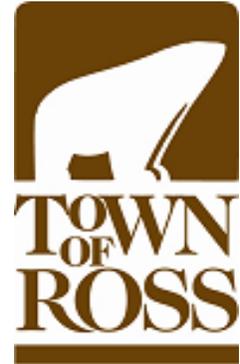


FEDERAL PROJECT NO. STPL-5176 (009)



**BOLINAS AVENUE AND SIR FRANCIS DRAKE BOULEVARD
IMPROVEMENTS PROJECT
FEDERAL PROJECT NO. STPL-5176 (009)**

CONTRACT DOCUMENTS (VOLUME II) INCLUDING:

**PROJECT GENERAL AND SPECIAL PROVISIONS
LOCAL ASSISTANCE PROCEDURES MANUAL**

For use with Standard Specifications and Standard Plans dated 2010 of the California Department of Transportation and Labor Surcharge and Equipment Rental Rates, Latest Editions, and the 2008 Marin Uniform Construction Standards.

Contract No. 2016 OBAG

Bid Opening:
June 23, 2016 at 10:00 a.m.
Ross Town Hall
31 Sir Francis Drake Boulevard
Ross, CA 94939

FEDERAL PROJECT NO. STPL – 5176 (009)
BOLINAS AVENUE AND SIR FRANCIS DRAKE BOULEVARD
IMPROVEMENTS PROJECT

These Special Provisions were prepared under the Direction of the following licensed persons:



Sean Condry, PE
Town Engineer



Daniel Blomquist, PE
Mark Thomas & Co., Inc.

TABLE OF CONTENTS

Table of Contents TOC 1

GENERAL PROVISIONS

A. Definitions and Terms 1
 B. Proposal Requirements and Conditions 2
 C. Award and Execution of Contract 2
 D. Beginning of Work, Time of Completion and Liquidated Damages 2
 E. Scope of Work 2
 F. Control of Work 3
 G. Preconstruction Conference 3
 H. Control of Materials 3
 I. Legal Relations and Responsibility 3
 J. Prosecution and Progress 8
 K. Measurement and Payment 8
 L. Indemnity and Insurance Requirements 12
 M. Force Account and Equipment Rental 14
 N. Sanitary Facilities & Storm Water Pollution Prevention 14
 O. Final Cleanup 17
 P. Final Inspection 17
 Q. Authority of Engineer and Conduct of Work 18
 R. Lines and Grades 18
 S. Overtime and Weekend Work 18
 T. Protection of Underground Facilities 19
 U. Sound Control Requirements 19
 V. Construction Materials and Testing 19
 W. Archaeological Discoveries 19
 X. Federal Lobbying Restrictions 20
 Y. Removal of Asbestos and Hazardous Substances 20
 Z. Subcontractor and DBE Records 20
 AA. Performance of Subcontractors 21
 BB. Prompt Progress Payment to Subcontractors 21
 CC. Prompt Payment of Funds Withheld to Subcontractors 21
 DD. Payments 21

LOCAL ASSISTANCE PROCEDURES MANUAL

Exhibit 12-E Attachment L 22
 Exhibit 12-G Required Federal Aid Contract Language 23
 Disadvantaged Business Enterprises (DBE) 23
 DBE Commitment Submittal
 Good Faith Efforts Submittal
 Exhibit 15 G Local Agency Bidder DBE Information (Construction Contracts)
 Subcontractor and Disadvantaged Business Enterprise Records
 Performance of Disadvantaged Business Enterprises
 Bid Opening 26
 Bid Rigging 26

Contract Award	26
Contract License	26
Changed Conditions	26
Differing Site Conditions	
Suspensions of Work Ordered by the Engineer	
Significant Changes in the Character of Work	
Beginning of Work, Time of Completion and Liquidated Damages	28
Buy America	28
Quality Assurance	28
Prompt Payment of Funds Withheld to Subcontractors	28
Form FHWA-1273 Required Contract Provisions Federal-Aid Contracts	29
Female and Minority Goals	42
Federal Trainee Program	43
Title VI Assurances	45
Use of United States-Flag Vessels	45
Exhibit 17-F Final Report-Utilization of Disadvantage Business Enterprise (DBE) First Tier Subcontractors...	47
Exhibit 17-O Disadvantaged Business Enterprise (DBE) Certification Status Change	49

SECTION 10 – SPECIAL PROVISIONS

10-1.01	General.....	SP-1
10-1.02	Order of Work and Progress Schedule	SP-4
10-1.03	Existing Facilities / Cooperation	SP-5
10-1.04	Dust Control	SP-8
10-1.05	Mobilization	SP-9
10-1.06	Erosion Control.....	SP-10
10-1.07	Storm Water Pollution Prevention Plan	SP-12
10-1.08	Traffic Control.....	SP-13
10-1.09	Closure Requirements and Conditions	SP-15
10-1.10	Clearing and Grubbing.....	SP-18
10-1.11	Demolition.....	SP-19
10-1.12	Construction Staking.....	SP-27
10-1.13	Earthwork.....	SP-28
10-1.14	Class 2 Aggregate Base	SP-30
10-1.15	Minor Concrete.....	SP-31
10-1.16	Hot Mix Asphalt.....	SP-35
10-1.17	Raising Utilities to Grade	SP-37
10-1.18	Relocate Fire Hydrant.....	SP-38
10-1.19	Drainage Structures.....	SP-39
10-1.20	Traffic Striping and Pavement Marking.....	SP-41
10-1.21	Roadside Signage	SP-43
10-1.22	Signal, Lighting, and Electrical Systems.....	SP-44
10-1.23	Final Cleanup	SP-54

APPENDICES SP-55

- Marin County Uniform Construction Standards (UCS)
 - Requirements for Concrete Curb, Gutter, Sidewalk, Driveway, and other Flatwork (UCS #100)
 - Curb, Gutter and Sidewalk Details (UCS #105)
 - Examples of Sidewalk Driveway Connections (UCS #115)
 - Catch Basin, Turning Structure, Manhole and Drop Inlet Notes (UCS #200)
 - Catch Basin Grate Detail (UCS #220)
 - Type “D” Catch Basin (UCS #240)
 - Drop Inlet and Turning Structure (UCS #260)
 - Monuments (UCS #300)
 - Trench Details (UCS #330)
 - Trench Notes (UCS #350)

- Caltrans Standard Plans:
 - Striping Details (A20A to A20D)
 - Pavement Marking Details (A24A to A24F)
 - Curb Ramp Details (A88A and A88B)
 - Signal, Lighting and Electrical Details (ES-1A, ES-1B, ES-4A, ES-4B, ES-4C, ES-4D, ES-5C, ES-6D, ES-7A, ES-7B, ES-7M, ES-7N, ES-7O, ES-7R, ES-8A, and ES-13A)

- Marin Municipal Water District
 - Relocate Existing Hydrant; Dated 11-03-15 (Sheet 1 of 1)

GENERAL PROVISIONS

A. Definitions and Terms

TOWN: Town shall mean the Town of Ross, a political subdivision of the State of California, or, if applicable, the public entity awarding this contract by action of the Town Council sitting as the governing body of such *public* entity, except as provided in Section K, "Indemnity and Insurance Requirements."

TOWN COUNCIL: Town Council shall mean the governing body of Ross.

DIRECTOR OF PUBLIC WORKS/ENGINEER: Director of Public Works/Engineer shall mean the Director of the Department of Public Works of Ross, acting on behalf of the Town or ex officio as engineer of the awarding entities as described under the definition of "Town ", or his authorized agent acting within the scope of his authority, who shall act as the representative to the Town during the term of the contract.

STANDARD SPECIFICATIONS: Standard Specifications shall mean the Standard Specifications of the State of California, Business, Transportation and Housing Agency, Department of Transportation, dated 2010. Any reference therein to a State Agency or officer shall be interpreted as if the corresponding Town Office or officer acting under this contract were so specified.

STANDARD PLANS: Standard Plans shall mean the standard plans of the State of California, Business and Transportation Agency, Department of Transportation dated 2010.

UNIFORM CONSTRUCTION STANDARDS: Uniform Construction Standards shall mean the Uniform Construction Standards approved and adopted by the Cities of Marin and County of Marin, in May, 2008.

CONTRACT DOCUMENTS: The work shall conform to the requirements of all the following contract documents:

- Project Plans.
- The Standard Specifications, insofar as they may apply.
- The Standard Plans, insofar as they may apply.
- The Uniform Construction Standards, insofar as they may apply.
- These specifications, including the Notice to Contractors.
- The Proposal and the Contract (or Agreement).
- The two (2) contract bonds required herein.
- Any supplemental agreements amending or extending the work.
- Executed Contract Change Orders.
- Permits from other agencies.
- Any working drawings, sketches, or instructions clarifying or enlarging upon the work specified herein.

Pertinent portions of any other documents included by reference thereto in these specifications, the Standard Specifications, or the Plans.

In case of conflict between the Standard Specifications and these following provisions, these provisions shall take precedence over and be used in lieu of such conflicting portions. It is the intent of this contract to obtain a finished, workmanlike job, complete in place.

In the event of any conflict, doubt, or questions arising with respect to the true meaning of the contract documents, reference shall be made to the Director of Public Works and his decision shall be final.

B. Proposal Requirements and Conditions

The bidder's attention is directed to the provisions in, "Proposal Requirements and Conditions," of these special provisions for the requirements and conditions which the bidder must observe in the preparation of the proposal form and the submission of the bid.

In addition to the subcontractors required to be listed, each proposal shall have listed therein the portion of work that will be done by each subcontractor listed. A sheet for listing the subcontractors is included in the Proposal.

The form of Bidder's Bond will be found following the signature page of the Proposal.

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

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

All proposals shall be made in strict accordance with the Instructions to Bidders.

Unless otherwise required by the Special Provisions, the Contractor shall guarantee all work done under the Contract to be free from faulty materials and workmanship for a period of one (1) year from the date of acceptance by the Town Council, and shall furnish a defective material and workmanship bond as provided in "Contract Bonds" of the Instructions to Bidders. Guarantee Form in contract section must be executed prior to requesting acceptance of the project.

The Contractor hereby agrees to repair or replace any and all work, together with any other adjacent work which may be displaced in so doing, that may prove to be not in accordance with the requirements of the Contract or that may be defective in its workmanship or material within the guarantee period specified, without any expense whatsoever to the Town.

The Contractor further agrees, that within ten (10) calendar days after being notified in writing by the Town of any work not in accordance with the requirements of the Contract or any defects in the work, he will commence and prosecute with due diligence all work necessary to fulfill the terms of this guarantee, and to complete the work within a reasonable period of time (not to exceed thirty (30) days after commencement of the repair work). In the event the Contractor fails to comply, it does hereby authorize the Town to proceed to have such work done at the Contractor's expense and he will honor and pay the costs and charges upon demand. The Town shall be entitled to all costs and expenses, including reasonable attorney's fees, necessarily incurred upon the Contractor's refusal to honor and pay the above costs and charges.

C. Award and Execution of Contract

Reference is made to Exhibit 12-G, Section 4, "Contract Award" of the Required Federal-Aid Contract Language, see General-Special Provisions.

D. Beginning of Work, Time of Completion and Liquidated Damages

Reference is made to Exhibit 12-G, Section 7, "Beginning of Work, Time of Completion, and Liquidated Damages" of the Required Federal-Aid Contract Language, see General-Special Provisions.

E. Scope of Work

Reference is made to Section 4 of the Standard Specifications.

F. Control of Work

Reference is made to Section 5 of the Standard Specifications.

The Contractor shall designate in writing before starting work, for approval by the Engineer prior to construction, an authorized representative who shall have the authority to represent and act for the Contractor. The authorized representative shall be the same person from the beginning to the end of the project.

Said authorized representative shall be present at the site of work at all times while work is actually in progress on the contract. When work is not in progress and during periods when work is suspended, arrangements acceptable to the Engineer shall be made for any emergency work which may be required.

Said authorized representative shall have a mobile phone at the site at all time while work is in progress.

Full compensation for providing Superintendence shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

G. Preconstruction Conference

Subsequent to the issuance of the Notice to Proceed, but prior to the commencement of work, a preconstruction conference will be held at the **San Anselmo Town Hall, San Anselmo, California** for the purpose of discussing with the Contractor the scope of work, contract drawings, specifications, existing conditions, signs and traffic control, materials to be ordered, equipment to be used, and all essential matters pertaining to the prosecution of and the satisfactory completion of the project as required. The Contractor's representatives at this conference shall include all major superintendents for the work, including major subcontractors.

At this meeting, the Contractor shall provide an emergency contact list. The list shall contain the names, phone numbers, fax number and address. The Contractor shall also provide the contact information for the local Insurance Agent(s). The contact information shall include the insurance company name, the local agent's name, local phone and fax numbers and local address.

In addition, at this meeting the truck routes shall be discussed. The truck route shall be written and mapped by the Contractor and submitted to the Engineer for review and approval seven (7) calendar days prior to the commencement of any project trucking. All trucking contractors and sub-contractors shall be notified in writing of the project truck routes.

Additionally, an on-site preconstruction meeting may be held for the purpose of discussing site specific matters.

H. Control of Materials

Reference is made to Exhibit 12-G, Section 8, "Buy America" of the Required Federal-Aid Contract Language, see the General-Special Provisions.

I. Legal Relations and Responsibility

Replace section **7-1.02A General** with:

Comply with laws, regulations, orders, and decrees applicable to the project. Indemnify and defend the Town of Ross, the Town of San Anselmo; the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity; and the Town's employees, officers, and agents against any claim or liability arising from the violation of a law, regulation, order, or decree by you or your employees or any individual or company furnishing resources or activities for you. Immediately report to the Engineer a discrepancy or inconsistency between the Contract and a law, regulation, order, or decree.

You shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the Work. If the Town incurs any fines or penalties because of your failure to comply with a law,

regulation, order, or decree, the Town deducts the amount of the fine or penalty. Immediately notify the Engineer if a regulatory agency requests access to the job site or to records. Submit a list of documents provided to the agency and issued enforcement actions.

A Town business license must be held.

Add to section 7-1.02I(2) Nondiscrimination:

Contractor must comply with the STANDARD CALIFORNIA NONDISCRIMINATION CONSTRUCTION CONTRACT SPECIFICATIONS (GOV. CODE, SECTION 12990). Contractor must include Section 7-1.02I(2) in all subcontracts.

Add to section 7-1.02K(3) Certified Payroll Records (Labor Code § 1776):

Do not submit certified payroll records by email. Submit certified payroll to the Engineer at **31 Sir Francis Drake Boulevard, Ross, California, 94939.**

Add to section 7-1.02K(6)(a) General:

The Engineer may notify Cal/OSHA if you fail to establish or maintain a safe and healthful workplace. The Engineer notifying or failing to notify Cal/OSHA does not relieve the Contractor of Contractor's responsibility to provide public and worker safety. The Engineers failure to identify an unsafe condition does not relieve the Contractor of Contractor's responsibility to provide public and worker safety.

Replace section 7-1.02L(2) Antitrust Claims with:

The following provisions of Public Contract Code Section 7103.5 and Government Code Sections 4553 and 4554 shall be applicable to the Contractor and all subcontractors:

“In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties.”

“If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.”

“Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.”

Add to section 7-1.03 PUBLIC CONVENIENCE:

Compliance with these special provisions does not relieve you of your responsibility for public safety.

You shall conduct operations in a manner which will result in the least possible obstruction and inconvenience to the public. You shall undertake no greater length or amount of work than you can prosecute properly with due regard to the rights of the public.

Unless otherwise provided in the Special Provisions or approved in writing by the Public Works Director, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.

No work will be allowed on Saturday, Sunday, or legal Town holidays, unless shown on the plans, specified in these Special Provisions or approved by the Engineer.

The Contractor shall exercise diligence in preventing dust nuisance. When necessary or when directed by the Engineer, the Contractor shall apply water for laying dust. Water shall be applied by means of pressure-type distributors equipped with a spray system that will insure a uniform application.

Provide driveway access. You are responsible for investigating and accommodating the specific access needs of the residents whose driveways are impacted by your construction activity. Prior to closure of driveways, coordinate and notify the property owner or resident at least twice of such closure. Closure notices shall be given to the property owner/resident 48 hours and one hour prior to each closure. It is your responsibility to assess and accommodate all property owners' specific needs for driveway access. In no case shall a driveway remain closed for more than 8 hours unless otherwise authorized by the Engineer.

Pedestrian access facilities shall be provided through construction areas at all times. If your operations require closure of walkways, adequate pedestrian directional signs shall be provided and maintained. At the end of each working day or until the pedestrian walkways are permanently restored, temporary asphalt concrete (4'-0" minimum width) or trench steel plate ADA compliant walkways, free from tripping hazards, shall be provided and maintained. The temporary walkway surfacing shall be skid resistant and free from irregularities.

Provide all public notification, written and otherwise, to ensure public convenience and public safety as specified herein and in the Standard Plans and Specifications, and as directed by the Engineer. Provide written notification to the public, local residents and businesses, local utility companies and any other persons or agencies affected by this project.

At all times other than normal working hours, all lanes shall be provided for uninterrupted traffic.

Add to section **7-1.04 PUBLIC SAFETY:**

The Contractor shall prepare a Traffic Control Plan for each street and for each stage of construction and when requested by the Engineer for any specific construction activity. The Traffic Plan shall be prepared by a person who is certified by the Institute of Transportation (ITS), the American Traffic Safety Services Association (ATSSA), the International Municipal Signal Association (IMSA) or the State of California Department of Transportation (Caltrans) as having successfully completed training in the design and operation of work zone traffic control. Along with the Traffic Control Plan, submit the designer's Certification. Work shall not proceed without the Engineer's advance approval of the Traffic Control Plan for the work attempted.

Traffic lanes may be temporarily shifted only during the hours of work. All original traffic lanes must be restored at the end of each work day.

If the failure to perform or the manner of performance of the Work results in a threat to public health or safety, the Town may, after making a reasonable attempt to contact you, perform necessary emergency work and deduct the reasonable cost of it from the amount owed to you.

Add to section **7-1.05A General:**

For the purpose of Section 7-1.05 INDEMNIFICATION, "TOWN" shall mean the Town of Ross and Town of San Anselmo, and the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity.

Contractor shall effectively protect and guard the Town, its officers, agents, and employees, from any liability as a consequence of any willful act, negligent act or non-negligent act or omission by the Contractor, any of the Contractor's employees or agents, or any subcontractor or supplier, and shall be responsible for any and all damage, injury, or death to persons, or damage to property. Contractor shall indemnify, defend and hold Town harmless from any and all claims, suits, actions, costs, and liability ensuing in connection with the performance of the contract, or failure to protect the safety of workers or the general public, regardless of the existence of or degree of fault or negligence on the part of the Town or the Contractor, subcontractor, or any employee of any of these, other than the active negligence of the Town, its officers, or employees.

In those instances where the Town has obtained "Rights of Entry" from private property owners upon whose property it will be necessary for the Contractor to enter to perform the work to be done under the contract, Contractor shall indemnify such property owners in the same manner as the Town is indemnified.

Add to section **7-1.06A General:**

For the purpose of Section 7-1.06 INSURANCE, "TOWN" shall mean the Town of Ross and Town of San Anselmo, and the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity.

Contractor shall procure and maintain as a minimum for the duration of the contract, the following described insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

1. Minimum Scope of Insurance

Coverage shall be at least as broad as:

- i. Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001 or equivalent or "claims made" form CG 00 02 or equivalent) NOTE: "claims made" coverage requires special approval and "modified occurrence" coverage is unacceptable.
- ii. Insurance Services Office form number CA 0001 (Ed. 01/87 or equivalent) covering Automobile Liability, Code 1 "any auto" with endorsement CA 0029 (auto contractual).
- iii. Worker's Compensation insurance as required by the State of California and Employers' Liability Insurance.

2. Minimum Limits of Insurance

Contractor shall maintain limits of no less than:

- i. General Liability: \$3 million per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.

- ii. Automobile Liability: \$2 million per accident for bodily injury and property damage.
- iii. Employers' Liability: Provide Employer's Liability Insurance in amounts not less than:
 - 1. \$1,000,000 for each accident for bodily injury by accident
 - 2. \$1,000,000 policy limit for bodily injury by disease
 - 3. \$1,000,000 for each employee for bodily injury by disease

3. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Town. At the option of the Town, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Town, its officials, employees and volunteers, or the Contractor shall provide a financial guarantee satisfactory to the Town guaranteeing payment of losses and related investigations, claim administration and defense expenses.

4. Other Insurance Provisions

The general liability policy is to contain, or be endorsed to contain, the following provisions:

- i. The Town of Ross and Town of San Anselmo, their officials, employees and volunteers are to be covered as insured with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations.
- ii. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (using either the Town's prepared form or using ISO form CG 20 10 11 85 or equivalent).
- iii. For any claims related to this project, the Contractor's insurance coverage shall be the primary insurance with respect to the Town, its officials, employees, or volunteers. Any insurance or self-insurance maintained by the Town shall be excess of the Contractor's insurance and shall not contribute with it.
- iv. The workers' compensation policy shall contain a waiver of subrogation in favor of the Town.
- v. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty days prior written notice (10 days for non-payment of premium) by certified mail with return receipt requested given to the Town.
- vi. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Town, its elected and appointed officers, employees, agents or volunteers

5. Rights of Entry

If applicable, all private property owners granting "Rights of Entry" for construction of the work shall be covered as insured under the same coverage as provided the Town as respects their ownership of the property and the work to be done thereon.

6. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's Financial Strength rating of no less than A:A-, and a Financial Size Category of no less than VII. Carriers not licensed in the State of California should have a current A.M. Best's rating of no less than A:X.

7. Verification of Coverage

Contractor shall furnish the Town with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the Town or on other than the Town's forms, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received and approved by the Town before work commences. The Town reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.

8. Subcontractors:

Contractor shall require all its subcontractors to name Contractor, and the Town under its policies as additional insured and Contractor shall require all its subcontractors to furnish separate certificates and endorsements. All coverage for subcontractors shall be subject to all of the requirements stated herein. By signing a contract the successful bidder acknowledges that he is aware of the provisions of Labor Code §3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with that Code, and that he will comply with such provisions before commencing of the work of this contract. On signing the contract, Contractor shall give the Town (1) a certificate of consent to self-insure issued by the Director of Industrial Relations, or (2) a certificate of Workers' Compensation insurance issued by an admitted insurer, or (3) an exact copy or duplicate thereof certified by the Director or the insurer.

J. Prosecution and Progress

Reference is made to Section 8 of the Standard Specifications.

The provisions of this section not modified by the Agreement or Contract shall apply to this project.

No subcontractor will be allowed on the project who is not listed in the List of Subcontractors contained in the Proposal, unless approved in advance and in writing by the Engineer.

If any subcontractor or any person employed by the Contractor fails or refuses to carry out the directions of the Engineer or appears to the Engineer to be incompetent or acts in a disorderly or improper manner, he shall be discharged immediately on demand by the Engineer, and such person shall not again be employed on the work.

The Contractor shall maintain records of all subcontracts entered into with certified DBE subcontractors and records of materials purchased from certified DBE suppliers. Such records shall show the name and business address of each DBE subcontractor or vendor and the total dollar amount actually paid each DBE subcontractor or vendor. Upon completion of the contract, a summary of these records shall be prepared on Form CEM-2402 and certified correct by the Contractor or his authorized representative, and shall be furnished to the Engineer.

Neither the contract, nor any monies due, or to become due, under the contract, may be assigned by the Contractor without the prior consent and approval of the Town Council, nor in any event without the consent of the Contractor's surety or sureties, unless such surety or sureties have waived their right to notice or assignment.

K. Measurement and Payment

FINAL PAY QUANTITIES. --

Final Pay Items. When an item of work is designated with an asterisk (*) in the Engineer's Estimate, 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, or 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. 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 in the amount represented by the eliminated portion of the item of work.

The estimated quantity for each item of work designated as in the Engineer's Estimate shall be considered as approximate only, and no guarantee is made that the quantity which can be determined by computations, based on the details and dimensions shown on the plans, will equal the estimated quantity. No allowance will be made in the event that the quantity based on computations does not equal the estimated quantity.

In case of discrepancy between the quantity shown in the Engineer's Estimate for a final pay item and the quantity or summation of quantities for the same item shown on the plans, payment will be based on the quantity shown in the Engineer's Estimate.

Reference is made to Section 9 of the Standard Specifications and the following provisions:

1. The Town may withhold from any estimate due the Contractor, a sum sufficient to protect the Town from loss on account of (a) defective work not remedied, (b) claims filed or reasonable evidence indicating probable filing of claims, (c) failure of Contractor to make payments properly to subcontractors, or for material or labor, (d) a reasonable doubt that the contract can be completed for the balance then unpaid, or (e) damage to another Contractor on the project, which amounts withheld will be paid upon removal of grounds for withholding payment.
2. Prompt progress payment and prompt payment of withheld funds to subcontractors: A prime contractor or subcontractor shall pay a subcontractor not later than 10 days of receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 10 days is applicable unless, a longer period is agreed to in writing. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction and other remedies of that section.

Federal regulation (49 CFR 26.29) requires that any delay or postponement of payment over 30 days of receipt of each payment may take place only for good cause and with the agency's prior written approval. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise, available to the prime contractor or subcontractor in the event of a dispute involving late payment, or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor. This provision applies to both DBE and non-DBE prime contractors and subcontractors.

3. Attention is directed to the prohibitions and penalties pertaining to unlicensed contractors as provided in Business and Professions Code Section 7028.15a and 7031.

Partial payments shall cover work completed through the 25th calendar day of each month for contracts where the number of working days exceeds twenty (20). No partial payments will be made for contracts having a time limit of twenty (20) days or less, unless completion has been significantly delayed by causes which are clearly not the fault of the Contractor.

When partial payments are to be made, the Engineer shall submit to the Contractor, on Town forms, an estimate of the total amount of work accomplished, which will show the computed amount due less a retention which shall be 10% of the value of the work accomplished, unless otherwise indicated in the Special Provisions. No partial payments will be made for materials stored on the job but not yet installed, unless otherwise provided in the Special Provisions. Upon receipt of the estimate from the Engineer, the Contractor shall submit a covering invoice to the Department of Public Works.

4. Final Payment

Upon satisfactory completion of the work, the Engineer shall submit to the Contractor a final estimate of all work accomplished. The Contractor shall then submit his/her final invoice to the Department of Public Works, and the Engineer will then recommend acceptance of the work to the Town Council. Notice of Completion will be filed and retention of monies will be made upon acceptance of the work as required by the laws of the State of California relating to the mechanic's liens. All monies due in excess of the retention shall be paid to the Contractor upon acceptance of the work by the Town Council.

All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

In the absence of a formal claim filed by the Contractor, the final estimate shall be conclusive and binding against both parties to the contract on all questions relating to the performance of the contract and the amount of work done thereunder and compensation therefor.

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 payment, 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 all claims arising under or by virtue of the contract so that the Engineer receives such written approval or statement of claims no later than close of business of the thirtieth day after receiving the proposed final estimate. If the thirtieth day falls on a Saturday, Sunday or legal holiday, then receipt of such written approval or statement of claims by the Engineer shall not be later than close of business of the next business day. No claim will be considered that was not included in the written statement of claims, nor will any claim be allowed as to which a notice or protest is required, unless the Contractor has complied with the notice or protest requirements in said sections.

On the Contractor's approval, or if he files no claim within said period of 30 days, 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 Town 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. If the Contractor within said period of 30 days files claims, the Engineer will issue a semifinal estimate in accordance with the proposed final estimate submitted to the Contractor and within 30 days thereafter the Town will pay the sum so found to be due. Such semifinal 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 insofar as affected by the claims filed within the time and in the manner required hereunder.

Claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. If additional information or details are required by the Engineer to determine the basis and amount of said claims, the Contractor shall furnish such further information or details so that the information or details are received by the Engineer no later than the fifteenth day after receipt of the written request from the Engineer. If the fifteenth day falls on a Saturday, Sunday or legal holiday, then receipt of such information or details by the Engineer shall not be later than close of business of the next business day. Failure to submit such information and details to the Engineer within the time specified will be sufficient cause for denying the claim.

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 those 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.

Claims submitted by the Contractor shall be accompanied by a notarized certificate containing the following language:

Under the penalty of law for perjury or falsification and with specific reference to the California False Claims Act, Government Code Section 12650 et. seq., the undersigned,

(Name)

(Title)

(Company)

hereby certifies that the claim for the additional compensation and time, if any, made herein for the work on this contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the contract between parties.

/s/ _____ Dated _____

Subscribed and sworn before me this day of

Notary Public

My Commission Expires

Failure to submit the notarized certificate will be sufficient cause for denying the claim.

Any claim for overhead type expenses or costs, in addition to being certified as stated above, 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 Town at its discretion.

Any costs or expenses incurred by the Town 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 Town within the meaning of the California False Claims Act.

The Director of Public Works will make the final determination of any claims which remain in dispute after completion of claim review by the Engineer. A board or person designated by said Director of Public Works will review such claims and make a written recommendation thereon to the Director. The Contractor may meet with the review board or person to make a presentation in support of such claims.

Upon final determination of the claims, the Engineer will then make and issue his final estimate in writing and within 30 days thereafter the Town will pay the entire sum, if any, found due thereon. Such final estimate 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.

5. Alternate Withholdings

The Contractor may elect to receive 100% of payments due under this contract, without retention of any portion of the payment by the County, excepting withholdings as set forth in Paragraph J. I. If the Contractor elects to receive full payments, he shall at his own expense and, at the time of contract award, deposit securities equivalent to 10% of the award amount with the County in accordance with the provisions of Section 10263 of the Public Contract Code. Such securities, if deposited by the Contractor, shall have the written consent of the Contractor's surety. Attention is directed to Article 9-1.065 of the Standard Specifications.

L. Indemnity and Insurance Requirements

For the purpose of this Section L, "Indemnity and Insurance Requirements", and this section only, "TOWN" shall mean the Town of Ross and Town of San Anselmo, and the public entity awarding this contract by action of the Town Council sitting as the governing body of such public entity.

1. Indemnity

Contractor shall effectively protect and guard Town, its officers, agents, and employees, from any liability as a consequence of any willful act, negligent act or non-negligent act or omission by the Contractor, any of the Contractor's employees or agents, or any subcontractor, and shall be responsible for any and all damage, injury, or death to persons, or damage to property. Contractor shall indemnify, defend and hold Town from any and all claims, suits, actions, costs, and liability ensuing in connection with the performance of the contract, or failure to protect the safety of workers or the general public, regardless of the existence of or degree of fault or negligence on the part of the Town or the Contractor, subcontractor, or any employee of any of these, other than the active negligence of the Town, its officers, or employees.

In those instances where the Town has obtained "Rights of Entry" from private property owners upon whose property it will be necessary for the Contractor to enter to perform the work to be done under the contract, Contractor shall indemnify such property owners in the same manner as the Town is indemnified.

2. Insurance Requirements

Contractor shall procure and maintain as a minimum for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

a. Minimum Scope of Insurance

Coverage shall be at least as broad as:

- i. Insurance Services Office Commercial General Liability coverage ("occurrence" form CG 0001 or equivalent or "claims made" form CG 00 02 or equivalent) NOTE: "claims made" coverage requires special approval and "modified occurrence" coverage is unacceptable.
- ii. Insurance Service Office form number CA 0001 (Ed. 01/87 or equivalent) covering Automobile Liability, Code 1 "any auto" with endorsement CA 0029 (auto contractual).

iii. Worker's Compensation insurance as required by the State of California and Employers Liability Insurance.

b. Minimum Limits of Insurance

Contractor shall maintain limits of no less than:

i. General Liability: \$3,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.

ii. Automobile Liability: \$2,000,000 per accident for bodily injury and property damage.

iii. Employers' Liability: \$1,000,000 per accident for bodily injury or disease.

c. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Town. At the option of the Town, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Town, its officials, employees and volunteers, or the Contractor shall provide a financial guarantee satisfactory to the Town guaranteeing payment of losses and related investigations, claim administration and defense expenses.

d. Other Insurance Provisions

The general liability policy is to contain, or be endorsed to contain, the following provisions:

i. The Town, its officials, employees and volunteers are to be covered as insured with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment furnished in connection with such work or operations.

General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (using either the Town's prepared form or using ISO form CG 20 10 11 85 or equivalent).

ii. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the Town, its officials, employees or volunteers. Any insurance or self-insurance maintained by the Town shall be excess of the Contractor's insurance and shall not contribute with it.

iii. The workers' compensation policy shall contain a waiver of subrogation in favor of the Town.

iv. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty days prior written notice (10 days for non-payment of premium) by certified mail with return receipt requested given to the Town.

e. Rights of Entry

If applicable, all private property owners granting "Rights of Entry" for construction of the work shall be covered as insured under the same coverage as provided the Town as respects their ownership of the property and the work to be done thereon.

f. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII. Carriers not licensed in the State of California should have a current A.M. Best's rating of no less than A:X.

g. Verification of Coverage

Contractor shall furnish the Town of Ross with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the Town of Ross or on other than the Town of Ross' forms, provided those endorsements or policies conform to the requirements. All certificates and endorsements are to be received and approved by the Town of Ross before work commences. The Town of Ross reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

h. Subcontractors

Contractor shall require all its subcontractors to name Contractor, Town under its policies and contractor shall require all its subcontractors to furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

M. Force Account and Equipment Rental

Attention is directed to the provisions of Section 9-1.04 of the Standard Specifications.

N. Sanitary Facilities & Storm Water Pollution Prevention

The Contractor shall provide all necessary sanitary disposal (*toilet*) accommodations for the use of all workmen on the job site and shall maintain the same in a clean and sanitary *condition*.

STORM WATER POLLUTION PREVENTION

The intent of these provisions is to enforce federal, state, and other local agencies regulations designed to eliminate storm water pollution. Storm drains discharge directly to creeks and the Bay without treatment. Storm water pollution due to construction operations shall be controlled by keeping pollution out of storm drain systems, reducing the exposure and discharge of materials and wastes to storm water, and by reducing erosion and sedimentation.

In this section, the term "storm drain system" shall refer to any storm water conduits, storm drain inlets and other storm drain structures, street gutters, channels, watercourses, creeks, lakes and the San Francisco Bay.

1. Material Storage. The Contractor shall comply with the following practices for materials storage:

The Contractor shall propose designated areas of the project site, for approval by the Engineer, suitable for material delivery, storage, and waste collection that, to the maximum extent practicable, are near construction entrances and at least 10' away from catch basins, gutters, drainage courses, and creeks.

During wet weather or when rain is forecast within 72 hours, the Contractor shall store materials that can contaminate rainwater or be transported by storm water or other runoff to the storm drain system inside a building or cover them with a tarp or other waterproof material secured in a manner that would prevent any of the materials from contacting the rainwater.

The storage and disposal of all hazardous materials such as paints, thinners, solvents, and fuels; and all hazardous wastes such as waste oil, must meet all federal, state, and local standards and requirements.

2. Street Sweeping. At the end of each working day or as directed by the Engineer, the Contractor shall clean and sweep roadways and on-site paved areas of all materials attributed to or invoiced in the work. The Contractor shall not use water to flush down streets in place of street sweeping.
3. Hazardous/Waste Management. The storage and disposal of all hazardous materials, such as pesticides, paints, thinners, solvents, and fuels; and all hazardous wastes, such as waste oil and antifreeze; shall comply with all federal, state, and local standards and requirements. When rain is forecast within 72 hours or during wet weather, the Engineer may prevent the Contractor from applying chemicals in the outside areas.
4. Spill Prevention and Control. The Contractor shall take any and all precautions to prevent accidental spills during the work under this contract. The Contractor shall keep a stockpile of spill cleanup materials such as rags or absorbents, readily accessible on-site. In the event of a spill, the Contractor shall immediately contain and prevent *leaks* and spills from entering the storm drain system, and properly clean up and dispose of the waste and clean up materials. If the waste is hazardous, the Contractor *shall comply* with all federal, state and local hazardous waste requirements.

The Contractor shall not wash any spilled material into the streets, gutters, storm drains, or creeks.

5. De-watering Operations. All groundwater removed from the trench must be de-silted prior to discharging it into the storm drain system through filtering materials methods meeting the Association of Bay Area Governments (ABAG) Standards For Erosion & Sediment Control Measures and/or through methods and procedures described in the California Storm Water Best Management Practice Handbook -Construction Activity (latest edition).

The Contractor shall reuse the water for other needs, such as dust control and irrigation, to the maximum extent practicable. The rinse water shall be permitted to infiltrate in dirt area or shall be discharged to the sanitary sewer.

6. Pavement Saw-cutting Operations. The Contractor shall prevent any saw-cutting debris from entering the storm drain system. The Contractor, preferably, shall use dry cutting techniques and sweep up residue. If wet methods are used, the Contractor shall vacuum slurry as cutting proceeds or collect all waste water by constructing a sandbag sediment barrier. The bermed area shall be of adequate size to collect all waste water and solids. The Contractor shall allow collected water to evaporate if the waste water volume is minimal and if maintaining the ponding area does not interfere with public use of the street area or create a safety hazard. If approved by the Engineer, the Contractor may direct or pump saw-cutting waste water to a dirt area and allow to infiltrate. The dirt area shall be adequate to contain all the waste water. After waste water has infiltrated, all remaining saw-cutting residue must be removed and disposed of properly. With the approval of the Engineer, de-silted water may be pumped to the sanitary sewer to assist in the evaporation or infiltration process. Remaining silt and debris from the ponding or bermed area shall be removed or vacuumed and disposed of properly. If a suitable dirt area is not available or discharge to the sanitary sewer is not feasible, with the approval of the Engineer, the Contractor shall filter the saw-cutting waste water through filtering materials and methods meeting ABAG Standards for Erosion and Sedimentation Control Measures (latest edition) before discharging to the storm drain.
7. Pavement Operations. The Contractor shall prevent the discharge of pollutants from paving operations by using measures to prevent run-on and runoff pollution, properly disposing of wastes, and by implementing the following practices:

No paving during wet weather.

Proper Material Storage (refer to previous section one).

Cover inlets and manholes when applying asphalt, seal coat, tack coat, slurry seal, or fog seal.

Place drip pans or absorbent materials under paving *equipment* when not *in* use. During wet weather, store contaminated paving equipment indoors or cover with tarp or other waterproof covering.

If paving *involves* Portland cement concrete, refer to (next section).

8. Concrete Operations.

The Contractor shall prevent the discharge of pollutants from concrete operations by properly disposing of waste, and by implementing the following practices:

Store all materials in waterproof containers or under cover away from drain inlets or drainage areas.

Avoid mixing excess amounts of Portland cement material.

Do not wash out concrete trucks into storm drains, open ditches, streets, streams, etc. Whenever possible, perform washout of concrete trucks off site where discharge is controlled and not permitted to discharge into the storm drain system. For on site washout, locate washout area at least 50 feet from storm drains, open ditches or other water bodies, preferably in a dirt area. Control runoff from the area by constructing a temporary pit or bermed area large enough for the liquid and solid waste.

Wash out concrete wastes into the temporary *pit* where the concrete can set, be broken up and then disposed of properly. If the volume of water is greater than what will allow concrete to set, allow the water to infiltrate and/or evaporate, if possible. Otherwise, allow water to settle, filter it and then pump to the sanitary sewer with approval of the Engineer. Remove or vacuum the remaining silt and debris from the pond or bermed area and dispose of it properly.

Dispose of water from washing of exposed aggregate to dirt area. The dirt area shall be adequate to contain all the waste water and once the waste water has infiltrated, any remaining residue must be removed. If a suitable dirt area is not available, then the Contractor shall filter the wash water through straw bales or other filtering materials meeting ABAG Standards for Erosion and Sediment Control Measures before discharging to the sanitary sewer with approval from the Engineer.

Collect and return sweepings from exposed aggregate concrete to a stockpile or dispose of the waste in trash containers.

9. Grading and Excavation Operations. The Contractor shall implement sedimentation and erosion control measures to prevent sediments or excavated material from entering the storm drain system.

The erosion and sedimentation control materials and methods shall be in accordance with ABAG Standards for Erosion and Sediment Control Measures and/or the procedures and methods described in the California Storm Water Best Management Practice Handbook - Construction Activity (latest edition).

10. Vehicle/Equipment Cleaning. The Contractor shall not perform vehicle or equipment cleaning on site or in the street using soaps, solvents, degreasers, steam cleaning equipment, or equivalent methods. The Contractor shall perform vehicle or equipment cleaning, with water only, in a designated, bermed area that will not allow rinse water to run off-site or into the storm drain system.

The Contractor shall dispose of wash water from the cleaning of water base paint equipment and tools to the sanitary sewer.

If using oil based paint, to the maximum extent practicable, the Contractor shall filter the paint thinner and solvents for reuse and dispose of the waste thinner and solvent, and sludge from cleaning of equipment and tools as hazardous waste.

11. Vehicle/Equipment Maintenance and Fueling. The Contractor shall perform maintenance and fueling of vehicles or equipment in a designated, bermed area or over a drip pan that will not allow run-on of storm water or runoff of spills. The Contractor shall use secondary containment, such as a drip pan, to catch leaks or spills any time that vehicle or equipment fluids are dispensed, changed, or poured. The Contractor shall clean up leaks and spills of vehicle or equipment fluids immediately and dispose of the waste and cleanup materials as hazardous waste.

The Contractor shall inspect vehicles and equipment arriving *on-site* for leaking fluids and shall promptly repair leaking vehicles and equipment. Drip pans shall be used to catch leaks until repairs are made. The Contractor shall recycle waste *oil* and antifreeze, to the maximum extent practicable. The Contractor shall comply with Federal, State and other local agencies for aboveground storage tanks.

12. Contractor Training and Awareness. The contractor shall train employees/subcontractors on the water pollution prevention requirements contained in these provisions. The Contractor shall inform all subcontractors of the water pollution prevention contract requirements and include appropriate subcontract provisions to ensure that these requirements are met.

The Contractor shall paint new catch basins, constructed as part of the project, with "No Dumping Drains To The Bay".

The Contractor shall conform to the requirements of Chapter 9.30 of the Municipal Code which regulates urban run-off pollution.

Full compensation for conforming to the provisions herein specified shall be considered as included in the prices paid for the contract items or work involved in compliance with said provisions and no additional compensation will be allowed therefore unless specified as part of a contract item for implementation of a Storm Water Pollution Prevention Plan (SWPPP).

O. Final Cleanup

Final cleanup shall conform to the requirements of Section 4-1.13 of the Standard Specifications and full compensation therefor will be considered as included in the prices paid for the various contract items of work and no separate payment will be made therefor.

P. Final Inspection

When the work covered by the project is substantially completed the Contractor shall notify the Engineer, in writing, that the work will be ready for final inspection on a definite date which shall be stated in such notice. The notice shall be given at least five (5) days prior to the stated date for final inspection. If the Engineer determines that the status of the work is as represented he will make the arrangements necessary to have final inspection commenced on the date stated in such notice, or as soon thereafter as is practicable.

Completion of the punch list items shall take place within the limits of the construction time period as allowed by the contract.

If the contractor receives the final punch list after the final project working day allowed by the contract, the Contractor shall complete the final punch list items within five (5) working days from receipt: If the Contractor receives the final punch list while working days are available, then the Contractor will have up to five (5) working days past the final project working day to complete the punch list items. If the final punch list items are not completed within the five (5) workings days, liquidated damages in the amount of \$200 per day shall be, assessed to the Contractor.

Q. Authority of Engineer and Conduct of Work

Attention is directed to the provisions in Section 5, "Control of Work," of the Standard Specifications and these Special Provisions.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications and the general provisions, the Contractor shall apply to the Engineer for such further explanations as may be necessary and shall conform to them as part of the contract, so far as may be consistent with the original specifications; and in the event of any doubt of questions arising regarding the true meaning of the specifications, reference shall be made to the Engineer, whose decision shall be final.

R. Lines and Grades

This work shall consist of furnishing and setting construction stakes and marks by the Contractor to establish the lines and grades required for the completion of the work as shown on the plans and as specified in the Standard Specifications and these Special Provisions.

Except as provided herein for establishment of horizontal and vertical control and right-of-way staking by the Engineer, all other specifications, including the requirements in Section 5-1.07, "Lines and Grades," of the Standard Specification, which require the establishment of lines and grades by the Engineer shall not apply to this contract.

The Contractor shall submit proposed procedures, methods, equipment, and typical stakes markings to be used, in writing to the Engineer, before setting any stakes or marks.

Construction staking shall be performed as necessary to control the work. Construction stakes and marks shall be furnished and set with accuracy adequate to assure that the complete work conforms to the lines, grades, and sections shown on the plans. The Engineer will establish and furnish survey data to the Contractor for the construction control survey. Horizontal control will mean nails and shiners with stationing as shown on the plan and vertical control will mean Town benchmarks.

In the event the Contractor's operations destroy any of the Engineer's survey control points, the Contractor shall either replace such control points at his expense, subject to verification by the Engineer, or request the Engineer to replace the destroyed control points. If requested to replace the control points, the Engineer will do so within 10 working days. The cost of any such verification or replacement of the Engineer's control surveys will be deducted from any moneys due or to become due the Contractor. The Contractor will not be allowed any adjustment in contract time for such verification or replacement of survey control points by the Engineer.

All computations necessary to establish the exact position of the work from control points shall be made by the Contractor. All computations, survey notes, and other records necessary to accomplish this work shall be neat, legible and accurate. Copies of such computations, notes, and other records shall be furnished to the Engineer prior to beginning work that requires their use.

Full compensation for construction staking shall be considered as included in the contract prices paid for the various bid items of work, and no separate payment will be made.

S. Overtime and Weekend Work

Inspection personnel will be available as required during normal working hours from 8:00 a.m. to 5:00 p.m. on Monday thru Friday. In the event that the Contractor wishes to schedule overtime work after 5:00 p.m. or before 8:00 a.m. on Monday thru Friday, or at any time on Saturdays, Sundays or holidays, he/she shall make arrangements with the Engineer at least forty-eight (48) hours in advance of such overtime work. In the event that the Engineer is unable to schedule the necessary personnel the Contractor's request may be denied and no work shall be performed outside of normal working hours unless the work is of an emergency nature.

T. Protection of Underground Facilities

Contractor shall protect in place existing utility facilities, unless noted on plans.

U. Sound Control Requirements

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

Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.

The noise level from the Contractor's operations, between the hours of 9:00 P.M. and 6:00 A.M., shall not exceed 86 decibels at a distance of 50 feet. This requirement in no way relieves the Contractor from responsibility for complying with local ordinances regulating noise level.

Said noise level requirement shall apply to all equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel. Full compensation for conforming to the requirements of *this* section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

V. Construction Materials and Testing

Attention is directed to Section 6 of the Standard Specifications. The Contractor shall furnish all materials required for this project.

All materials incorporated in the project shall meet the requirements of the tests specified in the Standard Specifications and other minimum requirements specified therein or in these specifications.

The Contractor, shall at no additional expense to the Town, furnish certificates of inspection or laboratory reports from a reputable testing or inspection agency as to compliance with the specifications and the composition, durability and performance of the following material:

NONE

Test reports on any material must be submitted and approved by the Engineer before incorporating that material in the work. All materials shall be adequately identified by tags or by other means as that material which has been tested and approved. Lack of proper identification shall be considered adequate cause of rejection of any material which cannot be properly inspected on the job.

The Town reserves the right to make such additional inspection or test as it may require prior to acceptance of any material and also reserves the right to reject any material previously approved because of serious defects or damage discovered subsequent to such approval. Any materials rejected by the Town shall immediately be removed from the job site, and no payment will be allowed.

W. Archaeological Discoveries

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

X. Federal Lobbying Restrictions

Section 1352, Title 1352, Title 31, United States Code prohibits Federal funds from being expended by the recipient or any lower tier subrecipient of a Federal-aid contract to pay for any person for influencing or attempting to influence a federal agency or Congress in connection with the awarding of any federal-aid contract, the making of any federal grant or loan, or the entering into of any cooperative agreement.

If any funds other than federal funds have been paid for the same purposes in connection with this federal-aid contract, the recipient shall submit an executed certification and, if required, submit a completed disclosure form as part of the bid documents.

A certification for federal-aid contracts regarding payment of funds to lobby Congress or a federal agency is included in the Proposal. Standard Form - LLL, "Disclosure of Lobbying Activities," with instructions for completion of the Standard Form is also included in the Proposal. Signing the Proposal shall constitute signature of the Certification.

The above referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding \$100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

The Contractor, subcontractors and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractors and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

- (1) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered federal action; or
- (2) A change in the person(s) or individual(s) influencing or attempting to influence a covered federal action; or
- (3) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal Action.

Y. Removal of Asbestos and Hazardous Substances

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

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

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and the Contractor will be compensated for the delay as provided in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Z. SUBCONTRACTOR AND DBE RECORDS

Reference is made to Exhibit 12-G, Section 1-d, "Subcontractor and Disadvantaged Business Enterprise Records" of the Required Federal-Aid Contract Language, see General-Special Provisions.

AA. PERFORMANCE OF SUBCONTRACTORS

Reference is made to Exhibit 12-E – Attachment L, Section 5-1____, “Subcontracting” and Exhibit 12-G, Section 1-e, “Performance of Disadvantaged Business Enterprises” of the Required Federal-Aid Contract Language, see General-Special Provisions.

BB. PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS

Reference is made to Exhibit 12-E – Attachment L, Section 5-1.____, “Prompt Payment to Subcontractors” of the Required Federal-Aid Contract Language, see General-Special Provisions.

CC. PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS

Reference is made to Exhibit 12-G, Section 10, “Prompt Payment of Funds Withheld to Subcontractors” of the Required Federal-Aid Contract Language, see General-Special Provisions.

DD. PAYMENTS

Attention is directed to Section 9-1.16, "Progress Payments," and 9-1.17, "Payment After Contract Acceptance," of the Standard Specifications and these special provisions.

For the purpose of making partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications, the amount set forth for the contract items of work hereinafter listed shall be deemed to be the maximum value of the contract item of work, which will be recognized for progress payment purposes.

No partial payment will be made for any materials on hand which are furnished but not incorporated in the work.

5-1. SUBCONTRACTING

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

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

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

Each subcontract must comply with the contract.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).

Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations' Web site.

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

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 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.

5-1. PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS

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

EXHIBIT 12-G REQUIRED FEDERAL-AID CONTRACT LANGUAGE
(For Local Assistance Construction Projects)**1. DISADVANTAGED BUSINESS ENTERPRISES (DBE)**

Under 49 CFR 26.13(b):

The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

To ensure equal participation of DBEs provided in 49 CFR 26.5, the Agency shows a goal for DBEs.

Make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

Meet the DBE goal shown elsewhere in these special provisions or demonstrate that you made adequate good faith efforts to meet this goal.

It is your responsibility to verify that the DBE firm is certified as DBE at date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to:

http://www.dot.ca.gov/hq/bep/find_certified.htm.

All DBE participation will count toward the California Department of Transportation's federally mandated statewide overall DBE goal.

Credit for materials or supplies you purchase from DBEs counts towards the goal in the following manner:

- 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
- 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
- Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer nor regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55(d)(1) through (4) and (6).

a. DBE Commitment Submittal

Submit the Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form, included in the Bid book. If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

If the DBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the DBE Commitment form to the Agency. DBE Commitment form must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

Other bidders do not need to submit the DBE Commitment form unless the Agency requests it. If the Agency requests you to submit a DBE Commitment form, submit the completed form within 4 business days of the request.

Submit written confirmation from each DBE stating that it is participating in the contract. Include confirmation with the DBE Commitment form. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract.

If you do not submit the DBE Commitment form within the specified time, the Agency will find your bid nonresponsive.

b. Good Faith Efforts Submittal

If you have not met the DBE goal, complete and submit the DBE Information - Good Faith Efforts, Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Only good faith efforts directed towards obtaining participation by DBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

If your DBE Commitment form shows that you have met the DBE goal or if you are required to submit the DBE Commitment form, you must also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the Agency finds that the DBE goal has not been met.

Good faith efforts documentation must include the following information and supporting documents, as necessary:

1. Items of work you have made available to DBE firms. Identify those items of work you might otherwise perform with your own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to DBE firms.
2. Names of certified DBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the DBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing statements, and other evidence of solicitation. You are reminded to solicit certified DBEs through all reasonable and available means and provide sufficient time to allow DBEs to respond.
3. Name of selected firm and its status as a DBE for each item of work made available. Include name, address, and telephone number of each DBE that provided a quote and their price quote. If the firm selected for the item is not a DBE, provide the reasons for the selection.
4. Name and date of each publication in which you requested DBE participation for the project. Attach copies of the published advertisements.
5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using DBE firms. If the agencies were contacted in writing, provide copies of supporting documents.
6. List of efforts made to provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the DBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.
7. List of efforts made to assist interested DBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the DBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the DBE assisted, nature of the assistance offered, and date assistance was provided. Provide copies of supporting documents, as appropriate.
8. Any additional data to support demonstration of good faith efforts.

The Agency may consider DBE commitments of the 2nd and 3rd bidders when determining whether the low bidder made good faith efforts to meet the DBE goal.

c. Exhibit 15-G - Local Agency Bidder DBE Information (Construction Contracts)

Complete and sign Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* included in the contract documents regardless of whether DBE participation is reported.

Provide written confirmation from each DBE that the DBE is participating in the Contract. A copy of a DBE's quote serves as written confirmation. If a DBE is participating as a joint venture partner, the Agency encourages you to submit a copy of the joint venture agreement.)

d. Subcontractor and Disadvantaged Business Enterprise Records

Use each DBE subcontractor as listed on Exhibit 12-B *Bidder's List of Subcontractors (DBE and Non-DBE)* and Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form unless you receive authorization for a substitution.

The Agency requests the Contractor to:

1. Notify the Engineer of any changes to its anticipated DBE participation
2. Provide this notification before starting the affected work
3. Maintain records including:
 - Name and business address of each 1st-tier subcontractor
 - Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier
 - Date of payment and total amount paid to each business

If you are a DBE contractor, include the date of work performed by your own forces and the corresponding value of the work.

Before the 15th of each month, submit a Monthly DBE Trucking Verification form.

If a DBE is decertified before completing its work, the DBE must notify you in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify you in writing of the certification date. Submit the notifications. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O, form. Submit the form within 30 days of contract acceptance.

Upon work completion, complete Exhibit 17-F *Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors*. Submit it within 90 days of contract acceptance. The Agency will withhold \$10,000 until the form is submitted. The Agency releases the withhold upon submission of the completed form.

e. Performance of Disadvantaged Business Enterprises

DBEs must perform work or supply materials as listed in the Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form, included in the Bid.

Do not terminate or substitute a listed DBE for convenience and perform the work with your own forces or obtain materials from other sources without authorization from the Agency.

The Agency authorizes a request to use other forces or sources of materials if it shows any of the following justifications:

1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. You stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet your bond requirements.
3. Work requires a contractor's license and listed DBE does not have a valid license under Contractors License Law.
4. Listed DBE fails or refuses to perform the work or furnish the listed materials.
5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
6. Listed DBE is ineligible to work on the project because of suspension or debarment.
7. Listed DBE becomes bankrupt or insolvent.

8. Listed DBE voluntarily withdraws with written notice from the Contract
9. Listed DBE is ineligible to receive credit for the type of work required.
10. Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.
11. Agency determines other documented good cause.

Notify the original DBE of your intent to use other forces or material sources and provide the reasons. Provide the DBE with 5 days to respond to your notice and advise you and the Agency of the reasons why the use of other forces or sources of materials should not occur. Your request to use other forces or material sources must include:

1. One or more of the reasons listed in the preceding paragraph
2. Notices from you to the DBE regarding the request
3. Notices from the DBEs to you regarding the request

If a listed DBE is terminated or substituted, you must make good faith efforts to find another DBE to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet the DBE goal.

The substitute DBE must be certified as a DBE at the time of request for substitution.

Unless the Agency authorizes (1) a request to use other forces or sources of materials or (2) a good faith effort for a substitution of a terminated DBE, the Agency does not pay for work listed on the Exhibit 15-G *Local Agency Bidder DBE Commitment (Construction Contracts)* form unless it is performed or supplied by the listed DBE or an authorized substitute.

2. **BID OPENING** The Agency publicly opens and reads bids at the time and place shown on the *Notice to Bidders*.
3. **BID RIGGING** The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is
(800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous.. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.
4. **CONTRACT AWARD** If the Agency awards the contract, the award is made to the lowest responsible bidder.
5. **CONTRACTOR LICENSE**
The Contractor must be properly licensed as a contractor from contract award through Contract acceptance (Public Contract Code § 10164).
6. **CHANGED CONDITIONS**
 - 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. (This provision may be omitted by the Local Agency, at their option.)

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:

- 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
- 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.

7. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall begin work within 15 calendar days after the contract has been approved by the attorney appointed and authorized to represent the Town of Ross.

This work shall be diligently prosecuted to completion before the expiration of 40 WORKING DAYS beginning on the fifteenth calendar day after approval of the contract.

The Contractor shall pay to the Town of Ross the sum of \$ 1,360.00 per day, for each and every calendar day's delay in finishing the work in excess of the number of working days prescribed above.

8. BUY AMERICA

Furnish steel and iron materials to be incorporated into the work with certificates of compliance. Steel and iron materials must be produced in the U.S. except:

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

Production includes:

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

9. QUALITY ASSURANCE

The Agency uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract.

You may examine the records and reports of tests the Agency performs if they are available at the job site.

Schedule work to allow time for QAP.

10. PROMPT PAYMENT OF FUNDS WITHHELD TO SUBCONTRACTORS

The agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the agency, of the contract work, and pay retainage to the prime contractor based on these acceptances. The prime contractor, or subcontractor, shall return all monies withheld in retention from a subcontractor within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Federal law (49CFR26.29) requires that any delay or postponement of payment over 30 days may take place only for good cause and with the agency's prior written approval. Any violation of this provision shall subject

the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified in Section 7108.5 of the Business and Professions Code. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

11. FORM FHWA-1273 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONTRACTS

[The following 10 pages are physically inserted into the contract without modification.]

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency

and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate)

determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the

contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same

prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and

engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in

connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these

instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered

Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

12. FEMALE AND MINORITY GOALS

To comply with Section II, "Nondiscrimination," of "Required Contract Provisions Federal-Aid Construction Contracts," the following are goals for female and minority utilization goals for Federal-aid construction contracts and subcontracts that exceed \$10,000:

The nationwide goal for female utilization is 6.9 percent.

The goals for minority utilization [45 Fed Reg 65984 (10/3/1980)] are as follows:

MINORITY UTILIZATION GOALS

Economic Area		Goal (Percent)
174	Redding CA: Non-SMSA (Standard Metropolitan Statistical Area) Counties: CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehama	6.8
175	Eureka, CA Non-SMSA Counties: CA Del Norte; CA Humboldt; CA Trinity	6.6
176	San Francisco-Oakland-San Jose, CA: SMSA Counties: 7120 Salinas-Seaside-Monterey, CA CA Monterey	28.9
	7360 San Francisco-Oakland CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo	25.6
	7400 San Jose, CA CA Santa Clara, CA	19.6
	7485 Santa Cruz, CA CA Santa Cruz	14.9
	7500 Santa Rosa CA Sonoma	9.1
	8720 Vallejo-Fairfield-Napa, CA CA Napa; CA Solano	17.1
	Non-SMSA Counties: CA Lake; CA Mendocino; CA San Benito	23.2
177	Sacramento, CA: SMSA Counties: 6920 Sacramento, CA CA Placer; CA Sacramento; CA Yolo	16.1
	Non-SMSA Counties CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA Sutter; CA Yuba	14.3
178	Stockton-Modesto, CA: SMSA Counties: 5170 Modesto, CA CA Stanislaus	12.3
	8120 Stockton, CA CA San Joaquin	24.3
	Non-SMSA Counties CA Alpine; CA Amador; CA Calaveras; CA Mariposa; CA Merced; CA Tuolumne	19.8
179	Fresno-Bakersfield, CA SMSA Counties: 0680 Bakersfield, CA CA Kern	19.1

	2840 Fresno, CA CA Fresno Non-SMSA Counties: CA Kings; CA Madera; CA Tulare	26.1 23.6
180	Los Angeles, CA: SMSA Counties: 0360 Anaheim-Santa Ana-Garden Grove, CA CA Orange 4480 Los Angeles-Long Beach, CA CA Los Angeles 6000 Oxnard-Simi Valley-Ventura, CA CA Ventura 6780 Riverside-San Bernardino-Ontario, CA CA Riverside; CA San Bernardino 7480 Santa Barbara-Santa Maria-Lompoc, CA CA Santa Barbara Non-SMSA Counties CA Inyo; CA Mono; CA San Luis Obispo	11.9 28.3 21.5 19.0 19.7 24.6
181	San Diego, CA: SMSA Counties 7320 San Diego, CA CA San Diego Non-SMSA Counties CA Imperial	16.9 18.2

For each July during which work is performed under the contract, you and each non material-supplier subcontractor with a subcontract of \$10,000 or more must complete Form FHWA PR-1391 (Appendix C to 23 CFR 230). Submit the forms by August 15.

13. FEDERAL TRAINEE PROGRAM

For the Federal training program, the number of trainees or apprentices is zero (0).

This section applies if a number of trainees or apprentices is specified in the special provisions.

As part of your equal opportunity affirmative action program, provide on-the-job training to develop full journeymen in the types of trades or job classifications involved.

You have primary responsibility for meeting this training requirement.

If you subcontract a contract part, determine how many trainees or apprentices are to be trained by the subcontractor.

Include these training requirements in your subcontract.

Where feasible, 25 percent of apprentices or trainees in each occupation must be in their 1st year of apprenticeship or training.

Distribute the number of apprentices or trainees among the work classifications on the basis of your needs and the availability of journeymen in the various classifications within a reasonable recruitment area.

Before starting work, submit to the Town of Ross:

1. Number of apprentices or trainees to be trained for each classification
2. Training program to be used
3. Training starting date for each classification

Obtain the Town of Ross' approval for this submitted information before you start work. The Town of Ross credits you for each apprentice or trainee you employ on the work who is currently enrolled or becomes enrolled in an approved program.

The primary objective of this section is to train and upgrade minorities and women toward journeymen status. Make every effort to enroll minority and women apprentices or trainees, such as conducting systematic and direct recruitment through public and private sources likely to yield minority and women apprentices or trainees, to the extent they are available within a reasonable recruitment area. Show that you have made the efforts. In making these efforts, do not discriminate against any applicant for training.

Do not employ as an apprentice or trainee an employee:

1. In any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman
2. Who is not registered in a program approved by the US Department of Labor, Bureau of Apprenticeship and Training

Ask the employee if the employee has successfully completed a training course leading to journeyman status or has been employed as a journeyman. Your records must show the employee's answers to the questions.

In your training program, establish the minimum length and training type for each classification. The Town of Ross and FHWA approves a program if one of the following is met:

1. It is calculated to:
 - Meet the your equal employment opportunity responsibilities
 - Qualify the average apprentice or trainee for journeyman status in the classification involved by the end of the training period
2. It is registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, and it is administered in a way consistent with the equal employment responsibilities of Federal-aid highway construction contracts

Obtain the State's approval for your training program before you start work involving the classification covered by the program.

Provide training in the construction crafts, not in clerk-typist or secretarial-type positions. Training is allowed in lower level management positions such as office engineers, estimators, and timekeepers if the training is oriented toward construction applications. Training is allowed in the laborer classification if significant and meaningful training is provided and approved by the division office. Off-site training is allowed if the training is an integral part of an approved training program and does not make up a significant part of the overall training.

The Town of Ross reimburses you 80 cents per hour of training given an employee on this contract under an approved training program:

1. For on-site training
2. For off-site training if the apprentice or trainee is currently employed on a Federal-aid project and you do at least one of the following:
 - Contribute to the cost of the training
 - Provide the instruction to the apprentice or trainee
 - Pay the apprentice's or trainee's wages during the off-site training period
3. If you comply this section.

Each apprentice or trainee must:

1. Begin training on the project as soon as feasible after the start of work involving the apprentice's or trainee's skill
2. Remain on the project as long as training opportunities exist in the apprentice's or trainee's work classification or until the apprentice or trainee has completed the training program

Furnish the apprentice or trainee:

1. Copy of the program you will comply with in providing the training
2. Certification showing the type and length of training satisfactorily completed

14. TITLE VI ASSURANCES

During the performance of this Agreement, the contractor, for itself, its assignees and successors in interest (hereinafter collectively referred to as CONTRACTOR) agrees as follows:

- (1) Compliance with Regulations: CONTRACTOR shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the REGULATIONS), which are herein incorporated by reference and made a part of this agreement.
- (2) Nondiscrimination: CONTRACTOR, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, sex, national origin, religion, age, or disability in the selection and retention of sub-applicants, including procurements of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Sub-agreements, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by CONTRACTOR for work to be performed under a Sub-agreement, including procurements of materials or leases of equipment, each potential sub-applicant or supplier shall be notified by CONTRACTOR of the CONTRACTOR'S obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- (4) Information and Reports: CONTRACTOR shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the California Department of Transportation or FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the California Department of Transportation or the FHWA as appropriate, and shall set forth what efforts CONTRACTOR has made to obtain the information.
- (5) Sanctions for Noncompliance: In the event of CONTRACTOR'S noncompliance with the nondiscrimination provisions of this agreement, the California Department of Transportation shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - (a) withholding of payments to CONTRACTOR under the Agreement within a reasonable period of time, not to exceed 90 days; and/or
 - (b) cancellation, termination or suspension of the Agreement, in whole or in part.
- (6) Incorporation of Provisions: CONTRACTOR shall include the provisions of paragraphs (1) through (6) in every sub-agreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

CONTRACTOR shall take such action with respect to any sub-agreement or procurement as the California Department of Transportation or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance, provided, however, that, in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a sub-applicant or supplier as a result of such direction, CONTRACTOR may request the California Department of Transportation enter into such litigation to protect the interests of the State, and, in addition, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

15. USE OF UNITED STATES-FLAG VESSELS

The CONTRACTOR agrees-

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carries, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

2. To Furnish within 20 days following the date of loading for shipments originating within the United State or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated “on-board” commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

MAINTAIN RECORDS AND SUBMIT REPORTS DOCUMENTING YOUR PERFORMANCE UNDER THIS SECTION

Final Report-Utilization of Disadvantaged Business Enterprises (DBE) and First-Tier Subcontractors

EXHIBIT 17-F FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE) AND FIRST-TIER SUBCONTRACTORS

1. Local Agency Contract Number		2. Federal-Aid Project Number		3. Local Agency			4. Contract Completion Date	
5. Contractor/Consultant			6. Business Address				7. Final Contract Amount	
8. Contract Item Number	9. Description of Work, Service, or Materials Supplied	10. Company Name and Business Address	11. DBE Certification Number	12. Contract Payments		13. Date Work Completed	14. Date of Final Payment	
				Non-DBE	DBE			
15. ORIGINAL DBE COMMITMENT AMOUNT \$ _____				16. TOTAL				

List all first-tier subcontractors/subconsultants and DBEs regardless of tier whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of work) was different than that approved at the time of award, provide comments on an additional page. List actual amount paid to each entity. If no subcontractors/subconsultants were used on the contract, indicate on the form.

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT							
17. Contractor/Consultant Representative's Signature		18. Contractor/Consultant Representative's Name		19. Phone		20. Date	
I CERTIFY THAT THE CONTRACTING RECORDS AND ON-SITE PERFORMANCE OF THE DBE(S) HAS BEEN MONITORED							
21. Local Agency Representative's Signature		22. Local Agency Representative's Name		23. Phone		24. Date	

DISTRIBUTION: Original – Local Agency, Copy – Caltrans District Local Assistance Engineer. Include with Final Report of Expenditures

ADA NOTICE: For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, Local Assistance Procedures Manual TTY 711, or write to Records and Forms

INSTRUCTIONS – FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE) AND FIRST-TIER SUBCONTRACTORS

- 1. Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
- 2. Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
- 3. Local Agency** - Enter the name of the local or regional agency that is funding the contract.
- 4. Contract Completion Date** - Enter the date the contract was completed.
- 5. Contractor/Consultant** - Enter the contractor/consultant's firm name.
- 6. Business Address** - Enter the contractor/consultant's business address.
- 7. Final Contract Amount** - Enter the total final amount for the contract.
- 8. Contract Item Number** - Enter contract item for work, services, or materials supplied provided. Not applicable for consultant contracts.
- 9. Description of Work, Services, or Materials Supplied** - Enter description of work, services, or materials provided. Indicate all work to be performed by DBEs including work performed by the prime contractor/consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
- 10. Company Name and Business Address** - Enter the name, address, and phone number of all subcontracted contractors/consultants. Also, enter the prime contractor/consultant's name and phone number, if the prime is a DBE.
- 11. DBE Certification Number** - Enter the DBE's Certification Identification Number. Leave blank if subcontractor is not a DBE.
- 12. Contract Payments** - Enter the subcontracted dollar amount of the work performed or service provided. Include the prime contractor/consultant if the prime is a DBE. The Non-DBE column is used to enter the dollar value of work performed by firms that are not certified DBE or for work after a DBE becomes decertified.
- 13. Date Work Completed** - Enter the date the subcontractor/subconsultant's item work was completed.
- 14. Date of Final Payment** - Enter the date when the prime contractor/consultant made the final payment to the subcontractor/subconsultant for the portion of work listed as being completed.
- 15. Original DBE Commitment Amount** - Enter the "Total Claimed DBE Participation Dollars" from Exhibits 15-G or 10-O2 for the contract.
- 16. Total** - Enter the sum of the "Contract Payments" Non-DBE and DBE columns.
- 17. Contractor/Consultant Representative's Signature** - The person completing the form on behalf of the contractor/consultant's firm must sign their name.
- 18. Contractor/Consultant Representative's Name** - Enter the name of the person preparing and signing the form.
- 19. Phone** - Enter the area code and telephone number of the person signing the form.
- 20. Date** - Enter the date the form is signed by the contractor's preparer.
- 21. Local Agency Representative's Signature** - A Local Agency Representative must sign their name to certify that the contracting records and on-site performance of the DBE(s) has been monitored.
- 22. Local Agency Representative's Name** - Enter the name of the Local Agency Representative signing the form.
- 23. Phone** - Enter the area code and telephone number of the person signing the form.
- 24. Date** - Enter the date the form is signed by the Local Agency Representative.

Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**INSTRUCTIONS –DISADVANTAGED BUSINESS ENTERPRISES (DBE)
CERTIFICATION STATUS CHANGE**

- 1. Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
- 2. Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
- 3. Local Agency** - Enter the name of the local or regional agency that is funding the contract.
- 4. Contract Completion Date** - Enter the date the contract was completed.
- 5. Contractor/Consultant** - Enter the contractor/consultant's firm name.
- 6. Business Address** - Enter the contractor/consultant's business address.
- 7. Final Contract Amount** - Enter the total final amount for the contract.
- 8. Contract Item Number** - Enter contract item for work, services, or materials supplied provided. Not applicable for consultant contracts.
- 9. DBE Contact Information** - Enter the name, address, and phone number of all DBE subcontracted contractors/consultants.
- 10. DBE Certification Number** - Enter the DBE's Certification Identification Number.
- 11. Amount Paid While Certified** - Enter the actual dollar value of the work performed by those subcontractors/subconsultants during the time period they are certified as a DBE.
- 12. Certification/Decertification Date (Letter Attached)** - Enter either the date of the Decertification Letter sent out by the Office of Business and Economic Opportunity (OBEO) or the date of the Certification Certificate mailed out by OBEO.
- 13. Comments** - If needed, provide any additional information in this section regarding any of the above certification status changes.
- 14. Contractor/Consultant Representative's Signature** - The person completing the form on behalf of the contractor/consultant's firm must sign their name.
- 15. Contractor/Consultant Representative's Name** - Enter the name of the person preparing and signing the form.
- 16. Phone** - Enter the area code and telephone number of the person signing the form.
- 17. Date** - Enter the date the form is signed by the contractor's preparer.
- 18. Local Agency Representative's Signature** - A Local Agency Representative must sign their name to certify that the contracting records and on-site performance of the DBE(s) has been monitored.
- 19. Local Agency Representative's Name** - Enter the name of the Local Agency Representative signing the form.
- 20. Phone** - Enter the area code and telephone number of the person signing the form.
- 21. Date** - Enter the date the form is signed by the Local Agency Representative.

SECTION 10. SPECIAL PROVISIONS

10.01 GENERAL

- A. LOCATIONS OF PROJECT. The Project is along portions of various streets within the Towns of Ross and San Anselmo as shown on the design plans. These locations include:
- a. Sir Francis Drake Boulevard from 100 Sir Francis Drake Boulevard south to 84 Sir Francis Drake Boulevard
 - b. Bolinas Avenue from the intersection with Sir Francis Drake Boulevard west to the intersection with Shady Lane
- B. SCOPE OF WORK. The work to be performed under this contract consists of improving existing traffic signal systems and pedestrian routes which will meet Federal, State, County, and Town requirements. Improvements shall, where possible, conform to Americans with Disabilities Act (ADA) requirements. The project will repave to improve and reconstruct the roadway on Sir Francis Drake Boulevard from Winship Avenue to through the 100 block and on Bolinas Avenue from Sir Francis Drake Boulevard to Shady Lane. The project includes work on the roadway islands, traffic signals, crosswalks, curb and gutter, sidewalks and curb ramps.
- C. SUBMITTALS. The Contractor shall submit a minimum of six (6) copies of all submittals including, but not limited to, shop drawings, schedules and reports, product data, manufacturer's instructions, design calculations, design drawings and other material required in the Contract Documents. Two (2) copies of each submittal will be returned to the Contractor within seven (7) calendar days from receipt by the Engineer. In addition to the submittals required in the Specifications or in specific work sections of the special provisions, the Contractor shall submit the following:
1. Construction Schedule. A proposed construction schedule shall be submitted at the preconstruction meeting. The schedule shall be updated, and submitted at the weekly construction meetings. Schedule may be CPM, or a Bar Chart Schedule, but must include all major work items and show all interrelationships.
 2. Schedule of Submittals. A schedule of all submittals shall be submitted at the preconstruction meeting.
 3. A traffic control plan shall be submitted to the Engineer at the pre-construction meeting. This plan shall explain how the Contractor will control the traffic during the life of the project. In this plan the Contractor shall identify how the conduct of the work will take place with minimum impact to the tenants at the Project Site.
 4. A construction staging and phasing plan shall be submitted to the Engineer at the preconstruction meeting. The contractor shall detail the anticipated order of work, anticipated times and durations for closure of sidewalks and roadway travel lanes. The contractor shall explain how they intend to maintain access to the public, including pedestrians and transit vehicles, through the area of work at all times. Attention is directed to Section 7-1.03 "Public Convenience," 7-1.04 "Public Safety," and 12 "Construction Area Traffic Control Devices" of the Standard Specifications, insofar as they may apply, and the Traffic Control section of these Special Provisions.
- D. The Contractor shall be cognizant that the project involves work on public roads in the Towns of Ross and San Anselmo. The bidder shall carefully examine the work site, the plans, specifications, and the proposal contract forms. Prior to bidding, the prospective contractors shall thoroughly investigate the conditions which will be encountered in the project.

- E. The Contractor shall protect in place all existing facilities within the limits of work that are not a part of the project. All damaged facilities shall be repaired or replaced as directed by the Engineer. All costs associated with protecting, repairing and/or replacing these facilities shall be the sole responsibility of the Contractor.
- F. The Contractor shall post “No Parking” and “Tow Away” signs with dates and time restrictions described in work areas seventy-two (72) hours prior to commencement of work. However, if the intended work does not commence within 24 hours of the scheduled work, all “No Parking” signs shall be removed from the site unless otherwise directed by the Engineer. The Contractor shall also follow the traffic and resident/business advisory requirements of **Section 10.08** of the Special Provisions.
- G. Normal working hours shall not be earlier than 8:00 A.M. or later than 5:00 P.M. on non-holiday weekdays. Extended hours and work on weekends and/or holidays may be approved by the Engineer, provided the Contractor makes such request at least 72 hours prior to work outside of the normal working hours.
- H. The Contractor shall provide a safe continuous path of travel for pedestrian traffic during all phases of construction. If pedestrians are directed away from the existing pedestrian travel way due to construction, a suitable alternate path shall be provided. If a suitable alternative path cannot be provided either due to environmental or site constraints, then the Contractor shall provide physical barrier(s) and signage closing the existing pedestrian travel way. The Contractor will consult with the Town Engineer regarding suitable alternative routes prior to closing the existing pedestrian travel way segments. A suitable alternate path will include, but is not limited to, temporary ADA compliant ramps, traffic control, and physical barriers to separate pedestrians from traffic and signage. It is clearly understood that it is the Contractor’s responsibility to provide a safe path of travel at all times.
- I. The Contractor shall provide to the Town the names, addresses, and telephone numbers of at least two emergency contacts for the duration of this contract. At any given time during the contract, at least one of these individuals must be reachable by telephone. This information shall be provided to the Town at the pre-construction conference. The Contractor shall immediately inform the Town of the replacement’s information should the Contractor’s contacts change during the duration of the contract.

FEDERAL REQUIREMENTS

The Contractor shall furnish various Federal reports in accordance with the following:

During the course of the contract, in compliance with the Davis-Bacon Act, the Contractor and all subcontractors shall submit weekly payroll records containing the following:

1. A properly completed payroll certification on forms supplied by Town, or Federal Forms ED-110 or WHO-347, including name, address, correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid for all employees;
2. A weekly Statement of Compliance Form ED-162, properly completed; and
3. A Certification of Prime Contractor as found on the reverse side of Form ED-110 and WHIG-347, or separate Town form, properly executed.

MINIMUM WAGE RATES

Attention is directed to the Federal minimum wage rate section contained within the contract documents. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rate determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The Town will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

Wage and equipment rental rates as determined by the State of California are listed in the Department of Transportation publications entitled "General Prevailing Wage Rates," issued monthly, and "Labor Surcharges and Equipment Rental Rates," issued semi-monthly.

The Federal minimum wage rates for this project, as predetermined by the United States Secretary of Labor, are available through the California Department of Transportation's Electronic Project Document Distribution Site on the Internet at <http://www.wdol.gov/>. Addenda to modify the Federal minimum wage rates, if necessary, will be issued to holders of the Contract Book. 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.

PAYMENT

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various Bid Items and no separate payment will be made.

10.02 ORDER OF WORK AND PROGRESS SCHEDULE

The Contractor shall prepare and submit a progress schedule in accordance with Section 8-1.04 "Start of Job Site Activities" of the Standard Specifications and in a form provided by or acceptable to the Engineer. The Contractor shall also provide a list of materials (indicating the names and addresses of suppliers) to be used on the project and his method of handling traffic.

The Contractor shall allow five (5) working days for the review and approval of the Progress Schedule by the Engineer.

No work may begin under the contract until the progress schedule, phasing plan and traffic control plans have been approved by the Engineer. Time required for review and approval of these items shall not constitute a basis for time extension.

Prior to the start of work the Contractor shall install the respective advance notice construction signs, and detour signs where applicable, in accordance with Section 10.08, "Signs and Traffic Control," of these Special Provisions.

Prior to commencing work, the Contractor shall contact the utility companies mentioned above to determine the status of their utilities relocations if any at these locations. The point-of- contacts are as follows:

AT&T

Michael McAfee
AT&T North Coast Engineering
– Public Works Coordination
2125 Occidental Road
Santa Rosa, CA 95401

Pacific Gas & Electric Co.

Eric Cookman
Industrial Power Engineer
1220 Andersen Drive
San Rafael, CA 94901

CableCom

Paul Alabona
Eng Supervisor
825 Chadbourne Rd
Fairfield, CA 94534

MMWD

Elysha Anderson
Senior Engineer
220 Nellen Avenue
Corte Madera, CA 94925

Ross Valley Sanitary District

Katherine Hayden
Infrastructure Assets Manager
2960 Kerner Boulevard
San Rafael, CA 94901

If further information is inconclusive, then the Contractor shall perform potholing (per Section 10.03 "Existing Facilities/Cooperation" of these Special Provisions) to ascertain the exact location of existing facilities.

Construction work shall not commence until all materials are available. The Contractor shall coordinate any work by the utilities and modify his work schedule to accommodate the utility work. It is anticipated that any necessary utility relocations will be identified and performed prior to operations by the Contractor.

PAYMENT

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various Bid Items and no separate payment will be made. Full compensation for supplying the "Progress Schedule" and all required updates shall be considered as included in the contract prices paid for the various bid items and no separate payment will be made.

10.03 EXISTING FACILITIES/COOPERATION

The location of all existing underground utilities may not be shown on the Plans. It is not the intent of the plans to show the exact location of existing or relocated utilities, and the Engineer assumes no responsibility therefor. You are responsible for verifying the actual location and depth in the field of all utilities.

Be cognizant of the existing overhead and underground utility lines in the proximity of the work area and take all precautions, as necessary, to not disturb these facilities.

Notify Underground Service Alert prior to any excavation. Call 811 and follow the USA North's California Excavation Manual and the specifications. Additionally, prior to starting an excavation, examine the excavation site for physical evidence (manholes, valve covers, water meters, fire hydrants, sewer cleanouts, storm drains, vaults, utility maintenance boxes, pole risers, etc) that would indicate the existence of underground facilities and investigate adequately to protect the utility. You must excavate, as cautiously and prudently as possible.

Where excavations are performed in the vicinity of underground utility mains and/or services the Contractor shall, as necessary, perform initial exploratory excavations to determine their exact depth and location. Payment for exploratory excavation shall be included in the various items of work needed to complete the excavation work. Extreme care shall be exercised to avoid damage, and it will be the Contractor's sole responsibility to have repairs made to existing facilities at his/her expense in the event of damage.

The Contractor is advised of the possible existence of certain underground facilities that may require special precautions to protect the health, safety and welfare of the workmen and of the public. These facilities include, but are not limited to: irrigation lines and peripherals; street lighting electric supply system conductors or conduits; telephone and cable service lines, either directly buried or in duct or conduit and; underground water, gas, and electrical distribution systems.

The Contractor shall not be entitled to any right of way delays associated with the relocation or repair of these utilities and other facilities and shall cooperate fully with the owners of these utilities and other facilities for their relocation and repair work.

Schedule constraints will be discussed at the preconstruction conference and the Contractor shall incorporate such adjustments in their contract scheduling as necessary.

All existing facilities in conflict with the proposed improvements shall be relocated by the Contractor.

Relocation and adjustment of existing utility facilities is the responsibility of the affected utility. Contractor is responsible for coordinating with affected utilities for relocation and adjustment of facilities by utility company forces.

Full compensation for relocating and adjusting existing utilities shall be considered as included in the various items of work and no separate payment will be made therefor.

Landscape Restoration

Hardscape features (fences, walkways, foot bridges, planters, etc.); trees, lawns, shrubbery, plants, flowers etc.; and irrigation lines that are not noted on the plans to be removed or relocated must be protected from damage or injury. If damaged or removed because of the Contractor's operations, they shall be restored or replaced to their original conditions. Broken irrigation lines must be

temporarily repaired immediately upon their breakage and permanently repaired prior to completion of the work. Repairs and replacements must be at least equal to existing improvements.

Full compensation for landscape restoration shall be considered as included in the various items of work and no separate payment will be made thereof unless otherwise noted.

Protection of Existing Marin Municipal Water District Facilities

The Contractor shall observe the following to ensure the safe and continued operation of existing water facilities within the scope of the project.

All trench crossing under existing water facilities shall be subject to the inspection and approval of the Marin Municipal Water District. A vertical separation of not less than six inches shall be provided between new conduit and existing water main or service lateral. The Contractor shall backfill to 90 percent compaction the full depth of new trench directly under and over the existing water facility. The Contractor shall use backfill materials in accordance with Marin Municipal Water District Specifications, or equal. Contractor shall maintain the new joint trench a minimum horizontal longitudinal distance of five feet between the edge of the joint trench and water facilities. All joint trench crossing shall be at least three feet from concrete thrust blocks.

When metallic with exception to cast iron (copper, steel, etc.) water mains or service laterals are encountered, the Contractor shall prime and wrap said facilities. The primer and wrap shall be supplied by Marin Municipal Water District.

Valve and appurtenances shall be operated by Marin Municipal Water District personnel only.

In case of damage to water mains or service laterals, arising from insufficient compaction or differential settlement of new joint trench as a result of construction by the Contractor, including direct or indirect damage to said water facilities, Marin Municipal Water District will make repairs at the Contractor's expense. All water main shutdowns, repairs, and inspections will be coordinated with the Marin Municipal Water District Construction Superintendent.

It is understood the water facilities shown on project plans are approximate and actual depths and locations must be field verified by the Contractor. The Marin Municipal Water District assumes no responsibility nor guarantees the information. This shall not relieve the Contractor or its agents of damage to said facilities. It is further recognized existing water facilities may not have adequate backfill around its water mains or service laterals. Nevertheless, the Contractor shall use precautionary methods, i.e., hand tools, probe, etc., to expose said facilities.

The Contractor shall also protect from damage existing private customer water laterals from the meter box to the right of way line. The facility shall be replaced or restored to a condition as good as when the Contractor entered upon the work. These laterals locations are not marked on the project plans and may not have imported backfill material surrounding the lateral. Various pipe materials were used for these laterals and could be one of the following polyvinyl chloride (PVC), copper, polyethylene (PE), polybutylene (PB) and galvanized steel.

Full compensation for protection of existing Marin Municipal Water District facilities shall be considered to be included in the contract until prices paid for the items of work and no additional compensation will be allowed therefor.

Temporary Relocation of Bus Stops

The Contractor shall maintain access to the existing bus stops located within the project limits and coordinate with Marin Transit and the Golden Gate Bridge Highway and Transit District (Golden

Gate Transit) for temporary relocation of bus stops as needed. Prior to commencing work, the Contractor shall contact the transit agencies mentioned above to coordinate access to the bus stops for the duration of construction activity and temporary relocation of bus stops as shown on the plan. The point-of- contacts are as follows:

Marin Transit

Anna Penoyar
Capital Analyst
711 Grand Avenue, Suite 110
San Rafael, CA 94901
Ph: (415) 226-0867

Golden Gate Transit

Ray Santiago
Senior Planner
1011 Andersen Drive
San Rafael, CA 94901-5318
Ph: (415) 257-4443

The Contractor shall be responsible for clearing and grubbing, excavation, backfill and paving at temporary bus stop locations, as needed, to facilitate ADA compliant access for boarding the buses. At the completion of construction, the Contractor shall restore the temporary bus stop to its original condition including any landscaping or concrete removed during the construction. Golden Gate Transit will furnish and install temporary bus stop signs as needed.

Full compensation for temporary relocation of bus stops shall be considered to be included in the contract until prices paid for the items of work and no additional compensation will be allowed therefor.

PAYMENT

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various Bid Items and no separate payment will be made.

10.04 DUST CONTROL

The Contractor shall provide dust control at all times, including holidays and weekends, as required to abate dust nuisance on and about the site which is a result of construction activities. Dust control shall be by means of sprinklered water or by other approved methods, except that chemicals, oil, or similar palliative shall not be used. Quantities and equipment for dust control shall be sufficient to effectively prevent dust nuisance on and about the site; and when weather conditions warrant, sprinklering equipment shall be on hand at all times for immediate availability.

The Engineer shall have authority to order dust control work whenever conditions warrant, and there shall be no additional cost. Dust control shall be effectively maintained whether or not the Engineer orders such work. Complaints from the public shall be reported to the Engineer and shall be acted on immediately.

Where earthwork operations are in progress, keep exposed earth surfaces dampened continuously. Also, keep dirt access ways and roads dampened continuously.

If portions of the site are temporarily inactive or abandoned for whatever reason, provide dust control and abatement continuously during such periods of inactivity.

Where dust resulting from construction activities has collected on public streets, hose down such streets to abate flying dust particles. Clean all streets from accumulated dirt and dust.

The Contractor shall take proper measures to prevent tracking of mud onto public streets. Such measures shall include, but are not limited to, covering muddy areas on the site with clean, dry sand, or as approved by the Engineer.

All egress from the site shall be maintained in a dry condition, and any mud tracked onto streets shall be immediately removed, and the affected area shall be cleaned. The Engineer may order such work at any time the conditions warrant.

Where trucks will leave a muddy site and enter paved public streets, the Contractor shall maintain a suitable truck wheel-washing facility and crew. All trucks, or other vehicles leaving the site, shall be cleaned of mud and dirt, including mud and dirt clinging to exterior body surfaces of vehicles.

All trucks coming to the site or leaving the site with materials or loose debris shall be loaded in a manner which will prevent dropping of materials or debris on streets. Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately.

PAYMENT

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various Bid Items. No separate payment will be made for work performed or material used to control dust and mud resulting from the Contractor's performance of the work, either inside or outside the right of way.

10.05 MOBILIZATION

GENERAL. This work shall consist of preparatory work and operation, including, but not limited to, those necessary for the movement of personnel, equipment supplies, and incidentals to the project site for the establishment of facilities necessary for work on the project and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site.

SCOPE OF WORK. Mobilization shall consist of all work in mobilizing the Contractor's equipment, furnishing required submittals and installing temporary fencing.

STAGING AREA. The Contractor shall utilize staging areas shown on the design plans. The Contractor shall obtain permission from the Engineer to use any portion of the public right-of-way for a staging area.

PAYMENT

The contract lump sum price paid for Mobilization shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for performing all the work involved in mobilization as specified herein.

10.06 EROSION CONTROL

Specifications for the work necessary for slope protection shall consist of providing all labor, tools, equipment, materials, and incidentals necessary to furnish, install, and secure, complete in place, all permanent and temporary erosion control features as indicated for the purpose of preventing on-site erosion and maintaining all sediments within the project boundaries and comply with the requirements of Marin County, Town of Ross and Town of San Anselmo.

The Contractor shall comply with **Section 10.07** of these Specifications and apply erosion/sediment control features as specified in the Stormwater Pollution Prevention Plan (SWPPP) and as directed by the Engineer for the different types and levels of construction.

A. EROSION CONTROL BLANKETS

Erosion control blankets shall be North American Green single net straw blanket, or equivalent. Erosion Control Blankets shall be installed and staked according to manufacturer's recommendations for slopes.

B. FIBER ROLLS

Fiber rolls shall be netted tubes, at least 12 inches in diameter, filled with straw or equivalent biodegradable product. Installation shall be in accordance with "Erosion and Sediment Control Field Manual" (latest edition) by the California Regional Water Quality Control Board, San Francisco Bay Region.

C. STRAW BALES

Use standard clean straw bales bound with wire. Straw bales shall be installed as necessary around catch basins, v-ditches, and inlets to intercept and detain sediment.

D. SILT FENCE

Silt fence shall be per "Erosion and Sediment Control Field Manual" (latest edition) by the California Regional Water Quality Control Board, San Francisco Bay Region. Silt fences shall be installed to intercept and detain sediment prior to entering storm drainage.

E. ROCK FILTER AND GRAVEL CONSTRUCTION FENCE

Rock to be used for the rock filters and for the protection of the construction entrance shall consist of Class 1, Type B Drain Rock conforming to Caltrans Section 68, unless otherwise noted.

As erosion control measures near capacity for silt retention, the Contractor shall remove the silt materials. The Contractor shall remove the materials from the site or to an area that is designated by the Town. The Contractor shall then reestablish the silt fences, fiber rolls, straw bales, or riprap to its original state.

INSPECTION

Silt fences, fiber rolls, straw bales, and riprap shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Any required repairs shall be made immediately, to the satisfaction of the Town.

PAYMENT

Full compensation for complying with the above provisions shall be considered as included in the contract price for the various Bid Items and no separate payment will be made.

10.07 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The Contractor shall comply with the following applicable regulations:

1. Clean Water Act, United States Environmental Protection Agency, and Porter-Cologne Clean Water Act, State of California.
National Pollutant Discharge Elimination System (NPDES),
General Permit for Storm Water Discharges associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ
2. “San Francisco Bay Basin (Region 2) Water Quality Control Plan” (Basin Plan), California Regional Water Quality Control Board, December 31, 2010 Edition.
3. Local Governing Agency requirements.

The Contractor shall comply with the following standards and guidelines on storm drain pollution prevention:

1. “Manual of Standards for Erosion and Sediment Control”, Association of Bay Area Governments
Order From: ABAG
P.O. Box 2050
Oakland, CA 94604
(510) 464-7900
2. CALTRANS Storm Water Quality Handbooks: Construction Site Best Management Practices (BMP’s) Manual, March 2003
3. California Storm Water Quality Association (CSWQA) Storm Water Best Management Practice Handbook Portal: Construction November 2009 (Available on CSWQA website only)

PAYMENT

Compensation for providing the SWPPP and, as necessary, implementing SWPPP measures shall be considered as included in the contract price for the various Bid Items and no separate payment will be allowed.

10.08 TRAFFIC CONTROL

Attention is directed to Section 7-1.03 "Public Convenience," 7-1.04 "Public Safety," and 12 "Construction Area Traffic Control Devices" of the Standard Specifications, insofar as they may apply, and these Special Provisions.

The Contractor shall refer to the current "Manual of Traffic Controls for Construction and Maintenance Work Zones," and the "Uniform Signs Chart," issued by the California Department of Transportation, and shall furnish, erect, maintain and remove all necessary signs and devices during the length of this contract.

Work shall be accomplished in such a manner as to provide access to all intersecting streets, bus stops, and adjacent properties whenever possible. If access to any property or bus stop is unavoidably precluded, then adequate nearby parking and bus stop shall be provided and maintained until direct access can again be restored. If it is necessary to limit access to certain driveways and bus stops during the course of the work, the residents or transit agency involved shall be notified at least seventy-two (72) hours in advance by the Contractor, in writing.

Flaggers shall be provided at all times during working hours when the road is restricted to a single lane of traffic only. Where flaggers are not visible to each other, they shall be equipped with two-way radios for communication, or the contractor shall furnish a properly equipped and signed pilot car and driver to pilot traffic through those project areas where two flaggers are not visible to each other, or at any time as directed by the Engineer. When directed by the Engineer, additional flaggers shall be provided to control traffic entering and leaving side streets at no additional expense to the Town.

The Contractor shall post NO PARKING signs as required to complete the work. Signs shall be placed a minimum of 72 hours in advance of construction activities.

It is the responsibility of the Contractor to arrange for the towing and removal of any vehicles which interfere with the work operations. Full compensation for the removal of the vehicles shall be considered as included in the price paid for the various items of work and no additional compensation will be allowed therefor.

At the end of any working day when work operations have obscured existing traffic striping (including legends), the striping shall be restored via permanent reflective painting or other interim materials subject to the approval of the Engineer. Temporary delineation shall be of the same color and type – including nighttime reflectivity – as the markings obscured.

Where existing road signs are in conflict with the proposed work, the Contractor shall relocate such signs to temporary or permanent locations as directed by the Engineer, or the signs may be covered upon the Engineer's approval.

At all times other than normal working hours, a minimum of one uninterrupted lane of traffic in each direction shall be provided.

The provisions of Section 12-1.03 of the Standard Specifications regarding the sharing of flagging costs is hereby deleted and flagging costs shall thus be borne by the Contractor.

At the end of each day's work, and at other times when construction operations are suspended, all equipment and other obstructions shall be removed from that portion of the roadway and sidewalk which shall be open for use by local traffic and pedestrians.

The Contractor shall examine the entire project site at the end of each day and verify that all necessary warning signs are in place and have effective nighttime reflective visibility.

PARKING AND STORAGE AREAS

All stockpiled materials and parked equipment at the job site shall be located to avoid interference with private property and to prevent hazards to the public. Locations of stockpiles, parking areas, and equipment storage must be approved by the Town Engineer. Storage of equipment and materials on the public right-of-way shall not be permitted. Fuel shall not be stored nor shall refueling or maintenance of equipment occur within 20 feet of a significant tree.

The Contractor shall make his own arrangements at his own expense for a staging area for the temporary stockpiling of material and equipment storage. The Contractor will not be allowed to use public streets or property for such purpose without the written approval of the Town.

Prior to using any private property, Contractor shall submit to the Town Engineer a written release from the property Town absolving the Town of any and all responsibility in connection with the use of such property in accordance with Section 5-1.20B(4) "Contractor-Property Owner Agreement," of the Standard Specifications.

PAYMENT

The lump sum price paid for Traffic Control System shall include furnishing all labor (including flaggers when necessary), materials (including all temporary signs) and equipment necessary to provide for the convenience and safety of the public (including measures to accommodate access to homeowners and bus stops, public notification, and changeable message boards) to facilitate the performance of the work as shown on the plans and specified herein.

10.09 CLOSURE REQUIREMENTS AND CONDITIONS

Lane Closures:

Except when a road closure is approved by the Engineer, one lane of traffic (minimum 11 feet per lane) must be open to vehicular traffic for the entire length of the project at all times. Striping and/or cones, barricades, and flagmen properly marked must be used to delineate the traffic lane.

No traffic lanes may be closed between 03:00 p.m. Friday and 09:00 a.m. Monday; or between 05:00 a.m. and 09:00 a.m. or 3:00 p.m. and 9:00 p.m. Monday through Friday; without written permission from the Town Engineer.

Lane closures require a traffic control plan to be submitted 14 days in advance of the work. Only closures plans demonstrated to be in conformance with public safety and public convenience will be approved.

When a travel lane is used for interchangeable direction to traffic, you must provide flaggers at each street intersection to expedite the safe passage of public traffic through the work under one-way controls. Where flaggers are not visible to each other, they must be equipped with two-way radios for communication, or you must furnish a properly equipped and signed pilot car and driver to pilot traffic through those project areas where two flaggers are not visible to each other or at any time as directed by the Engineer. When directed by the Engineer and as necessary to protect the work, additional flaggers must be provided to control traffic entering and leaving side streets and no additional compensation shall be provided therefore.

Stopped public traffic must not exceed a period of five (5) minutes when traffic is being handled by one-lane/alternating two-way control.

Lanes or streets must be closed long enough to protect the work.

Do not open new HMA pavement to traffic until the surface temperature is below 130 degrees F.

Contractor shall order work so that all lanes shall be opened to traffic by the times specified above without damaging the surface.

Road Closure and Notification:

No road shall be closed to traffic until immediately prior to the application of HMA. No road shall be closed before 9:00 p.m. or after 5:00 a.m. No road shall be closed between 5:00 a.m. Friday through 9:00 p.m. Monday. Road closures require a traffic control plan to be submitted 14 days in advance of the work. Only closures plans demonstrated to be in conformance with public safety, public convenience and weight limits (on detour routes) will be approved. Failure to illustrate a safe closure with an efficient and functional detour will result in a denial of road closure and the Work must be carried out with a lane closure.

Contractor shall submit a written schedule of planned closures for the next five (5) day period. The Closure Schedule shall describe the locations and times when the proposed closures are to be in effect. No lane closures will be allowed unless the Contractor has obtained a confirmation of their written lane closure schedule from the Engineer.

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

Lane and sidewalk closures shall conform to the provisions in Section 10.09, “Closure Requirements and Conditions” of these Special Provisions and the provisions herein.

The Contractor shall provide safe, convenient and ADA compliant vehicular and pedestrian access to side streets, bus stops, and all driveways at all times. Compensation for providing temporary ramps, temporary sidewalks, or traffic plates necessary to provide vehicular and pedestrian passage shall be considered as included in the price(s) paid under “Traffic Control System” in these Special Provisions and no additional compensation will be allowed.

Initially (on the first working day) you must notify local authorities and Engineer of the need for road closure(s) and areas of construction delays. After the first working day, you must keep local authorities updated on any changes in the original closure and delay information. Keep the Engineer updated on road closure(s) and/or areas of construction delays on a daily basis.

Local authorities are defined as, but not limited to, Central Marin Police Authority, Ross Police Department, California Highway Patrol, local Fire Department, United States Post Office, Marin Transit, Golden Gate Transit, local waste management companies, Emergency Response Companies and/or all businesses or regular users whose ability to perform their daily job will be affected by road closures, detours or general work by your forces.

Emergency Response vehicles are permitted to pass through the work area without delay at all times. Provide transition material at the vertical drops that will safely accommodate these emergency vehicles at all times. All other local authorities will be permitted to pass through the work area without delay at all times except during sealing or paving operations. Provide transition material at the vertical drops that will safely accommodate these vehicles at all times.

Contractor must coordinate directly with local waste management company and shall not permit local waste management trucks to travel on a street between the start of grinding until 3 days after paving is complete. Schedule operations to ensure that the garbage is collected on the regularly scheduled day.

Contractor must notify residents within a closed section of road by door hanger of road closures stating the contractor’s contact information, the date(s) of closure, and hours of closure. The door hangers must be delivered no later than ninety-six (96) hours prior to road closure. Prior to dissemination, the Engineer must approve the door hanger. For planning purposes, a road is considered closed if non-emergency vehicles are delayed, or delays are expected to be more than 5 minutes.

72 hours ahead of an approved road closure, at each end of roads affected by closures, the Contractor must post on a sign post or barricade, an informational sign that includes the following information: Contractor’s name and contact information, project information and duration of work. Sign lettering must be a minimum of 2-inches in height, legible, and subject to approval by the Engineer.

Lanes or streets must be closed long enough to protect the work.

Do not open new HMA pavement to traffic until the surface temperature is below 130 degrees F.

Contractor shall order work so that all lanes shall be opened to traffic by 5:00 AM without damaging the surface.

In addition, post no parking signs.

PAYMENT

Compensation for closure requirements and conditions shall be considered as included in the contract price paid under “Traffic Control System,” in these Special Provisions and no additional compensation will be allowed.

10.10 CLEARING AND GRUBBING

Clearing and grubbing shall conform to the applicable provisions of Section 16 of the Standard Specifications and these Special Provisions. This work shall consist of removing objectionable material from within the limits of work for construction. Clearing and grubbing shall be performed in advance of grading operations and in accordance with the requirements specified in these specifications.

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

Existing utilities encountered during construction shall be protected at all times. Each respective utility company shall operate solely their own utility.

Clearing and grubbing shall include, but not be limited to, the removal from the area of work and disposal of all brush, roots, tree stumps and limbs, debris, and shrubs which conflict with the work that is designated on the plans. Clearing and grubbing shall not exceed the limits of work shown in the design plans unless the work is authorized by the Engineer.

All removed material, unless otherwise indicated on the plans specified herein, shall become the property of the Contractor who shall dispose of same outside the road right-of-way at a legal dumpsite.

Landscaping removed or damaged necessary to install improvements indicated on the plans shall be replaced by the Contractor as soon as possible. The cost for replacing existing or damaged landscaping shall be paid for as part of the lump sum price for removals.

DISPOSAL OF MATERIAL

All trench excavation and any other materials generated from the project becomes the property of the Contractor and no additional compensation will be paid for its disposal. The Contractor shall make arrangements for disposing of materials outside the Site and the Contractor shall pay all costs involved. The Contractor shall first obtain permission from the property owner on whose property the disposal is to be made and absolve the Town from any and all responsibility in connection with the disposal of material on said property. When material is disposed of as above provided, the Contractor shall conform to all required codes pertaining to grading, hauling, and filling of earth.

PAYMENT

Compensation for providing “Clearing and Grubbing”, including furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in clearing and grubbing as shown on the plans, and as directed by the Engineer, including the removal and disposal of the resulting material shall be included in the lump sum price paid for “Removals”, and no additional compensation will be allowed.

10.11 DEMOLITION

Demolition shall include removal of structures, including backfilling of resultant excavations and depressions, as indicated in the design plans. The extent of demolition work shall be as follows:

1. Asphaltic concrete roadway sections indicated in the Layout Plans shall be completely removed including the underlying base material.
2. As applicable, utility services to facilities to be removed or demolished shall be disconnected, cut, and capped.
3. Concrete curb, gutters, sidewalks and driveways indicated in the Layout Plans shall be completely removed.
4. Removing demolition material from within the limits of work for the construction of the sidewalks, curb ramps, curb and gutters, and other areas as may be specified in the special provisions

Attention is directed to the American National Standards Institute (ANSI) A10.6 "Safety Requirements for Demolition Operations", California Code of Regulations (CCR) Title 8, Chapter 4, Subchapter 4 – "Construction Safety Orders", Title 24, Part 2, California Building Code, Chapter 33, Section 3303," Protection of Pedestrians during Construction or Demolition".

The Contractor shall obtain all special permits and licenses and give all notices required for performance and completion of the demolition and removal work, hauling, and disposal of debris.

SITE CONDITIONS

The Contractor shall:

1. Erect and maintain temporary bracing, shoring, lights, barricades, signs, and other measures as necessary to protect the public, workers, and adjoining property from damage from demolition work, all in accordance with applicable codes and regulations.
2. Protect utilities, pavements, and facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by demolition operations.
3. Protection of Utilities: Protect drainage lines indicated or, when not indicated, found or otherwise made known to the Contractor before or during demolition work.
4. Maintain existing utilities and protect from damage as necessary to satisfy the requirements of jurisdictional utility companies and related codes and regulations.
5. Make arrangements with affected utility companies and owners to provide the information and services necessary to coordinate and complete the Work.
6. Notify the Engineer and utility owners 72 hours before performing any excavation work. Notify affected utilities by calling Underground Service Alert (USA) at 1-800-227-2600 or 811. Contact utility owners not covered by USA, by calling the affected utility owners directly.
7. Noise and Dust Abatement: Comply with requirements specified in Section T in the General Provisions and Section 10-04 in the Special Provisions. In addition, provide continuous noise and dust abatement as required to prevent disturbance and nuisance to the public and workers and to the occupants of adjacent premises and surrounding areas.

Dampen or cover areas affected by demolition operations as necessary to prevent dust nuisance.

8. The Contract Drawings and related documents may not represent all surface conditions at the site and adjoining areas. The known surface conditions are as indicated, and shall be compared with actual conditions before commencement of work.
9. Existing drainage systems below grade are located from existing documents and from surface facilities such as manholes, valve boxes, area drains, and other such surface fixtures.
10. If existing active services encountered are not indicated or otherwise made known to the Contractor and interfere with the permanent facilities under construction, notify the Engineer in writing, requesting instructions on their disposition. Take immediate steps to ensure that the service provided is not interrupted, and do not proceed with the work until written instructions are received from the Engineer.
11. Thicknesses of existing pavements are from previous construction documents, and do not imply the actual depth or thickness of the total pavement or base material, where it occurs. Remove pavement of whatever thickness as required.

DEMOLITION

The Contractor shall perform demolition in accordance with the approved Layout Plans. Operational procedures shall be in accordance with the approved Layout Plans. The Contractor shall perform demolition with small tools as much as possible. Blasting will not be permitted. Backfill and compact depressions caused by excavations, demolition, and removal shall be in accordance with the requirements of Section 10.13- Earthwork.

The Contractor shall provide a clean and orderly site.

Removal of AC paving shall conform to the applicable provisions of Section 15-3, "Removing Concrete" of the Standards Specifications and these Special Provisions.

Existing asphalt roadway, where specified on the plans, shall be removed and disposed of in accordance with the provisions of Section 5-1.20B(4) of the Standard Specifications, existing concrete removal shall conform to Section 15-3, "Removing Concrete," of the Standard Specifications.

Concrete curb, gutter, and sidewalks shall be sawcut and removed within existing joints as necessary.

Demolition shall also include the removal and disposal of all items as shown on the plans conflicting with the work; removal and disposal of signs and posts to be permanently removed from project limits; sawcutting; removal and disposal of asphalt concrete; removal and disposal of miscellaneous concrete, curbs, and sidewalks; and removal of miscellaneous planter material, or work as directed by the Engineer.

PAYMENT

Full compensation for furnishing all labor, materials and equipment necessary to perform the removal and disposal of materials as directed by the Engineer to complete the work as shown on the plans and specified herein, shall be included in the lump sum price paid for under "Removals". No additional compensation will be allowed.

Replace section 15-2.02B(3) with:

15-2.02B(3) Cold Plane Asphalt Concrete

15-2.02B(3)(a) General

Notify businesses and homeowners forty-eight (48) hours in advance of grinding operations.

Pavement grinding operations must not commence until all existing traffic delineation and all street surface facilities/features including utility castings and boxes, survey monuments and benchmarks within the area have been “tied out/ referenced” by the Contractor and noted to the Engineer.

Protect concrete pavements and walks, curbs and bases, and other improvements adjacent to the operations with suitable materials. You are responsible for any damage caused and you must make necessary repairs. All damage caused by your operations must be repaired or replaced to the satisfaction of the Engineer. The required grinding is to be performed without disturbing the existing curb and gutter which may be cracked and fragile. Damage to the existing curb and gutter resulting from operating the grinding machine or the “hand” clearing operations must be corrected, to the satisfaction of the Engineer, by you at your expense.

Any concrete gutters chipped by the pavement grinding operations must be epoxy patched or, removed and replaced. “Mason’s mix” shall not be permitted.

Cover drainage inlets and use linear sediment barriers to protect downhill receiving waters until sawcutting, grinding, sealing, and paving activities are completed and excess material has been removed.

Limits of grinding, as shown on the plans and as directed by the Engineer, must be marked by the Engineer prior to grinding operations. The contractor shall be responsible to notify the Engineer for marking of limits a minimum of 48 hours prior to startup time.

No additional compensation shall be made for concrete grinding in excess of the limits marked or as shown on the plans unless so directed by the Engineer.

If you do not complete HMA placement before opening the area to traffic, you must:

1. Construct temporary HMA tapers to the level of the existing pavement at conforms and driveways
2. Post signs that prohibit vehicles over 5 ton from traveling on the unfinished roadway
3. Only allow equipment and trucks on the street that are required for construction of same street.

15-2.02B(3)(b) Materials

Use the same quality of HMA for temporary tapers that is used for the HMA overlay or comply with the specifications for minor HMA in section 39.

15-2.02B(3)(c) Construction

15-2.02B(3)(c)(i) General

Do not use a heating device to soften the pavement.

The cold plane machine must be:

1. Equipped with a cutter head width that matches the planing width. If the cutter head width is wider than the cold plane area shown, submit to the Engineer a request for using a wider cutter head. Do not cold plane unless the Engineer approves your request.
2. Equipped with automatic controls for the longitudinal grade and transverse slope of the cutter head and:
 - 2.1. If a ski device is used, it must be at least 30 feet long, rigid, and a 1-piece unit. The entire length must be used in activating the sensor.
 - 2.2. If referencing from existing pavement, the cold planing machine must be controlled by a self-contained grade reference system. The system must be used at or near the centerline of the roadway. On the adjacent pass with the cold planing machine, a joint-matching shoe may be used.
3. Equipped to effectively control dust generated by the planing operation.
4. Operated so that no fumes or smoke is produced.
5. Equipment must be equipped with a conveyor system and the Contractor must concurrently load the pavement grindings into an adjacent truck
6. Equipment must meet all requirements of legally powered regulatory agencies including noise control standards.
7. Equipment must not produce excessive dust and must conform to the Standards of the Bay Area Air Quality Control Board. Pre-heating of the asphalt concrete must not be performed. The machine must be equipped with a water device for dust control. The grinding machine must have a side shield to prevent ground material from being thrown on the sidewalk.

Pavement Grinding must be in accordance with the applicable provisions of the specifications and shall involve: Grinding an adequate depth so the finished grinding surface is the depth below finished grade as shown on the plans, across the roadway between the lip of gutter and lip of gutter, or edge of pavement, , with cross slopes, as shown on the plans. Depth of grind shown on the plans is measured from the lip of gutter, and the unit price includes any material overlaid above the lip of gutter or edge of pavement and includes material in the gutter pan.

The final cut must result in a uniform surface conforming to the plans. The outside lines of the planed area must be neat and uniform. Planing asphalt concrete pavement operations must be performed without damage to the surfacing to remain in place.

Errors caused by overgrinding must be corrected by the Contractor at his expense to the satisfaction of the Engineer; this may include an asphalt leveling course.

In those areas where the existing asphalt pavement extends to the curb face over the gutter pan and is left after the grinding operation, the Contractor must clear this residue asphalt pavement to the curb face. The area requiring "hand" clearing must be that area between the edge of the grinding wedge left by operating the grinding machine to the curb face. The Contractor must then use suitable methods to clear residue asphalt concrete from the gutter pan (grinding lip to curb face).

Once cold planning has begun on a street, only allow equipment and trucks that are necessary for the construction of that same street to travel on the planed surface. During the cold plane process, trucks

and equipment must travel on the original grade as much as possible. Grind in passes such that trucks must not travel more than 250' on the planed surface.

After grinding and before paving, the contractor must provide a proof roll vehicle between 15 and 20 ton and walk the site with the Engineer to confirm the limits of dig out areas and identify and mark any additional locations. Contractor shall allow sufficient time in the schedule to complete the proof rolling and marking.

TEMPORARY HMA TAPERS

Where transverse joints are planed in the pavement at conform lines no drop-off shall remain between the existing pavement and the planed area when the pavement is opened to public traffic. If Hot Mix Asphalt (HMA) has not been placed to the level of existing pavement before the pavement is to be opened to public traffic a temporary HMA taper must be constructed. HMA for temporary tapers must be placed to the level of the existing pavement and tapered on a slope of 30:1 (Horizontal: Vertical) or flatter to the level of the planed area.

HMA for temporary tapers must be the same quality as the HMA used elsewhere on the project or must conform to the material requirements for minor HMA. HMA for tapers must be compacted by any method that will produce a smooth riding surface. Temporary HMA tapers must be completely removed, including the removal of loose material from the underlying surface, before placing the permanent surfacing. The removed material must be disposed of outside the highway right of way in conformance with specifications.

TEMPORARY PAVEMENT DELINEATION

Temporary pavement delineation must be furnished, placed, maintained, and removed in conformance with the provisions in Section 12 of the specifications. Nothing in these special provisions shall be construed as reducing the minimum standards specified in the California MUTCD or as relieving the Contractor from the responsibilities specified in Section 7-1.04, "Public Safety," of the specifications.

When the work causes obliteration of pavement delineation, temporary or permanent pavement delineation must be in place before opening the traveled way to public traffic.

Work necessary, including required lines or markers, to establish the alignment of temporary pavement delineation must be performed by the Contractor. Surfaces to receive application of paint or removable traffic tape temporary pavement delineation must be dry and free of dirt and loose material. Temporary pavement delineation must be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation, or as determined by the Engineer.

Painted pavement markings used for temporary delineation must conform to Section 84-3, "Painted Traffic Stripes and Pavement Markings," of the Standard Specifications, except for payment.

Temporary pavement delineation shall be used until the permanent delineation is in place, and for a minimum of 10 and a maximum of 14 days. Before the end of the 14th day, the permanent delineation shall be placed.

SCHEDULING AND NOTICE

Unless otherwise approved by the Engineer, contractor must schedule operations such that not more than (2) two calendar days elapse between the time when street are cold planed and the permanent surfacing is placed.

REMOVAL AND DISPOSAL

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, become the property of the Contractor and must be disposed of outside the highway right of way in conformance with specifications. Removal operations of cold planed material must be concurrent with planing operations and follow within 50 feet of the planer, unless otherwise directed by the Engineer.

15-2.02B(3)(d) Measurement

Cold plane asphalt concrete pavement is 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 depth shown on the plans, or the volume of asphalt pavement above the proposed finish grade.

15-2.02B(3)(e) Payment

The contract price paid per square yard for Cold Plane Asphalt Concrete (2.4”), shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cold planing asphalt concrete surfacing, including disposing of planed material, protecting improvements, adjustment of utility valve covers, manholes and monuments, notification, proof rolling, furnishing the HMA for constructing temporary HMA tapers, maintaining, removing, and disposing of temporary HMA tapers, placing, maintaining, removing and disposing of temporary pavement delineation, as specified in the Standard Specifications and these special provisions and as directed by the Engineer, and no additional compensation will be allowed therefor.

Replace section 15-2.02C(3) with:

15-2.02C(3) Payment

Referencing, and removing existing pavement delineation shall be considered as included in the contract prices paid for new pavement delineation, and no separate payment will be made therefor.

Add to section 15-2.10B:

Utility companies reserve the right to perform the work using their own forces after the contract is awarded. You must notify the utility agencies prior to start of construction for any coordination effort and to determine if the utility owners will perform the work using their own forces. Advise the Town of the utility owner’s response prior to the start of construction. If the owners chose to use their own forces, then prior to placing of asphalt concrete, notify utility agencies a minimum of five (5) working days in advance of paving operations so that the affected agencies can be prepared to reset covers to grade following paving.

Contact information of utility companies is:

MMWD

amitchell@marinwater.org

RVSD

khayden@rvsd.org
dgavallos@rvsd.org

Obtain a response. Advise the Town if assistance with additional contact information is necessary.

All manhole and other utility covers encountered in the area of HMA must be carefully referenced out using spray chalk or similar non-permanent marking media prior to disturbance by the Contractor. Notify the Engineer that the referencing is complete at least 2 days prior to work that may disturb the utility covers. Using the reference markings, the locations of the covers must be

painted on the pavement surface immediately after paving to assure they can be found in an emergency. Referenced markings must be removed after the utilities are raised.

Covers must be adjusted so that there will not be any perceptible difference in elevation between the finished pavement surface and the cover. The Engineer shall be the sole judge of the acceptable degree of smoothness of passage of a motor vehicle over the adjusted covers.

Portland cement concrete used for adjusting covers must be Class B, 5 sack minor concrete conforming to the provisions in State Standard Specification Section 51, "Concrete Structures," and must be 1 inch maximum grading specified in Section 90-1.02C(4)(d), "Combined Aggregate Grading" of the specifications.

Mortar used in resetting manhole covers must conform to the requirements of the specifications, including Section 51.

Precast concrete elements must conform to the requirements of the specifications, including Section 70-4.

Salvaged materials which are undamaged may be reinstalled as directed by the Engineer. Structures built of cast-in-place or precast concrete and brick or vitrified clay pipe parts must be replaced in kind, unless otherwise permitted by the owners of the facilities.

Dirt, rocks or debris shall not be permitted to enter sewer or storm drain lines. When manhole adjustment involves excavation or concrete removal, a temporary cover must be placed to prevent entry of material into the manhole and sewer pipe.

During sealing or paving operations, all surface structures must be protected and no adhesive material shall be permitted to fill the joint between the frame and cover.

Cooperate with utility companies working within and around the project area. In the event a utility company elects to have you perform the work by written confirmation, you will be responsible for adjusting the covers. You must perform the work according to said utility companies standards.

In the event that work by others causes a delay in your operation, you will be granted a time extension but shall not be entitled to a Delay per Section 8-1.07 of the State Standard Specifications due to the progress or operations of others.

WATER VALVE

Water valve covers must be adjusted to grade per Marin Municipal Water District Standards, as shown on the plans, and as directed by the Engineer.

SANITARY SEWER MANHOLES

Sanitary Sewer Manholes must be adjusted to grade per Ross Valley Sanitary Sewer District, Sanitary District No. 1 of Marin County Standard Specifications and Drawings, as shown on the plans, and as directed by the Engineer.

SANITARY SEWER CLEAN OUTS

Sanitary Sewer Clean Outs (rod holes) must be adjusted to grade per Ross Valley Sanitary Sewer District, Sanitary District No. 1 of Marin County Standard Specifications and Drawings, as shown on the plans, and as directed by the Engineer.

STORM DRAIN MANHOLES

Storm Drain Manholes must be adjusted to grade as shown on the plans and as directed by the Engineer.

IDENTIFYING, REPLACING MONUMENT, AND ADJUSTING MONUMENT COVER

Protect all monuments whether noted on the plans or not. Monuments that will be disturbed must be identified by the Contractor to the Engineer, in order for a town hired surveyor to set reference points to reestablish the monument. Contractor must provide at least 10 days' notice to the Engineer of any monuments that will be disturbed. No monuments shall be removed without the prior agreement of the Engineer nor before the surveyor has set reference points to reestablish the monument. Monuments that will be disturbed must be removed during the removal of the existing pavement. After the pavement is reconstructed, disturbed monuments must be replaced in the same location using the same bronze plaque and cast iron frame and cover. After the pavement is reconstructed, for monuments that are protected in place, the monument cover must be adjusted so that there will not be any perceptible difference in elevation between the finished pavement surface and the cover. Monument Covers must be adjusted to grade per Marin Uniform Construction Standards, as shown on the plans and as directed by the Engineer.

Utility and monument adjustments shall not be measured or paid for separately. The contract price paid for utility adjustments and identifying, replacing monuments and adjusting monument covers, as shown on the plans, as specified in specifications, and as directed by the Engineer, shall be included in the contract price paid for various bid items of work included, and no additional compensation will be allowed.

10.12 CONSTRUCTION STAKING

The Contractor will be responsible for the accuracy of all layout work and will retain the services of a licensed surveyor or civil engineer to set lines and grades for all construction. Contractor is to cooperate with the Town in coordinating staking with grading operators. Equipment operators and workers are to be skilled in grading operations and are to be supervised by a competent superintendent who is familiar with the nature of the work, these provisions, and all permit conditions. All grading, sub-grading, and finished grading areas shall be controlled by such intermediate grade stakes and lines as may be necessary to obtain the slopes and levels required by the finished grade elevations shown on the plans.

All bench marks, monuments and other reference points shall be carefully protected and maintained at no increased cost and, if disturbed or destroyed, shall be replaced as directed by the Engineer and Town at Contractor expense.

The Contractor shall have his own grade setter/checker onsite during all grading and filling operations. The grade setter/checker shall verify the horizontal and vertical improvements in progress so that improvements will be built to conform to the lines, width and grades on the plans. The Contractor shall make available the grade setter/checker to work with the Engineer on checking and verifying all grade stakes, form work, etc. when requested by the Engineer. The grade setter/checker shall provide all necessary equipment and tools to perform his/her work. All computations necessary to establish the exact position of the work from control points shall be made by the Contractor.

PAYMENT

Compensation for all required surveying, grade staking, and job layout shall be considered as included in the contract price paid for the various bid items of work included and no additional compensation shall be allowed.

10.13 **EARTHWORK**

Earthwork shall conform to the applicable provisions of Section 19, "Earthwork", of the Standard Specifications and these Special Provisions.

Earthwork shall include excavation and grading associated with the concrete sidewalk, curb ramps, curb and gutters and other earthwork as necessary to complete the work described in these Special Provisions.

Excavated material shall become the property of the Contractor and shall be disposed of outside the right of way. Subject to the approval of the Engineer, suitable excavated material may be used as backfill where necessary.

Edges of excavation in existing roadway pavement shall be cut neat.

The Contractor shall notify the engineer immediately after identifying a grade conflict. The Contractor shall not be eligible for additional compensation for minor design changes other than those that cause a change in quantities.

In the event of a grade conflict, the Contractor shall pursue other work which is not affected by the conflict. If such alternative work is available, the Contractor shall not be eligible for additional compensation due to the grade conflict.

Import fill or on-site fill shall be moisture conditioned to near Optimum Moisture Content and on-site clay soil being used as fill should be moisture conditioned to above Optimum Moisture Content. Fill shall be placed in uniform horizontal layers not exceeding 8 inches in loose thickness, and compacted to at least 90 percent Relative Compaction. In areas where fill or backfill will underlie flatwork/slabs, the upper 6 inches of fill shall be kept moist until flatwork/slabs are placed.

If import fill is needed, it shall consist of soil that has a Liquid Limit of less than 40 and a Plasticity Index of less than 15 (as determined by ASTM D 4318-98), is free of organic material, and contains no rocks or clods larger than 4 inches in greatest dimensions. Moisture conditioning may be necessary to achieve compaction requirements.

No open trenches or other excavated areas shall be within or adjacent to the traveled way when work is not actively in progress.

Temporary plates to cover open trenches may only be installed when there is active work underway at the particular site **and when specifically authorized by the Engineer.**

SHORING

Contractor shall not begin the aforementioned excavation prior to receiving approval of the shoring plans by the Engineer. (Note that the Engineer's approval shall in no way limit the Contractor's responsibility for the shoring system.) If such plan complies with the shoring system standards established by the construction Safety Orders, the plan shall be submitted at least five (5) days before the Contractor intends to begin excavation for the trench. If such plan varies from the shoring system standards established by the construction Safety Orders, the plan shall be prepared and signed by the engineer who is registered as a Civil Engineer in the State of California and the plan and design calculations shall be submitted at least five (5) working days before the Contractor intends to begin excavation for the trench.

PAYMENT

Compensation for all required earthwork shall be considered as included in the contract price paid for the various bid items of work included and no additional compensation shall be allowed.

10.14 CLASS 2 AGGREGATE BASE

Class 2 Aggregate Base (Class 2 AB) shall conform to Section 26 of the Standard Specifications for $\frac{3}{4}$ " Maximum Class 2 AB.

Spreading and compacting of Class 2 AB material shall be performed by methods that will produce a uniform base, firmly compacted, and free from pockets of coarse or fine material. Subgrade material shall be Class 2 AB in accordance with Section 26-1.02B of the Standard Specifications for $\frac{3}{4}$ " maximum gradation (except where otherwise indicated on the plans) and compaction shall be moisture conditioned (if necessary) to above optimum moisture content and compacted to at least 95 percent relative compaction. The subgrade should not be allowed to dry out prior to pavement construction.

PAYMENT

Compensation for all required aggregate base shall be considered as included in the contract price paid for the various bid items of work included and no additional compensation shall be allowed.

10.15 MINOR CONCRETE

Minor Concrete (Minor Concrete Structures) shall conform to the provisions of Sections 51-7 and 90-2, Section 73, “Concrete Curbs and Sidewalks,” Section 52, “Reinforcement,” and applicable portions of the Uniform Construction Standards (May 2008) approved and adopted by the County of Marin and these Special Provisions. Removing existing concrete shall conform to Section 15-3, “Removing Concrete” of the Standard Specifications.

Minor concrete structures shall include curbs and gutters, ramps, sidewalks, curb ramps, and passageways as shown on the plans. Structure excavation and structure backfill incidental to minor concrete work shall be included in the price paid for minor concrete. Structure excavation and backfill shall comply with Section 19-3 of the Standard Specifications.

Concrete used for curbs and gutters, sidewalks, curb ramps and passageways shall be Class “B” concrete (except where otherwise indicated on the plans), shall contain a minimum of five (5) sacks of Portland Cement per cubic yard and shall have a 28-day compressive strength of at least 2,500 psi. The aggregate grading shall be the local standard ¾-inch maximum plant mix as approved by the Engineer.

In lieu of the provisions in Section 73-1.03C, “Fixed Forms,” of the Standard Specifications, surfaced lumber of nominal dimension may be used for forming the back of the curb and gutter and the front face of the gutter, provided the complete curb and gutter are constructed to the full concrete dimensions shown on the plan.

All curbs, gutters and sidewalks shall have two (2) pounds of Davis Black Color No. 8084 added to each cubic yard of concrete.

All concrete shall receive a light broom finish.

New work adjacent to existing shall match the existing as closely as possible, except where shown on the plans.

Any damage caused by the Contractor to existing improvements shall be repaired or replaced by the Contractor at his expense.

Concrete shall be cured in accordance with applicable provisions of Section 90 of the Standard Specifications. Minor concrete which will be exposed to vehicular traffic shall be protected from bearing the traffic load for a minimum of seven (7) days after placement, unless stated otherwise herein. Traffic plates shall be of sufficient thickness so as not to deflect to or in any way mar the protected concrete.

Curing compound shall be used on all minor concrete surfaces. Application of curing compound shall be made in accordance with Section 90-2 of the Standard Specifications. The quality and quantity to be used shall be approved by the Engineer. The liquid compound shall contain a coloring matter which does not permanently alter the natural color of the concrete, but which will color sufficiently at the time of application to indicate readily the areas covered. The use of any membrane material which would impart a slippery surface to the concrete will not be permitted. The liquid shall be applied under pressure with a spray nozzle at the rate recommended by the manufacturer, unless otherwise directed by the Engineer, and in such manner as to cover the surface thoroughly. Care shall be exercised to avoid damage to the seal before the expiration of the curing period. Seal damage shall be immediately repaired by the application of additional membrane material over the damaged portion.

A. CURB AND GUTTER

Curbs and gutters shall comply with County of Marin Uniform Construction Standard Drawings No. 100 and No. 105 and per detail shown on the plans, but may be modified by the Engineer to fit field conditions. Curb shall apply to bid item for Concrete Curb. Where new curb and gutter construction conforms to existing curb and gutter, a minimum of three (3) reinforcing bars, No. 3 or No. 4, twelve inches in length, shall be embedded into the existing curb and gutter by means of drilling a hole, inserting the reinforcing bar, and filling the hole with epoxy grout. These bars shall be embedded six inches with the remainder of the bar in the new concrete.

Transverse weakened plane and expansion joints for curb and gutter shall be placed in accordance with Section 73-1.05 of the Standard Specifications, except where otherwise indicated on the plans. When adjacent to new concrete paving, weakened plane joints in the curb shall coincide with the transverse weakened plane joints in the new concrete paving. Transverse weakened plane joints for new concrete paving shall be placed at 13.5 foot intervals in accordance with Section 40-1.08 of the Standard Specifications.

The edges of the curb and gutter shall be rounded with an edging tool. Weakened plane joints shall be placed in a true straight line which shall be at right angles or radial to the curb line, and at right angles to the surface of the concrete. Weakened planes for curb and gutter shall not exceed one-eighth inch (1/8") in width, and shall be formed by means of an approved weakened plane scoring tool, or a steel bar inserted into the surface to form the weakened plane and removed; or by means of approved strips of forming material which may be left in place. When the forming material is left in place, the top edge shall be slightly below the surface of the concrete. After the surface has been finished, the joint shall be edged with an edging tool having a one-eighth inch (1/8") radius.

New work adjacent to existing shall match the existing as closely as possible, except where shown on the plans. The Contractor shall perform a water test on gutters upon completion of gutter construction. The test must be performed in the presence of the inspector and must demonstrate to the Engineer's satisfaction that positive drainage through the gutter will be achieved with the gutter as constructed. If required by the Engineer, the Contractor shall replace any unsatisfactory curb and gutter and replace said at no additional cost.

B. CURB RAMPS AND PASSAGEWAYS

Curb ramps and median passageways shall comply with Caltrans Standard Plans A88A, A88B and details shown on the plans, but may be modified by the Engineer to fit field conditions.

An accessible pedestrian path-of-travel shall be maintained at all times by the Contractor during minor concrete work. Any exception must be approved in advance by the Engineer. Where necessary, temporary path of travel improvements may include but is not limited to, temporary curb ramps, protected walkways when pedestrians are directed into the vehicle travel way and signage to redirect pedestrian traffic. All temporary measures shall be compliant with state and federal ADA requirements. Pedestrian path of travel detours shall not create sight distance constraints for motorists. The Contractor is responsible for maintenance of all temporary pedestrian path improvements. The Contractor shall submit a demolition plan to the Engineer prior to demolition and subsequent construction of curb ramps. The demolition plan shall clearly indicate temporary pedestrian path of travel at all times. The demolition shall commence upon approval of the demolition plan by the Engineer. Contractor shall allow (5) working days for review of the demolition plan. No additional working days will be allowed for review of the phasing plan. No curb ramps may be removed prior to approval of the phasing plan by the Engineer. Once the curb ramp phasing plan is approved the by Engineer, modifications to the phasing plan shall only be allowed with written approval from the Engineer.

Curb ramps and passageways shall include all construction details of each respective type of ramp to be installed as specified on the plans. **Forms and finished slopes on new curb ramps will be checked in the field by the resident engineer using a 2-foot level.** All curb ramp and passageway forms shall be checked by the resident engineer prior to pouring concrete. Construction details include the installation of joints, grooves, retaining curb, if necessary, adjustment of utility boxes to new grade, relocation of street/traffic signs, conforming work with existing private improvements and any modifications to fit field conditions as directed by the Engineer.

Detectable Warning surface shall be made of precast concrete panels, TekWay Dome Tile, or approved equivalent. Any detectable warning surface equivalent specification shall be submitted in writing for approval to the Engineer. A minimum of 5 working days shall be allowed for approval by the Engineer.

C. SIDEWALKS

Sidewalks shall be Class “B” concrete and comply with the Marin County Uniform Construction Standard detail numbers 100 and 105 and per detail shown on the plans, but may be modified by the Engineer to fit field conditions.

MEASUREMENT

Minor Concrete - Concrete Curbs shall be measured by the linear foot in place.

Minor Concrete - Concrete Sidewalks shall be measured by square foot in place.

Minor Concrete - Curb Ramps and Passageways shall be measured by each in place. Unit price shall include a ramp or passageway with detectable warning surface, transition areas, curb and gutter immediately adjacent to the ramp, transitions, and asphalt concrete (removal and replacement) around curb ramps as identified in the Plans or by the Engineer to conform with the existing roadway. Compensation for retaining curb shall be considered as included in the respective unit prices paid for curb ramps and passageways and no additional payment will be made.

PAYMENT

The contract price paid for each item, shall include full compensation for furnishing all labor, materials (including aggregate base), tools, coordinating with utility companies and working around their facilities, equipment, and incidentals necessary to complete the work (including structure excavation and backfill, furnishing and placing and removing formwork, reinforcing steel, curing, and water testing) as shown on the plans and specified herein, for completing in place all the work involved in constructing these items, as shown on the plans and specified in the Standard Specifications and these Special Provisions, or as directed by the Engineer.

The linear foot price paid for Concrete Curbs shall include full compensation for furnishing all labor, materials, and equipment necessary to complete the work (including demolition, saw-cutting and forming) as shown on the Plans and specified herein.

The square foot price paid for Concrete Sidewalks shall include full compensation for furnishing all labor, materials, and equipment necessary to complete the work (including demolition, saw-cutting and forming) as shown on the Plans and specified herein.

The respective unit price paid for each concrete Curb Ramp and Passageway shall include full compensation for furnishing all labor, materials and equipment necessary to complete the work (including saw-cutting and forming) as shown on the plans and specified herein.

No adjustment in the contract unit price for minor concrete shall be made for increases or decreases of more than 15 percent of the quantities set forth in the Schedule of Bid.

10.16 HOT MIX ASPHALT

Hot Mix Asphalt shall conform to the provisions in Section 39, “Hot Mix Asphalt”, of the Standard Specifications and these Special Provisions.

MATERIALS

Asphalt concrete shall be Type “A” with aggregate conforming to 1/2 inch maximum medium grading pursuant to Section 39-2.02B, “Quality Control Testing”, of the Standard Specifications.

The grade of asphalt binder mixed with aggregate for HMA Type A shall be PG 64-10.

Prime coat shall be liquid asphalts SC-70 or MC-70, as directed the Engineer. Paint binder shall be RS-1. Surface to receive asphalt concrete shall be clean.

Any asphalt spilled, placed or tracked outside the required areas shall be removed by the Contractor to the satisfaction of the Engineer and no additional payment will be made.

The percentage of paving asphalt shall be six (6) percent, or as determined by the Engineer.

PLACEMENT

In lieu of the provisions of Section 39-3.03, “Spreading and Compacting Equipment”, the following shall apply: The asphalt concrete shall be spread by hand, or other approved method, and rolled with a minimum of one 8-ton tandem roller, or equivalent vibratory compactor, as approved by the Engineer.

Spreading, shoveling or raking asphalt concrete shall not leave irregular or segregated areas.

Finish surface of the wearing course must be thoroughly compacted, smooth, and free from ruts, humps, depressions, cold joints, or other irregularities.

Finish paving must conform to slopes, lines, and finish grades indicated and as directed by the Engineer, and must drain properly.

Where adjacent surfaces are intended to be flush (as at concrete gutters, walks, and paving), they must smoothly conform at all joints.

Ridges, indentations, and other objectionable marks left in the surface of the HMA concrete by paving or rolling equipment must be eliminated by rolling. The use of equipment that leaves ridges, indentations, or other objectionable marks in the HMA concrete must be discontinued, and other acceptable equipment must be employed.

Where cold joints are indicated or approved by the Engineer as necessary, cut back the placed and compacted cold asphalt a minimum of three inches with a concrete or masonry power saw, so that a vertical face of compacted full thickness material is exposed. Treat this surface with a tack coat before proceeding with the placement of new HMA concrete surfacing.

Finish paving must conform to finish elevations within plus or minus 0.01 of a foot and must be level to within plus or minus 1/4 inch in 10 feet when measured with a 10 foot straightedge in any direction.

Upon completion of final rolling, traffic must not be permitted on the finished pavement for at least three hours, and until the asphalt concrete has cooled sufficiently to withstand traffic without being

deformed. Finished pavement must be maintained in finished clean condition until the work is accepted by the Town.

Replace the 2nd, 3rd, and 4th paragraphs of section 39-1.11B(1) of the RSS for section 39-1.11 with:

Do not leave a vertical joint more than 0.15-foot high between adjacent lanes or between a lane and the shoulder of a road open to public traffic.

Place HMA on adjacent traveled way lanes so that at the end of each work shift the distance between the ends of HMA layers on adjacent lanes is from 5 to 10 feet. Place additional HMA along the transverse edge at each lane's end and along the exposed longitudinal edges between adjacent lanes. Hand rake and compact the additional HMA to form temporary conforms. You may place Kraft paper or another authorized bond breaker under the conform tapers to facilitate the taper removal when paving operations resume.

Place additional HMA along the pavement's edge to conform to road connections, private drives, and driveways. Hand rake, if necessary, and compact the additional HMA to form a smooth conform taper.

MEASUREMENT

Quantities of Asphalt Concrete will be determined from certified weight tickets delivered to the Engineer at the work site.

PAYMENT

The price paid per ton for Hot Mix Asphalt (Type A) shall include full compensation for furnishing all labor, materials (including asphalt binder, tack coat, paving asphalt, aggregate and filler) and equipment necessary to complete the work as shown on the plans, and specified herein and as directed by the Engineer.

No adjustment in the contract unit price will be made for increases or decreases of more than 15 percent of the bid quantity.

10.17 RAISING UTILITIES TO GRADE

WATER VALVE ACCESS COVER

Existing water valve access covers shall be adjusted to grade in accordance with the detail shown on the plans, the Marin Municipal Water District (MMWD) Standards and these Special Provisions.

Water valve covers may be raised to grade during the paving operations by MMWD using their own forces. Contractor shall coordinate work with the schedule.

MMWD shall be notified 48 hours in advance of any work related to the work described as follows:

A. During Paving Operations

During the paving operation, the Contractor shall place sheet metal sleeves in the vertical access pipe over the water valve, and replace the water valve access cover. The uncompacted asphalt concrete shall be hand-raked uniformly around the water valve access cover. The Contractor shall then compact the asphalt concrete pressing the sheet metal sleeve and access cover flush with the new roadway surface.

B. Prior to Roadway Excavation and Pavement Grinding Operations

Where water valve access covers are within the limits of any roadway excavation operation, the Contractor shall notify MMWD in advance of the work to perform preliminary valve preparation and maintenance of valves prior to roadway excavation.

MMWD shall perform the following:

- Water valve access covers and sheet metal sleeve shall be removed prior to excavation and/or planning of pavement
- Vertical access pipe over the water valve shall be plugged with cloth rags to prevent loose materials (grindings) from filling the pipe
- Vertical access pipe and water valve access cover shall be reset during pavement restoration work
- After final paving, vertical access pipe shall be cleaned of loose grindings, rocks, asphalt concrete and all other debris.

However, Contractor shall provide adequate time notice for MMWD to complete the above work.

MEASUREMENT

Utility adjustments shall not be measured or paid for separately.

PAYMENT

The contract price paid for utility adjustments as shown on the plans, as specified in specifications, and as directed by the Engineer, shall be included in the contract price paid for various items for work involving utility adjustments, and no additional compensation will be made therefor.

10.18 FIRE HYDRANT RELOCATION

Existing fire hydrant shall be relocated in accordance with the detail shown on the plans, the Marin Municipal Water District (MMWD) Plan (See Appendix), MMWD Standards and these Special Provisions.

Fire Hydrant may be relocated by MMWD using their own forces. Contractor shall coordinate work with the schedule.

MMWD shall be notified two (2) weeks and again five (5) days in advance of any work related to the fire hydrant relocation.

MEASUREMENT

If relocation of fire hydrant is to be completed by the Contractor's forces, relocation shall be measured by each adjusted facility.

Attention is directed to the various items of work for relocate fire hydrant. MMWD shall retain the ability to decrease the amount of a contract item of work or eliminate in its entirety. No adjustment to the contract unit price and number of working days will be made.

PAYMENT

The respective price paid per each for relocate fire hydrant shall include furnishing all labor, materials and equipment necessary to complete the work as shown on the plans and specified herein. No compensation will be allowed for any relocations which may be performed by the utility agency of the facilities.

Bid price for relocate fire hydrant shall be approved by MMWD prior to any work by the Contractor. MMWD shall retain the right to decrease the amount of a contract item of work or eliminate in its entirety without any adjustment in compensation. Bid price shall include all fees and coordination effort with the MMWD for the relocation of fire hydrant.

10.19 DRAINAGE STRUCTURES

Specifications for the furnishing and installing of cast-in-place concrete and precast concrete structures for drainage as indicated in the design plans. The work includes drainage inlets and the related cast iron and steel products required for gratings, covers, and manhole steps and ladders, channel inserts, and pulling eyes.

SUBMITTALS

When not indicated on the Contract Drawings in sufficient detail or definition, the Contractor shall submit detailed drawings of cast-in-place and precast concrete utility structures and related metal work. The Contractor shall submit manufacturer's product data for standard manufactured precast concrete utility boxes and structures and for metal gratings and covers and other related miscellaneous metal items. The Contractor shall submit certification or other acceptable evidence that covers and grates to be provided for roadways and sidewalk areas meet proof testing requirements for H2O loadings and be bicycle and pedestrian safe.

MATERIALS

Portland Cement shall be ASTM C150, Type II, low alkali. Admixtures shall be (if used) Air Entrainment: ASTM C260. Provide six percent air entrainment, plus or minus one percent. Pozzolan: ASTM C618, Class N. Provide pozzolan of 10 percent by weight of the cement content.

Mix Design shall be Class 3000 minimum. Maximum water-cement plus pozzolan ratio : 0.45.
Maximum slump: Four inches.

MATERIALS (PRECAST)

The Contractor shall provide precast concrete structures which conform to the general configuration, capacities, and inverts indicated. The Contractor shall provide fine and coarse aggregates conforming to ASTM C33, in size commensurate with structure and reinforcement clearances. Class 3000 minimum Concrete may be polymer or latex modified to achieve higher strengths and denser concrete. Concrete shall not deteriorate from chemical attack of sanitary waste. The Engineer shall perform such inspections and tests as required to verify compliance with these Specifications. The Contractor shall furnish samples of materials and their handling as needed by the Engineer for analyses of materials.

MATERIALS (METAL COVERS, GRATES, AND INLETS)

Metal used in manufacture of castings shall conform to ASTM A48, Class 35B for Gray Iron, or ASTM A536, Grade 65-45-12 for Ductile Iron. Castings shall be of uniform quality, free from blowholes, shrinkage, distortion or other defects. Castings shall be smooth and cleaned by shot blasting. Minimum tensile strength shall be 35,000 psi. Castings shall be manufactured true to pattern; component parts shall fit together in a satisfactory manner. Round frames and covers shall have continuously machined bearing surfaces to prevent rocking and rattling. Covers shall be of a type that overlaps box edges. Where castings will be subjected to loads of H2O or greater, as indicated, provide ductile iron castings.

- A. GRATES. Cast Ferrous Grates: Grates for area drains and catch basins shall be heavy duty, bicycle safe inlet grates and frames of size and configuration indicated. Grates in roadways and parking areas shall withstand H2O loadings when proof-tested in accordance with Caltrans Bridge Design Specifications Manual, Section 3.
- B. MORTAR. Cement mortar for the sealing of openings for pipe penetrations, for cementing of joints of component parts of precast structures, for providing of flow characteristics for the

bottoms of drainage structures, and other features as indicated shall conform with the California Building Code, Chapter 21, Type S (without Lime), with a minimum compressive strength at 28 days of 1,800 psi. Mortar shall comply with applicable requirements of ASTM C270, including measurement, mixing, proportioning and water retention. Ten percent by volume of the cement content of the mortar shall be fly ash or pozzolanic material confirming with ASTM C618. Use mortar within 90 minutes after mixing. Discard mortar which has been mixed longer or which has begun to set. Retempering of mortar will not be permitted.

- C. INSTALLATION. When drainage structures are located in areas to be paved or surfaced, no individual structure shall be constructed to final grade until the paving or surfacing has been completed immediately adjacent to the structure. Drainage inlets shall be connected to the storm drain pipe at elevations indicated in the design plans.

Precast Concrete Structures: Install as indicated. Comply with applicable requirements of ASTM C891. Provide such appurtenances and installation accessories, including cement mortar and sealants, as required for a complete installation.

Metal Components: Install grates and frames, steps, ladders, channel inserts, and pulling eyes as indicated and in accordance with the respective manufacturer's instructions. Covers and grates in roadways, parking areas, and concrete walks shall be installed flush with adjacent, abutting pavement.

PAYMENT

Drainage Structures on the project shall be considered as included in the contract price paid for "Raise Drain Inlet to Finish Grade" and "Relocate Drain Inlet". The contract price paid per each drainage inlet of the types specified in the Engineer's estimate shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in connecting the storm drain pipe to the drainage inlet.

10.20 TRAFFIC STRIPING AND PAVEMENT MARKINGS

Traffic stripes (traffic lines) and pavement markings shall conform to the Provisions in Sections 84-1, "General," 84-2, "Thermoplastic Traffic Stripes and Pavement Markings," and 84-3, "Painted Traffic Stripes and Pavement Markings," of the Standard Specifications and these Special Provisions.

No more than one lane of traffic will have traffic striping and pavement markers under construction at any one time.

Details and dimensions of traffic stripes and pavement markings shall be in accordance with the State Department of Transportation Standard Plans.

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

Sandblasting or grinding shall be used for removal of existing traffic stripes and pavement markings outside the limits of new paving. All alternate methods shall be approved by the Engineer.

All traffic stripes and pavement markings shall be thermoplastic unless otherwise noted on the plans or as directed by the Engineer. Thermoplastic material for traffic stripes shall be applied to a minimum thickness of 0.08 inch.

REMOVAL OF TRAFFIC STRIPES AND PAVEMENT MARKINGS

Traffic stripes and pavement markings shall be removed at the locations shown on the plans and as directed by the Engineer.

Waste from removal of yellow thermoplastic and yellow painted traffic stripe and pavement marking contains lead chromate in average concentrations greater than or equal to 350 mg/kg and less than 1000 mg/kg Total Lead. Residue produced when yellow thermoplastic and yellow paint are removed may contain heavy metals in concentrations that exceed thresholds established by the California Health and Safety Code and may produce toxic fumes when heated.

The removed yellow thermoplastic and yellow paint shall be disposed of at a Class 1 disposal facility or a Class 2 disposal facility permitted by the Regional Water Quality Control Board in conformance with the requirements of the disposal facility operator within 30 days after accumulating 100 kg of residue and dust. The Contractor shall make necessary arrangements with the operator of the disposal facility to test the yellow thermoplastic and yellow paint residue as required by the facility and these special provisions. Testing shall include, at a minimum, (1) Total Lead and Chromium by EPA Method 7000 series and (2) Soluble Lead and Chromium by California Waste Extraction Test. From the first 3360 L of waste or portion thereof, if less than 3360 L of waste are produced; a minimum of four randomly selected samples shall be taken and analyzed. From each additional 840 L of waste or portion thereof, if less than 840 L are produced; a minimum of one additional random sample shall be taken and analyzed. The Contractor shall submit the name and location of the disposal facility and analytical laboratory along with the testing requirements to the Engineer not less than 10 days prior to the start of removal of yellow thermoplastic and yellow painted traffic stripe and pavement marking. The Department of Health Services Environmental Laboratory Accreditation Program shall certify the analytical laboratory. Test results shall be provided to the Engineer for review prior to signing a waste profile as requested by the disposal facility, prior to issuing an EPA identification number and prior to allowing removal of the waste from the site.

The Contractor shall prepare a project specific Lead Compliance Plan to prevent or minimize worker exposure to lead while handling removed yellow thermoplastic and yellow paint residue. Attention is

directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific Cal-OSHA requirements when working with lead.

The Lead Compliance Plan shall contain the elements listed in Title 8, California Code of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene shall approve the Lead Compliance Plan. The Plan shall be submitted to the Engineer at least 7 days prior to beginning removal of yellow thermoplastic and yellow paint.

Prior to removing yellow thermoplastic and yellow painted traffic stripe and pavement marking, personnel who have no prior training, including City personnel, shall complete a safety training program provided by the Contractor that meets the requirements of Title 8, California Code of Regulations, Section 1532.1, "Lead," and the Contractor's Lead Compliance Program.

Where grinding or other methods approved by the Engineer are used to remove yellow thermoplastic and yellow painted traffic stripe and pavement marking, the removed residue, including dust, shall be contained and collected immediately. Sweeping equipment shall not be used. Collection shall be by a high efficiency particulate air (HEPA) filter equipped vacuum attachment operated concurrently with the removal operations or other equally effective methods approved by the Engineer. The Contractor shall submit a written work plan for the removal, storage, and disposal of yellow thermoplastic and yellow painted traffic stripe and pavement marking to the Engineer for approval not less than 10 days prior to the start of the removal operations. Removal operations shall not be started until the Engineer has approved the work plan.

The removed yellow thermoplastic and yellow painted traffic stripe and pavement-marking residue shall be stored and labeled in covered containers. Labels shall conform to the provisions of Title 22, California Code of Regulations, Sections 66262.31 and 66262.32. Labels shall be marked with date when the waste is generated, the words "Hazardous Waste", composition and physical state of the waste (for example, asphalt grindings with thermoplastic or paint), the word "Toxic", the name and address of the Engineer, the Engineer's telephone number, contract number, and Contractor or subcontractor. The containers shall be a type approved by the United States Department of Transportation for the transportation and temporary storage of the removed residue. The containers shall be handled so that no spillage will occur. The containers shall be stored in a secured enclosure at a location within the project limits until disposal, as approved by the Engineer.

If the yellow thermoplastic and yellow painted traffic stripe and pavement marking residue is transported to a Class 1 disposal facility, a manifest shall be used, and the transporter shall be registered with the California Department of Toxic Substance Control. The Engineer will obtain the United States Environmental Protection Agency Identification Number and sign all manifests as the generator within 2 working days of receiving sample test results and approving the test methods.

The Contractor shall assume that the yellow paint removed is not regulated under the Federal Resource Conservation and Recovery Act (RCRA). Additional disposal costs for removal residue regulated under RCRA, as determined by test results required by the disposal facility, will be paid for as extra work as provided in Section 4-1.05, "Changes and Extra Work," of the State Standard Specifications.

Nothing in these special provisions shall relieve the Contractor of the Contractor's responsibilities as specified in Section 7-1.04, "Public Safety," of the State Standard Specifications.

PAYMENT

The unit prices paid for "Thermoplastic Pavement Markings", "12" White Thermoplastic Line, 24" Continental Crosswalk", "Striping and Markers", and "Curb Paint" shall be considered full compensation for furnishing all labor, materials and equipment necessary to complete the work, as shown on the plans and specified herein.

10.21 ROADSIDE SIGNAGE

Roadside signs shall conform to the Provisions in Sections 82-3, “Roadside Signs,” of the Standard Specifications and these Special Provisions.

Details and dimensions of roadside signs shall be in accordance with the California Manual on Uniform Traffic Control Devices (MUTCD).

REMOVAL AND SALVAGING OF ROADSIDE SIGNS

Signs and posts shall be removed at the locations shown on the plans and as directed by the Engineer. Removed signs shall be salvaged to the Town of San Anselmo Corp Yard at 550 San Francisco Boulevard. Removed sign posts shall be disposed of in accordance with the Standard Specifications.

PAYMENT

The contract unit price paid for “Roadside Signs”, shall be considered full compensation for furnishing all labor, materials and equipment necessary to complete the work, as shown on the plans and specified herein.

10.22 SIGNALS, LIGHTING, AND ELECTRICAL SYSTEMS

DESCRIPTION

Traffic signal and safety lighting system work shall conform to the provisions in Section 86, “Electrical Systems,” of the State Standard Specifications and these special provisions.

ORDER OF WORK

The Contractor shall be responsible for locating and marking the positions of all signal standards and pull boxes. All locations shall be approved by the Engineer before any work is performed.

Full compensation for marking the positions of the signal standards and pull boxes, shall be considered as included in the contract lump sum price paid for “Traffic Signal Modifications,” and no additional compensation will be allowed therefore.

TEMPORARY SIGNAL SYSTEM

The Contractor shall maintain a minimum of two signal heads operational for all movements throughout the construction period.

If necessary, the Contractor shall install either a temporary foundation, wire span, or any other methods to maintain the signal operation during the construction period. The Contractor shall maintain a safe walking area, meeting the minimum width and clearance requirements as prescribed by Americans with Disability Act (ADA).

The Contractor shall submit a signal phasing plan for approval by the Engineer.

Temporary Signal System, if necessary, shall be considered as included in the lump sum prices paid for “Traffic Signal Modifications” and no additional payment will be allowed therefore.

FOUNDATIONS

Portland cement concrete shall conform to Section 90-10, “Minor Concrete,” of the State Standard Specifications and shall contain not less than 470 pounds of cement per cubic yard, except concrete reinforced pole foundations shall contain not less than 564 pounds of cement per cubic yard.

The Contractor shall remove all existing foundations in conflict with the proposed location of the new poles.

Removal of the signal foundations shall be considered as included in the lump sum price paid for “Traffic Signal Modifications” and no additional payment will be allowed therefore.

STANDARDS, STEEL PEDESTALS AND POSTS

Type 1 standards shall be assembled and set with the handhole on the downstream side of the pole in relation to traffic or as shown on the plans.

CONDUIT

Conduit to be installed underground shall be Type 1 or Type 3 unless otherwise specified.

Detector termination conduits shall be Type 3 or Type 4.

The conduit in a foundation and between a foundation and the nearest pull box shall be Type 1.

Conduit sizes shown on the plans and specified in the State Standard Specifications and these special provisions are referenced to metallic type conduit.

When a standard coupling cannot be used for joining Type 1 conduit, a UL listed threaded union coupling conforming to the provisions in Section 86-2.05C, "Installation," of the State Standard Specifications, or a concrete-tight split coupling, or concrete-tight set screw coupling shall be used.

When Type 3 conduit is placed in a trench (not in pavement or under Portland cement concrete sidewalk), after the bedding material is placed and the conduit is installed, the trench shall be backfilled with commercial quality concrete, containing not less than 16 lb. of Portland cement per cubic feet, to not less than 4-inches above the conduit before additional backfill material is placed.

Conduit runs shown on the plans to be located behind curbs may be installed in the street, within 3 feet of, and parallel with the face of the curb, by the "Trenching in Pavement Method" in conformance with the provisions in Section 86-2.05C, "Installation," of the State Standard Specifications. Pull boxes shall be located behind the curb or at the locations shown on the plans.

After conductors have been installed, the ends of conduits terminating in pull boxes, service equipment enclosures, and controller cabinets shall be sealed with an approved type of sealing compound.

At those locations where conduit is required to be installed under pavement and existing underground facilities require special precautions in conformance with the provisions in "Obstructions" of these special provisions, conduit shall be placed by the "Trenching in Pavement Method" in conformance with the provisions in Section 86-2.05C, "Installation," of the State Standard Specifications.

At other locations where conduit is required to be installed under pavement and if a delay to vehicles will not exceed 5 minutes, conduit may be installed by the "Trenching in Pavement Method."

REUSE OF EXISTING CONDUITS

All existing conduits, to be used or reused, shall be cleaned out by pulling a mandrill of appropriate size through the conduit run and then the conduit run shall be blown out using compressed air. Compressed air shall be blown through the conduit until no foreign objects are ejected.

PULL BOXES

Grout shall not be placed in the bottom of pull boxes.

Pull boxes for traffic signal circuits shall be marked "Traffic Signal."

Pull boxes for lighting circuits shall be marked "Street Light." Pull boxes for PG&E service connection shall meet all PG&E requirements. Pull box shall have non-slip lid.

Pull boxes shall not be installed in the wheelchair area of the ramp.

CONDUCTORS AND WIRING

Splices shall be insulated by "Method B" or, at the Contractor's option, splices of conductors shall be insulated with heat-shrink tubing of the appropriate size after thoroughly painting the spliced conductors with electrical insulating coating.

The minimum insulation thickness, at any point, for Type USE, RHH or RHW wire shall be 1.0 mm for conductor sizes No. 14 to No. 10, inclusive, and 1.3 mm for No. 8 to No. 2, inclusive. The minimum insulation thickness, at any point, for Type THW and TW wires shall be 0.03-inches for conductor sizes No. 14 to No. 10, inclusive, 0.04-inches for No. 8, and 1.37 mm for No. 6 to No. 2, inclusive.

INSTALLATION OF NEW CONDUCTORS AND CABLES IN EXISTING CONDUITS

Existing conductors and cables shall be removed from existing conduit runs to be reused prior to installation of new conductors or cables. Existing conductors and cables shall be bundled with new conductors and cables prior to reinstallation. No conductors or cables shall be pulled into existing conduit until the existing conduit is cleaned out.

TESTING

The Contractor shall perform a high-voltage series lighting test consisting of the open circuit voltage of the connected constant current transformer between conductors and ground.

The high-voltage test shall not be performed on existing circuits or equipment. Non-testing of existing circuits and equipment shall not relieve the Contractor from the responsibility for malfunctioning of existing lighting circuits due to the Contractor making splices in or connecting to the circuits and such malfunctions shall be corrected at the Contractor's expense.

SIGNAL FACES AND SIGNAL HEADS

Lamps for vehicular traffic signal units and shall be Contractor furnished.

All red, yellow, and green ball/arrow sections shall be furnished with LED modules as specified in Section 86-4, "Traffic Signal Faces and Fittings", of the State Standard Specifications. LED modules shall be Type 1.

PEDESTRIAN SIGNAL FACES AND SIGNAL HEADS

All pedestrian signals shall be furnished with LED modules with self-contained countdown timer. Pedestrian signals shall be Type A.

Pedestrian countdown traffic signal housing built to Institute of Transportation Engineers' (ITE) "Pedestrian Traffic Control Signal Indications" (PTCSI) Standard. The message-bearing surface of the module shall be supplied with an overlapping, full "UPRAISED HAND" and "WALKING PERSON" symbol that complies with PTCSI standard for these symbols for a message-bearing surface of the size specified and the numbers 00 to 99 on the numerical countdown display.

The numerical countdown display shall have 2 rows of LEDs and a minimum height of 7 inches. The modules shall use light emitting diodes as the light source as shown on the plans and in conformance with these specifications. Outlined shapes shall not be accepted. LED pedestrian countdown signal modules used on this project shall be from a single manufacturer.

Circuit boards and power supplies shall be contained inside the modules. Circuit boards shall conform to the requirements in Chapter 1, Section 6 of the "Transportation Electrical Equipment Specifications," (TEES) published by the State of California Department of Transportation.

The lens of the LED pedestrian countdown signal modules shall be polycarbonate UV stabilized and a minimum of 1/4" thick. The exterior of the lens of the LED pedestrian countdown signal module shall be smooth and frosted to prevent sun phantom.

The Pedestrian Countdown construction shall meet the following requirements:

- 1) The LED pedestrian countdown signal module shall be a single, self-contained device, not requiring on-site assembly for installation into the existing traffic signal housing and include an installed gasket.
- 2) The LEDs for the "Upraised Hand" shall be Portland Orange and shall utilize Aluminum Indium Gallium Phosphide (AlInGaP) technology or equal, and rated for 100,000 hours or more of continuous operation from 40°C to +74°C. The LEDs for the "Walking Person" shall be Lunar White and shall utilize InGaN technology.
- 3) All internal LED and electronic components shall be adequately supported to withstand mechanical shock and vibration from high winds and other sources.
- 4) The signal module shall be made of UL94VO flame-retardant materials. The lens is excluded from this requirement.
- 5) The lens of the LED pedestrian countdown signal modules shall be polycarbonate UV stabilized.
- 6) The exterior of the lens of the LED pedestrian countdown signal module shall be uniform and frosted to reduce sun phantom effect.
- 7) Each individual LED traffic module shall be identified for warranty purposes with the manufacturer's trade name, serial number and operating characteristics, i.e., rated voltage, power consumption, and voltampere.
- 8) Environmental Requirements:
 - a) The LED pedestrian countdown signal modules shall be rated for use in the ambient operating temperature range of -40°C to +60°C (-40°F to +140°F).
 - b) The LED pedestrian countdown signal modules, when properly installed with gasket, shall be protected against dust and moisture intrusion per requirements of NEMA Standard 250-1991, sections 4.7.2.1 and 4.7.3.2, for Type 4 enclosures to protect all internal LED, electronic, and electrical components.
- 9) Luminous Intensity
 - a) Pedestrian countdown LED signal modules shall be designed to operate over the specified ambient temperature and voltage range, attract the attention of, and be readable by, a viewer (both day and night) at all distances from 3 m to the full width of the area to be crossed.
 - b) The luminous intensity of the LED pedestrian countdown signal module shall not vary more than $\pm 10\%$ for voltage range of 80 VAC to 135 VAC.
- 10) Chromaticity - The measured chromaticity coordinates of the LED signal modules shall conform to the chromaticity requirements as follows:
 - a) "Upraised Hand" shall be Portland Orange.
 - b) not greater than 0.390, nor less than 0.331, nor less than 0.997 – x.

- c) “Walking Person” shall be Lunar White.
- d) x: not less than 0.290, nor greater than 0.330
- e) y: not less than $1.5x - 0.175$, nor greater than $1.5x - 0.130$

11) Electrical

- a) The secured, color coded, 914 mm (36 in) long, 600V, 20 AWG minimum, jacketed wires, conforming to the National Electrical Code, rated for service at +105°C, are to be provided for electrical connection.
- b) The LED pedestrian countdown signal module shall operate from a 60 ± 3 Hz AC line over a voltage range of 80 VAC to 135 VAC. Rated voltage for all measurements shall be 120 ± 3 volts rms.
- c) The LED circuitry shall prevent perceptible flicker over the voltage range specified above.
- d) The LED pedestrian countdown signal module circuitry shall include voltage surge protection against high-repetition noise transients and low-repetition noise transients as stated in Section 2.1.6, NEMA Standard TS-2, 1992.
- e) Catastrophic failure of one LED light source shall not result in the loss of more than the light from that one LED.
- f) The LED pedestrian countdown module shall be operationally compatible with the currently used controller assemblies. The LED pedestrian and countdown module shall be operationally compatible with conflict monitors.
- g) The LED pedestrian countdown module including its circuitry must meet Federal Communications Commission (FCC) Title 47, Subpart B, Section 15 regulations concerning the emission of noise.
- h) The LED pedestrian countdown module shall provide a power factor of .90 or greater over the operating voltage range and temperature range specified above for modules with 6 watts or more.
- i) Total harmonic distortion (current and voltage) induced into an AC power line by an LED pedestrian countdown module shall not exceed 20% over the operating voltage range and temperature range specified above.

12) Functions

- a) Basic operation
 - i) The control and regulation module shall be of the “smart” type in order for the countdown displays to be automatically adjusted with the programmed intervals of the traffic controller.
 - ii) Operating Modes
 - (1) The module shall operate in two different modes:

- (i) Full Cycle Countdown Mode – The module will start counting when the walk signal is energized. It will countdown the full walk and flashing clearance signal to reach “0” and turn off when the steady “Don’t Walk” signal turns on.
- (ii) Clearance Cycle Countdown Mode – The module will start counting when the flashing clearance signal turns on and will countdown to “0” and turn off when the steady “Don’t Walk” signal turns on.

Note: The units shall be set on the clearance cycle countdown mode at the factory. The units shall be changeable to either mode by a “jumper wire” on the back of the unit.

- iii) Power failure - The equipment must maintain a consistent countdown during short power failures (<1 second). A longer failure or an absence of signal superior to one (1) second must turn off display and trigger a restart system remembering the last sequence, as it is done for the NEMA traffic controller.
- 13) Quality Assurance - LED pedestrian countdown modules shall be manufactured in accordance with a Vendor quality assurance (QA) program including both design and production quality assurance. All QA process and test result documentation shall be kept on file for a minimum of seven years.
- 14) Warranty
- a) The unit shall be repaired or replaced by the contractor if it exhibits a failure due to workmanship or material defect within the first 60 months of delivery.
 - b) The unit shall be repaired or replaced if the intensity level falls below 50% of the original values within 60 months of delivery.

PEDESTRIAN PUSH BUTTONS

All pedestrian push buttons shall be installed on poles located within the maximum reach range of 24 inches (0.6m) of a level landing. All pedestrian push buttons shall be identified with color coded tape per 2001 California Building Code, Section 11178.5.9.

Pedestrian Push Button assemblies shall be A.D.A. compliant, type B, and of tamper proof construction. The housing shall be either die-cast or permanent mold aluminum and shall be painted standard traffic signal green unless specified otherwise on the project plans. The assembly shall be shockproof and rainproof in any weather condition.

The pedestrian push button switch shall be peizo driven, solid state switching unit with screw type terminals, rated 0.3A maximum at 8-36V AC/DC, operating temperatures of -40 °F to 220 °F and a minimum rated life of 100 million operations. The switching unit shall be enclosed in high impact polycarbonate alloy composition body. The body shall be black, UV stabilized, and weather- and chemical- resistant.

The actuator shall be a stainless steel button with a minimum diameter of 2 inches. The switch shall have an actuating force of 3 ± 1 lbs.

LIGHT EMITTING DIODE STREET LIGHT FIXTURES

The Contractor shall furnish and install new Light Emitting Diode (LED) energy-efficient lighting fixtures and maintain existing electrical systems during construction in designated locations. Fixtures shall be rated for the existing pole height, include new integrated photocells.

Luminaires shall conform to the requirements listed below. Luminaires shall be from the same manufacturer for any wattage to be furnished. The furnished product shall conform to an established tariff rate as published by the local utility.

Contractor shall comply with all pole and fixture labeling requirements for PG&E. The contractor shall notify the engineer daily on pole locations which are missing numbers.

A. LED Luminaire Specifications:

Life Cycle Cost & Payback: Proposer shall submit a life cycle cost analysis for each fixture to be furnished. Payback period shall be less than expected fixture life. Based on 4,000 hours of operation per year, fixture life shall be 10 years or full warranty duration, whichever is less. Life cycle cost calculations shall include Furnish and Install costs, cost offsets from grant awards, and cost of energy savings.

Correlated Color Temperature (CCT): CCT shall range from 4,000 to 6,000 +/- 300 nominal CCT. Color shift during L70 period shall be less than 5%. Acceptable LM80 test results shall be provided.

Color Rendering Index (CRI): Luminaires shall have a minimum CRI of 70.

Off-state Power Consumption: The power draw of the luminaire (including PE or remote control devices) shall not exceed 0.50 (one half) watts when in the off state.

On-state Power Consumption: The LM79 test shall exceed 62 lumens per watt.

Warranty: The warranty shall provide for the full replacement of the entire lamp system exclusive of lamp post due to any failure for a minimum of seven (7) years. Warranties shall include all labor, materials and equipment necessary to address the deficiency, including field replacement.

Operating Environment: Luminaire shall be able to operate normally in temperatures from -20° C to 50° C.

Cooling System: Shall consist of a heat sink with no fans, pumps, or liquids, and shall be tested for heat management with debris to ensure buildup does not degrade heat dissipation such that the light operates outside of its design life performance parameters.

Dimensions (Approx.): For fixtures to be mounted on mast arms longer than 5 feet long, when any single dimension is more than 10 percent greater than the fixture being replaced, a Wind Load analysis, stamped by an appropriately registered Engineer, shall be provided to prove the existing pole can accommodate the Wind Loading of the proposed fixture.

Housing: Shall be primarily constructed of metal. Finish shall be gray in color, powder coated and rust resistant. Finish shall have a warranty of not less than 7 years. Fixture shall be self-cleaning. Driver must be mounted internally and be replaceable. Driver must be accessible without tools. All screws shall be stainless steel. Captive screws are needed on any components that require maintenance after installation. No parts shall be constructed of polycarbonate. Housing will be IP rated to not less than 55.

Dark Sky Compliance: Fixtures shall comply with International Dark Sky Association guidelines, and shall be included in their list of Approved Fixtures. Fixtures shall be fully shielded and installed in such a way that no light is emitted above a horizontal plane running through the lowest part of the fixture.

Certification: Entire fixture including internal components, and as a whole unit, shall be either UL certified, CSA International certified or equivalent.

Mounting Arm Connection: Cobrahead fixtures shall mount on 1 5/8 to 2 3/8 O.D. horizontal tenon with no more than four 9/16-inch hex bolts and two piece clamp with vertical tilt adjustment range of +/- 5%. Effective Projected Area (EPA) of luminaire shall not exceed 1.6 and shall withstand 100 MPH wind gusts when mounted on a standard 6' steel mounting bracket arm without additional reinforcement.

PE Cell Receptacle: Luminaires shall have a 3-prong twist-lock photo-control receptacle in accordance with ANSI C136.10. The PE socket shall be able to rotate so that the PE window can be positioned to face the north direction.

House Shield: Shall provide option for house side light control.

B. LED Module/Array Specifications:

Lumen Depreciation of LED Light Sources: LED module(s)/array(s) shall deliver at least 70% of initial lumens, when installed for a minimum of 50,000 hours. Submit lumen depreciation (operating life) data for each luminaire supported by the LED chip manufacturers' IESNA LM80 test data that directly correlates to luminaire level performance. Submit certified photometric reports per IESNA LM79 from an approved Department of Energy Independent testing laboratory to validate manufacturer's photometric performance claims for each luminaire.

C. LED Power Supply/Driver Requirements:

Power Factor: Shall have a minimum Power Factor of 0.90

Max amperage at LED: Shall conform to the following:

Step increments on current to the driver: - 350 mA (with option of 525 mA and 700 mA) for Equivalent Replacement of 70 W HPS - 525 mA (with option of 350 mA and 700 mA) for Equivalent Replacement of 100 W HPS

OR

Driver adjustment for multi-current input operation: Standard factory for Equivalent Replacement of 70 W HPS and 100 W HPS setting shall be 21 mA, as delivered from the factory. Adjustment shall not exceed 700 mA. L70 shall not be below 50,000 for the highest operating forward current.

Transient Protection: Per IEEE C.62.41-1991, Class A operation. The line transient shall consist of seven strikes of a 100k HZ ring wave, 6 kV level, for both common mode and differential mode.

Operating Temperature: Power supply shall operate between -20° C and 50° C.

Frequency: Output operating frequency must be \geq 120 Hz (to avoid visible flicker) and input operating frequency of 60 Hz.

Interference: Power supplies shall meet FCC 47 CFR Part 15/18 (Consumer Emission Limits).

Noise: Power supply shall have a Class A sound rating per ANSI Standard C63.4.

Terminal Block: Shall be capable of #12 to #6 AWG.

D. LED Roadway Application Requirements:

Minimum Light Output: Luminaires shall have a light distribution that is appropriate to the location based on IESNA RP-8 Guidelines or equivalent to or superior to the existing fixture where RP-8 guidelines are not being met and in accordance with the lighting plan developed in coordination with the Engineer. Equivalence shall be based on the test procedure IESNA:LM-63-1995 as published by the

Illuminating Engineering Society of North America.

Reference is made to Caltrans Standard Plan ES-10 as an example of one type of fixture to be removed. Light distributions of the proposed lighting shall conform to the following criteria:

- The 0.2 footcandle (fc) contour line, measured perpendicular to the luminaire arm on a line twenty (20) feet toward the street centerline from the fixture, shall fall no less than 10 percent nor more than 20 percent from the equivalent measurement for the fixture selected for each location in the lighting plan.
- The 0.2 fc contour line, measured parallel to the luminaire arm on the street side of the fixture, shall fall within ± 10 percent from the equivalent fixture selected for each location in the lighting plan.
- The 0.2 fc contour line, measured parallel to the luminaire arm on the house side of the fixture, shall fall no less than 20 percent nor more than 5 percent from the equivalent fixture selected for each location in the lighting plan.

Luminaire Efficacy: Luminaire Light Output (includes fixture efficiency and thermal effects), Luminaire Input Power shall meet DOE Energy Star Criteria

Minimum Luminaire Efficacy: 62 lm/W at all operating temperatures and forward currents.

E. PHOTOELECTRIC CONTROL

Photoelectrical control shall conform to Section 86-6.11, "Photoelectric Controls" of the State Standard Specifications except as modified herein.

All photoelectric control shall be Type IV. A photoelectric unit shall be supplied for each luminaire, connected to the same voltage as the luminaire.

If the existing street lights are hooked up to a Type I, II or III photoelectric unit, the Contractor shall disable such units for the street lights in which retrofits are installed as part of this project.

REMOVING AND SALVAGING EXISTING EQUIPMENT

Contractor shall remove and salvage any and all equipment as shown on the plans. All salvaged material not reinstalled shall be delivered to the Town's storage facility.

Any materials salvaged by the Contractor and damaged as a result of his handling, moving, or reinstalling those materials, shall be replaced in kind with new materials, to the satisfaction of the Engineer.

At the option of the Engineer, any salvaged materials that is not longer needed, including signal poles, shall become the property of the Contractor and shall be hauled off-site and disposed of in accordance with the provisions in Section 15-2.03, "Disposal" of the State Standard Specifications.

All costs involved in salvaging and delivery or disposal of materials shall be considered as included in the contract lump sum price paid for various items of work, and no additional compensation will be allowed therefor.

MEASUREMENT AND PAYMENT

Traffic Signal Modifications shall be measured and paid for on a lump sum basis. The contract lump sum prices paid for traffic signal modification shall include full compensation for furnishing all labor, materials,

tools, equipment and incidental, and for doing all work involving in the traffic signal modification as shown on the plans, as specified in these special provisions, the Standard Plans and Specifications and as directed by the Engineer, including, dewatering (if needed), all appurtenances and equipment specified, foundations, poles, signal heads, pedestrian heads, pedestrian push buttons, potholing, conduits, pull boxes, wiring, signs, painting, conductors, connection to existing pull boxes, removing existing wiring and salvaging equipment, removal and relocation of sign panels, furnishing and installation of sign panels, testing, modification of the lighting system, temporary signal system, removal of foundations and no additional payment will be allowed therefore.

Full compensation for all additional materials and labor, not shown on the plans or specified, which are necessary to complete the installation of the various systems, shall be considered as included in the prices paid for the system, or units thereof, and no additional compensation will be allowed therefore.

Full compensation for hauling and stockpiling electrical material shall be considered as included in the contract price paid for the item requiring the material to be salvaged, and no additional compensation will be allowed therefore.

10.23 **FINAL CLEANUP**

Cleanup shall conform to the provisions of Section 4-1.13, “Cleanup,” of the Standard Specifications, details on the plans, and these Project Provisions

The project area shall be left in a neat and clean condition, as approved by the Engineer, at the end of each workday. The project site shall be clear of clutter at the end of each workday.

The project area shall be left in a neat and clean condition upon completion of the project prior to final inspection by the Engineer.

PAYMENT

Full compensation for complying with the above provisions shall be considered as included in the contract prices paid for the various bid items and no additional compensation will be allowed.

APPENDICES

MARIN COUNTY UNIFORM CONSTRUCTION STANDARDS (UCS):

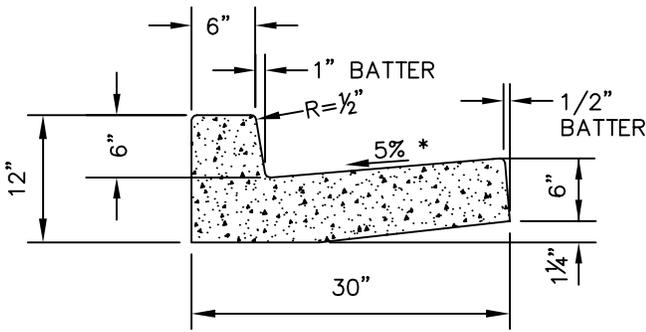
Requirements for Concrete Curb, Gutter, Sidewalk, Driveway, and other Flatwork (UCS #100)
Curb, Gutter and Sidewalk Details (UCS #105)
Examples of Sidewalk Driveway Connections (UCS #115)
Catch Basin, Turning Structure, Manhole and Drop Inlet Notes (UCS #200)
Catch Basin Grate Detail (UCS #220)
Type “D” Catch Basin (UCS #240)
Drop Inlet and Turning Structure (UCS #260)
Monuments (UCS #300)
Trench Details (UCS #330)
Trench Notes (UCS #350)

MMWD PLAN

Relocate Fire Hydrant (Sheet 1 of 1); Dated 11-03-15

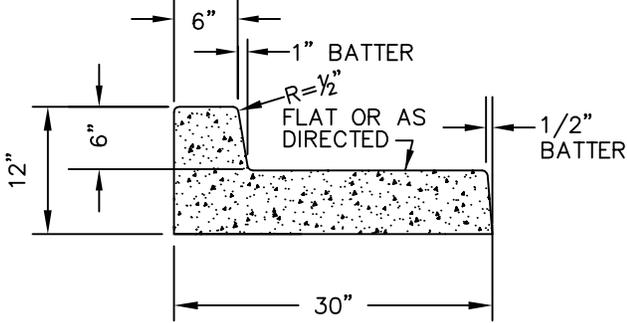
1. EXISTING CONCRETE SHALL BE REMOVED AT EXPANSION OR WEAKENED PLANE JOINTS OR AT SAWCUTS AS FIELD MARKED BY AGENCY ENGINEER. SAWCUTS MUST GO ENTIRELY THROUGH CONCRETE.
2. FOR NEW DEVELOPMENT, NO UTILITY BOXES OR POLES WILL BE PERMITTED IN THE SIDEWALK AREA WITHOUT THE PRIOR WRITTEN APPROVAL OF THE AGENCY ENGINEER.
3. WHERE UNDERCUT SUBGRADE OR UNSUITABLE SUBGRADE MATERIAL IS ENCOUNTERED, THE AGENCY ENGINEER MAY REQUIRE REMEDIAL WORK TO BE DONE, INCLUDING OVER EXCAVATION AND BACKFILLING WITH CRUSHED ROCK AND, WHEN DIRECTED BY THE ENGINEER, PLACING GEOTEXTILE FABRIC BENEATH THE NEW CONCRETE SECTION.
4. SUBGRADE SHALL BE COMPACTED TO AT LEAST 95% RELATIVE COMPACTION IN THE TOP SIX INCHES.
5. NEW WORK SHALL MATCH EXISTING AS CLOSELY AS POSSIBLE IN FINISH, SCORING AND COLOR. FOR NEW INSTALLATIONS PLACED ADJACENT TO EXISTING, 2LB. DAVIS BLACK #8084 (OR EQUIVALENT) PER CU. YD. CONCRETE SHALL BE ADDED TO MIX.
6. EXCEPT WHERE SPECIFIED OTHERWISE HEREIN, NO ADMIXTURES SHALL BE USED WITHOUT THE PERMISSION OF THE AGENCY ENGINEER.
7. FORMS SHALL MEET GRADE AND FORM FACES SHALL NOT VARY FROM THE DIMENSIONS SHOWN BY MORE THAN 1/2 INCH.
8. NO CONCRETE SHALL BE PLACED UNTIL THE AGENCY ENGINEER HAS INSPECTED AND APPROVED FORMS AND SUBGRADE/BASE.
9. SUBGRADE/BASE SHALL BE THOROUGHLY WETTED IMMEDIATELY PRIOR TO PLACING CONCRETE.
10. CONCRETE SHALL BE A MINIMUM CLASS B (5 SACK MIX) WITH 1 INCH MAXIMUM AGGREGATE FROM AN APPROVED MIXING PLANT. NO BAGGED MIX IS PERMITTED.
11. CONCRETE SHALL HAVE A SLUMP OF NOT MORE THAN FOUR INCHES.
12. FOR SIDEWALKS AND DRIVEWAY APPROACHES, 1/4 INCH DEEP SCORE LINES SHALL BE PLACED AT FOUR FEET ON CENTER OR AS DIRECTED BY THE AGENCY ENGINEER.
13. WEAKENED PLANE JOINTS AT LEAST 3/4" DEEP SHALL BE PLACED AT A MINIMUM 16 FEET ON CENTER EXCEPT FOR SIDEWALKS AND DRIVEWAY APPROACHES WHICH SHALL BE A MINIMUM 5 FEET ON CENTER.
14. 3/8 INCH THICK EXPANSION JOINTS SHALL BE PLACED ON BOTH SIDES OF DRIVEWAY APPROACHES, AT CURB AND SIDEWALK RETURN POINTS, DRAINAGE STRUCTURES AND OTHER LOCATIONS AS SHOWN ON THE PLANS.
15. ALL EXPOSED EDGES SHALL BE ROUNDED WITH 1/2 INCH RADIUS TOOL.
16. ALL FLAT SURFACES SHALL BE LIGHT BROOM FINISHED UNLESS OTHERWISE SPECIFIED BY AGENCY ENGINEER.
17. CURBS, SIDEWALKS AND DRIVEWAY APPROACHES SHALL HAVE FORMS REMOVED AND BE BACKFILLED WITHIN SEVEN DAYS AFTER POURING.
18. THE DESIGNATED DIMENSIONS AND SLOPES MAYBE MODIFIED TO ACCOMMODATE EXISTING ADJACENT FACILITIES SUBJECT TO THE APPROVAL OF THE AGENCY ENGINEER.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	REQUIREMENTS FOR CONCRETE CURB, GUTTER, SIDEWALK, DRIVEWAY AND OTHER "FLATWORK"						MAY 2008
							DWG. NO.
							100
	REV.	DATE	BY				

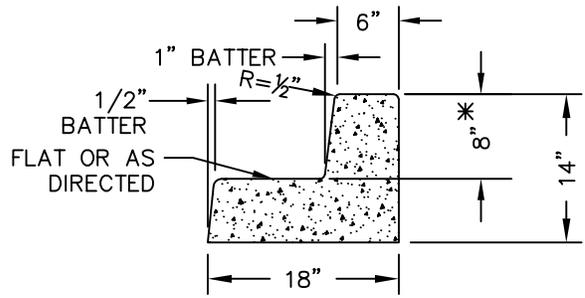


TYPE "A" CURB

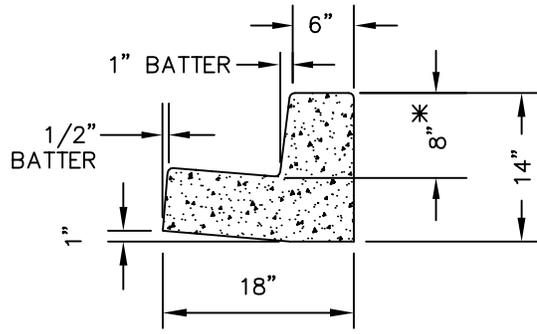
* 3% MAX. AT CURB RAMPS



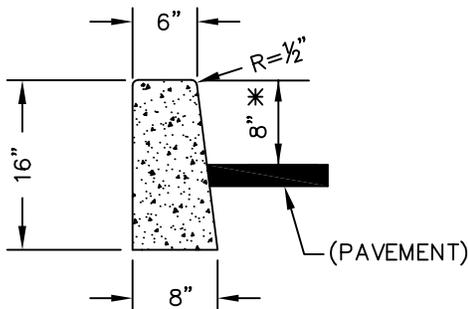
TYPE "C" CURB



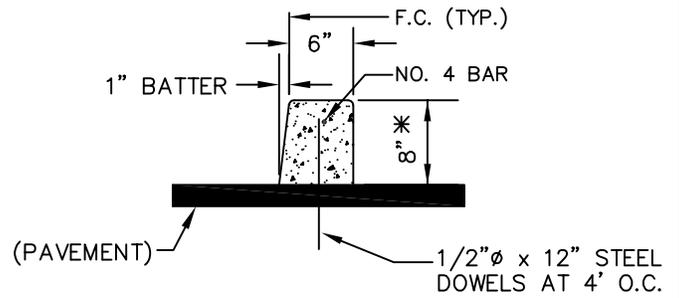
TYPE "B" CURB



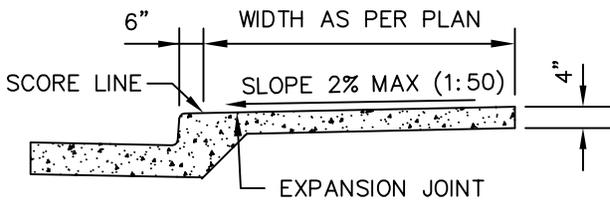
TYPE "D" CURB



TYPE "E" CURB

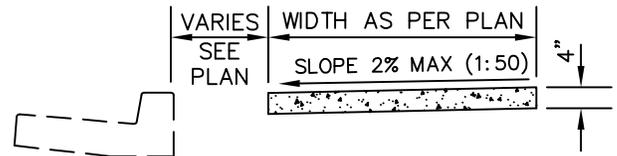


TYPE "F" CURB



TYPE "A" SIDEWALK

POUR CURB & GUTTER SEPARATELY FROM SIDEWALK



TYPE "B" SIDEWALK

POURED SEPARATE FROM CURB

NOTES:

1. SEE DRAWING NO. 100 FOR GENERAL REQUIREMENTS.
2. * 8" CURB HEIGHT UNLESS 6" HEIGHT APPROVED BY AGENCY ENGINEER.

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

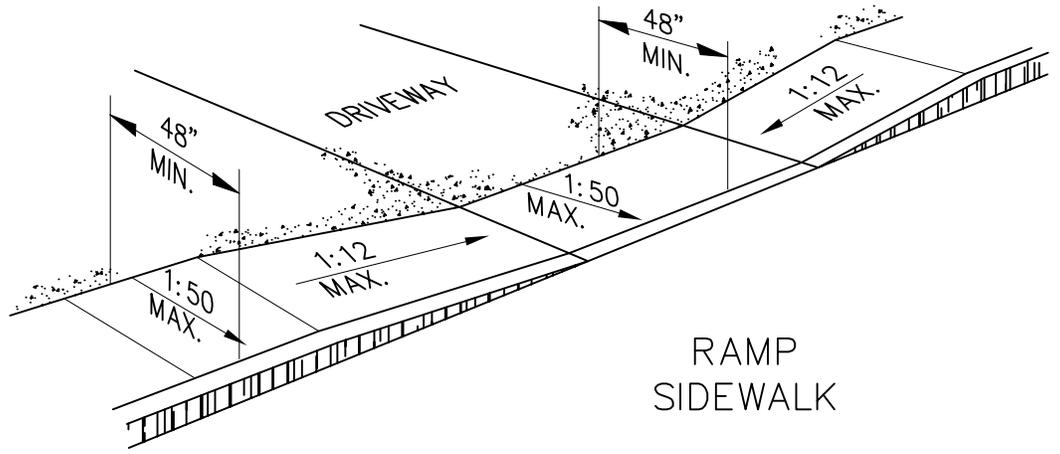
CURB, GUTTER
AND SIDEWALK
DETAILS

REV. DATE BY

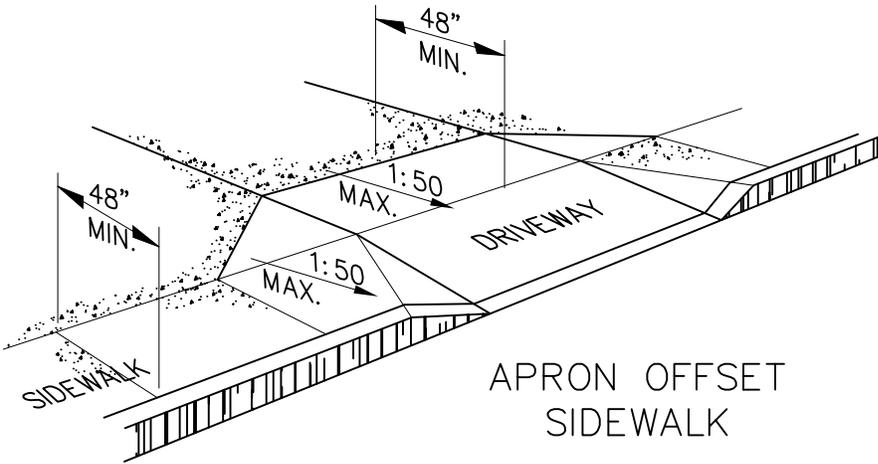
MAY 2008

DWG. NO.

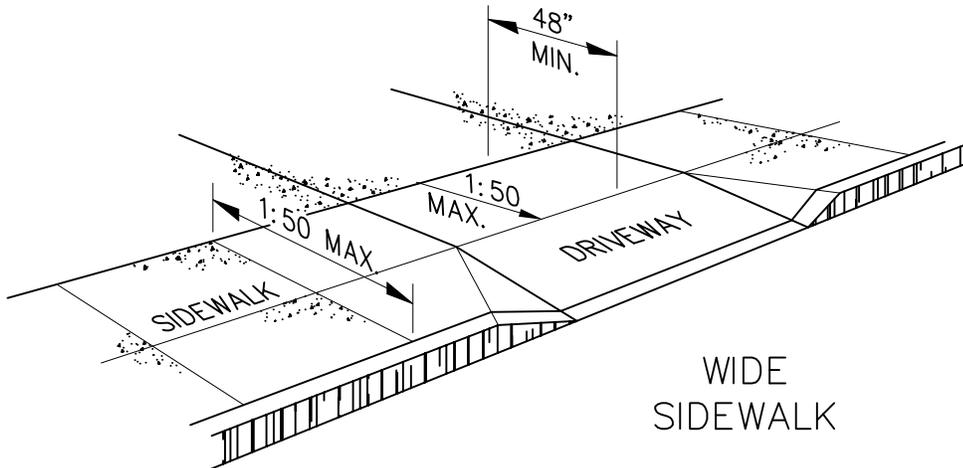
105



RAMP
SIDEWALK



APRON OFFSET
SIDEWALK



WIDE
SIDEWALK

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

EXAMPLES
OF SIDEWALK
DRIVEWAY
CONNECTIONS

REV.	DATE	BY	

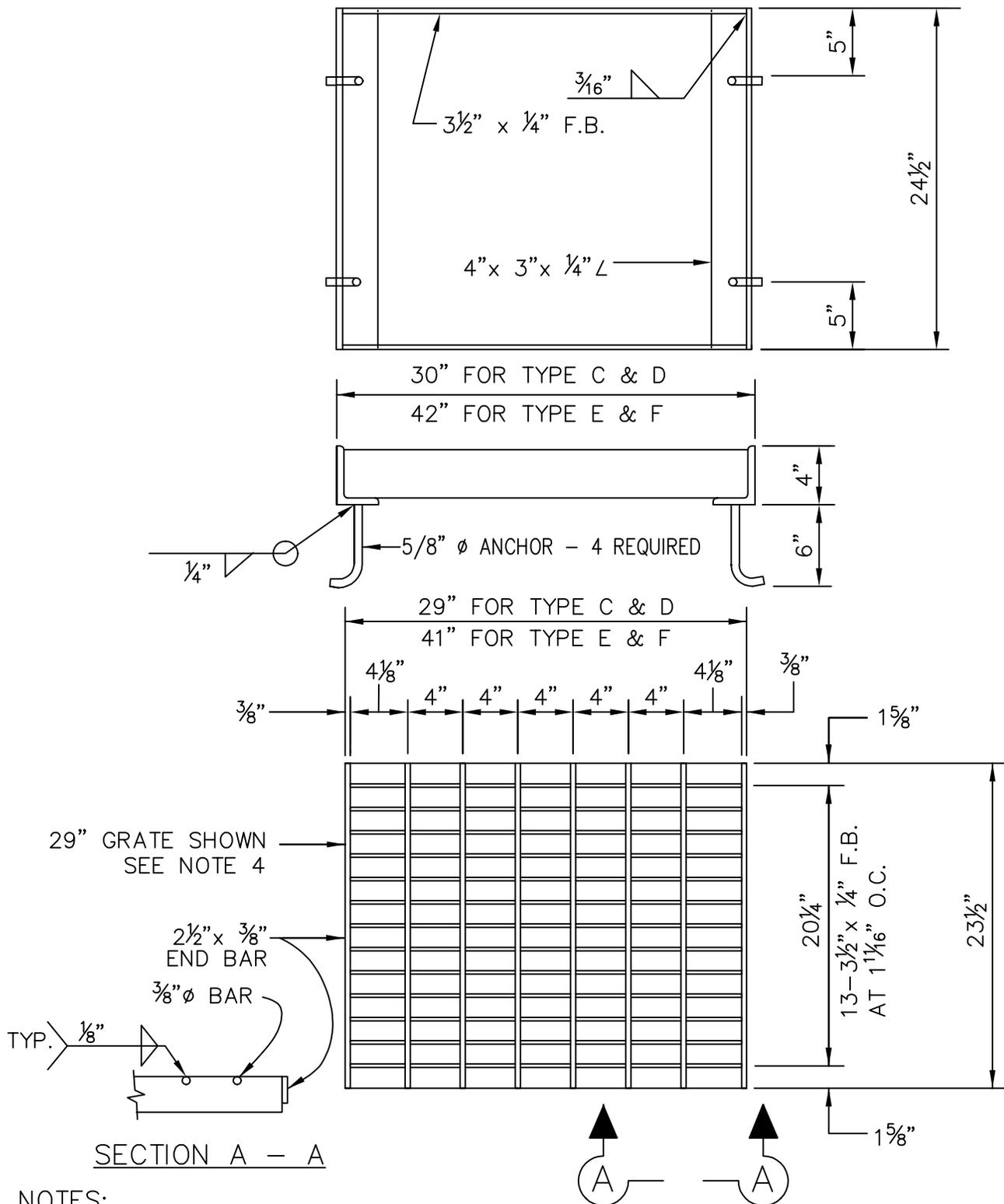
MAY
2008
DWG. NO.
115

CATCH BASIN, TURNING STRUCTURE, MANHOLE AND DROP INLET NOTES

1. CONCRETE SHALL BE CLASS "A" (6 SACK MIX) UNLESS OTHERWISE NOTED. STRUCTURE TOPS CAST WITH ADJACENT CURB/SIDEWALK MAY BE CLASS "B" CONCRETE.
2. BASE SHALL BE PLACED AGAINST UNDISTURBED EARTH, SIDES MAY BE FORMED OR PLACED AGAINST UNDISTURBED EARTH.
3. WHERE CONDUITS ARE ENCOUNTERED THAT ARE LARGER IN DIAMETER THAN THE WIDTH OF THE WALL THROUGH WHICH THEY PASS, THE INSIDE DIMENSION OF THE WALLS PERPENDICULAR TO THE DIRECTION OF THE PIPE SHALL BE INCREASED TO 12" WIDER THAN THE OUTSIDE DIAMETER OF THE PIPE.
4. EXPANSION JOINTS SHALL BE PLACED THROUGH CURB AND SIDEWALK AT BOTH SIDES OF CATCH BASINS AND SHALL BE LIMIT OF PAYMENT FOR CURB AND GUTTER. UNIT PRICES FOR DRAINAGE STRUCTURES SHALL INCLUDE CURB, GUTTER AND SIDEWALK POURED WITH DRAINAGE STRUCTURE.
5. NO CONCRETE SHALL BE PLACED PRIOR TO FORM AND STEEL APPROVAL BY THE AGENCY ENGINEER.
6. SEE DRAWING NO. 215 FOR STEP (AS REQUIRED BY AGENCY ENGINEER) AND MANHOLE CASTING DETAIL.
7. SEE DRAWING NO. 220 FOR CATCH BASIN GRATE DETAIL.
8. WALL THICKNESS, REINFORCING, AND STEP (AS REQUIRED BY AGENCY ENGINEER) REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TABLE BELOW, UNLESS OTHERWISE INDICATED BY THE PROJECT PLANS OR DIRECTED BY THE AGENCY ENGINEER.
9. PLACE 2" WEEPHOLES AS REQUIRED BY THE AGENCY ENGINEER.
10. EQUIVALENT PRECAST STRUCTURES MAY BE SUBSTITUTED AS APPROVED BY THE AGENCY ENGINEER.
11. WALL THICKNESS SHALL NOT EXCEED 10" ON ANY STRUCTURE.
12. PRECAST INLETS AND MANHOLES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS AND BE DESIGNED TO WITHSTAND H-20 LOADING.

DEPTH	WALL THICKNESS (SEE NOTE #11)	WALL REINFORCEMENT	STEPS REQUIRED
LESS THAN 3'	6"	NO. 4 AT 12" BOTH WAYS	NO
LESS THAN 3'	8"	NONE OUTSIDE ROADWAY. NO. 4 AT 12" BOTH WAYS WITHIN OR ADJACENT TO ROAD.	NO
3' TO 8'	6"	NO. 4 AT 12" BOTH WAYS	AS REQUIRED BY THE AGENCY ENGINEER
OVER 8'	8"	NO. 4 AT 12" BOTH WAYS	AS REQUIRED BY THE AGENCY ENGINEER

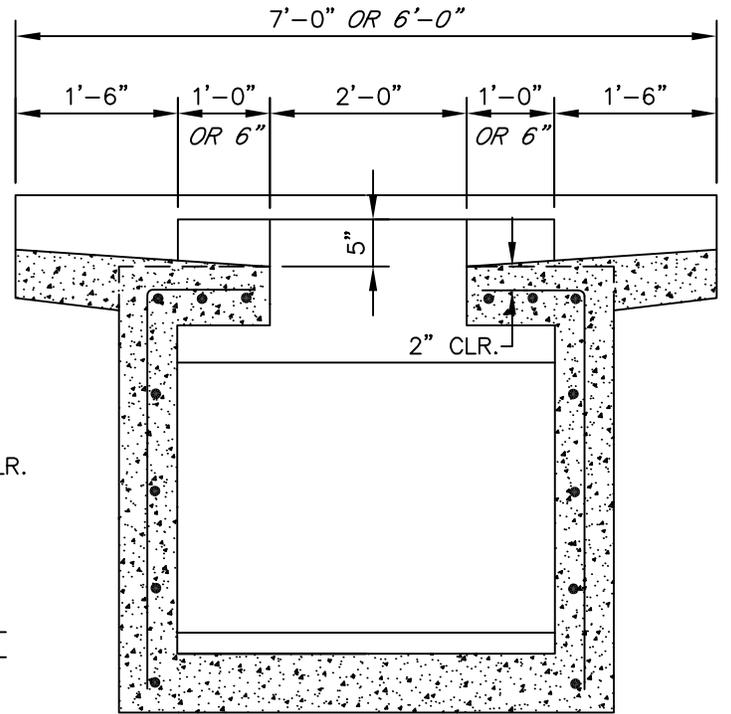
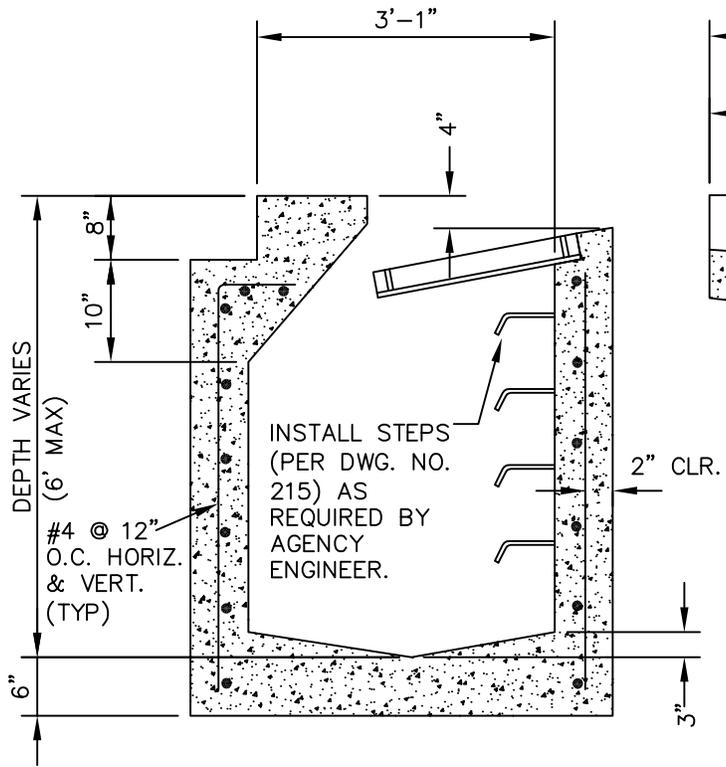
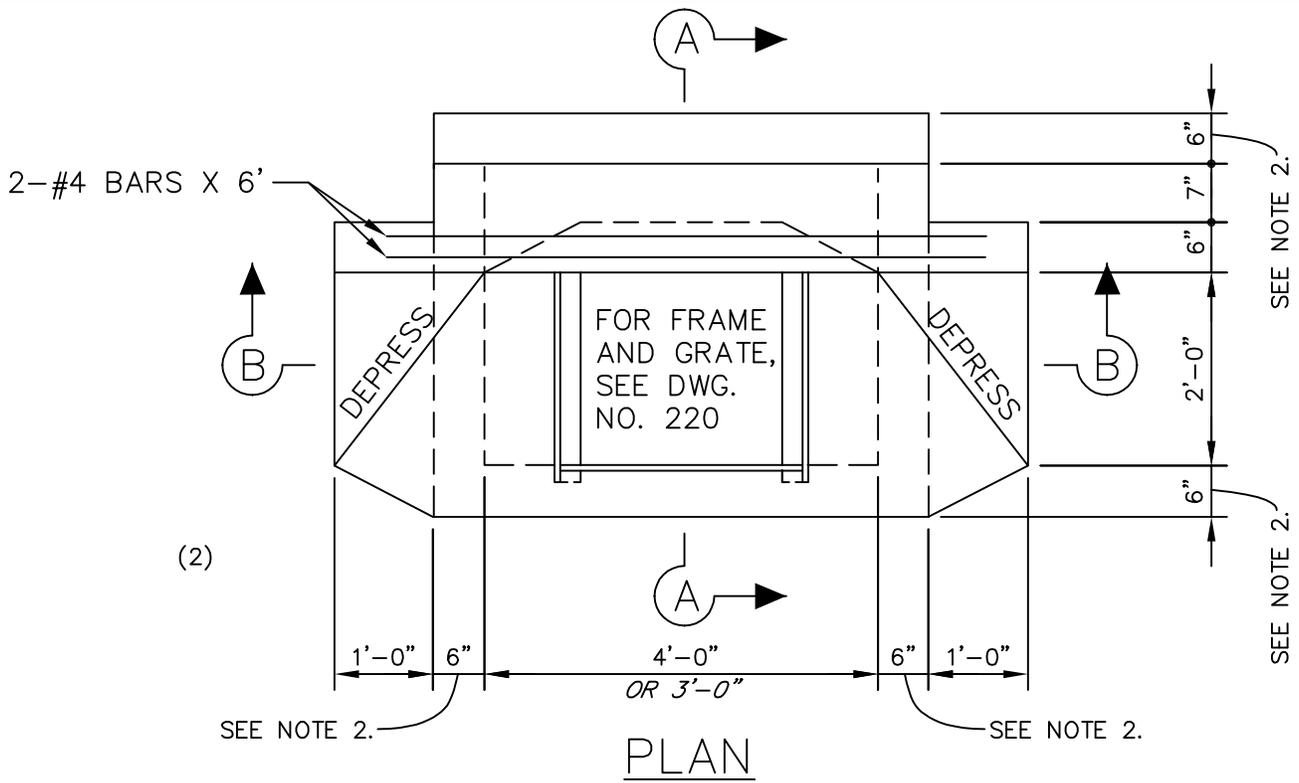
UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	NOTES FOR CATCH BASIN, MANHOLE, DROP INLET & TURNING STRUCTURE				MAY 2008
					DWG. NO.
					200
		REV.	DATE	BY	



NOTES:

1. ALL STEEL SHALL BE STRUCTURAL GRADE.
2. ALL STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
3. TOP AND BOTTOM SURFACES OF GRATE SHALL BE GROUND FLUSH AFTER WELDING.
4. FOR 40" GRATE USE STATE STD. GRATE TYPE 24-9 OR 24-12.
5. FOR GRATES IN A PEDESTRIAN PATH OF TRAVEL, GRATE OPENINGS SHALL BE $\frac{1}{2}$ " PERPENDICULAR TO THE WALKING DIRECTION.

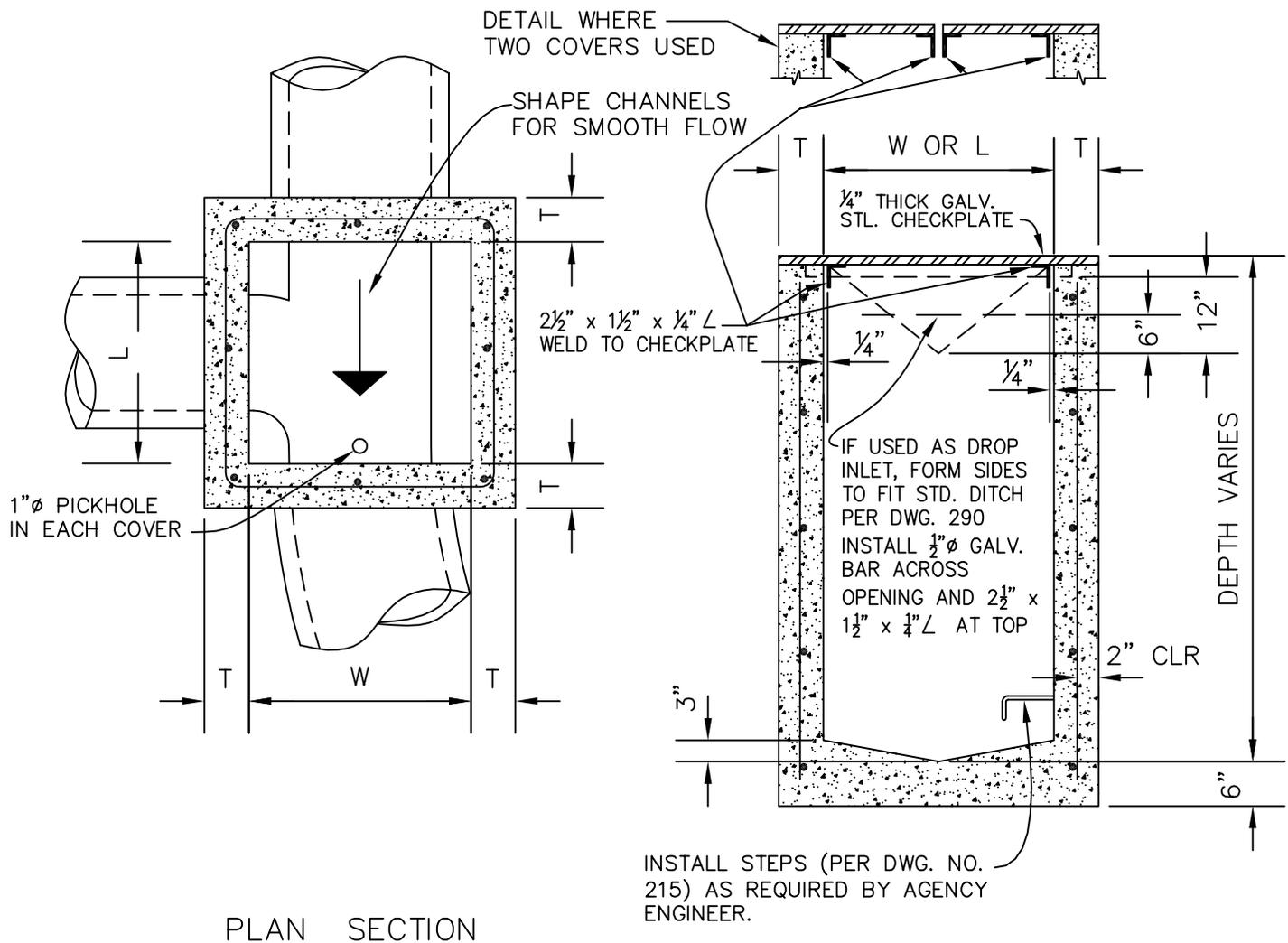
UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	CATCH BASIN GRATE DETAIL			MAY 2008
				DWG. NO.
	1	4/16/10	SAS	220
	REV.	DATE	BY	



NOTES:

1. SEE DRAWING NO. 200 FOR GENERAL NOTES.
2. FOR STRUCTURE > 8' DEEP, WALL THICKNESS = 8".
3. FOR CATCH BASINS FROM 3'-0" TO 6'-0" DEEP THE INSIDE DIMENSION MAY BE 3'-0" BY 3'-1". DIMENSIONS FOR THESE ARE SHOWN ITALICS.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	TYPE "D" CATCH BASIN			MAY 2008
				DWG. NO.
				240
				REV. DATE BY



PLAN SECTION

PROFILE SECTION

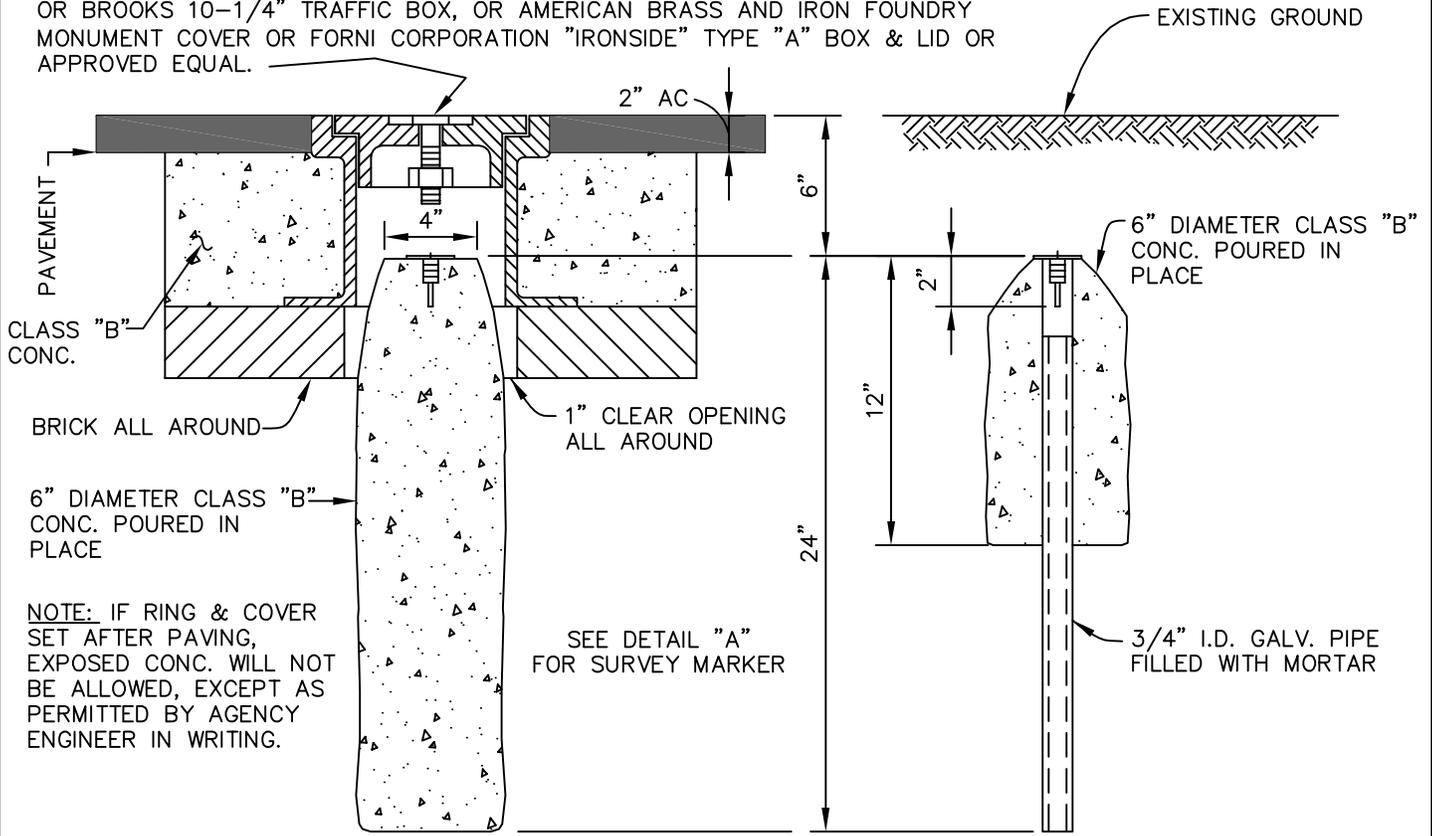
DEPTH	L	W	COVER(S)
LESS THAN 3'	24"	24"	1-36"x36"
3' TO 6'	36"	36"	2-24"x48"
OVER 6'	36"	48"	2-30"x48"

NOTES:

1. LENGTHS AND WIDTHS WILL VARY AS NECESSARY TO ACCOMMODATE SIZE AND ANGLES OF CONNECTING PIPES.
2. SEE DRAWING NO. 200 FOR GENERAL NOTES, WALL THICKNESS (T), REINFORCING AND STEP REQUIREMENTS.
3. SIDE ENTRY CONFIGURATION MAY BE MODIFIED TO ACCOMMODATE FIELD CONDITIONS WITH THE APPROVAL OF THE AGENCY ENGINEER.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	DROP INLET AND TURNING STRUCTURE				MAY 2008
					DWG. NO.
					260
		REV.	DATE	BY	

C.I. MONUMENT RING AND COVER, PHOENIX P-2001-E, OR ARTMARK APC-51, OR BROOKS 10-1/4" TRAFFIC BOX, OR AMERICAN BRASS AND IRON FOUNDRY MONUMENT COVER OR FORNI CORPORATION "IRONSIDE" TYPE "A" BOX & LID OR APPROVED EQUAL.



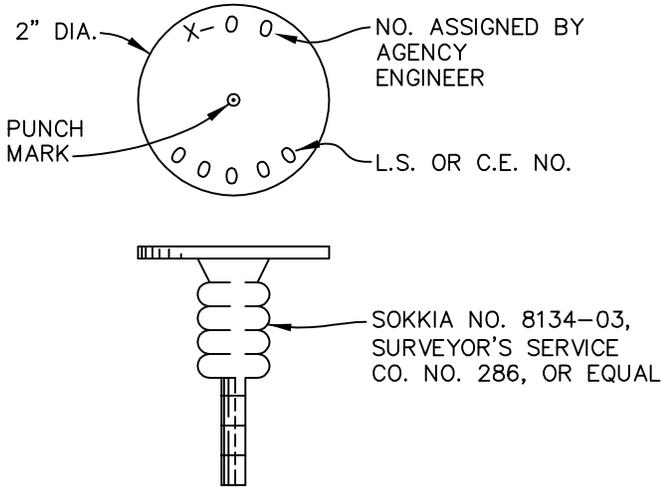
NOTE: IF RING & COVER SET AFTER PAVING, EXPOSED CONC. WILL NOT BE ALLOWED, EXCEPT AS PERMITTED BY AGENCY ENGINEER IN WRITING.

SEE DETAIL "A" FOR SURVEY MARKER

THE WORD "MONUMENT" SHALL BE CLEARLY STAMPED ON ALL COVERS.

STREET MONUMENT

PIPE MONUMENT



DETAIL "A"

NOTES:

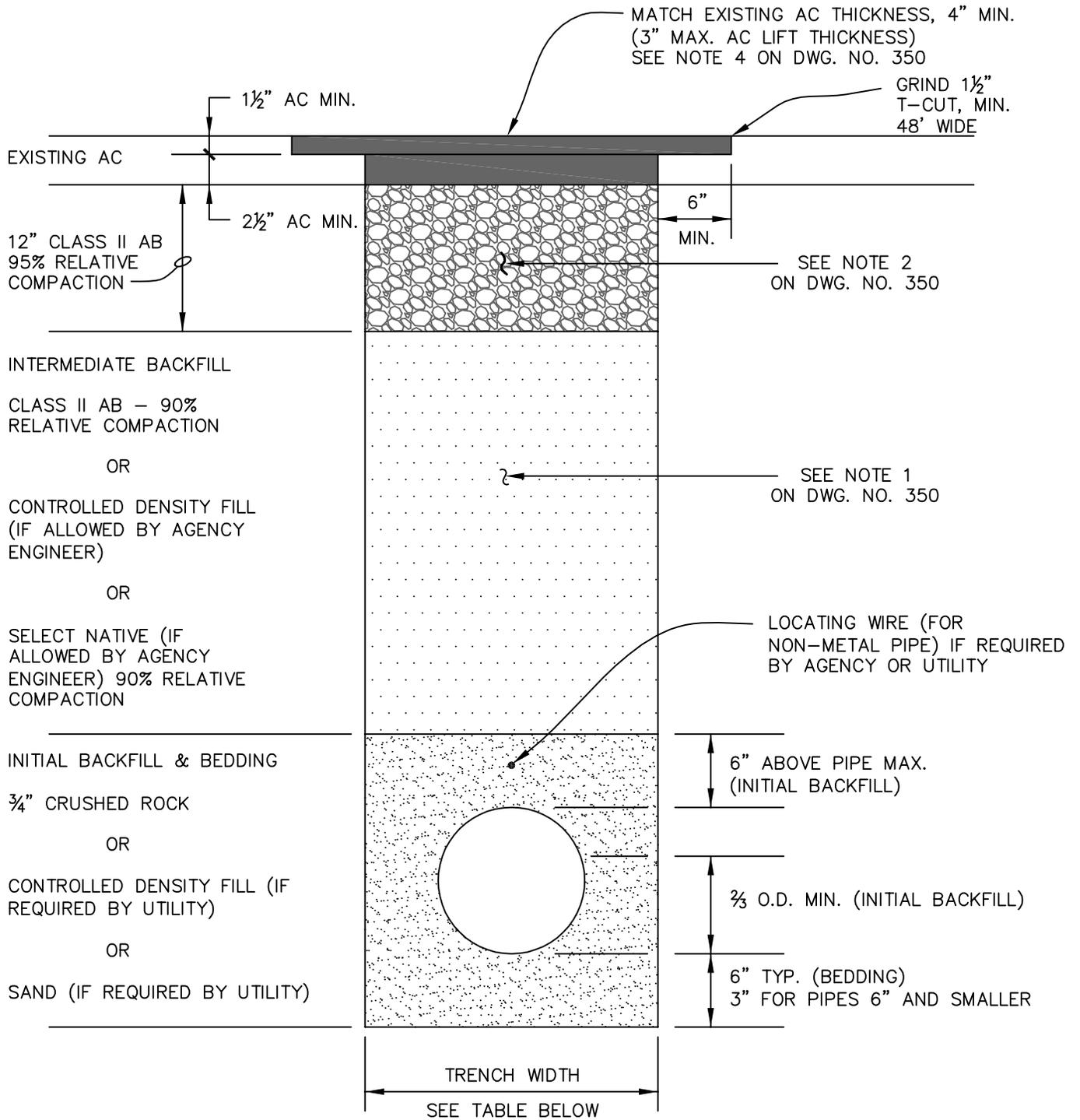
1. MONUMENTS SHALL BE SET AT THE LOCATIONS DESIGNATED ON THE PLANS AND ON THE FINAL MAP.
2. STREET MONUMENTS SHALL BE USED IN ALL PAVED AREAS AND OTHER LOCATIONS AS SHOWN ON THE PLANS. IRON PIPE MONUMENTS SHALL BE USED AT ALL OTHER LOCATIONS IN THE PUBLIC RIGHT OF WAY.
3. NO CONCRETE SHALL BE PLACED PRIOR TO EXCAVATION INSPECTION BY THE AGENCY ENGINEER.
4. MONUMENTS SET ON SUBDIVISION BOUNDARIES SHALL BE 3/4" DIAMETER GALVANIZED IRON PIPE 24" LONG FILLED WITH MORTAR.

M:\Standards\County Standards (UCS)\2008 Updated County Standards

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

MONUMENTS

			MAY 2008
			DWG. NO.
			300
REV.	DATE	BY	



NOTE: IF ROADWAY HAS EXISTING AC OVER CONCRETE, TRENCH RESTORATION SHALL BE DETERMINED BY THE AGENCY ENGINEER.

TYPE 1

ASPHALT CONCRETE PAVED STREETS

CONDUIT SIZE	LESS THAN 6"	6" TO 24"	OVER 24" TO 60"	OVER 60"
TRENCH WIDTH	O.D. + 12"	O.D. + 24"	O.D. + 24"	O.D. + 24"

FOR PIPES WITH MORE THAN 36" OF COVER, THE AGENCY ENGINEER MAY ALLOW A REDUCED TRENCH WIDTH INCLUDING A CHANGE TO A SELF-COMPACTING ENGINEERED TYPE OF INITIAL BACKFILL MATERIAL.

UNIFORM STANDARDS
ALL CITIES AND
COUNTY OF MARIN

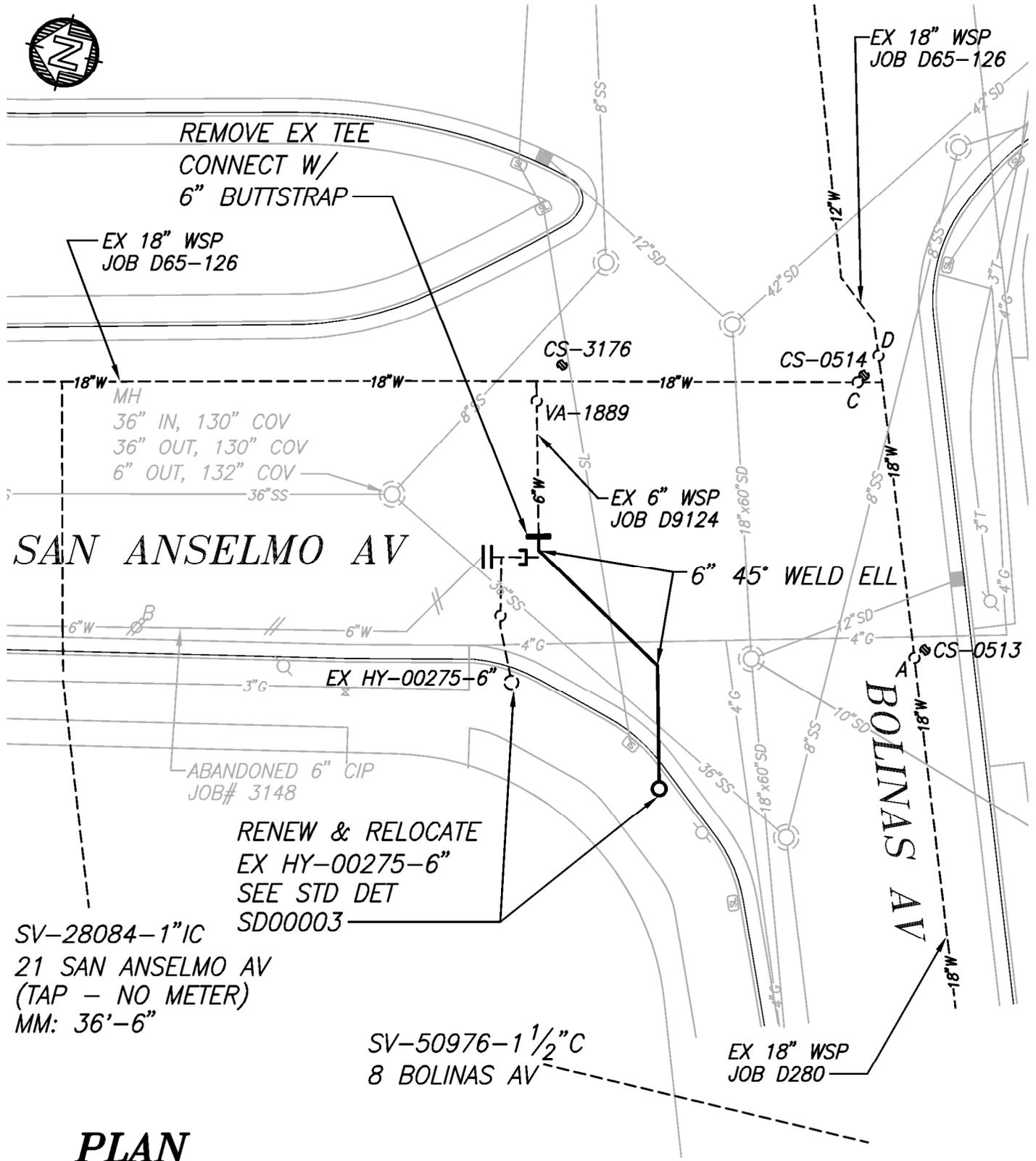
TRENCH DETAILS
SHEET 1 OF 3

			MAY 2008
			DWG. NO.
			330
REV.	DATE	BY	

MATERIAL AND COMPACTION REQUIREMENT FOR TRENCH BACKFILL

1. INTERMEDIATE BACKFILL SHALL BE CLASS II AGGREGATE BASE. SUITABLE NATIVE OR IMPORTED GRANULAR MATERIAL MAY BE USED IF ALLOWED BY AGENCY ENGINEER. RELATIVE COMPACTION SHALL BE AT LEAST 90%.
2. CLASS II AGGREGATE BASE SHALL CONFORM TO THE STATE STANDARD SPECIFICATIONS. MINIMUM RELATIVE COMPACTION SHALL BE 95%. IF PAVEMENT HAVING A STRUCTURAL SECTION GREATER THAN 15" IS CUT, ADDITIONAL BASE MATERIAL MAY BE REQUIRED BY THE AGENCY ENGINEER. BASE SHALL BE PLACED AND COMPACTED PRIOR TO PLACING OF TEMPORARY PAVING.
3. TESTING OF MATERIALS AND PERFORMANCE SHALL BE IN CONFORMANCE WITH THE METHODS STATED IN THE LATEST EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, EXCEPT THAT RELATIVE COMPACTION MAY BE TESTED BY AASHTO METHOD T180, ASTM D-1557, OR TEST METHOD CALIF. 231 (NUCLEAR DENSITOMETER).
4. PLACE AC IN 3" MAX, LIFTS, EXCEPT FINAL LIFT SHALL BE 2 1/2" MAX. ADDITIONAL THICKNESS AND LIFTS OF ASPHALT CONCRETE MAY BE REQUIRED TO MATCH EXISTING STRUCTURAL SECTION ON MAJOR ROADS, OR PER LOCAL JURISDICTION REQUIREMENTS.
5. "JETTING" OF BACKFILL MATERIAL IS NOT PERMITTED.
6. THE USE OF PEA GRAVEL (OR SIMILAR ROUNDED AGGREGATE), IS NOT PERMITTED.
7. THE USE OF CONTROLLED DENSITY FILL (CDF) SHALL BE APPROVED BY THE AGENCY ENGINEER PRIOR TO PLACEMENT.
8. TRENCH EDGES SHALL BE TRIMMED TO A NEAT LINE AS REQUIRED BY THE AGENCY ENGINEER. TRIMMING SHALL BE BY SAWCUT OR ROTARY GRINDER.
9. THE SURFACE COURSE OF TRENCH RESTORATION SHALL EXTEND TO THE LIP OF GUTTER IF THE EDGE OF TRENCH IS WITHIN 4' OF THE LIP OF GUTTER, AND TO THE EDGE OF PAVEMENT IF THE EDGE OF TRENCH IS WITHIN 4' OF AN UNPAVED SHOULDER.
10. CONTRACTOR MUST SHORE ALL TRENCHES IN CONFORMANCE WITH OSHA AND STATE SAFETY STANDARDS.

UNIFORM STANDARDS ALL CITIES AND COUNTY OF MARIN	TRENCH NOTES SHEET 3 OF 3				MAY 2008
					DWG. NO.
					350
		REV.	DATE	BY	



REMOVE EX TEE
CONNECT W/
6" BUTTSTRAP

EX 18" WSP
JOB D65-126

MH
36" IN, 130" COV
36" OUT, 130" COV
6" OUT, 132" COV

SAN ANSELMO AV

EX 6" WSP
JOB D9124

6" 45° WELD ELL

EX HY-00275-6"

ABANDONED 6" CIP
JOB# 3148

RENEW & RELOCATE
EX HY-00275-6"
SEE STD DET
SD00003

SV-28084-1"IC
21 SAN ANSELMO AV
(TAP - NO METER)
MM: 36'-6"

SV-50976-1 1/2" C
8 BOLINAS AV

EX 18" WSP
JOB D280

BOLINAS AV

PLAN

SCALE: NTS

 **MARIN MUNICIPAL WATER DISTRICT**
220 NELLEN AVE., CORTE MADERA, CA 94925 (415) 924-4600

DATE: 11-03-15 JOB NO: _____ SHEET: 1 OF 1
PREPARED BY: WT DESIGN BY: KMcD

**SAN ANSELMO
SAN ANSELMO AV**

RELOCATE EXISTING HYDRANT