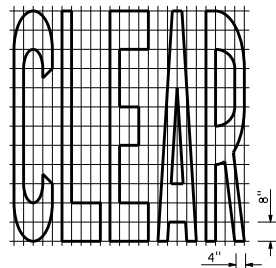
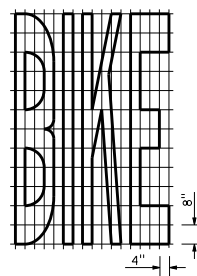
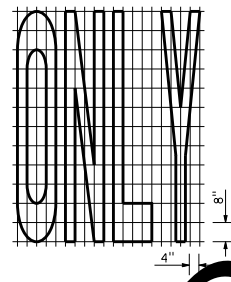
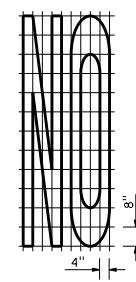
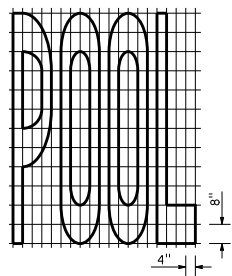
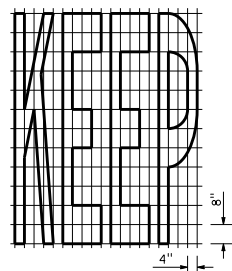
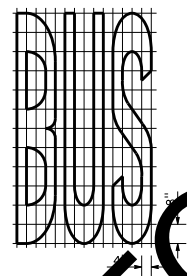
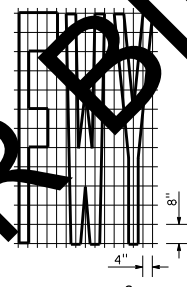
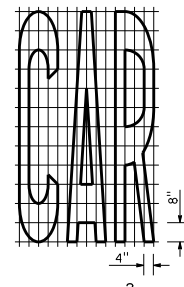
WORD MARKINGS

ITEM	f+2	ITEM	f+2	ITEM	f+2	ITEM	f+2
XING	21	YIELD	24	BIKE	5	PED	18
AHEAD	31	SCHOOL	35	SLOW	23	COMPACT	10
WAIT	19	SIGNAL	32	STOP	22	RUNAWAY	43
LANE	6	TURN	24	LEFT	19	VEHICLES	42
RIGHT	26	HERE	26				

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
 WORDS**

NO SCALE

A 24D


 $A=24 f+2$

 $A=27 f+2$

 $A=21 f+2$

 $A=22 f+2$

 $A=14 f+2$

 $A=23 f+2$

 $A=24 f+2$

 $A=20 f+2$

 $A=16 f+2$

 $A=17 f+2$

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS

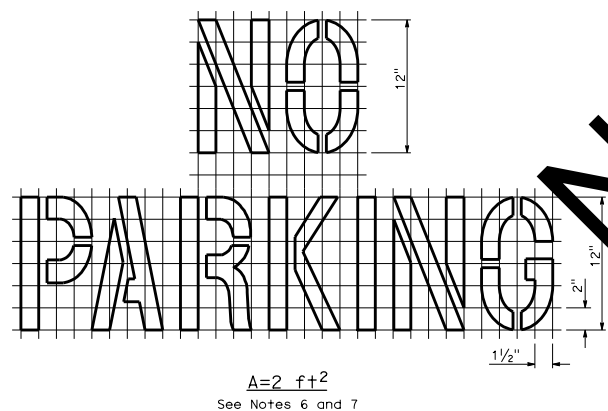
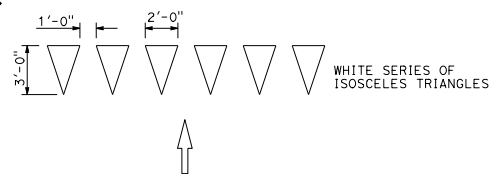
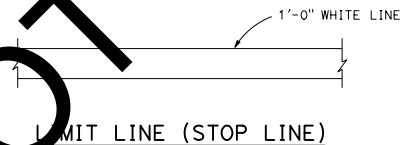
Atifa Ferouzi
 REGISTERED CIVIL ENGINEER
 No. C80402
 Exp. 3-31-19
 CIVIL
 STATE OF CALIFORNIA

May 31, 2018
 PLANS APPROVAL DATE
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 COPIES OF THIS PLAN SHEET.

WORD MARKINGS			
ITEM	f+2	ITEM	f+2
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16

NOTES:

1. If a message consists of more than one word, it must read "UP", i.e., the first word must be nearest the driver.
2. The space between words must be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

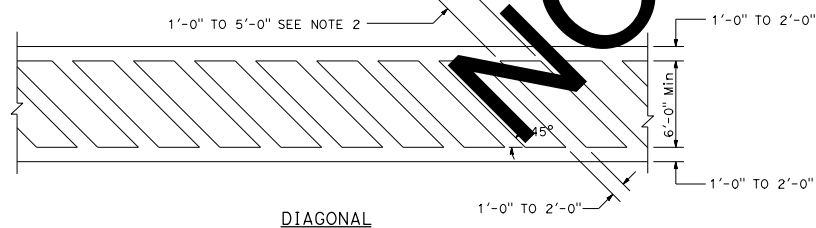
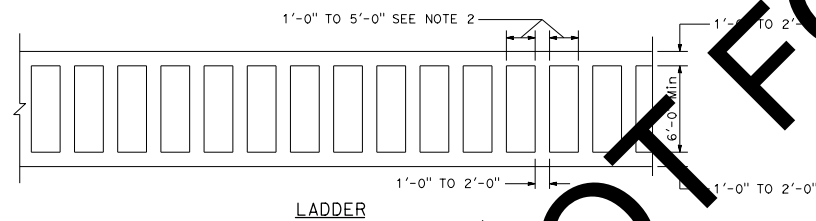
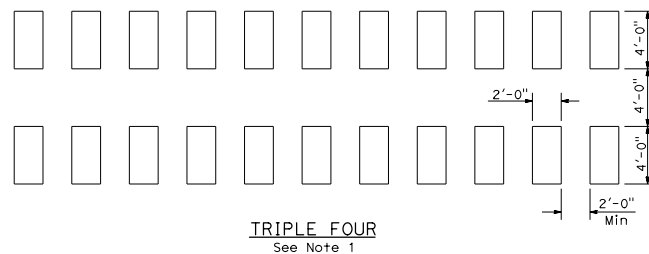
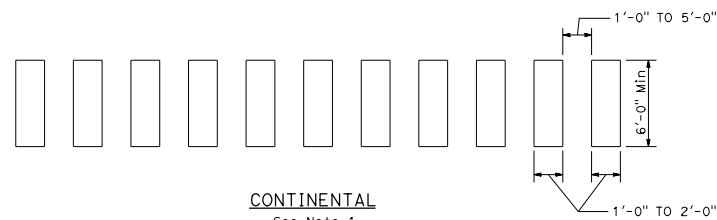

 $A=2 f+2$
 See Notes 6 and 7


YIELD LINE

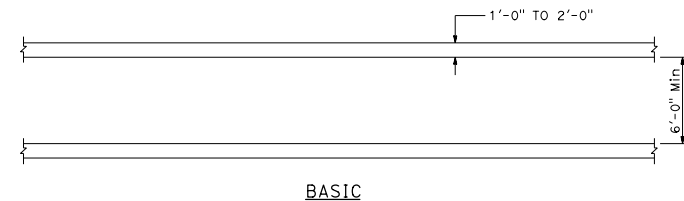
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES

NO SCALE

A 24E



HIGHER VISIBILITY CROSSWALKS



NOTES:

1. Spaces between markings must be placed in wheel tracks of each lane.
2. Spacings not to exceed 2.5 times width of longitudinal line.
3. All crosswalk markings must be white except those near schools must be yellow.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

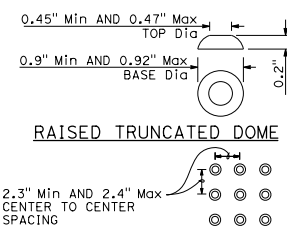
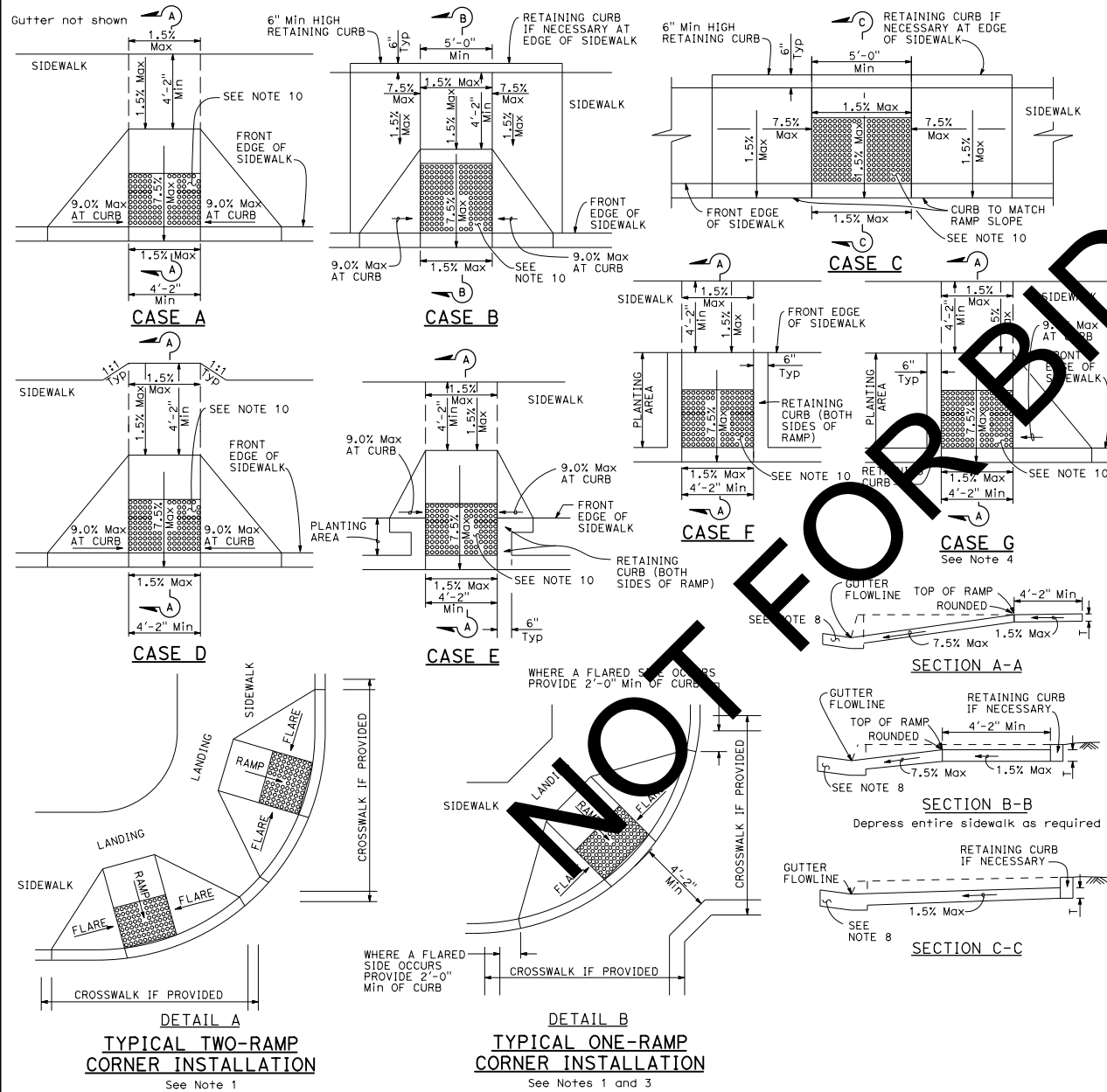
Atifa Ferouzi
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 PLANS APPROVAL DATE
 No. C80402
 Exp. 3-31-19
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STATE OF CALIFORNIA
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**PAVEMENT MARKINGS
 CROSSWALKS**

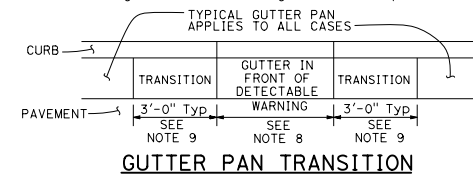
NO SCALE

A24F



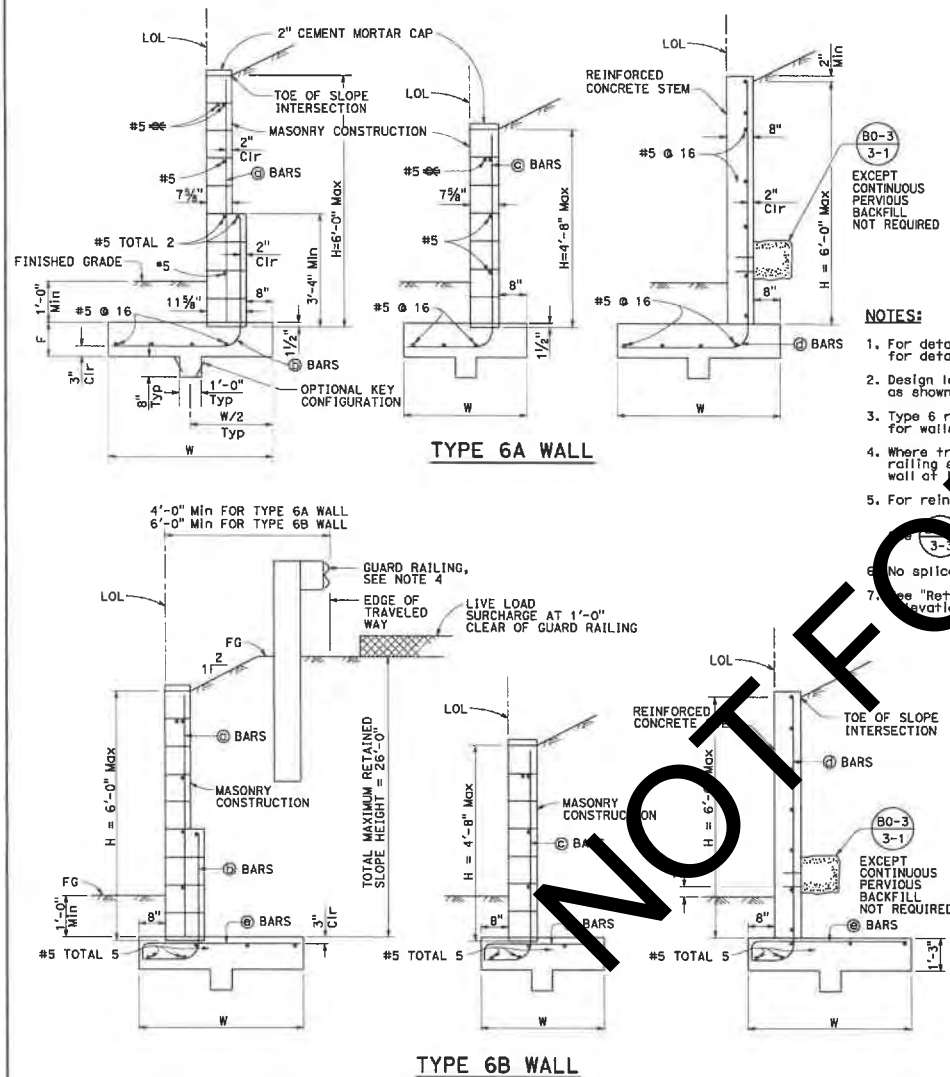
RAISED TRUNCATED DOME PATTERN (IN-LINE) DETECTABLE WARNING SURFACE

- NOTES:** See Note 10
1. If site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate. For specific site condition configuration, including the conform to existing sidewalk, see Project Plans.
 2. If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-2" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B or C or may be widened as in Case D.
 3. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
 4. As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
 5. The ramp portion of the curb ramp is a typical rectangle, unless modified in the Project Plans.
 6. Side slope of ramp flares vary uniformly from a maximum of 9.0% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
 7. The adjacent surfaces at curb ramps to walks, gutters, and streets shall be at the same level.
 8. Counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches of the curb ramp shall not be steeper than 1V:20H (5.0%). Gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.
 9. Transition gutter pan slope from 1" of depth for each 2'-0" of width to match typical gutter pan slope per Standard Plan A87A.
 10. The detectable warning surface will be a rectangle as shown at back of curb, unless modified in the Project Plans. Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. Detectable warning surfaces shall extend the full width of the ramp except a maximum gap of 1 inch is allowed on each side of the ramp. Detectable warning surfaces shall conform to the requirements in the Standard Specifications.
 11. Sidewalk and ramp thickness, "T", shall be 3 1/2" minimum.
 12. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
 13. Detectable warning surface may have to be cut to allow removal of utility covers while maintaining detectable warning width and depth.



STATE OF CALIFORNIA
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CURB RAMP DETAILS
NO SCALE

A88A

**SYMBOLS:**

Ser - service limit state
 Str - strength limit state
 Ext - extreme event limit state
 B' - effective footing width (ft)
 q_o - net bearing stress (ksf), q_o assumed to be FG at toe
 q_u - gross uniform bearing stress (ksf)

EXCEPT
 CONTINUOUS
 PERVIOUS
 BACKFILL
 NOT REQUIRED

NOTES:

- For details not shown at "68", see "68" similarly, for details not shown at "68", see "68" similarly.
- Design loading for both Type 6A and "68" is as shown at "68".
- Type 6 retaining wall shall be limited to use for walls of Design H of 6'-0" or less.
- Where traffic is adjacent to the top of wall, guard railing should be set back from the top front face of wall at least 4'-0" or 6'-0", dependent on wall type.
- For reinforced concrete wall stem joint details, see "3-3" and "4-4".
- No splices are allowed on #5, #6, #8, and #10 bars.
- See "Retaining Wall Type 6 Details" sheet for location view and footing step details.

DESIGN NOTES:

DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
 Building Code Requirements for Masonry Structures (TMS 402-08/ACI 530-08/ASCE 5-08)

LS: 240 psf surcharge on level ground surface as limited by Guard Railing location

SEISMIC: k_h = 0.2
 k_v = 0.0

SOIL: φ = 34°
 γ = 120 pcf

REINFORCED CONCRETE: f'_c = 3,600 psi
 f_y = 60,000 psi

REINFORCED MASONRY: f_m' = 1,500 psi
 f_y = 60,000 psi

LOAD COMBINATIONS AND LIMIT STATES:
 Service I Q = 1.00DC+1.00EV+1.00EH+1.00LS
 Strength I Q = 1.00DC+1.00EV+1.75LS
 Extreme I Q = 1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE

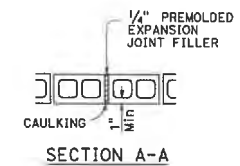
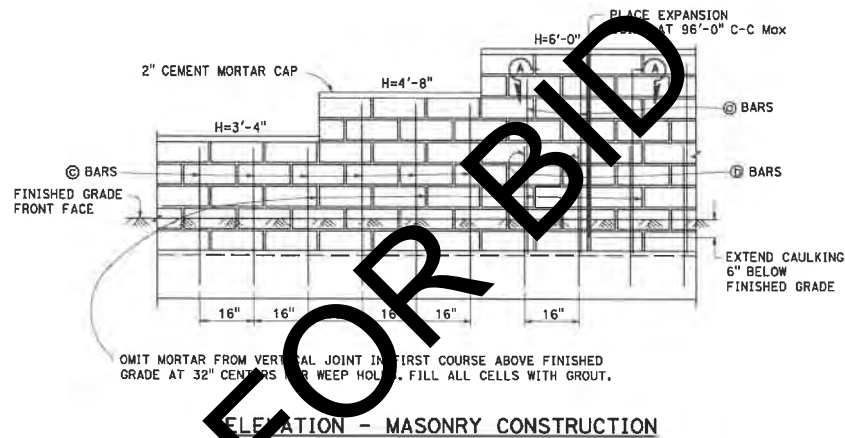
Where:
 Q: Force Effects
 a: 1.25 or 0.90, Whichever Controls Design
 φ: 1.35 or 1.00, Whichever Controls Design
 γ: 1.50 or 0.90, Whichever Controls Design
 DC: Dead Load of Structure Components
 EH: Horizontal Earth Fill Pressure
 EV: Vertical Earth Pressure from Earth Fill Weight
 LS: Live Load Surcharge
 EQD: Seismic Earth Pressure
 EQE: Soil and Structural and Nonstructural Components Inertia

TYPE 6A WALL - TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA					
DESIGN H	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"
W	3'-8"	4'-1"	4'-8"	5'-3"	6'-9"
F	1'-0"	1'-0"	1'-2"	1'-3"	1'-4"
#5 BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
#6 BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
#8 BARS	#5 @ 16"	#5 @ 16"	#5 @ 16"	NONE	NONE
#10 BARS	#5 @ 16"	#5 @ 16"	#5 @ 16"	#5 @ 16"	#6 @ 16"
Ser: B', q _o	3.4, 0.3	3.8, 0.3	4.3, 0.3	4.9, 0.4	6.0, 0.4
Str: B', q _o	3.3, 0.7	3.6, 0.7	4.1, 0.8	4.7, 0.8	5.7, 0.9
Ext: B', q _o	1.3, 1.9	1.4, 2.0	1.7, 2.1	1.9, 2.2	3.9, 1.4

TYPE 6B WALL - TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA					
DESIGN H	3'-4"	4'-0"	4'-8"	5'-4"	6'-0"
W	4'-6"	5'-1"	5'-7"	6'-2"	6'-9"
#5 BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
#6 BARS	NONE	NONE	NONE	#5 @ 16"	#5 @ 16"
#8 BARS	#5 @ 16"	#5 @ 16"	#5 @ 16"	NONE	NONE
#10 BARS	#5 @ 16"	#5 @ 16"	#5 @ 16"	#5 @ 16"	#6 @ 16"
#12 BARS	#5 @ 16"	#5 @ 16"	#6 @ 16"	#6 @ 16"	#7 @ 16"
Ser: B', q _o	3.3, 0.6	3.7, 0.8	4.0, 0.9	4.5, 1.0	4.1, 1.4
Str: B', q _o	1.9, 1.4	2.3, 1.6	2.5, 1.8	2.8, 1.9	1.8, 3.6
Ext: B', q _o	1.5, 2.8	1.8, 3.1	1.9, 3.6	2.1, 3.8	2.4, 3.9

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
RETAINING WALL TYPE 6 (CASE 2)
 NO SCALE

B3-7B




Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS
 REGISTERED CIVIL ENGINEER				
May 31, 2018 PLANS APPROVAL DATE				
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TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	50	100	25
60	1440	720	360	240	50	100	25
65	1560	780	390	260	50	100	25
70	1680	840	420	280	50	100	25
75	1800	900	450	300	50	100	25

* - For other offsets, use the following merging taper length formula for L:
 For speed of 40 mph or less, $L = WS^2/60$
 For speed of 45 mph or more, $L = WS$

Where: L = Taper length in feet
 W = Width of offset in feet

S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no channel markings or where there is a conflict between existing pavement markings and channel markings (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE ***		
		-3%	-6%	9%
		ft	ft	ft
mph	ft	ft	ft	ft
20	115	116	120	126
25	155	156	163	173
30	200	205	215	227
35	250	257	271	287
40	305	313	333	354
45	360	370	400	427
50	415	426	474	507
55	475	487	553	593
60	530	543	638	686
65	585	600	728	785
70	645	662	825	891
75	710	729	927	1003

* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

- Longitudinal buffer space or flagger station spacing

*** - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

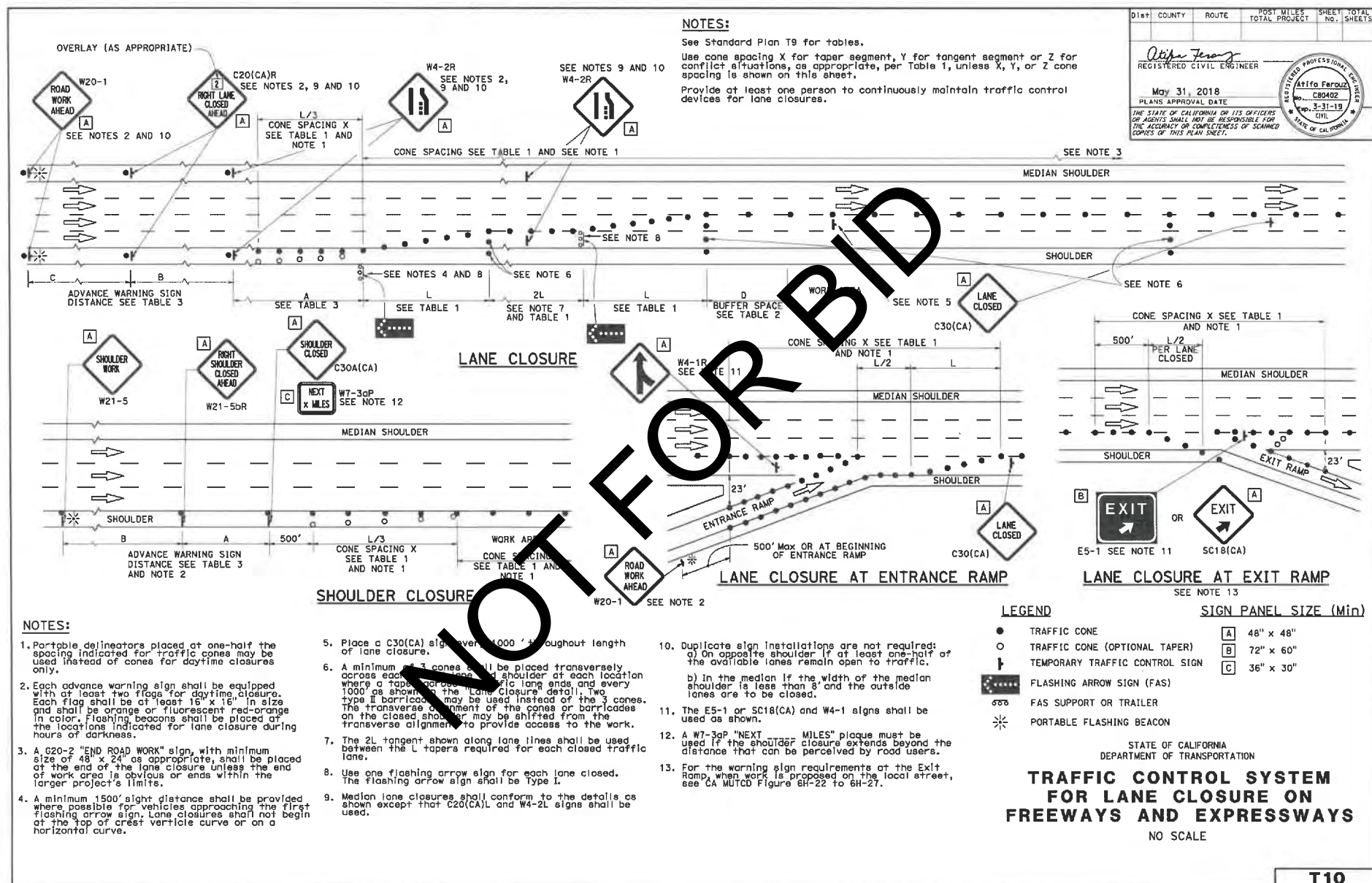
ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM TABLES FOR LANE AND RAMP CLOSURES

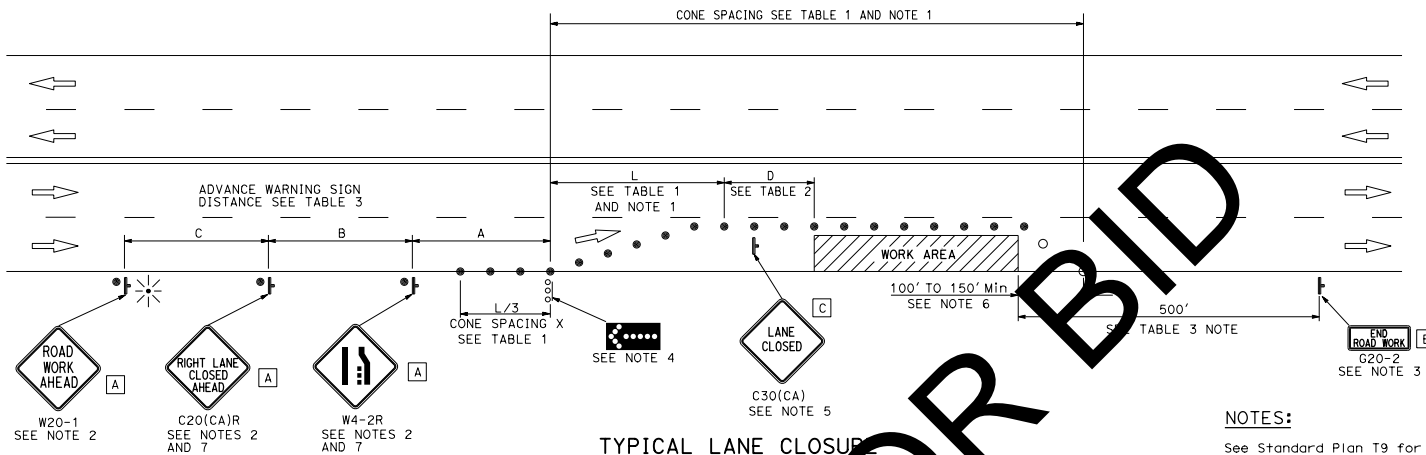
NO SCALE



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

Atifa Ferouzi
 REGISTERED CIVIL ENGINEER
 May 31, 2018
 PLANS APPROVAL DATE
 No. C80402
 EXP. 3-31-19
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TYPICAL LANE CLOSURE

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- † TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ▬ FAS SUPPORT OR TRAILER
- ☼ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- | | |
|---|-----------|
| A | 48" x 48" |
| B | 36" x 18" |
| C | 30" x 30" |

NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area.
- Length may be reduced by the Engineer to address site conditions.
- Median lane closures shall conform to the details shown except that C20(CA)L and W4-2L signs shall be used.
- For approach speeds over 50 MPH, use the "Traffic Control System for Lane Closure on Freeways and Expressways" plan for lane closure details and requirements.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR LANE CLOSURE ON
MULTILANE CONVENTIONAL
HIGHWAYS**

NO SCALE

T11

LEGEND

- TRAFFIC CONE
- ⋈ TEMPORARY TRAFFIC CONTROL SIGN
- ⋈... FLASHING ARROW SIGN (FAS)
- ⋈ FAS SUPPORT OR TRAILER
- ⋈ PORTABLE FLASHING BEACON

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 24" x 24"
- C 36" x 18"

NOTES:

See Standard Plan T9 for tables.

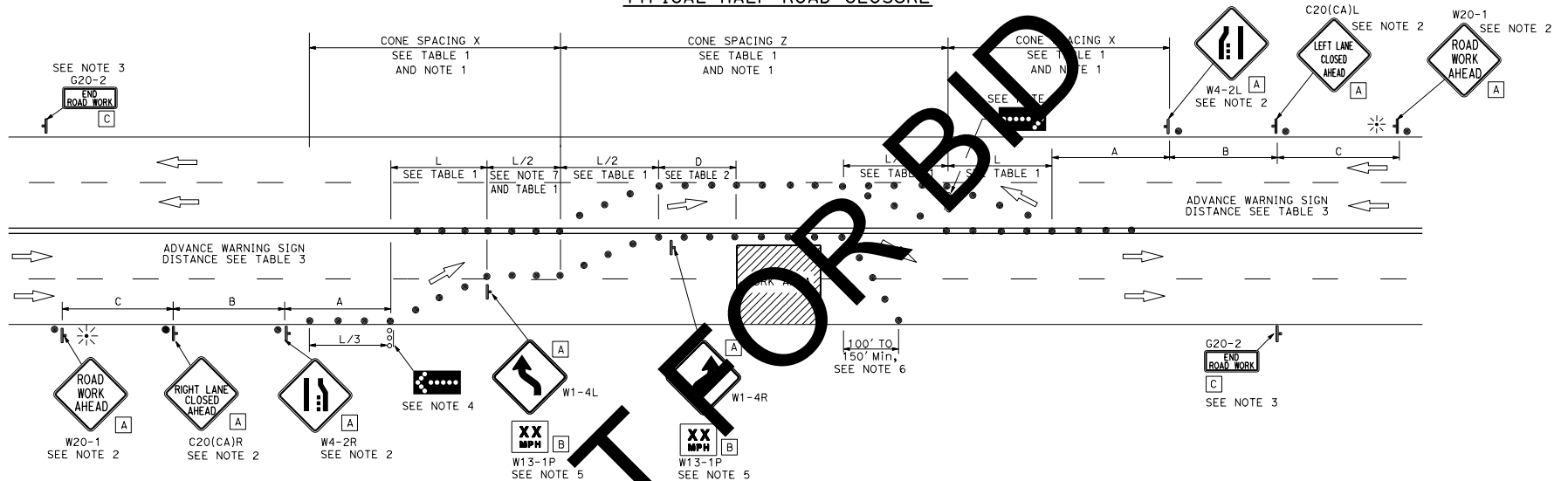
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Provide at least one person to continuously maintain traffic control devices for lane closures.

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS

Atifa Ferouzi
 REGISTERED CIVIL ENGINEER
 No. C80402
 Exp. 3-31-19
 CIVIL
 STATE OF CALIFORNIA

May 31, 2018
 PLANS APPROVAL DATE
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TYPICAL HALF ROAD CLOSURE**NOTES:**

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closures during hours of darkness.
- A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- A minimum 1500' sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Advisory speed will be determined by the Engineer. The W13-1P Plaque will not be required when advisory speed is more than the posted or maximum speed limit.
- Length may be reduced by the Engineer to address site conditions.
- The tangent (L/2) shall be used.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR HALF ROAD CLOSURE ON
MULTILANE CONVENTIONAL
HIGHWAYS AND EXPRESSWAYS**

NO SCALE

T12

NOTES:

See Standard Plan T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

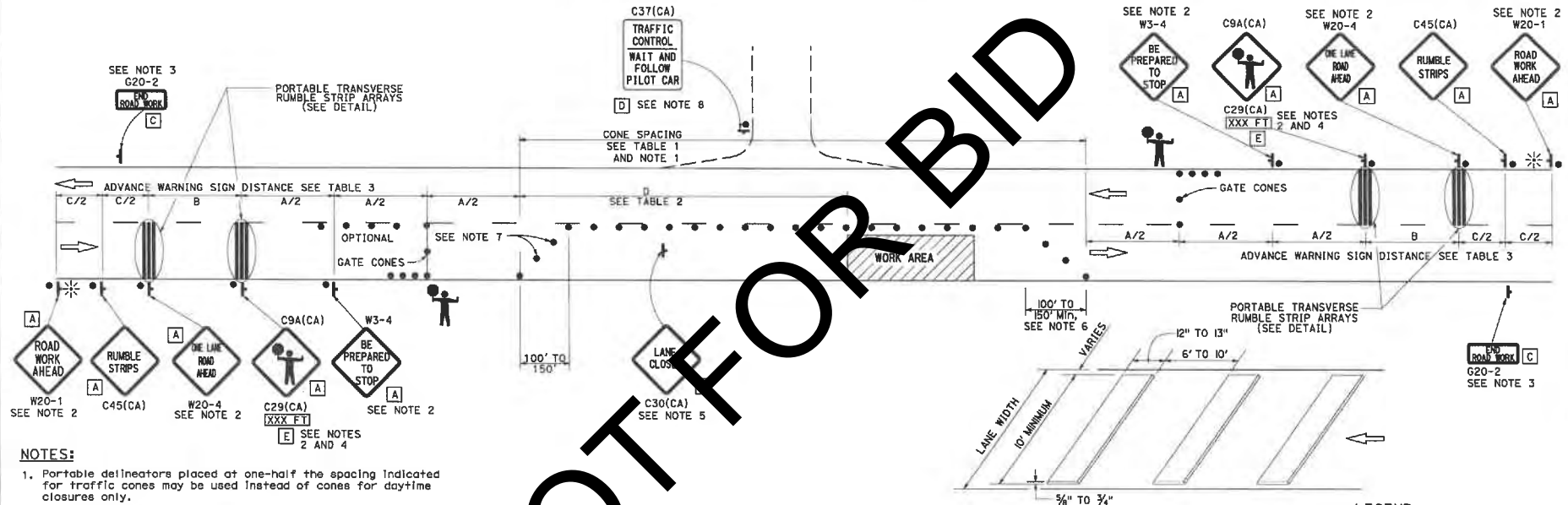
Provide at least one person to continuously maintain traffic control devices for lane closures.

DATE	COUNTY	ROUTE	POST MILES	SHEET TOTAL
			TOTAL PROJECT	NO. SHEETS

Registered Civil Engineer
 May 31, 2018
 PLANS APPROVAL DATE
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TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



NOTES:

- Portable delineators placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within the larger project's limits.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work area. They are optional if the work area is visible from the flagger station.
- Length may be reduced by the Engineer to address site conditions.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within the traffic control area.

PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL

SIGN PANEL SIZE (Min)

A	48" x 48"
B	30" x 30"
C	36" x 18"
D	36" x 42"
E	20" x 7"

LEGEND

- TRAFFIC CONE
- † TEMPORARY TRAFFIC CONTROL SIGN
- ★ PORTABLE FLASHING BEACON
- ⚠ FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

Figure 2A-2 (CA). Examples of Heights and Lateral Locations of Sign Installations

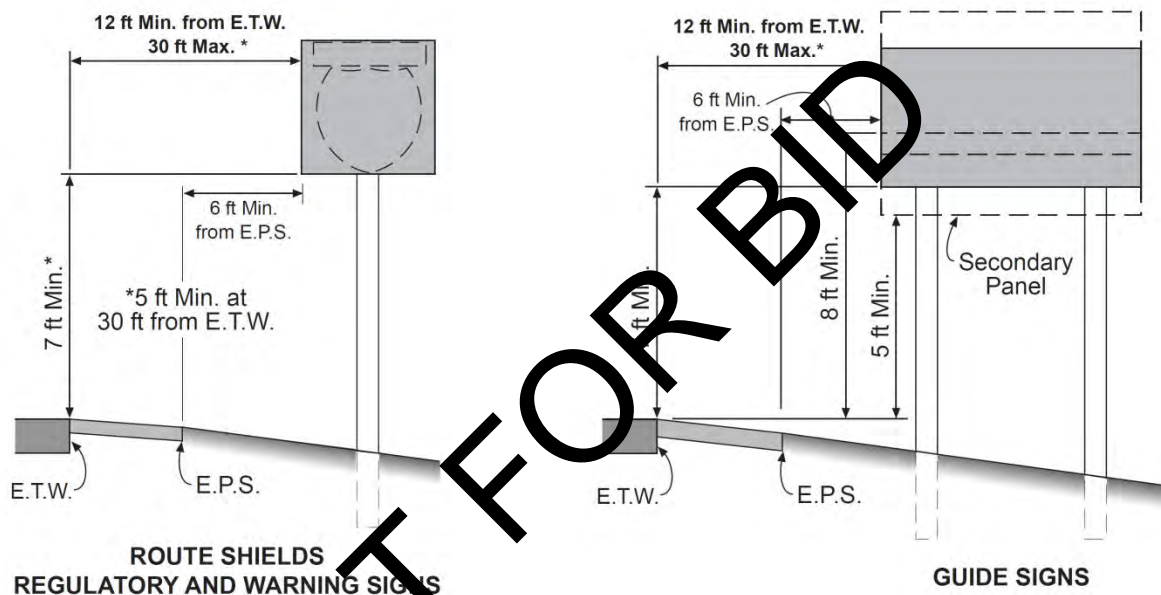
NOTES:

These sign positions are typical and should be considered a standard. When physical conditions require deviation from these typicals, they should be documented. When clear roadside recovery areas are provided, signs shall be placed as far from the traveled way as possible, up to 30 ft. When possible, they should be placed in protected locations.

Signs in medians shall be placed at midpoint of median, and should not be closer than 6 ft from the edge of a paved shoulder, or if none, 12 ft from the edge of the traveled way. When appropriate, signs for opposing directions shall be placed back to back.

E.T.W. = Edge of Traveled Way
E.P.S. = Edge of Paved Shoulder

FREEWAY AND EXPRESSWAY LOCATIONS



CONVENTIONAL HIGHWAYS AND INTERCHANGE AREAS

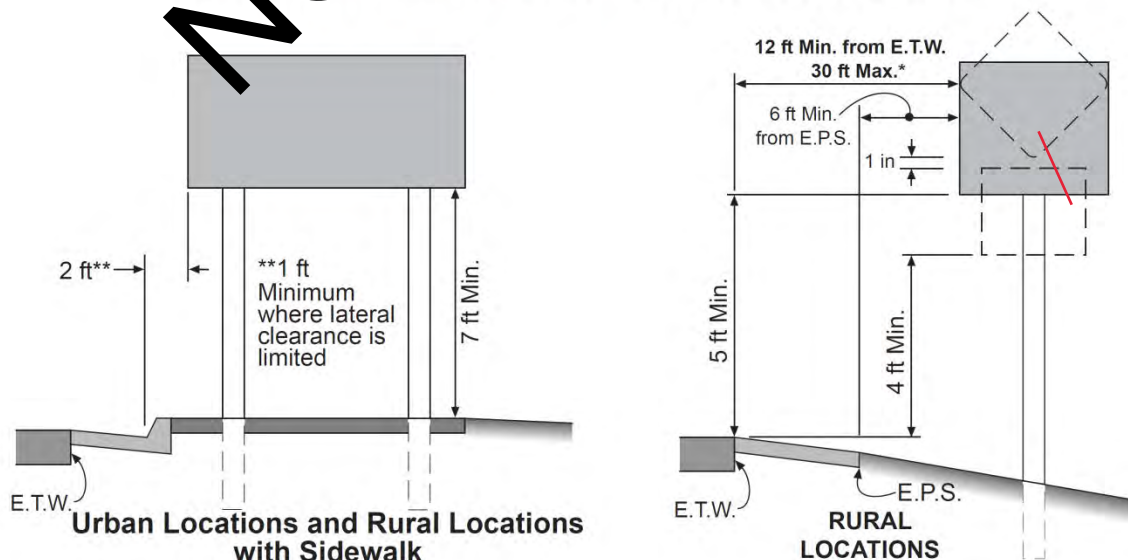
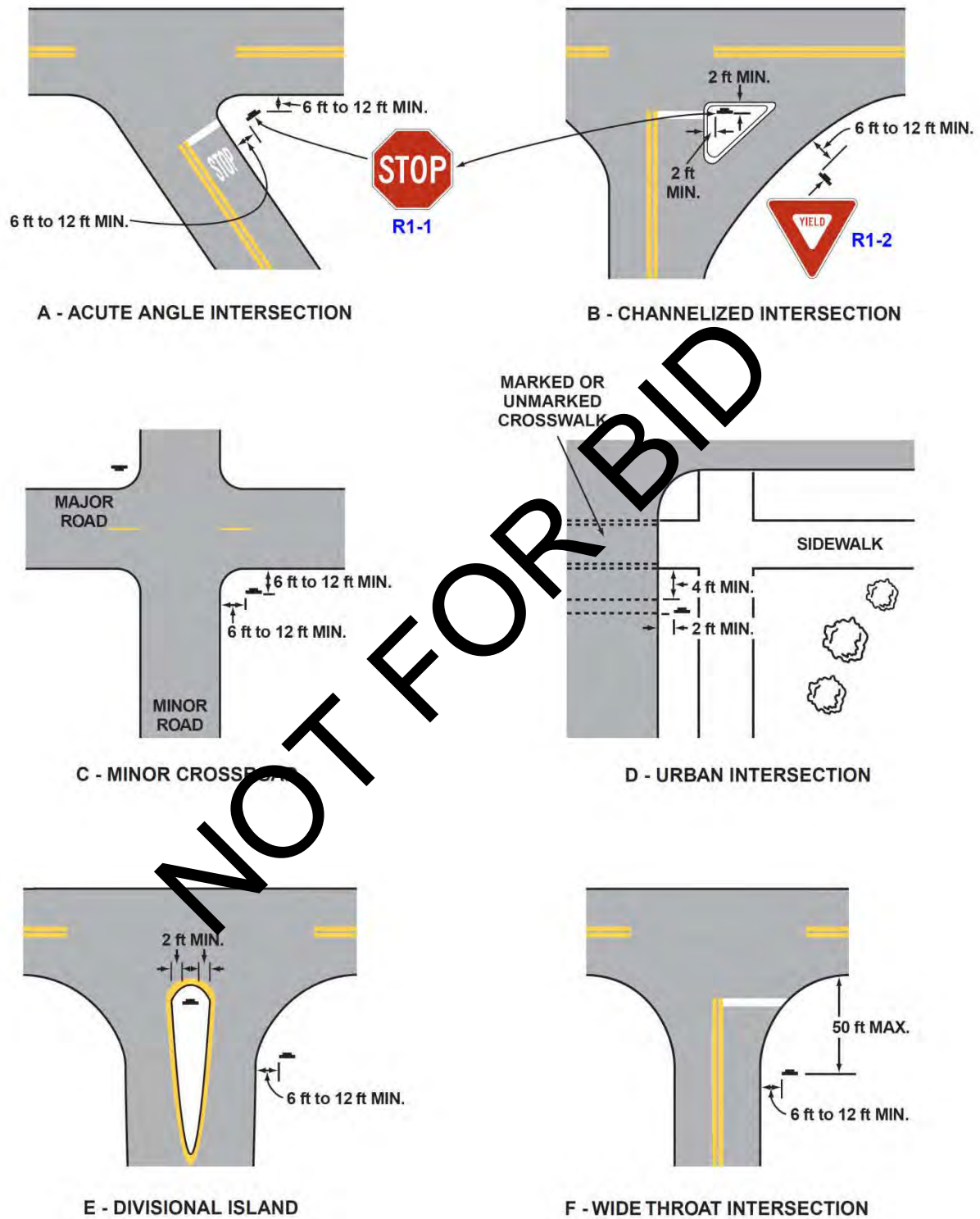


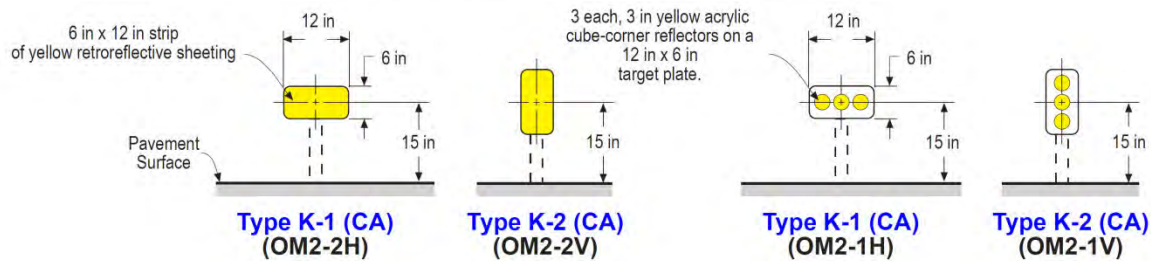
Figure 2A-3. Examples of Locations for Some Typical Signs at Intersections



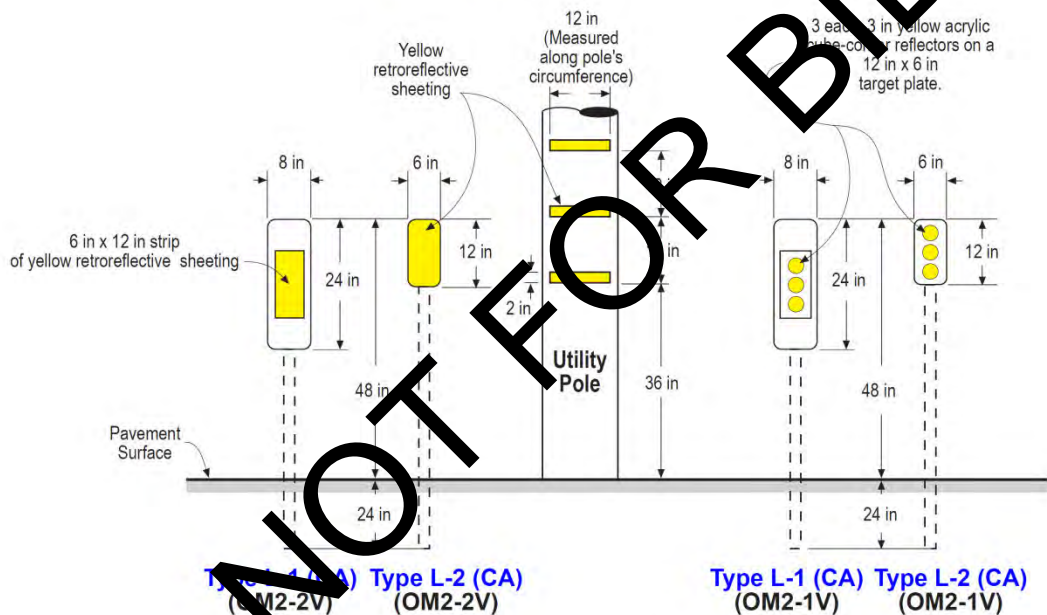
Note: Lateral offset is a minimum of 6 feet measured from the edge of the shoulder, or 12 feet measured from the edge of the traveled way. See Section 2A.19 for lower minimums that may be used in urban areas, or where lateral offset space is limited.

Figure 2C-13 (CA). California Object Markers (Sheet 1 of 2)

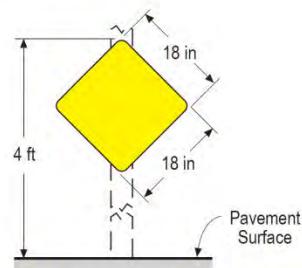
Type K (CA) Object Marker (Type 2)
(obstructions adjacent to the roadway)



Type L (CA) Object Marker (Type 2)
(obstructions adjacent to the roadway)



Type N (CA) Object Marker (Type 1 or Type 4)
(obstructions within the roadway or end of roadway)



Type N-1 (CA) (OM1-3), Type N-2 (CA) (OM4-3)

NOT TO SCALE

Type P (CA) Object Marker (Type 3)
(obstructions adjacent to the roadway)



Diagram illustrating the dimensions and materials for a vertical post-and-rail system:

- 0.75 in spacing at the top and between bands
- 3 each, 3 in bands or 1 each, 9 in band of yellow retroreflective sheeting
- 2.25 in Minimum Diameter
- 18 in - 24 in
- Pavement Surface

Type R (CA) Object Marker (Type 1)
(obstructions within the roadway)

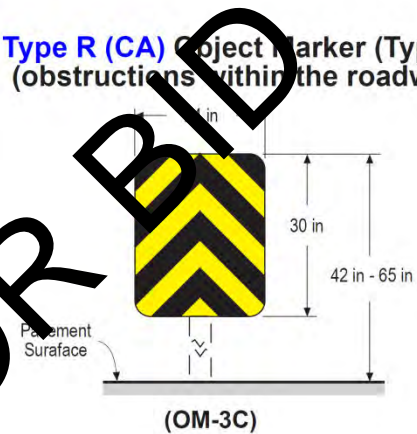
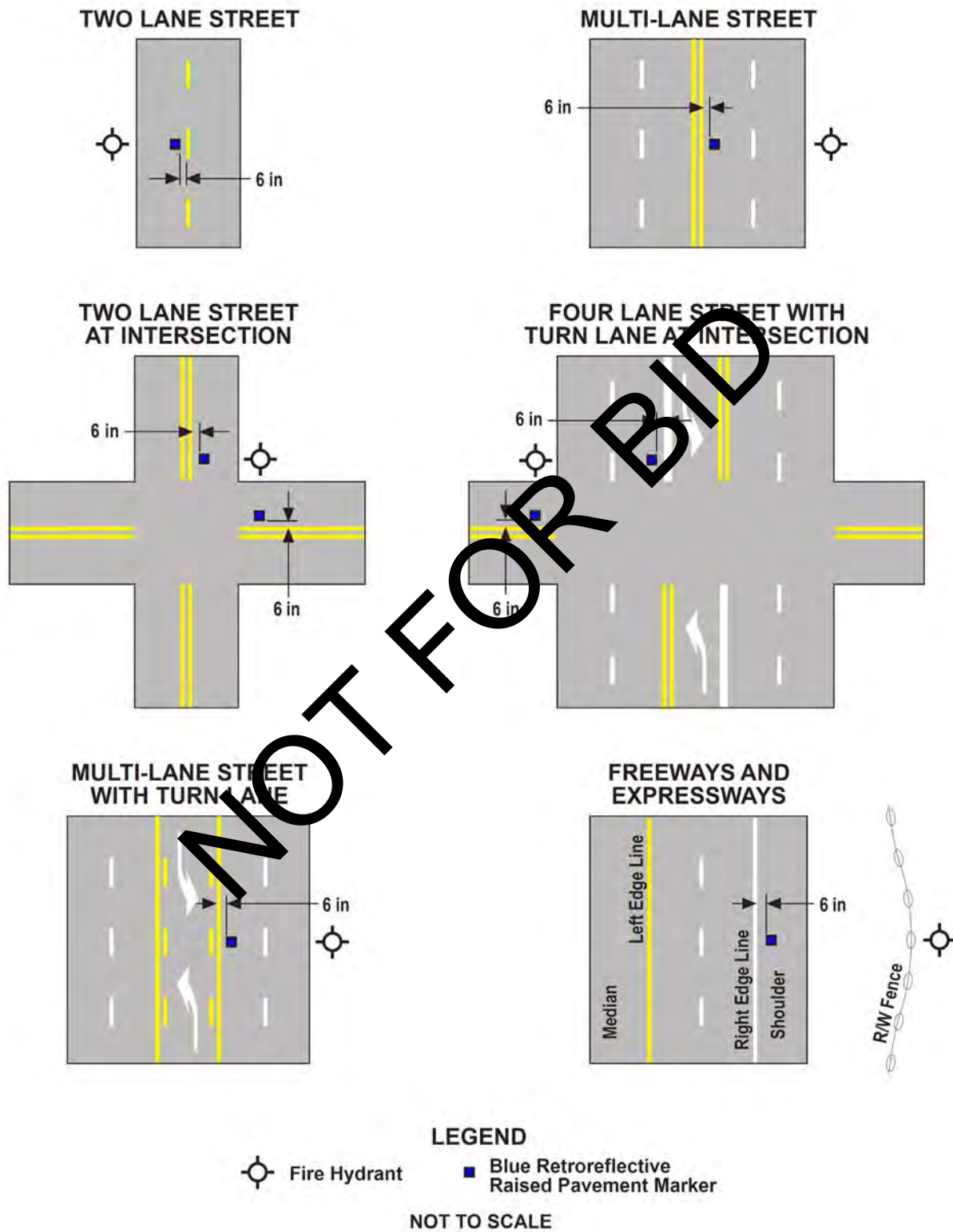


Figure 3B-102 (CA). Examples of Fire Hydrant Location Pavement Markers



CHAPTER 6D. PEDESTRIAN AND WORKER SAFETY

Section 6D.01 Pedestrian Considerations

Support:

⁰¹ A wide range of pedestrians might be affected by TTC zones, including the young, elderly, and people with disabilities such as hearing, visual, or mobility. These pedestrians need a clearly delineated and usable travel path. Considerations for pedestrians with disabilities are addressed in Section 6D.02.

Standard:

⁰² **The various TTC provisions for pedestrian and worker safety set forth in Part 6 shall be applied by knowledgeable (for example, trained and/or certified) persons after appropriate evaluation and engineering judgment.**

⁰³ **Advance notification of sidewalk closures shall be provided by the maintaining agency.**

⁰⁴ **If the TTC zone affects the movement of pedestrians, adequate pedestrian access and walkways shall be provided. If the TTC zone affects an accessible and detectable pedestrian facility, the accessibility and detectability shall be maintained along the alternate pedestrian route.**

Option:

⁰⁵ If establishing or maintaining an alternate pedestrian route is not feasible during the project, an alternate means of providing for pedestrians may be used, such as adding free bus service around the project or assigning someone the responsibility to assist pedestrians with disabilities through the project limits.

Support:

⁰⁶ It must be recognized that pedestrians are reluctant to retrace their steps to a prior intersection for a crossing or to add distance or out-of-the-way travel to a destination.

Guidance:

⁰⁷ *The following three items should be considered when planning for pedestrians in TTC zones:*

A. Pedestrians should not be led into conflicts with vehicles, equipment, and operations.

B. Pedestrians should not be led into conflicts with vehicles moving through or around the worksite.

C. Pedestrians should be provided with a convenient and accessible path that replicates as nearly as practical the most desirable characteristics of the existing sidewalk(s) or footpath(s).

⁰⁸ *A pedestrian route should not be shared and/or moved for non-construction activities such as parking for vehicles and equipment.*

⁰⁹ *Consideration should be made to separate pedestrian movements from both worksite activity and vehicular traffic. Unless an acceptable route that does not involve crossing the roadway can be provided, pedestrians should be appropriately directed with advance signing that encourages them to cross to the opposite side of the roadway. In urban and suburban areas with high vehicular traffic volumes, these signs should be placed at intersections (rather than midblock locations) so that pedestrians are not confronted with midblock worksites that will induce them to attempt skirting the worksite or making a midblock crossing.*

Support:

¹⁰ Figures 6H-28 and 6H-29 show typical TTC device usage and techniques for pedestrian movement through work zones.

Guidance:

¹¹ *To accommodate the needs of pedestrians, including those with disabilities, the following considerations should be addressed when temporary pedestrian pathways in TTC zones are designed or modified:*

A. Provisions for continuity of accessible paths for pedestrians should be incorporated into the TTC plan.

B. Access to transit stops should be maintained.

C. A smooth, continuous hard surface should be provided throughout the entire length of the temporary pedestrian facility. There should be no curbs or abrupt changes in grade or terrain that could cause tripping or be a barrier to wheelchair use. The geometry and alignment of the facility should meet the applicable requirements of the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" (see Section 1A.11).

D. The width of the existing pedestrian facility should be provided for the temporary facility if practical. Traffic control devices and other construction materials and features should not intrude into the usable width of the

sidewalk, temporary pathway, or other pedestrian facility. When it is not possible to maintain a minimum width of 60 inches throughout the entire length of the pedestrian pathway, a 60 x 60-inch passing space should be provided at least every 200 feet to allow individuals in wheelchairs to pass.

E. Blocked routes, alternate crossings, and sign and signal information should be communicated to pedestrians with visual disabilities by providing devices such as audible information devices, accessible pedestrian signals, or barriers and channelizing devices that are detectable to the pedestrians traveling with the aid of a long cane or who have low vision. Where pedestrian traffic is detoured to a TTC signal, engineering judgment should be used to determine if pedestrian signals or accessible pedestrian signals should be considered for crossings along an alternate route.

F. When channelization is used to delineate a pedestrian pathway, a continuous detectable edging should be provided throughout the length of the facility such that pedestrians using a long cane can follow it. These detectable edgings should comply with the provisions of Section 6F.74.

G. Signs and other devices mounted lower than 7 feet above the temporary pedestrian pathway should not project more than 4 inches into accessible pedestrian facilities.

Option:

12 Whenever it is feasible, closing off the worksite from pedestrian intrusion may be preferable to channelizing pedestrian traffic along the site with TTC devices.

Guidance:

13 Fencing should not create sight distance restrictions for road users. Fences should not be constructed of materials that would be hazardous if impacted by vehicles. Wooden railing fencing, and similar systems placed immediately adjacent to motor vehicle traffic should not be used as substitutes for crashworthy temporary traffic barriers.

14 Ballast for TTC devices should be kept to the minimum amount needed and should be mounted low to prevent penetration of the vehicle windshield.

15 Movement by work vehicles and equipment across designated pedestrian paths should be minimized and, when necessary, should be controlled by flaggers or TTC. Staging or stopping of work vehicles or equipment along the side of pedestrian paths should be avoided, since it encourages movement of workers, equipment, and materials across the pedestrian path.

16 Access to the work space by workers and equipment across pedestrian walkways should be minimized because the access often creates unacceptable changes in grade, and rough or muddy terrain, and pedestrians will tend to avoid these areas by attempting non-intersection crossings where no curb ramps are available.

Option:

17 A canopied walkway may be used to protect pedestrians from falling debris, and to provide a covered passage for pedestrians.

Guidance:

18 Covered walkways should be durably constructed and adequately lighted for nighttime use.

19 When pedestrian and vehicle paths are rerouted to a closer proximity to each other, consideration should be given to separating them by a temporary traffic barrier.

20 If a temporary traffic barrier is used to shield pedestrians, it should be designed to accommodate site conditions.

Support:

21 Depending on the possible vehicular speed and angle of impact, temporary traffic barriers might deflect upon impact by an errant vehicle. Guidance for locating and designing temporary traffic barriers can be found in Chapter 9 of AASHTO's "Roadside Design Guide" (see Section 1A.11).

Standard:

22 **Short intermittent segments of temporary traffic barrier shall not be used because they nullify the containment and redirective capabilities of the temporary traffic barrier, increase the potential for serious injury both to vehicle occupants and pedestrians, and encourage the presence of blunt, leading ends. All upstream leading ends that are present shall be appropriately flared or protected with properly installed and maintained crashworthy cushions. Adjacent temporary traffic barrier segments shall be properly connected in order to provide the overall strength required for the temporary traffic barrier to perform properly.**

23 Normal vertical curbing shall not be used as a substitute for temporary traffic barriers when temporary traffic barriers are needed.

Option:

24 Temporary traffic barriers or longitudinal channelizing devices may be used to discourage pedestrians from unauthorized movements into the work space. They may also be used to inhibit conflicts with vehicular traffic by minimizing the possibility of midblock crossings.

Support:

25 A major concern for pedestrians is urban and suburban building construction encroaching onto the contiguous sidewalks, which forces pedestrians off the curb into direct conflict with moving vehicles.

Guidance:

26 *If a significant potential exists for vehicle incursions into the pedestrian path, pedestrians should be rerouted or temporary traffic barriers should be installed.*

Support:

27 TTC devices, jersey barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.

Guidance:

28 *Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)" (see Section 1A.11), and should not be used as a control for pedestrian movements.*

29 *In general, pedestrian routes should be preserved in urban and suburban areas. Alternative routing should be discouraged.*

30 *The highway agency in charge of the TTC zone should regularly inspect the activity area so that effective pedestrian TTC is maintained.*

Support:

31 Other laws and requirements are unique to California and need to be followed when providing pedestrian access through or around TTC zones.

32 Additional information on this topic can be found in publication titled "Pedestrian Considerations for California Temporary Traffic Control Zones on Caltrans' following web link:
<http://dot.ca.gov/hq/traffops/engineering/control-devices/pdf/PedBrochure.pdf>

Section 6D.02 Accessibility Considerations

Support:

01 Additional information on the design and construction of accessible temporary facilities is found in publications listed in Section 1A.11 (see Publications 12, 38, 39, and 42).

Guidance:

02 *The extent of pedestrian needs should be determined through engineering judgment or by the individual responsible for each TTC zone situation. Adequate provisions should be made for pedestrians with disabilities.*

Standard:

03 **When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Where pedestrians with visual disabilities normally use the closed sidewalk, a barrier that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk.**

Support:

04 Maintaining a detectable, channelized pedestrian route is much more useful to pedestrians who have visual disabilities than closing a walkway and providing audible directions to an alternate route involving additional crossings and a return to the original route. Braille is not useful in conveying such information because it is difficult to find. Audible instructions might be provided, but the extra distance and additional street crossings might add complexity to a trip.

Guidance:

05 *Because printed signs and surface delineation are not usable by pedestrians with visual disabilities, blocked routes, alternate crossings, and sign and signal information should be communicated to pedestrians with visual*

disabilities by providing audible information devices, accessible pedestrian signals, and barriers and channelizing devices that are detectable to pedestrians traveling with the aid of a long cane or who have low vision.

Support:

06 The most desirable way to provide information to pedestrians with visual disabilities that is equivalent to visual signing for notification of sidewalk closures is a speech message provided by an audible information device. Devices that provide speech messages in response to passive pedestrian actuation are the most desirable. Other devices that continuously emit a message, or that emit a message in response to use of a pushbutton, are also acceptable. Signing information can also be transmitted to personal receivers, but currently such receivers are not likely to be carried or used by pedestrians with visual disabilities in TTC zones. Audible information devices might not be needed if detectable channelizing devices make an alternate route of travel evident to pedestrians with visual disabilities.

Guidance:

07 If a pushbutton is used to provide equivalent TTC information to pedestrians with visual disabilities, the pushbutton should be equipped with a locator tone to notify pedestrians with visual disabilities that a special accommodation is available, and to help them locate the pushbutton.

Section 6D.03 Worker Safety Considerations

Support:

01 Equally as important as the safety of road users traveling through the TTC zone is the safety of workers. TTC zones present temporary and constantly changing conditions that are unexpected by the road user. This creates an even higher degree of vulnerability for workers on or near the roadway.

02 Maintaining TTC zones with road user flow inhibited as little as possible, and using TTC devices that get the road user's attention and provide positive direction are of particular importance. Likewise, equipment and vehicles moving within the activity area create a risk to workers on foot. When possible, the separation of moving equipment and construction vehicles from workers on foot provides the operator of these vehicles with a greater separation clearance and improved sight lines to minimize exposure to the hazards of moving vehicles and equipment.

Guidance:

03 The following are the key elements of worker safety and TTC management that should be considered to improve worker safety:

- A. Training—all workers should be trained on how to work next to motor vehicle traffic in a way that minimizes their vulnerability. Workers having specific TTC responsibilities should be trained in TTC techniques, device usage, and placement.*
- B. Temporary Traffic Barriers—temporary traffic barriers should be placed along the work space depending on factors such as lateral clearance of workers from adjacent traffic, speed of traffic, duration and type of operations, time of day, and volume of traffic.*
- C. Speed Reduction—reducing the speed of vehicular traffic, mainly through regulatory speed zoning, funneling, lane reduction, or the use of uniformed law enforcement officers or flaggers, should be considered. The use of regulatory speed zone signing tends to be more effective when law enforcement is present. Refer to Section 6C.01.*
- D. Activity Area—planning the internal work activity area to minimize backing-up maneuvers of construction vehicles should be considered to minimize the exposure to risk.*
- E. Worker Safety Planning—a trained person designated by the employer should conduct a basic hazard assessment for the worksite and job classifications required in the activity area. This safety professional should determine whether engineering, administrative, or personal protection measures should be implemented. This plan should be in accordance with the Occupational Safety and Health Act of 1970, as amended, "General Duty Clause" Section 5(a)(1) - Public Law 91-596, 84 Stat. 1590, December 29, 1970, as amended, and with the requirement to assess worker risk exposures for each job site and job classification, as per 29 CFR 1926.20 (b)(2) of "Occupational Safety and Health Administration Regulations, General Safety and Health Provisions" (see Section 1A.11).*

Notes for Figure 6H-28—Typical Application 28 Sidewalk Detour or Diversion

Standard:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

Guidance:

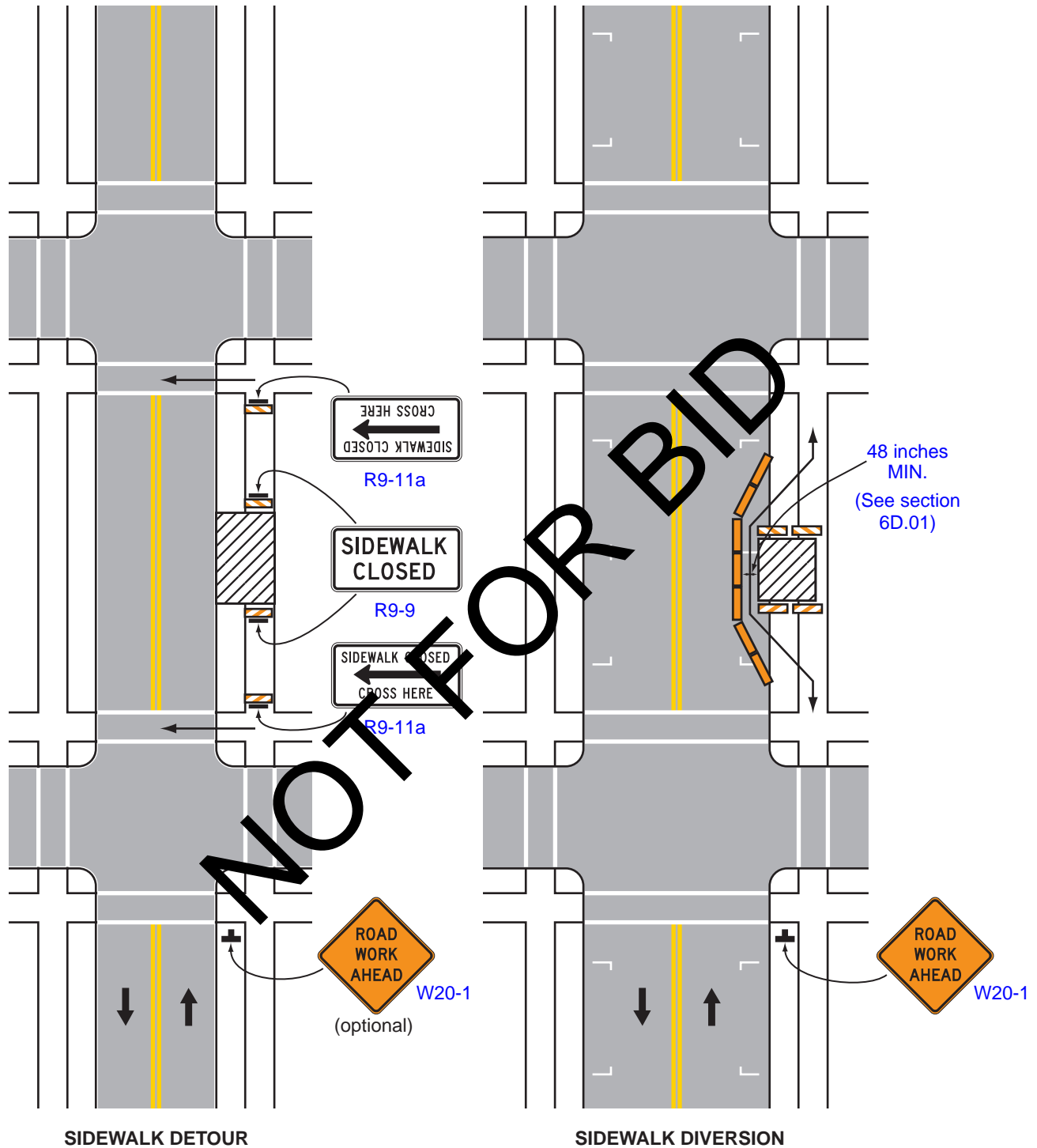
2. Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should be used to separate the temporary sidewalks from vehicular traffic.
3. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.

Option:

4. Street lighting may be considered.
5. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control vehicular traffic.
6. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.
7. Type C Steady-Burn or Type D 360-degree Steady-Burn warning lights may be used on channelizing devices separating the temporary sidewalks from vehicular traffic flow.
8. Signs, such as KEEP RIGHT (LEFT), may be placed along a temporary sidewalk to guide or direct pedestrians.

NOT FOR BID

Figure 6H-28. Sidewalk Detour or Diversion (TA-28)



Typical Application 28

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Notes for Figure 6H-29—Typical Application 29 Crosswalk Closures and Pedestrian Detours

Standard:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
2. ~~Curb parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.~~

Guidance:

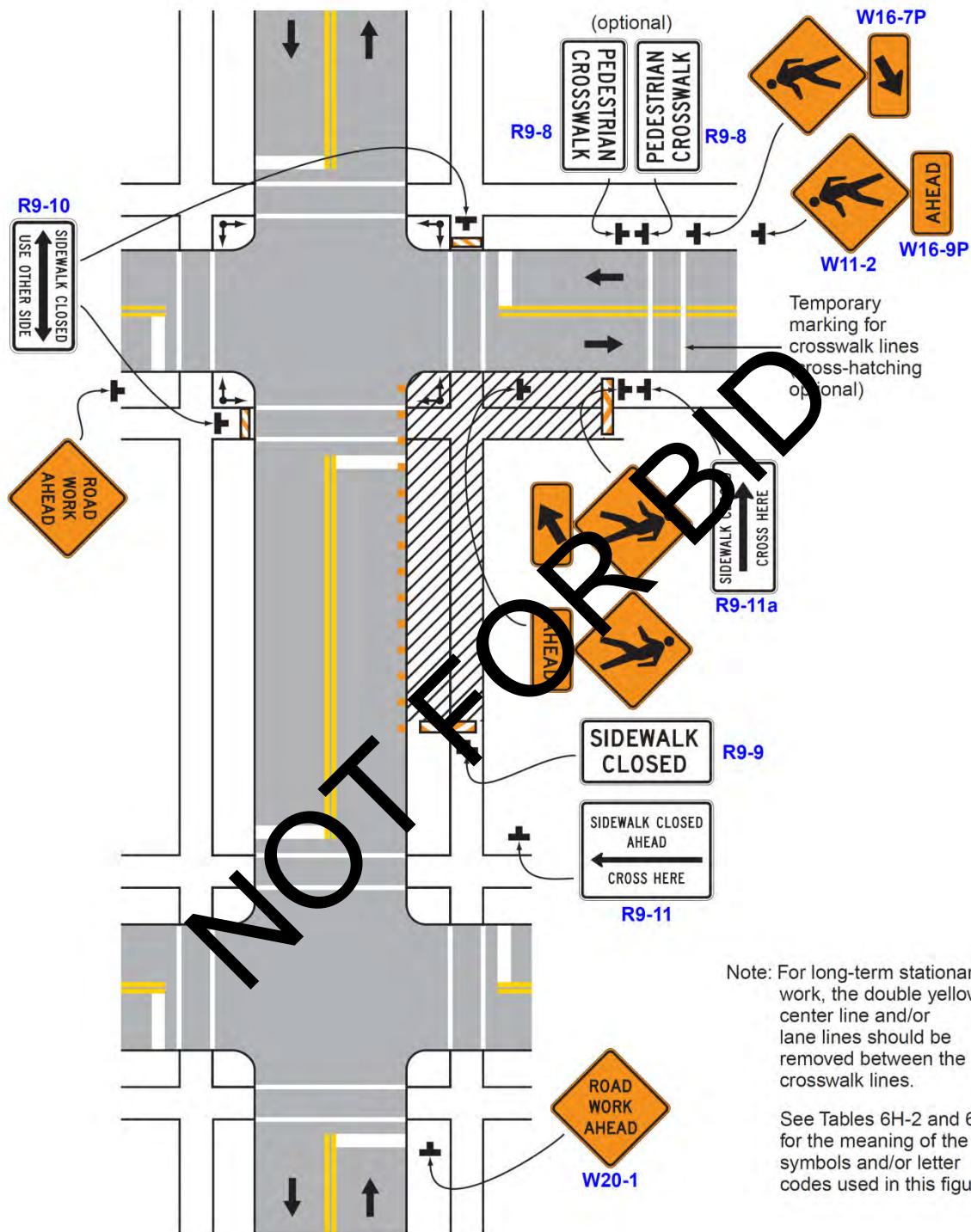
2. *Parking should be prohibited in advance of mid-block crosswalks. Mid-block crosswalks should be avoided, when possible. See Section 3B.18.*
3. *Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.*
4. *Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.*

Option:

5. Street lighting may be considered.
6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control vehicular traffic.
7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and closing sidewalks.
8. Type C Steady-Burn or Type D 360-degree Steady-Burn warning lights may be used on channelizing devices separating the work space from vehicular traffic.
9. In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.

NOT FOR BID

Figure 6H-29. Crosswalk Closures and Pedestrian Detours (TA-29)



Typical Application 29

BIDDER: _____

PROPOSAL

**TO THE BOARD OF SUPERVISORS
OF THE SAN BERNARDINO COUNTY
STATE OF CALIFORNIA**

For Construction On

**LINDEN AVENUE AND OTHER ROADS
Various Limits**

**LENGTH: 1.08 Miles
WORK ORDER: TX1796
AREA: Rialto
ROAD NO.: Various (See Plan)**

NOTICE: BIDDERS MUST OBTAIN BIDDING DOCUMENTS AND PREPARE THEIR BIDS ON FORMS OBTAINED DIRECTLY FROM THE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS OR FROM THE SAN BERNARDINO COUNTY ELECTRONIC PROCUREMENT NETWORK (ePRO) <https://epro.sbcounty.gov/epro/>. BIDS PREPARED ON FORMS OBTAINED FROM OTHER SOURCES WILL NOT BE ACCEPTED. BIDDERS MUST BE LISTED ON THE OFFICIAL PLAN HOLDERS LIST AT THE TIME BIDS ARE PUBLICLY OPENED. BIDS RECEIVED FROM BIDDERS WHO ARE NOT LISTED ON THE OFFICIAL PLAN HOLDERS LIST WILL NOT BE ACCEPTED.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein, that this proposal is made without collusion with any other person, firm, or corporation, that bidder has carefully examined the location of the proposed work, the proposed form of contract, and the plans and specifications therein referred to; and bidder proposes and agrees if this proposal is accepted, that bidder will contract with the San Bernardino County, in the form of the copy of the contract to provide all necessary machinery, tools, apparatus and other means of construction, and to do all work and furnish all the materials specified in the contract, in the manner and in the time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that bidder will take in full payment therefore the following prices, to wit:

PROPOSAL CHECKLIST AND ASSEMBLY SEQUENCE

IMPORTANT

Failure to Properly Complete Bid Package May Result in Rejection of Bid

1

Proposal – Assemble all pages in same numbering sequence as original.

- ☐ Replacement Bid Sheets from Addendum are substituted in sequence, if applicable.
- ☐ Unit Prices are entered for all bid items (or Alternate bid items).
- ☐ Corrections or changes to the bid document are initialed.
- ☐ Subcontractors, if any, are listed
- ☐ Public Contract Code Section 10285.1 Statement is executed
- ☐ Public Contract Code Section 10162 Questionnaire is completed
- ☐ Noncollusion Declaration is executed and submitted with bid.
- ☐ Bidder Information is completed and correct.
- ☐ Proposal is complete and signed by authorized company representative.

2

Addendums, if any, are acknowledged. (Normally sent by facsimile and mail)

- ☐ "Bidder's Certification" (Just the Certification page) are executed and attached.

3

Bidder's Security.

- ☐ 10% of Bid Amount in Cash, Cashier's Check, Certified Check or Bidder's Bond.
- ☐ If Bidder's Bond, surety Signature is notarized.
- ☐ If Bidder's Bond, surety power of attorney is attached.

4

ePRO.

- ☐ Registered as a Vendor in the ePro System prior to date and time to receive bid.
- ☐ If submitting bid through ePro, original Bid Security submitted in a separate sealed envelope labeled "Bid Bond" with the title of the work and name of bidder marked on outside of envelope to the Department of Public Works, Front Reception. Must be received on or before the time set for the opening of bids.
- ☐ If submitting a bid through ePro, Scan and attach to your quote the Fully Executed Proposal Documents (pages P-1 thru P-14).
- ☐ If submitting a bid through ePro, Scan and attach to your quote the Fully Executed Certification Page for ALL Addendums.

5

REGISTERED WITH THE DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) (SENATE BILL 854).

DIR Registration Number identified for Bidder and all subcontractors.

Bidder: _____

Project: **LINDEN AVENUE AND OTHER ROADS**

W.O.#: **TX1796**

Limits: **Various Limits**

Item No.	Approx. Quant.	Meas. Unit	Item Description	Unit Price	Total
1	50,000	FA	Supplemental Work at Forced Account (Unforeseen Utility Conflict and Subgrade Stabilization)	\$ 1.00	\$ 50,000.00
2	1	L.S.	Water Pollution Control Program	\$	\$
3	1	L.S.	Mobilization	\$	\$
4	1	L.S.	Traffic Control System	\$	\$
5	6	EA.	Portable Changeable Message Sign	\$	\$
6	23	L.F.	Remove Chain Link Fence (At 6399 Fillmore Avenue)	\$	\$
7	27	L.F.	Remove Wood Fence (At 6399 Fillmore Avenue)	\$	\$
8	27	L.F.	Remove Block Wall (At 6399 Fillmore Avenue)	\$	\$
9	1	L.S.	Temporary Chain Link Fence and Gate	\$	\$
10	38	L.F.	Remove Asphalt Concrete Dike	\$	\$
11	4,600	S.Y.	Remove Asphalt Concrete Surfacing	\$	\$
12	2	EA.	Reset Roadside Sign	\$	\$
13	3	EA.	Relocate Mailbox	\$	\$
14	440	S.Y.	Cold Plane Asphalt Concrete Pavement	\$	\$
15	13,000	S.Y.	Micro Milling	\$	\$
16	150	TON	Micro-Surfacing (Type II)	\$	\$
17	13,000	S.Y.	Scrub Seal	\$	\$
18	290	S.Y.	Remove Concrete (Sidewalk, Spandrel, Cross Gutter and Ramp)	\$	\$
19	200	L.F.	Remove Concrete (Curb and Gutter)	\$	\$
20	1	L.S.	Clearing and Grubbing	\$	\$
21	1	L.S.	Develop Water Supply	\$	\$
22	790	C.Y.	Roadway Excavation	\$	\$
23	9	S.Y.	Grouted Rock Treatment	\$	\$
24	1	L.S.	Modify Irrigation System	\$	\$
25	1	L.S.	Remove and Relocate Landscape Rocks	\$	\$
26	1	L.S.	Finishing Roadway	\$	\$
27	535	C.Y.	Class 2 Aggregate Base	\$	\$
28	1,800	TON	Asphalt Concrete (Type A, 3/4" Maximum Grading, PG 70-10)	\$	\$
29	89	TON	Asphalt Concrete (Leveling) - (Type A, 3/8" Maximum Grading, PG 64-10)	\$	\$
30	170	TON	Rubberized Asphalt Concrete (Type G, 1/2" Maximum Grading, PG 64-16)	\$	\$

Bidder: _____

Project: **LINDEN AVENUE AND OTHER ROADS**

W.O.#: **TX1796**

Limits: **Various Limits**

Item No.	Approx. Quant.	Meas. Unit	Item Description	Unit Price	Total
31	1,350	S.Y.	Glass Pave 50	\$	\$
32	38	L.F.	Place 8" Asphalt Concrete Dike	\$	\$
33	52	S.Y.	Place Asphalt Concrete (Miscellaneous Area)	\$	\$
34	105	C.Y.	Minor Concrete (Curb and Gutter, Sidewalk, Ramp, Cross Gutter, Spandrel and Driveway)	\$	\$
35	78	S.F.	ADA Detectable Warning Surface	\$	\$
36	1	L.S.	Install Block Wall In Kind (At 6399 Fillmore Avenue)	\$	\$
37	1	L.S.	Install Wood Fence In Kind (At 6399 Fillmore Avenue)	\$	\$
38	1	EA.	Object Marker Type L-1 (CA)(OM2-2V)	\$	\$
39	1,607	L.F.	Paint 6" Double Yellow Traffic Stripe (2-Coat)	\$	\$
40	1,156	L.F.	Paint 6" Traffic Stripe (2-Coat)	\$	\$
41	852	S.F.	Paint Pavement Marking (2-Coat)	\$	\$
42	3	EA.	Pavement Markers (Retroreflective-Blue)	\$	\$
43	100	EA.	Pavement Markers (Retroreflective Type D and G)	\$	\$

PROJECT TOTAL: \$

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items.

The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Total" column shall be the extension of the unit price bid on the basis of the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, however, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, then the amount set forth in the "Total" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained, rounded to the next lower penny, shall be the unit price.

If this proposal shall be accepted, the contract shall be signed by the successful bidder and returned within 10 days, and the contract bonds, copy of insurance policies, and Certificates of Insurance, with documents to verify any self-insurance coverage shall be provided within 10 days, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution. Should the undersigned fail to contract as aforesaid, the Board of Supervisors may, at its option, determine that the bidder has abandoned the contract, and, thereupon, this proposal and the acceptance thereof shall be null and void, and the forfeiture of such security accompanying this proposal shall operate and the same may be the property of the San Bernardino County.

NOT FOR BID

**NOTE: THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE PROPOSAL
BIDDER**

The bidder shall complete the following information as required by the Subletting and Subcontracting Fair Practices Act, Public Contract Code section 4100 et seq.

Note: Subcontractors must be licensed and registered with the DIR (with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)) at the time of the bid opening.

Information marked with ** is required. (Make additional copies of this form if needed)

SUBCONTRACTORS LIST

Name: ** Fed. ID: Item(s) #: **

Business Location: ** % (s):

Telephone: () Amount: \$

License #: ** Description of Work: **

DIR Registration #: **

Name: ** Fed. ID: Item(s) #: **

Business Location: ** % (s):

Telephone: () Amount: \$

License #: ** Description of Work: **

DIR Registration #: **

Name: ** Fed. ID: Item(s) #: **

Business Location: ** % (s):

Telephone: () Amount: \$

License #: ** Description of Work: **

DIR Registration #: **

Name: ** Fed. ID: Item(s) #: **

Business Location: ** % (s):

Telephone: () Amount: \$

License #: ** Description of Work: **

DIR Registration #: **

NOTE: THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE PROPOSAL

PUBLIC CONTRACT CODE SECTION 10232 STATEMENT

In accordance with Public Contract Code section 10232, the Contractor hereby states, under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In accordance with Public Contract Code section 10285.1, the bidder hereby declares under penalty of perjury that the bidder

has ☐ Check One has not ☐

been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code section 1101, with any public entity, as defined in Public Contract Code section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided.

The above Statements are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of these Statements.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

NOTE: THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE PROPOSAL

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In accordance with Public Contract Code section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes

Check One

No

If the answer is yes, explain the circumstances in the following space.

NOT FOR

NOTE: The above Questionnaire is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Questionnaire.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

PUBLIC CONTRACT CODE
SECTIONS 9204, 20104, 20104.2, 20104.4, 20104.6, AND 20104.50
RESOLUTION OF CONSTRUCTION CLAIMS AND PROMPT PAYMENT

9204

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The

public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute

resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2020, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2020, deletes or extends that date.

20104.

(a)(1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and a local agency.

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b)(1) "Public work" means "public works contract" as defined in Section 1101 but does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) "Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

20104.2 For any claim subject to this article, the following requirements apply:

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

(b)(1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 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.

(c)(1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 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 documentation, whichever is greater.

(d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency'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 local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in 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 Government Code. For 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 subdivision (a) 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.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by 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 Government Code.

20104.4 The following procedures are established for all civil actions filed to resolve claims subject to this article:

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the

submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b)(1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act (Title 4 (commencing with Section 2016.10) of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

20104.6

(a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

ARTICLE 1.7

Modification; Performance, Payment

20104.50

(a) (1) It is the intent of the Legislature in enacting this section to require all local governments to pay their contractors on time so that these contractors can meet their own obligations. In requiring prompt payment by all local governments, the Legislature hereby finds and declares that the prompt payment of outstanding receipts is not merely a municipal affair, but is, instead, a matter of statewide concern.

(2) It is the intent of the Legislature in enacting this article to fully occupy the field of public policy relating to the prompt payment of local governments' outstanding receipts. The Legislature finds and declares that all government officials, including those in local government, must set a standard of prompt payment that any business in the private sector which may contract for services should look towards for guidance.

(b) Any local agency which fails to make any progress payment within 30 days after receipt of an undisputed and properly submitted payment request from a contractor on a construction contract shall pay interest to the contractor equivalent to the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure.

(c) Upon receipt of a payment request, each local agency shall act in accordance with both of the following:

(1) Each payment request shall be reviewed by the local agency as soon as practicable after receipt for the purpose of determining that the payment request is a proper payment request.

(2) Any payment request determined not to be a proper payment request suitable for payment shall be returned to the contractor as soon as practicable, but not later than seven days, after receipt. A request returned pursuant to this paragraph shall be accompanied by a document setting forth in writing the reasons why the payment request is not proper.

(d) The number of days available to a local agency to make a payment without incurring interest pursuant to this section shall be reduced by the number of days by which a local agency exceeds the seven-day return requirement set forth in paragraph (2) of subdivision (c).

(e) For purposes of this article:

(1) A "local agency" includes, but is not limited to, a city, including a charter city, a county, and a city and county, and is any public entity subject to this part.

(2) A "progress payment" includes all payments due contractors, except that portion of the final payment designated by the contract as retention earnings.

(3) A payment request shall be considered properly executed if funds are available for payment of the payment request, and payment is not delayed due to an audit inquiry by the financial officer of the local agency.

(f) Each local agency shall require that this article, or a summary thereof, be set forth in the terms of any contract subject to this article.

NOTE: THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE PROPOSAL

**NONCOLLUSION DECLARATION
TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID**

(Public Contract Code section 7106)

The undersigned declares:

I am the _____ [title] of _____
[name of the bidder], the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on

_____ [date], _____ [city], _____ [state].

Print Name

Signature - REQUIRED

NOTE: The above Noncollusion Declaration is part of the Bid, and failure to include the Noncollusion Declaration with the Bid will result in the Bid being found nonresponsive.

Bidders are reminded that this declaration must be signed under penalty of perjury.

If the bid proposal is submitted through ePro the undersigned acknowledges that its electronic signature is legally binding.

IRAN CONTRACTING ACT OF 2010
(Public Contract Code section 2200 et seq.)

(Applicable only to Contracts of One Million Dollars (\$1,000,000) or More):

In accordance with Public Contract Code section 2204 (a), the bidder certifies that at the time the bid is submitted or the contract is renewed, that bidder is not identified on a list created pursuant to subdivision (b) of Public Contract Code section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code section 2202.5, or as a person described in subdivision (b) of Public Contract Code section 2202.5, as applicable. A state agency shall submit the certification information to the Department of General Services.

NOTE: The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

Bidders are cautioned that making a false certification may subject bidder to civil penalties, termination of existing contract, and ineligibility to bid on a contract for a period of three (3) years in accordance with Public Contract Code section 2205.

NOT FOR BID

NOTE: THIS FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE PROPOSAL

Accompanying this proposal is _____

in the amount equal to at least ten percent of the total of the bid.

(Note: Insert the words "CASH (\$)," "CASHIER'S CHECK," "CERTIFIED CHECK," or "BIDDER'S BOND," as the case may be.)

The names of all persons interested in the foregoing proposal as principals are as follows:

NOTICE: If the bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state true name of firm, also names of all individual co-partners composing firm; if bidder or other interested person is an individual, state first and last names in full.

Licensed in accordance with an act providing for the registration of Contractors,

License No.: _____ Expiration Date: _____

Dept. of Industrial Relations Reg. No: _____ Federal Identification No.: _____

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing documents are true and correct and that the bidder satisfies all of the requirements identified in said documents.

If the bid proposal is submitted through eProc the undersigned acknowledges that its electronic signature is legally binding.

<u>Print Name</u>	<u>Signature - REQUIRED</u>	<u>Title</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Date: _____

Name of Bidder _____

Business Address _____

Place of Business _____

Business Phone No. _____ Business Fax No. _____

Place of Residence _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, _____

_____, as Principal, (hereinafter called the "Principal"),
and _____, as Surety, (hereinafter called "Surety"),
an admitted Surety insurer pursuant to Code of Civil Procedure, Section 995.120, legally doing business in California at:

_____ are held and firmly bound unto the **SAN BERNARDINO COUNTY**, as Obligee, (hereinafter called "**Obligee**"), in the sum of _____ Dollars (\$ _____),

for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents.

WHEREAS, the Principal has submitted a bid for:

PROJECT TITLE: LINDEN AVENUE AND OTHER ROADS, PROJECT LIMITS: VARIOUS LIMITS; W. O. NO.: TX1796

BID DATE: _____

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of said proposal and give such bonds as may be specified in the bidding or contract documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this _____ day of _____, _____ Year

Principal

Surety

By: _____
Signature

By: _____
Signature, Attorney-in-Fact

Printed Name

Printed Name

Title



Contract Number

SAP Number

PUBLIC WORKS

Department Contract Representative
Telephone Number

Contractor
Contractor Representative
Telephone Number
Contract Term
Original Contract Amount
Amendment Amount
Total Contract Amount
Cost Center

IT IS HEREBY AGREED AS FOLLOWS:

(Use space below and additional bond sheets. Set forth service to be rendered, amount to be paid, manner of payment, time for performance or completion, determination of satisfactory performance and cause for termination, other terms and conditions, and attach plans, specifications, and addenda, if any.)

ARTICLE I. That for and in consideration of payment and agreements hereinafter mentioned to be made and performed by County, and under the conditions expressed in the two bonds, hereunto annexed, Contractor agrees with County, at Contractor's own proper cost and expense to do all the work and to furnish all the materials necessary to construct and complete in a good, workmanlike and substantial manner, this project to the satisfaction of the Director of Public Works in accordance with the following documents, which are incorporated herein by this reference, and the articles set out below:

Plans entitled: Plans for Construction on LINDEN AVENUE AND OTHER ROADS Various Limits, Rialto area, Work Order No.: TX1796, Road No.: Various (See Plan).

California Department of Transportation (Caltrans) 2015 Standard Specifications including the Caltrans 2015 Revised Standard Specifications (Revisions through July 21, 2017) and the 2018 Standard Plans (Revisions through October 15, 2021), unless specified otherwise in the contract documents.

Special Provisions entitled: Special Provisions for Construction on LINDEN AVENUE AND OTHER ROADS Various Limits; Length: 1.08 Miles; Work Order No.: TX1796; Area: Rialto; Road No.: Various (See Plan).

ARTICLE II. Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this agreement; also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work, until its acceptance by the County, and for all risks of every description connected with the work; also for expenses incurred by or in consequence of the suspension or discontinuance of work and for well and faithfully completing the work, and the whole thereof, in the manner and according to the plans and specifications, and the requirements of the Engineer under them, to wit: of work and for well and faithfully completing the work, and the whole thereof, in the manner and according to the plans and specifications, and the requirements of the Engineer under them, to wit:

Project: LINDEN AVENUE AND OTHER ROADS

W.O.#: TX1796

Limits: Various Limits

Item No.	Approx. Quant.	Meas. Unit	Item Description	Unit Price	Total
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*Table of Contract Quantities, Items and
Prices will be shown here*

NOT FOR BIDDING

ARTICLE III. County hereby promises and agrees with Contractor to employ and does hereby employ Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid, and thereby contracts to pay the same at the time, in the manner and upon conditions above set forth, and said parties hereto for themselves, their heirs, executors, administrators, successors and assigns do hereby agree to the full performance of the covenants herein contained.

ARTICLE IV. Contractor shall accept all payments from County via electronic funds transfer (EFT) directly deposited into the Contractor's designated checking or other banking account. Contractor shall promptly comply with directions and accurately complete forms provided by County required to process EFT payments.

ARTICLE V. Contractor may, upon written request and at their expense, deposit substitute securities found in Government Code Section 16430 as authorized by Public Contract Code Section 22300 in lieu of retention monies withheld to insure performance.

ARTICLE VI. It is further expressly agreed by and between the parties hereto that, should there be any conflict between the terms of this instrument and the bid or proposal of said Contractor, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said proposal conflicting herewith.

ARTICLE VII. During the term of the Contract, Contractor shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, sexual orientation, age, or military and veteran status. CONTRACTOR shall comply with Executive Orders 11296, 11375, 11625, 12138, 12432, 12250, Title VI and VII of the Civil Rights Act of 1964, the California Fair Housing and Employment Act, County Policy and other applicable federal, state and County laws, regulations and policies relating to equal employment and contracting opportunities, including laws and regulations hereafter enacted.

ARTICLE VIII. By my signature hereunder, as Contractor, I certify that I am aware of 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, and I will comply with such provisions before commencing the performance of the work of this contract.

ARTICLE IX. By my signature hereunder, as Contractor, I certify that I am aware of the provisions and requirements of Sections 1777.5 and 1777.7 of the Labor Code relating to apprenticeship standards; and that I accept responsibility for compliance with the provisions of Section 1777.5 for all apprenticeable occupations pertaining to performance of work under this contract.

ARTICLE X. By my signature hereunder, as Contractor, I agree that County has the right to review, obtain and copy all records pertaining to performance of the contract. I agree to provide County with any relevant information requested and shall permit County access to company's premises upon reasonable notice for purposes on interviewing employees and inspecting records. I shall maintain all project records for at least three (3) years after final payment under the contract.

ARTICLE XI. Contractor shall comply with the Prevailing Wage Laws described in this Agreement, including Exhibit A.

As required by Labor Code section 1771.1(a) "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."

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BOARD OF SUPERVISORS

►

Curt Hagman, Chairman, Board of Supervisors

Dated: _____
SIGNED AND CERTIFIED THAT A COPY OF THIS
DOCUMENT HAS BEEN DELIVERED TO THE
CHAIRMAN OF THE BOARD

Lynna Monell
Clerk of the Board of Supervisors
of the San Bernardino County

By _____
Deputy

(Print or type name of corporation, company, contractor, etc.)

By _____
(Authorized signature - sign in blue ink)

Name _____
(Print or type name of person signing contract)

Title _____
(Print or Type)

Dated: _____

Address _____

FOR COUNTY USE ONLY

Approved as to Legal Form

►
_____, County Counsel

Date _____

Reviewed for Contract Compliance

►

Date _____

Reviewed/Approved by Department

►

Date _____

NOT FOR BID

EXHIBIT A - PREVAILING WAGE REQUIREMENTS

A. All or a portion of the Scope of Work in the Contract requires the payment of prevailing wages and compliance with the following requirements:

1. **Determination of Prevailing Rates:**

Pursuant to Labor Code sections 1770, et seq., the County has obtained from the Director of the Department of Industrial Relations (DIR) pursuant to the California Labor Code, the general prevailing rates of per diem wages and the prevailing rates for holiday and overtime work in the locality in which the Scope of Work is to be performed. Copies of said rates are on file with the County, will be made available for inspection during regular business hours, may be included elsewhere in the specifications for the Scope of Work, and are also available online at www.dir.ca.gov. The wage rate for any classification not listed, but which may be required to execute the Scope of Work, shall be commensurate and in accord with specified rates for similar or comparable classifications for those performing similar or comparable duties. In accordance with Labor Code section 1773.2, the Contractor shall post, at appropriate and conspicuous locations on the job site, a schedule showing all applicable prevailing wage rates and shall comply with the requirements of Labor Code sections 1773, et seq.

2. **Payment of Prevailing Rates**

Each worker of the Contractor, or any subcontractor engaged in the Scope of Work, shall be paid not less than the general prevailing wage rate, regardless of any contractual relationship which may be alleged to exist between the Contractor or any subcontractor, and such worker.

3. **Prevailing Rate Penalty**

The Contractor shall, as a penalty, forfeit two hundred dollars (\$200.00) to the County for each calendar day or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of the DIR for such work or craft in which such worker is employed by the Contractor or by any subcontractor in connection with the Scope of Work. Pursuant to California Labor Code section 1775, the difference between such prevailing wage rates and the amount paid to each worker for each calendar day, or portion thereof, for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by the Contractor.

4. **Ineligible Contractors:**

Pursuant to the provisions of Labor Code section 1777.1, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a contractor or subcontractor on a public works project. This list of debarred contractors is available from the DIR website at <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. Any contract entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract, and any public money that may have been paid to a debarred subcontractor by a contractor on the project shall be returned to the County. The Contractor shall be responsible for the payment of wages to workers as a debarred subcontractor who has been allowed to work on the Scope of Work.

5. **Payroll Records:**

- a. Pursuant to California Labor Code section 1776, the Contractor and each subcontractor, shall keep accurate certified payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by them in connection with the Scope of Work. The payroll records enumerated herein shall be verified by a written declaration made under penalty of perjury that the information contained in the payroll record is true and correct and that the Contractor or subcontractor has complied with the requirements of the California Labor Code sections 1771, 1811, and 1815 for any Scope of Work performed by his or her employees. The payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

- i. A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his/her authorized representative on request;
 - ii. A certified copy of all payroll records shall be made available for inspection or furnished upon request to the County, the Division of Labor Standards Enforcement of the DIR;
 - iii. A certified copy of payroll records shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the County or the Division of Labor Standards Enforcement. If the requested payroll records have not been previously provided to the County or the Division of Labor Standards Enforcement, the requesting party shall, prior to being provided the records, reimburse the cost of preparation by the Contractor, subcontractor and the entity through which the request was made; the public shall not be given access to such records at the principal office of the Contractor;
 - iv. The Contractor shall file a certified copy of the payroll records with the entity that requested such records within ten (10) days after receipt of a written request; and
 - v. Copies provided to the public, by the County or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor or any subcontractor, performing a part of the Scope of Work shall not be marked or obliterated. The Contractor shall inform the County of the location of payroll records, including the street address, city and county and shall, within five (5) working days, provide a notice of a change of location and address.
- b. The Contractor shall have ten (10) days from receipt of the written notice specifying in what respects the Contractor must comply with the above requirements. In the event Contractor does not comply with the requirements of this section within the ten (10) day period, the Contractor shall, as a penalty to the County, forfeit one-hundred dollars (\$100.00) for each calendar day, or portion thereof for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, such penalty shall be withheld from any portion of the payments then due or to become due to the Contractor.

6. Limits on Hours of Work:

Pursuant to California Labor Code section 1810, eight (8) hours of labor shall constitute a legal day's work. Pursuant to California Labor Code section 1811, the time of service of any worker employed at any time by the Contractor or by a subcontractor, upon the Scope of Work or upon any part of the Scope of Work, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as provided for under Labor Code section 1815. Notwithstanding the foregoing provisions, work performed by employees of Contractor or any subcontractor, in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (1½) times the basic rate of pay.

7. Penalty for Excess Hours:

The Contractor shall pay to the County a penalty of twenty-five dollars (\$25.00) for each worker employed on the Scope of Work by the Contractor or any subcontractor, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one calendar week, in violation of the provisions of the California Labor Code, unless compensation to the worker so employed by the Contractor is not less than one and one-half (1½) times the basic rate of pay for all hours worked in excess of eight (8) hours per day.

8. Senate Bill 854 (Chapter 28, Statutes of 2014) and Senate Bill 96 (Chapter 28, Statutes of 2017) Requirements:

- a. Contractor shall comply with Senate Bill 854 and Senate Bill 96. The requirements include, but are not limited to, the following:
- i. No contractor or subcontractor may be listed on a bid proposal (submitted on or after March 1, 2015) for a public works project unless registered with the DIR pursuant to Labor Code section 1725.5, with limited exceptions from this requirements for bid purposes only as allowed under Labor Code section 1771.1(a).
 - ii. No contractor or subcontractor may be awarded a contract for public work or perform work on a public works project (awarded on or after April 1, 2015) unless registered with the DIR pursuant to Labor Code section 1725.5.
 - iii. This project is subject to compliance monitoring and enforcement by the DIR.
 - iv. As required by the DIR, Contractor is required to post job site notices, as prescribed by regulation, regarding compliance monitoring and enforcement by the DIR.
 - v. Contractors and all subcontractors must submit certified payroll records online to the Labor Commissioner for all new public works projects issued on or after April 1, 2015, and for all public works projects, new or ongoing, on or after January 1, 2016.
 - 1) The certified payroll must be submitted at least monthly to the Labor Commissioner.
 - 2) The County reserves the right to require Contractor and all subcontractors to submit certified payroll records more frequently than monthly to the Labor Commissioner.
 - 3) The certified payroll records must be in a format prescribed by the Labor Commissioner.
 - vi. Registration with the DIR and the submission of certified payroll records to the Labor Commissioner are not required if the public works project is \$25,000 or less when the project is for construction, alteration, demolition, installation or repair work, or if the public works project is \$15,000 or less when the project is for maintenance work.
- b. Labor Code section 1725.5 states the following:

"A contractor shall be registered pursuant to this section to 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 public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1) (A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor

employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

(i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.

(ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).

(b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.

(d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:

(1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.

(2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors

are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.

(3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).

(e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.

(f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work."

c. Labor Code section 1771.1 states the following:

"(a) 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.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 21 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h)(1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100) for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j)(1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work."

d. Labor Code section 1771 states the following:

"a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) If the contractor or subcontractor is not registered pursuant to Section 1725.5 and is performing work on a project for which registration is not required because of subdivision (f) of Section 1725.5, the unregistered contractor or subcontractor is not required to furnish the records specified in Section 1776 directly to the Labor Commissioner but shall retain the records specified in Section 1776 for at least three years after completion of the work.

(5) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(d) The requirements of paragraph (3) of subdivision (a) shall apply to all contracts for public work, whether new or ongoing, on or after January 1, 2016.”

B. STATE PUBLIC WORKS APPRENTICESHIP REQUIREMENTS

1. State Public Works Apprenticeship Requirements:

- a. The Contractor is responsible for compliance with Labor Code section 1777.5 and the California Code of Regulations, title 8, sections 230 – 230.2 for all apprenticeable occupations (denoted with “#” symbol next to craft name in DIR Prevailing Wage Determination), whether employed by the Contractor, subcontractor, vendor or consultant. Included in these requirements is (1) the Contractor’s requirement to provide notification (i.e. DAS-140) to the appropriate apprenticeship committees; (2) pay training fund contributions for each apprenticeable hour employed on the Contract; and (3) utilize apprentices in a minimum ratio of not less than one apprentice hour for each five journeyman hours by completion of Contract work (unless an exception is granted in accordance with Labor Code section 1777.5) or request for the dispatch of apprentices.
- b. Any apprentices employed to perform any of the Scope of Work shall be paid the standard wage to apprentices under the regulations of the craft or trade for which such apprentice is employed, and such individual shall be employed only for the work of the craft or trade to which such individual is registered. Only apprentices, as defined in California Labor Code section 3077, who are in training under apprenticeship standards and written apprenticeship agreements under California Labor Code sections 3070 et seq. are eligible to be employed for the Scope of Work. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which such apprentice is training.

2. Compliance with California Labor Code section 1777.5 requires all public works contractors to:

- a. Submit Contract Award Information (DAS-140):
 - i. Although there are a few exemptions (identified below), all Contractors, regardless of union affiliation, must submit contract award information when performing on a California public works project.
 - ii. The DAS-140 is a notification “announcement” of the Contractor’s participation on a public works project—it is not a request for the dispatch of an apprentice.
 - iii. Contractors shall submit the contract award information (you may use form DAS 140) within 10 days of the execution of the prime contract or subcontract, but in no event later than the first day in which the Contractor has workers employed on the public work.

- iv. Contractors who are already approved to train apprentices (i.e. check "Box 1" on the DAS-140) shall only be required to submit the form to their approved program.
- v. Contractors who are NOT approved to train apprentices (i.e. those that check either "Box 2" or "Box 3" on the DAS-140) shall submit the DAS-140 TO EACH of the apprenticeship program sponsors in the area of your public works project. For a listing of apprenticeship programs see <http://www.dir.ca.gov/Databases/das/pwaddrstart.asp>.
- b. Employ Registered Apprentices
 - i. Labor Code section 1777.5 requires that a contractor performing work in an "apprenticeable" craft must employ one (1) hour of apprentice work for every five (5) hours performed by a journeyman. This ratio shall be met prior to the Contractor's completion of work on the project. "Apprenticeable" crafts are denoted with a pound symbol "#" in front of the craft name on the prevailing wage determination.
 - ii. All Contractors who do not fall within an exemption category (see below) must request for dispatch of an apprentice from an apprenticeship program (for each apprenticeable craft or trade) by giving the program actual notice of at least 72 hours (business days only) before the date on which apprentices are required.
 - iii. Contractors may use the "DAS-142" form for making a request for the dispatch of an apprentice.
 - iv. Contractors who are participating in an approved apprenticeship training program and who did not receive sufficient number of apprentices from their initial request must request dispatch of apprentices from ALL OTHER apprenticeship committees in the project area in order to fulfill this requirement.
 - v. Contractor should maintain and submit proof (when requested) of its DAS-142 submittal to the apprenticeship committees (e.g. fax transmittal confirmation). A Contractor has met its requirement to employ apprentices only after it has successfully made a dispatch request to all apprenticeship programs in the project area.
 - vi. Only "registered" apprentices may be paid the prevailing apprentice rates and must, at all times work under the supervision of a Journeyman (Cal. Code Regs., tit 8, § 230.1).
- c. Make Training Fund Contributions
 - i. Contractors performing in apprenticeable crafts on public works projects, must make training fund contributions in the amount established in the prevailing wage rate publication for journeymen and apprentices.
 - ii. Contractors may use the "CAC-2" form for submittal of their training fund contributions.
 - iii. Contractors who do not submit their training fund contributions to an approved apprenticeship training program must submit their contributions to the California Apprenticeship Council (CAC), PO Box 420603, San Francisco, CA 94142-0603.
 - iv. Training fund contributions to the CAC are due and payable on the 15th day of the month for work performed during the preceding month.
 - v. The "training" contribution amount identified on the prevailing wage determination shall not be paid to the worker, unless the worker falls within one of the exemption categories listed below.

3. Exemptions to Apprenticeship Requirements:

- a. The following are exempt from having to comply with California apprenticeship requirements. These types of contractors do not need to submit a DAS-140, DAS-142, make training fund contributions, or utilize apprentices:
 - i. When the Contractor holds a sole proprietor license ("Owner-Operator") and no workers were employed by the Contractor. In other words, the contractor performed the entire work from start to finish and worked alone.

- ii. Contractors performing in non-apprenticeable crafts. "Apprenticeable" crafts are denoted with a pound symbol "#" in front of the craft name on the prevailing wage determination.
- iii. When the Contractor has a direct contract with the Public Agency that is under \$30,000.
- iv. When the project is 100% federally-funded and the funding of the project does not contain any city, county, and/or state monies (unless the project is administered by a state agency in which case the apprenticeship requirements apply).
- v. When the project is a private project not covered by the definition of public works as found in Labor Code section 1720.

4. Exemption from Apprenticeship Ratios:

- a. The Joint Apprenticeship Committee shall have the discretion to grant a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the Contractor from the 1-to-5 ratio set forth in this Section when it finds that any one of the following conditions are met:
 - i. Unemployment for the previous three-month period in such area exceeds an average of fifteen percent (15%); or
 - ii. The number of apprentices in training in such area exceeds a ratio of 1-to-5 in relation to journeymen; or
 - iii. The Apprenticeable Craft or Trade is replacing at least one-thirtieth (1/30) of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis; or
 - iv. If assignment of an apprentice to any work performed under the Contract Documents would create a condition which would jeopardize such apprentice's life or the life, safety or property of fellow employees or the public at large, or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman.
- b. When such exemptions from the 1-to-5 ratio between apprentices and journeymen are granted to an organization which represents contractors in a specific trade on a local or statewide basis, the member contractors will not be required to submit individual applications for approval to local Joint Apprenticeship Committees, provided they are already covered by the local apprenticeship standards.

5. Contractor's Compliance:

- a. The responsibility of compliance with this Section for all Apprenticeable Trades or Crafts is solely and exclusively that of the Contractor. All decisions of the Joint Apprenticeship Committee(s) under this Section are subject to the provisions of California Labor Code section 3081 and penalties are pursuant to Labor Code section 1777.7 and the determination of the Labor Commissioner.

NOT FOR BID