

Contract 10074

Federal Grant # FED-5307-CMAQ

Re-Bid Ramp Metering Implementation Project Phase III

Contract Documents

Issued for Bid

May 14, 2010



SANTA CLARA
Valley Transportation Authority

Part of every trip you take®

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
CONTRACT DOCUMENTS
for
CONTRACT 10074
RE-BID RAMP METERING IMPLEMENTATION PROJECT PHASE III

Table of Contents

Section	Page
1.0 INVITATION TO BID.....	3
2.0 FOREWORD.....	7
1. The Valley Transportation Authority.....	9
2. General Description of Work.....	10
3. Description of the Contracting Process.....	10
3.0 INSTRUCTIONS TO BIDDERS	15
1. Scope of Work.....	15
2. Pre-Bid Conference.....	15
3. Examination of the Contract Documents	15
4. Examination of Site and Existing Conditions	19
5. Addenda to Contract Documents	19
6. Prevailing Wage Rates.....	20
7. Preparation and Submittal of Bid.....	20
8. Bid Security	21
9. Opening of Bids.....	21
10. Withdrawal of Bid.....	21
11. Conditional Bids	21
12. Bidders Interested In More Than One Bid	21
13. Single Bid Response	21
14. Award or Rejection of Bids.....	21
15. Basis of Award.....	22
16. Bidder Review and Protest Procedures	22
17. Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion	22
18. Federal Requirements.....	23
4.0 CONTRACT FORMS	27
1. Construction Agreement	29
2. Performance Bond	31
3. Payment Bond.....	33
4. Certificate of Insurance.....	35
5. Alternate Form W-9.....	37
5.0 BID FORMS.....	41
1. Bid Form.....	43
2. Bidder's Bond.....	49
3. Designation of Subcontractors – Fair Practices Act.....	51
4. Listing of DBE Prime of Subcontractors	53
4a. Supplemental Prime Contractor and Subcontractor Information.....	55
5. References.....	57
6. Litigation Disclosure.....	59

7.	Affidavit of Non-Collusion	61
8.	Certificate of Bidder – Section 4420	63
20.	Certification of Restriction on Lobbying.....	65
22.	Equal Employment Opportunity Certification.....	69
6.0	SPECIAL CONDITIONS	73
SC-1	Indemnification	73
SC-2	Insurance	73
SC-3	Contract Bonds.....	75
SC-4	Time for Performance	75
SC-5	Liquidated Damages.....	75
SC-6	Contract Data Requirements	76
SC-7	Permits and Fees	78
SC-8	Materials & Services	78
SC-9	Not Used	79
SC-10	Work Sequence & Constraints	79
SC-11	Mobilization	80
SC-12	Sound Control Requirements.....	80
SC-13	Worker's Safety Provisions	81
SC-14	Hazardous Materials.....	81
SC-15	Construction Water Conservation	82
SC-16	Air Pollution Control.....	82
SC-17	Contractor Cooperation and Coordination	82
SC-18	(Not Used).....	82
SC-19	Final Pay Quantities	82
SC-20	Not Used	82
SC-21	Increase or Decreased Quantities, and Quantity Variation.....	82
SC-22	Project Close-Out Requirements - Record Drawings	83
SC-23	Progress Schedule Project.....	83
SC-24	Minimum ESCAPE Best Management Practices	84
SC-25	Not Used	84
SC-26	Not Used	84
SC-27	Final Pay Estimate.....	84
SC-28	Partnering	85
SC-29	Final Inspection and Acceptance of Work.....	85
SC-30	Not Used	85
SC-31	Not Used	85
SC-32	Highway Construction Equipment.....	85
SC-33	Not Used	85
SC-34	Conformity	85
SC-35	Use Of Materials Found On The Work	85
SC-36	Certificates of Compliance	85
SC-37	Not Used	85
SC-38	Not Used	85
SC-39	Final Inspection and Acceptance	85
SC-40	Dust Control	85
SC-41	Weight Limitations	86
SC-42	Public Convenience and Safety	86
SC-43	Flagging.....	90
SC-44	Not Used	91
SC-45	Equipment And Plants.....	91
SC-46	Preservation of Property.....	91
SC-47	Not Used	91
SC-48	Time of Completion	91
SC-49	Measurement of Quantities.....	91
SC-50	Contract Data Requirements List (CDRL)	94
SC-51	Technical Submittals List.....	95

7.0 GENERAL CONDITIONS.....	99
LEGAL RESPONSIBILITIES AND RELATIONSHIPS.....	99
1. Applicable Law and Jurisdiction	99
2. Compliance with Laws and Regulations.....	99
3. Contractor's Licensing Requirements.....	99
4. Independent Contractor	99
5. Permits, Licenses, Fees and Notices.....	99
6. Nondiscrimination.....	99
7. Prohibited Interests.....	100
8. Labor Provisions	100
9. Hazardous Materials or Unusual Conditions.....	101
10. Erosion and Sedimentation Control Action Plan Element (ESCAPE)	101
11. Tree Removal.....	102
12. Archaeological/Historical Discoveries	102
13. Disadvantaged Business Enterprise Policy and Requirements	108
14. Patent Rights	108
15. Intellectual Property, Copyright and Patent Infringement	108
16. Rights in Technical Data	108
17. Ownership of Work and Material.....	109
18. Title and Risk of Loss	109
19. Assignment and Delegation.....	109
20. Subcontracts	109
21. Waiver and Nonwaiver.....	109
22. Antitrust Claims.....	109
23. Stop Notices	109
AUTHORIZED REPRESENTATIVES AND COMMUNICATIONS.....	109
24. Authorized Representatives.....	109
25. Notices and Communications	110
26. Pre-Construction Meeting	111
27. Project Meetings.....	111
28. Publicity Releases.....	111
TIME FOR PERFORMANCE OF WORK	111
29. Notice to Proceed.....	111
30. Time of Completion	112
31. Progress Schedule	112
32. Excusable Delays and Extensions of Time.....	112
33. Failure to Complete the Work on Time.....	112
PERFORMANCE OF WORK.....	112
34. Contractor's Work Area	112
35. Temporary Construction Facilities and Utilities.....	112
36. Character of Workmen	113
37. Working Environment.....	113
38. Public Convenience and Safety	113
39. Cooperation/Coordination and Work by Others.....	113
40. Security.....	113
41. Product Operations, Supplier Approval and Substitutions	113
42. Source of Materials	114
43. Submittal of Shop Drawings, Product Data and Samples.....	114
44. Survey Requirements.....	115
45. Protection and Restoration of Property	116
46. Utility Paint Markings	116
47. Quality Assurance Program.....	116
48. Inspection	116

49. Certificates of Compliance and Testing.....	116
50. Removal of Rejected or Unauthorized Work	117
51. Disposal of Materials.....	118
52. Protection of Completed Portions of Work	118
53. Cleanup	118
54. Redlined Construction Drawings.....	118
55. Final Inspection and Acceptance of All or a Portion of the Work.....	118
COMPENSATION, PAYMENTS, RECORDS AND AUDIT.....	119
56. Compensation.....	119
57. Increased or Decreased Quantities, and Quantity Variation.....	119
58. Certified Payrolls.....	120
59. Progress Payments.....	121
60. Force Account Payment.....	121
61. Prompt Payment	125
62. Final Payment.....	125
63. Project Records	125
64. Not Used.....	125
65. Change Requests and Change Notices.....	125
66. Change Order	126
67. Differing Site Conditions.....	126
68. Claims.....	127
SUSPENSION OF WORK, CONTRACT TERMINATION.....	129
69. Suspension of the Work.....	129
70. Termination for Convenience or in the Public Interest.....	129
71. Termination for Default.....	129
72. Contractor's Duties Upon Termination	130
WARRANTY PROVISIONS.....	130
73. Warranty.....	130
74. Warranty Work.....	130
75. Warranty on Replaced Parts.....	130
76. Systematic Failures.....	131
8.0 TECHNICAL SPECIFICATIONS	135
TS-1 General Provisions	137
TS-2 Construction Traffic Control	138
TS-3 EXISTING FACILITIES	147
TS-4 Traffic Management System (TMS).....	149
9.0 CONTRACT DRAWINGS / PLANS.....	162
10.0.....	163
A. Federal Requirements - From 1273	
B. Encroachment Permit	

1.0 INVITATION TO BID

1.0 INVITATION TO BID

Notice is hereby given that sealed bids for the performance of the work described herein will be received by the Contracts Officer of the Santa Clara Valley Transportation Authority ("VTA") until the time of Bid Opening, at which time the bids so received will be publicly opened and read aloud. Bid Opening will be held at

**3331 North First Street, Building A
Conference Room A109
San Jose, California 95134-1906**

on

June 9, 2010 at 2:00 p.m.

Bids received after the date and time stated above will be rejected as nonresponsive. It is highly recommended that all bids be hand delivered.

Contract Documents specifying the requirements of the work to be performed, the terms of the Contract and the details of the bidding procedure may be secured from the CONTRACTS OFFICE of VTA at the address above. A non-refundable payment of \$25.00 per set is required for the Contract Documents. Upon request by Contractor and receipt of payment, these documents will be mailed. **Prospective Bidders must acquire the Contract Documents directly from the Contracts Office in order to bid on this project.**

The time of completion shall be **60 calendar days** commencing on the **twentieth (20th) calendar day** following issuance of the Notice of Award by VTA.

The Bidder to whom the Contract will be awarded must, at the time of award, possess current licenses in the following classification and certification issued by the California State Contractors License Board: **Class A or C-10 Contractor**. Bidder's subcontractors must also be properly licensed at the time of bid submittal.

The Contractor and all subcontractors used for this work shall pay their employees the general prevailing rate of per diem wages as incorporated herein by reference. These wage rates are available through the California State Department of Industrial Relations, <http://www.dir.ca.gov/DLSR/PWD/> (Labor Code Section 1770. et seq.). This contract is also subject to Federal requirements for payment of prevailing wages as determined by the Secretary of Labor. Federal wage rates are available at the Department of Labor website, www.access.gpo.gov/davisbacon. Where there are differences in the rates, the higher shall apply.

Performance Bonds and Payment Bonds are not required for contracts valued at less than \$25,000. However, a Bidder's Bond is required on all bids. **Bids shall be submitted on the forms provided in these Contract Documents in signed original.**

VTA is an Equal Opportunity employer. Contractors shall comply with the Equal Opportunity / Affirmative Action requirements as set forth in Contract Documents and shall submit Bid Form #22, Equal Employment Opportunity Certification, with their bid. It is the policy of VTA that no person shall, on the grounds of race, color, religion, ancestry, national origin, age, disability or sex, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity conducted by VTA.

VTA affirms that in any contract entered into pursuant to this work disadvantaged and small business enterprises will be afforded full opportunity to submit bids in response to this Invitation to Bid.

This Contract is subject to title 49, part 26, Code of Federal Regulations (49 CFR 26) entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs and to the requirements issued by the California Department of Transportation (CalTrans) for contracts assisted by funds from the Federal Highway Administration (FHWA)." Bidders who obtain Underutilized Disadvantaged Business Enterprise (UDBE) or other Disadvantaged Business Enterprise (DBE) participation on this contract will assist VTA in meeting its overall annual anticipated UDBE goal. A UDBE is a firm that meets the definition of DBE and is a member of the following groups: 1) Black American, 2) Native American, 3) Asian Pacific American and 4) Women. All UDBEs are DBEs, but not all DBEs are UDBEs.

UDBEs, DBEs and small businesses (SBs) are encouraged to participate in the performance of agreements financed in whole or in part with Federal funds. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of US DOT assisted agreements. 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.

All UDBE firms listed on Bid Form #4 must be certified at the time of bid to be counted toward the contract UDBE goal. Bidders must comply with VTA's Policy on Utilization of Disadvantaged Business Enterprises, as set out in Section 7.0, GC-13. VTA has established a goal of 14% participation by UDBEs in this contract. **A Bidder who fails to achieve the UDBE goal and who fails to demonstrate sufficient good-faith efforts to meet such goal shall be deemed 'non responsive' and therefore ineligible for award of the Contract.** Please note that in order for VTA to determine responsiveness the three apparent low bidders, and other bidders as requested, must submit **Bid Form #4, Good Faith Efforts and other documentation** as set out in Section 7.0, GC-13 by 4:00pm on the next working day following bid opening. **All Bidders must submit Bid Forms #3a and #4a by 4:00pm the 2nd working day following bid opening.** It is bidder's sole responsibility for verifying subcontractor certification as DBE or UDBE to VTA. Prospective Bidders are encouraged to call VTA's Office of Small & Disadvantaged Businesses at (408) 321-5962 for assistance in UDBE participation and for obtaining UDBE/DBE application forms. Also see http://www.vta.org/inside/downloads/forms/print_dbe_apps.doc.

The right is reserved, as the interests of VTA may require, to reject any or all bids, to waive any informality in bids, and to accept or reject any items of the bid.

Please direct inquiries concerning the Contract Documents, bidding procedure and legal requirements to the undersigned by fax at (408) 955-9729.

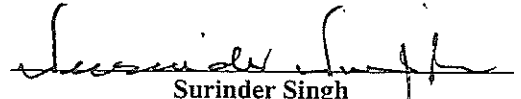
A pre-bid conference will be held at

**3331 North First Street, Building A
Conference Room 106
San Jose, California 95134-1906**

on

May 26, 2010 at 10:00 a.m.

By order of the Santa Clara Valley Transportation Authority, State of California, on May 14, 2010.


Surinder Singh
Manager-Highway Construction Contracts

2.0 FOREWORD

2.1 THE VALLEY TRANSPORTATION AUTHORITY

Santa Clara Valley Transportation Authority (VTA) is an independent special district responsible for bus, light rail and paratransit operations; congestion management; specific highway improvement projects; and, countywide transportation planning. As such, VTA is both an accessible transit provider and multi-modal transportation planning organization involved with transit, highways and roadways, bikeways and pedestrian facilities. VTA provides services to cities throughout the county including Campbell, Cupertino, Gilroy, Los Altos, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga and Sunnyvale.

VTP 2035 is the long-range countywide transportation plan for Santa Clara County. VTA, in its role as the appointed Congestion Management Agency for Santa Clara County, is responsible for preparing and periodically updating the countywide transportation plan.

The VTA Board of Directors adopted VTP 2035 in its January 2009 meeting. One of the projects identified in VTP 2035 is the Countywide Freeway Traffic Operation System and Ramp Metering Improvements Project.

2.2 GENERAL DESCRIPTION OF WORK

Work consists of the replacement of non-functioning detector loops for ramp metering at designated on-ramp and off-ramp on the State Highway right-of-way. All locations are within the County of Santa Clara. Contractor shall furnish and install detector lead-in cable; wireless magnetometer vehicle detection system (WMVDS) and perform all termination, testing and labeling as required for a complete and operational system. Contractor shall also furnish and install work area traffic control devices, traffic control systems and flagging as indicated herein.

2.3 DESCRIPTION OF THE CONTRACTING PROCESS

The procedure which will be followed during the period between VTA's determination of the successful Bidder and its issuance of a Notice to Proceed consists of the steps listed and explained below:

- Issuance of Notice of Award
- Signing of Construction Agreement by successful Bidder
- Submittal and approval of Schedule of Values, WPCP, Performance Bond, Payment Bond and Insurance Certificate(s)
- Execution of Contract by VTA

Notice of Award After Bids are opened at the time and place stipulated, the Contract will be awarded to the lowest responsive and responsible Bidder subject to VTA's right to reject any or all bids. No Bidder may withdraw its bid for the period of days stipulated on the Bid Form after the date set for the Bid Opening. The Bid shall be subject to acceptance by VTA during this period.

Promptly upon VTA's approval of the award of the Contract, the Contracts Office will issue a "Notice of Award" (NOA) letter to the successful Bidder. Included with the Notice of Award will be two originals of **Construction Agreement** and one original of the following:

- **Performance Bond** in the amount of 100% of the Total Contract Amount, to guarantee faithful performance of the work under the Contract, including the replacing of or making acceptable any defective materials or faulty workmanship.

- **Payment Bond** in the amount of 100% of the Total Contract Amount, to inure to the benefit of persons performing labor or furnishing materials in connection with the work of the proposed contract. This bond shall be maintained in full force and effect until all work under the contract is completed and accepted by VTA, and until all claims for materials and labor have been paid.

Within **six working days** from the date of Notice of Award, the successful Bidder shall return executed copies of these documents. Within this same period, Bidder shall furnish Certificates of Insurance as more fully described below.

Both the Performance Bond and the Payment Bond shall be issued by:

- Either a California Admitted Surety OR a current Treasury Listed Surety (Federal Register); AND either a current A.M. Best AIV-rated Surety OR one having a current Standard and Poors (S&P) rating of A, or
- An admitted surety insurer which complies with provisions of the California Code of Civil Procedure, Section 995.660, or
- In lieu of both of the above, a company of equal financial size and stability that is approved by VTA's Risk Manager.

Should any surety or sureties be deemed unsatisfactory at any time by VTA, notice will be given to Contractor to that effect, and Contractor shall forthwith substitute a new surety or sureties satisfactory to VTA.

All alterations, time extensions, extra work, additional work or any other changes authorized in the Contract, may be made without notice to, or securing the prior consent of, the surety or sureties on the Performance or Payment Bonds.

Certificates of Insurance Bidder shall furnish original certificates showing evidence that the insurance coverages specified in the **Special Conditions** herein have been obtained and are in force. All certificates shall provide that not less than 60 calendar days written notice shall be given to VTA in the event of cancellation or material change in the policy.

Forfeiture of Bid Security Failure of the Bidder to whom the Notice of Award was issued to sign the Construction Agreement and submit all of the documents required within **six working days** shall be just cause for the annulment of the award and forfeiture of Bidder's security.

Return of Bid Security If the Bid is not accepted by VTA within the period of days stipulated on the Bid Form after the date set for Bid Opening, or if the Bidder to whom the Contract is awarded executes and delivers to VTA the required documents, then the Bidder's Bond, cash, or the amount of the certified or cashier's check shall be returned to all bidders.

Executed Contract After Contractor's delivery of two signed original Construction Agreements and all required submissions as stipulated above, VTA will sign the Construction Agreement. No agreement between VTA and Contractor shall be in effect until VTA executes the Construction Agreement.

Notice To Proceed Contractor shall commence performance of work after receipt of the Notice to Proceed, and shall continuously and diligently prosecute the work to completion on or before the time or times set forth in **Special Conditions** herein. The first charged day shall be the twentieth (20th) calendar day following issuance of the Notice of Award. Contractor shall not enter upon, occupy, commence any materials fabrication or perform work within VTA property or State right of way prior to receiving the Notice to Proceed. Any work performed or expenses incurred by Contractor prior to Contractor's receipt of Notice to Proceed shall be entirely at Contractor's risk.

3.0 INSTRUCTIONS TO BIDDERS

3.0 INSTRUCTIONS TO BIDDERS

1. Scope of Work Work consists of the replacement of non-functioning detector loops for ramp metering at designated on-ramp and off-ramp on the State Highway right-of-way. All locations are within the County of Santa Clara.

Contractor shall furnish and install detector lead-in cable; wireless magnetometer vehicle detection system (WMVDS) and perform all termination, testing and labeling as required for a complete and operational system.

Contractor shall also furnish and install work area traffic control devices, traffic control systems and flagging as indicated herein.

2. Pre-Bid Conference A pre-bid conference will be held at the time and place set out in the **Invitation to Bid**. The purpose of this meeting is to inform prospective Bidders and potential subcontractors of subcontracting and material supply opportunities and to receive comments and questions regarding the work and the Contract Documents from attendees. Representatives of VTA will be present to discuss:

- The Anticipated DBE Participation Level (ADPL) for the participation of disadvantaged businesses.
- Affirmative Action/Equal Employment Opportunity requirements.
- Coordination of the work to be performed.
- Community relations
- Other subjects as appropriate.

3. Examination of the Contract Documents Each prospective Bidder shall carefully examine the Contract Documents and become thoroughly familiar with the terms and conditions contained therein prior to the Bid Opening date. The bid submitted shall include a sum to cover the cost of all items necessary to perform the work as set forth in the Contract Documents. No allowance of any kind will be made to any Bidder because of lack of such examination or knowledge. The submittal of a bid shall be conclusive evidence that the Bidder has made such an examination.

3.1 Definitions. "Definitions and Terms," of the Standard Specifications and Contract Documents.

Whenever in the Standard Specifications, Standard Plans and these contract documents the following terms are used, unless the context otherwise requires, the intent and meaning shall be interpreted as follows:

ACCEPTANCE: The formal written acceptance by VTA of an entire contract which has been completed in all respects in accordance with the plans and specifications and any modifications thereof previously approved.

BASEMENT MATERIAL: The material in excavation underlying the lowest layer of subbase, base, pavement, surfacing or other specified layer which is to be placed.

BIDDER: Any individual, firm, partnership, corporation, or combination thereof, submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

CALENDAR DAYS: A calendar day shall be any day including all legal holidays, Saturday and Sunday.

CONDUIT: A pipe or tube in which smaller pipes, tubes or electrical conductors are inserted or are to be inserted.

CONTRACT: The written agreement covering the performance of the work and the furnishing of labor, materials, tools and equipment in the construction of the work. The contract shall include the notice to contractors, proposal, plans, specifications, conditions, and contract bonds; also any and all supplemental agreements amending or extending the work contemplated and which may be required to complete the work in a substantial and acceptable manner. Supplemental agreements are written agreements covering alterations, amendments or extensions to the contract and include contract change orders.

CONTRACT DOCUMENTS: The materials and physical evidence of the Contract.

CONTRACTOR: The person or persons, firm, partnership, corporation, or combination thereof,

private or municipal, who have entered into a contract with VTA.

CULVERT: Any structure, other than a bridge, which provides an opening under a roadway for drainage or other purposes.

DAYS: Unless otherwise designated, days as used in the specifications will be understood to mean calendar days.

DEPARTMENT: Valley Transportation Authority (VTA).

DEPARTMENTS OR OFFICERS: Wherever departments or officers are referred to herein, the comparable VTA departments or officers are meant thereby for the purpose of these Contract Documents.

DETOUR: A temporary route for traffic around a closed portion of a road.

DIRECTOR OR DIRECTOR OF TRANSPORTATION: VTA Director of Congestion Management and Highway Programs or his/her duly authorized representatives.

DISADVANTAGED BUSINESS ENTERPRISE (DBE): Wherever the term (DBE) is referred to herein, the following term shall also apply for the purpose of these Contract Documents: Disabled Veterans Business Enterprise (DVBE).

DIVIDED HIGHWAY: A highway with separated traveled ways for traffic, generally in opposite directions.

ENGINEER: VTA.

FEDERAL AGENCIES: Whenever, in the specifications, reference is made to any Federal agency or officer, the reference shall be deemed made to any agency or officer succeeding in accordance with law to the powers, duties, jurisdiction and authority of the agency or officer mentioned.

FIXED COSTS: Any necessary labor, material and equipment costs directly expended on the item or items under consideration which remain constant regardless of the quantity of the work done.

FRONTAGE ROAD: A local street or road auxiliary to and located generally on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

GRADING PLANE: The surface of the basement material upon which the lowest layer of subbase, base, pavement, surfacing or other specified layer is placed.

HIGHWAY: The whole right of way or area which is reserved for and secured for use in constructing the roadway and its appurtenances

LABORATORY: The established Laboratory authorized by VTA to test materials and work involved in the contract

LEGAL HOLIDAYS: Those days designated as State holidays in the Government Code.

LIQUIDATED DAMAGES: The amount prescribed in the contract documents, pursuant to the authority of Public Contract Code Section 10226, to be paid to VTA or to be deducted from any payments due or to become due the Contractor for each day's delay in completing the whole or any specified portion of the work beyond the time allowed in the contract documents.

MANUAL OF TRAFFIC CONTROLS: The Caltrans publication entitled "MANUAL OF TRAFFIC CONTROLS for Construction and Maintenance Work Zones." This manual may be obtained from Caltrans Publications.

MEDIAN: That portion of a divided highway separating the traveled ways for traffic in opposite directions including inside shoulders.

NOTICE OF AWARD (NOA): Written notification issued by VTA awarding the contract.

NOTICE TO PROCEED: Notification to the Contractor to commence construction.

OFFICE OF STRUCTURE DESIGN: When the specifications require working drawings to be submitted to the Office of Structure Design, the drawings shall be submitted to the Resident Engineer.

OVERSIGHT ENGINEER: The assigned representative of the California Department of Transportation that is duly authorized to oversee work covered by these specifications.

PAVEMENT: The uppermost layer of material placed on the traveled way or shoulders. This term is used interchangeably with surfacing.

PLANS: The official project plans, Standard Plans, profiles, typical cross sections, working drawings and supplemental drawings, or reproductions thereof, approved by VTA, which show the location, character, dimensions and details of the work to be performed. These documents are to be considered as a part of the plans.

PROCESSING: Any operation or operations of whatever nature and extent required to produce a specified material.

RESIDENT ENGINEER: Authorized representative for VTA. Also identified as the Engineer.

RESIDENT INSPECTOR: Resident Engineer or his/her authorized representative.

ROADBED: The roadbed is that area between the intersection of the upper surface of the roadway and the side slopes or curb lines. The roadbed rises in elevation as each increment or layer of sub-base, base, surfacing or pavement is placed. Where the medians are so wide as to include areas of undisturbed land, a divided highway is considered as including 2 separate roadbeds.

ROADWAY: That portion of the highway included between the outside lines of sidewalks, or curbs, slopes, ditches, channels, waterways, and including all the appertaining structures, and other features necessary for proper drainage and protection.

SHOULDERS: The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

SPECIAL PROVISIONS: The special provisions are specific clauses setting forth conditions or requirements peculiar to the work. References to these can include VTA Special Conditions, General Conditions, and Technical Specifications.

SPECIFICATIONS: The directions, provisions and requirements contained in these Contract documents.

STANDARD PLANS: The Standard Plans of the State of California Department of Transportation.

STANDARD SPECIFICATIONS: The Standard Specifications of the State of California, Department of Transportation.

STATE: The Santa Clara Valley Transportation Authority (VTA).

STATE CONTRACT ACT: The applicable portions of the Public Contract Code. The provisions of this act and other applicable laws form and constitute a part of the provisions of this contract to the same extent as if set forth herein in full.

STATE FURNISHED MATERIALS: Materials furnished by VTA.

SUBBASE: A layer of specified material of planned thickness between a base and the basement material.

SUBGRADE: That portion of the roadbed on which pavement, surfacing, base, subbase, or a layer of any other material is placed.

SUBSTRUCTURE: All that part of the bridge below the bridge seats, tops of piers, haunches of rigid frames, or below the spring lines of arches. Backwalls and parapets of abutments and wingwalls of bridges shall be considered as parts of the substructure.

SUPERSTRUCTURE: All that part of the bridge except the bridge substructure.

SURFACING: The uppermost layer of material placed on the traveled way, or shoulders. This term is used interchangeably with pavement.

TRAFFIC LANE: That portion of a traveled way for the movement of a single line of vehicles.

TRAVELED WAY: That portion of the roadway for the movement of vehicles, exclusive of shoulders.

WORK: All the work specified, indicated, shown or contemplated in the contract to construct the Improvement, including all alterations, amendments or extensions thereto made by contract change order or other written orders of VTA.

WORKING DAYS: Any day not a Saturday, Sunday, or U.S. legal holiday.

VTA: The Santa Clara Valley Transportation Authority.

3.2 ABBREVIATIONS Each abbreviation signifies the following:

Abbreviation	Term
AAN	American Association of Nurserymen.
AASHTO	American Association of State Highway and Transportation Officials.
AISC	American Institute of Steel Construction.
AISI	American Iron and Steel Institute.
ANSI	American National Standards Institute.
APHA	American Public Health Association.
API	American Petroleum Institute.
AREA	American Railway Engineering Association.
ASME	American Society of Mechanical Engineers.
ASTM	American Society for Testing and Materials.
AWG	American Wire Gage.
AWPA	American Wood-Preservers' Association.
AWS	American Welding Society.
AWWA	American Water Works Association.
EIA	Electronic Industries Association.
IEEE	Institute of Electrical and Electronics Engineers.
NEMA	National Electrical Manufacturers Association.
UL	Underwriters' Laboratories Inc.

3.3 UNITS OF MEASUREMENT Some of the symbols for units of measurement used in the specifications and in the Summary of Quantities and Prices are defined as follows. The symbols for other units of measurement used in the specifications are as defined in ASTM Designation: E-380, or in the various specifications and test referenced in the specifications

Symbols as used in the Specifications	Symbols as used in the Summary of Quantities and Prices	Definitions
A	-	amperes
-	EA	each
g	G	gram
kg	KG	kilogram
ha	HA	hectare (10 ,000 m ²)
h	H	hour
J	-	joule
-	LNKM	lane kilometer
L	L	liter
LS	LS	lump sum
m	M	meter
km	KM	kilometer
mm	MM	millimeter
µm	-	micrometer
nm	-	nanometer
m ²	M ²	square meter
m ³	M ³	cubic meter
N	-	newton
Nm	-	newton meter
Ω	-	ohm
Pa	-	pascal
kPa	-	kilopascal
Mpa	-	megapascal
s	-	second
-	STA	station (100 m)
-	TAB	tablet
tonne	TONNE	metric ton (1000 kg)
W	-	watt
V	-	volt

4. Examination of Site and Existing Conditions In addition to examination of the Contract Documents, each prospective Bidder shall, prior to the Bid Opening, become fully informed regarding all existing and expected site conditions which might in any way affect the cost or the time of performance of the work. Any failure of the prospective Bidder to fully investigate the site and inform itself of existing and anticipated site conditions shall not relieve such Bidder from

responsibility for estimating properly the cost or difficulty of performing the work.

5. Addenda to Contract Documents VTA reserves the right to make changes in the Contract Documents as it may deem appropriate up to the time set for opening of bids. Any and all changes in the Contract Documents shall be made by written Addendum, which shall be issued by VTA to all prospective Bidders who have been issued copies of the Contract Documents.

If such Addenda require changes in quantities or might affect the prices bid, or both, the date set for opening of bids may be postponed by such number of days as in the opinion of VTA shall enable Bidders to revise their bids. In any case, Bid Opening shall be at least **five working days** after the issue date of the last Addendum and that Addendum shall include an announcement of the new date, if applicable, for opening bids.

Failure to acknowledge receipt of all Addenda may cause the bid to be considered non-responsive to the Contract Documents. Bidder certifies that the Contract Documents and Addenda thereto have been thoroughly read and that there are no misunderstandings as to the meaning, purpose or intent of any provision in the Contract Documents as modified by those Addenda.

6. Prevailing Wage Rates Pursuant to appropriate Sections of the Labor Code of the State of California, the Director of the California Department of Industrial Relations has ascertained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension, and similar purposes) applicable to the work to be performed under this Contract, for straight time, overtime, Saturday, Sunday and holiday work. Contractor shall post a copy of the prevailing wage rates at the jobsite or material staging area.

Workmen employed in the work must be paid at the rates at least equal to the prevailing wage rates adopted by VTA. If Contractor uses a craft or classification not shown on the prevailing wage determinations, Contractor may be required to pay the wage rate of that craft or classification most closely related to it as shown in the general determinations effective at the time of Contract award.

In the performance of the work specified in this Contract, the Prime Contractor and all subcontractors shall be responsible for compliance with California Labor Code Sections 1776 (Payroll records, retention, inspection, noncompliance penalties, rules and regulations) and 1777.5 (Employment of registered apprentices, wages, standards, number, apprenticeable craft or trade, exemptions, contributions).

This Contract is also subject to Federal requirements for payment of prevailing wages as determined by the

Secretary of Labor. Where there are differences in the rates, the higher shall apply.

7. Preparation and Submittal of Bid The Bidder shall prepare its bid in strict accordance with all of the requirements of the Contract Documents and any addenda thereto. In order to receive consideration, all bids shall comply with the following instructions:

7.1 Bids shall be submitted on the forms provided in these Contract Documents in signed original. Bids submitted in any other form may be considered nonresponsive and rejected.

7.2 Blank spaces in each bid form shall be properly filled in by indelible means, and the phraseology thereof shall not be changed. Any conditions or limitations made to the items mentioned therein may be cause for rejection. Alterations by erasure or interlineation must be explained or noted in the bid over the signature of the Bidder.

7.3 No telegraphic or FAX bid or telegraphic or FAX modification of a bid will be considered. No bids received after the time fixed for receiving them will be considered. Late bids will be returned to the Bidder unopened.

7.4 All bids shall be enclosed in a sealed envelope bearing the Contract Number, the title of the project, the date and hour of the opening, and the name of the Bidder. Bids shall be addressed to the Contracts Officer, Santa Clara Valley Transportation Authority, and shall be delivered to the Contracts Office, 3331 North First Street, Bldg. A, San Jose, CA 95134-1906 no later than the time scheduled for Bid Opening. It is the sole responsibility of the Bidder to see that its bid is received in a timely manner.

7.5 Bids shall include full compensation for furnishing all labor, material, tools, and equipment and doing all the work complete in place in accordance with the requirements of the Contract. Bid prices shall include all applicable taxes, freight charges and other applicable fees of any kind.

Contractor shall be responsible for assessing any and all applicable taxes related to the purchase of or installation of materials used on a VTA project and shall, for purposes of determining transaction or use tax liability, use the VTA job site as the place where "engaged in business."

7.6 The quantities given in the Schedule of Quantities and Prices for which unit prices are asked to be bid are approximate only, being given as a basis for the comparison of bids, and VTA does not, expressly or by implication, represent that the actual quantities required will correspond therewith, but reserves the right to increase or decrease the quantity of any class or portion of the work, or to omit portions of the work, as VTA may deem necessary or advisable.

7.7 The Bidder shall show the Contract number and title on its bid and on all correspondence.

7.8 If there is a discrepancy between unit prices and extensions, or a discrepancy between the sum of the extensions and the Total Contract Price, VTA will review the figures submitted to determine whether the discrepancies are the result of computational error and, if so, will correct the unit prices, extensions or Total Contract Price accordingly.

7.9 Bidder hereby certifies that it is aware of the provisions of California Labor Code §3700, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and that Bidder will comply with such provisions before commencing the performance of the work of this Contract.

7.10 DBE Documentation

The three low Bidders will be required to submit the following documents to the Contracts Office no later than 4:00 p.m. the next working day following bid opening:

- Bid Form #4

All bidders are required to submit Bid Form # 4a by 4:00pm on the second working day following bid opening.

8. Bid Security Each bid shall be accompanied by a certified or cashier's check, cash, or a Bidder's bond in the sum of not less than 10% of the Total Contract Price and said checks or bond shall be made payable to the order of the Santa Clara Valley Transportation Authority. In case the successful Bidder fails to file satisfactory bonds or provide the insurance required by the Contract Documents, or refuses to enter into a Contract within the specified time, it shall forfeit its bid security. If the bid is not accepted by VTA within 120 calendar

days after the date set for the opening of bids, or if the Bidder to whom the contract is awarded executes and delivers to VTA the required Contract Forms, then the amount of the cash or the certified or cashier's check shall be returned to the Bidder.

9. Opening of Bids Bids will be opened and publicly read aloud by the Contracts Officer at the time and place stated in the Invitation to Bid.

10. Withdrawal of Bid Any Bidder may withdraw its bid, either personally or by a written request by a duly authorized representative, at any time prior to the scheduled time for opening of bids. However, no Bidder may withdraw its bid for a period of **120 calendar days** after the Bid Opening. Bidder's attention is directed to the provisions of the Public Contract Code Sections 5100 to 5108 regarding relief of bidders.

11. Conditional Bids Conditional bids, or those which take exception to the Contract Documents, will be considered non-responsive and will be rejected.

12. Bidders Interested In More Than One Bid No entity shall be allowed to make or file or be interested as a principal in more than one bid for the same work, unless alternate bids are called for. However, a person, firm or corporation submitting a sub-bid to a Bidder, or who has quoted prices on materials to a Bidder, is not thereby disqualified from submitting a sub-bid or quoting prices to other Bidders or from being a principal Bidder for the same work.

13. Single Bid Response If only one bid is received in response to the Invitation to Bid, a detailed cost proposal may be required of the single Bidder. A cost/price analysis and evaluation and/or audit will be performed of the cost proposal in order to determine if the price is fair and reasonable.

14. Award or Rejection of Bids The award of the contract to the successful Bidder will be made within **120 calendar days** after the opening of bids. If the first Bidder selected as a successful Bidder refuses or fails to execute the contract, VTA may award the contract to the second successful Bidder selected as provided herein and such an award, if made, will be made within **120 calendar days** after the opening of the bid proposals. If the second successful Bidder refuses or fails to execute the contract, VTA may award the contract to the third successful Bidder selected as above provided and such an award, if made, will be made within **60**

calendar days after opening of the bid proposals. The periods of time specified above within which the award of contract may be made shall be subject to an extension for such further period as may be agreed upon in writing between VTA and the Bidder concerned. VTA reserves the right to reject any or all bids and to waive any informality in the bids or in the bid process. Obvious cases of bid imbalancing may be cause for rejection.

VTA is in the process of obtaining an Encroachment Permit from Caltrans. If after receipt of the bids for the project an Encroachment Permit has not been obtained, VTA reserves the right to reject all bids and re-advertise the project or extend the award period as agreed in writing between VTA and the Bidder.

15. Basis of Award The criteria for determining the successful Bidder will include the Bidder's responsiveness to the requirements of the Contract Documents, Bidder's responsibility results of a pre-award Buy America audit, if required and price. Any Bidder may be required to furnish evidence satisfactory to VTA that it and its proposed subcontractors have sufficient means and experience in the type of work called for in the Contract Documents to assure completion of the Contract in a satisfactory manner.

An option is included to construct an access road off Walnut Avenue between E line Sta. 68+60 and 69+50 Rt. If exercised by VTA, the option will result in increase of quantities for the items of work listed as Optional Bid items at the end of Bid Form No. 1, "Schedule of Quantities and Prices." If the option is exercised, the additional quantities will be paid at the Contractor's listed base bid prices unless noted otherwise. Lowest responsible bidder will be determined on the basis of the base bid, excluding the optional bid quantities.

16. Bidder Review and Protest Procedures The following procedures shall be used by Bidders seeking review of the Contract Documents or the Contracting process:

16.1 General A Bidder may discuss the Contract Documents with VTA. Such discussions do not, however, relieve Bidders from the responsibility of submitting written, documented requests as required by these procedures. Bidder requests and protests shall be addressed to the Contracts Office, Santa Clara Valley Transportation Authority, 3331 North First Street, San Jose, CA 95134-1906, Attention: Purchasing & Materials Manager, and

clearly marked "Bid Protest" on the outside of the envelope. VTA will decide the merits of the request or protest and render a determination. The protest resolution record will be provided to the protesting Bidder upon request.

16.2 Pre-Bid Opening Protests Prior to bid opening, a bidder may submit to VTA protests regarding the procurement process or on items in the Contract Documents. Any such protest shall be received by VTA, in writing, not less than **ten working days** before the date of scheduled Bid Opening. Any protest shall be fully supported with technical data, test results, or other pertinent information as evidence that the protest should be upheld.

VTA will make a determination of each Bidder protest. That written determination will be mailed or otherwise furnished to the Bidder.

16.3 Post Bid Opening Protest Protests based upon alleged improprieties in the procurement or the procurement process which can only be apparent after Bid Opening or the closing date for receipt of additional post Bid Opening documentation, shall be filed no later than **five working days** following the issuance of a Notice of Recommended Award. Protests shall contain a statement of the grounds for protests and supporting documentation. Final VTA decision on the protest will be mailed or otherwise furnished to bidder prior to award of the contract.

17. Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion – Lower Tier Covered Transactions By signing and submitting this bid, the Bidder is providing the certification set out below.

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 Bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, VTA may pursue available remedies, including suspension and/or debarment.

The Bidder shall provide immediate written notice to VTA if at any time the Bidder learns that its certification was erroneous when submitted or had become erroneous by reason of changed circumstances.

The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant,

person, primary covered transaction, principal, bid, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 [49 CFR Part 29]. You may contact VTA for assistance in obtaining a copy of those regulations.

The Bidder agrees by submitting its bid 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 proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by VTA.

The Bidder further agrees by submitting this bid 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.

A Bidder in a covered transaction may rely upon a certification of a prospective bidder in a lower tier covered transaction that it is not proposed for debarment under 48 CFR part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from covered transactions, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

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 a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier transaction with a person who is proposed for debarment under CFR 48 part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, VTA may pursue available remedies, including suspension and/or debarment

18. Federal Requirements. Federal requirements 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.

4.0 CONTRACT FORMS

4.0 CONTRACT FORMS

1. **Construction Agreement ***
2. **Performance Bond ***
3. **Payment Bond ***
4. Sample Insurance Certificate
5. Alternate IRS Form W-9
6. Listing of Subcontractors, Suppliers, Subconsultants

* Form must be acknowledged by a Notary

Return ALL Contract Forms To:

CONTRACTS OFFICE
3331 North First Street, Bldg. A
San Jose, CA 95134-1906
(408) 321-7189
Fax (408) 955-9729

PLEASE NOTE:

It is not necessary to complete these forms to bid on this project. But in the event Bidder is awarded the Contract he shall be required to execute all Contract Forms.

CONTRACT FORM #1

CONSTRUCTION AGREEMENT

This Agreement is entered into between the Santa Clara Valley Transportation Authority ("VTA") and

ccc

("Contractor") as of the date set out below. VTA and Contractor agree as follows:

- **Scope of Work.** Contractor shall provide all labor, materials, tools, equipment and incidentals necessary to perform the work described as

CONTRACT 10074 RE-BID RAMP METERING IMPLEMENTATION PROJECT PHASE III

in a satisfactory and workmanlike manner and in accordance with the provisions of the Contract Documents.

2. **Compensation.** Full compensation to Contractor for the complete and satisfactory performance of the work under this Agreement and all of the provisions of the Contract Documents, and for Contractor's payment of all obligations incurred to others in performance of the work, shall be the Total Contract Price shown in the Schedule of Quantities and Prices attached hereto as this amount may be adjusted in accordance with other provisions of the Agreement. All costs for Work shown or indicated in the Contract Documents, even if not specifically provided for by a bid item in the Schedule of Quantities and Prices, shall be included in the Total Contract Price per GC-59, **Progress Payments**.
3. **Contract Documents – Order of Precedence.** The following sections of the Contract Documents are incorporated by reference into this Construction Agreement:

Order of Precedence (Highest order listed first)

Section 7.0, GC-13	Disadvantaged Business Enterprise (DBE) Policy and Requirements (49 CFR Part 26)
Section 1.0 through 4.0	Invitation to Bid, Foreword, Instructions to Bidders, Contract Forms
Section 5.0	Bid Forms
Section 8.0, Subsection TS-1	"References to the Caltrans Standard Specifications with Amendments" of the Technical Specifications
Section 8.0	Technical Specifications
Section 6.0	Special Conditions
Section 9.0	Contract Drawings and Plans
Section 7.0	General Conditions
Caltrans Standard Plans	May 2006 with amendments
Caltrans Standard Specifications	May 2006 with amendments

These documents are essential parts of the agreement between the parties and are intended to be complementary and to describe and provide for a complete work. In the event of conflict among the documents, precedence shall be given in the order listed above. In the event of any discrepancy

between any drawing and the dimensions written thereon, the dimensions shall be taken as correct. Detail drawings shall prevail over general drawings.

4. **Quality of Work.** Where the plans or specifications describe portions of the work in general terms, but not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be provided.
5. **Time of Performance.** Contractor shall commence work under the Agreement immediately upon issuance by VTA of a Notice to Proceed and shall complete all of the work under the Agreement by the dates specified in **Section 6.0 Special Conditions**. The issuance of a Notice to Proceed is contingent upon Contractor's submittal and approval of proper insurance certificates, performance bond, payment bond, **Water Pollution Control Program** and executed Construction Agreement no later than **six working days** following the date of VTA's Notice of Award. The first chargeable day under this Agreement shall be the **twentieth (20th) calendar day** following the date of VTA's Notice of Award.
6. **Entire Agreement.** This Agreement constitutes the entire agreement between VTA and Contractor respecting the subject matter hereof. All other agreements, understandings and communications between the parties hereto are deemed to be merged into and superseded by the provisions of this Agreement. No modification or change to this Agreement shall have any force or effect unless it is in writing and expressly referred to as being a Change Order to this Agreement.
7. **Responsible Conduct.** Contractor shall at all times deal in good faith and truthfully with VTA. Contractor shall submit documentation to VTA, including reports, claims, requests for change orders, equitable adjustment, contract modifications or requests of any kind seeking increased compensation or decreases of an obligation on this contract only in good faith and upon an honest evaluation of the underlying circumstances and an honest calculation of any amount being sought. A violation of this standard of conduct will subject the Contractor to being deemed "nonresponsible" pursuant to SCVTA Administrative Code, Chapter 9, Article III and potentially ineligible for future contracts with VTA, regardless of whether VTA relied on or responded to the submission.

IN WITNESS WHEREOF two identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by VTA and Contractor respectively, on the dates set out below.

CONTRACTOR

VTA

By: _____

By: _____
Michael T. Burns, General Manager

Title: _____

By: _____
Thomas B. Smith, Purchasing & Materials Manager

Date: _____

Date: _____

Contractor's License No.: _____

Class / Expiration Date: _____

PERFORMANCE BOND FOR PUBLIC WORKS

KNOW ALL PEOPLE BY THESE PRESENTS: That

WHEREAS, the Santa Clara Valley Transportation Authority ("VTA") has awarded to

("Principal") a contract described as:

**CONTRACT 10074
RE-BID RAMP METERING IMPLEMENTATION PROJECT PHASE III**

and all of the Contract Documents attached to or forming a part of said Agreement are hereby referred to and made a part hereof; and

WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract,

NOW THEREFORE, we, the Principal and

as Surety, are held and firmly bound unto the Santa Clara Valley Transportation Authority (hereinafter called "VTA"), in the penal sum of \$ _____, lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above-bound Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said contract and any alteration thereof made as therein provided, on their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless VTA, its officers, agents, and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

And the said Surety for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any change, extension of time, alteration or additions to the terms of the contract or to the work or to the specifications.

In the event suit is brought upon this bond by VTA and judgment is recovered, Surety shall pay all costs incurred by VTA in such suit, including a reasonable attorney's fee to be fixed by the Court.

IN WITNESS WHEREOF this instrument has been duly executed by Principal and Surety on this

_____ day of _____, 20_____.

PRINCIPAL:

SURETY:

(Company)

(Company)

(Signature)

(Signature)

(Name – Please Print)

(Name – Please print)

(Title)

(Title)

NOTE: Signatures of those executing for Surety must be acknowledged by a Notary.

NOTE TO SURETY COMPANY:

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

SURETY COMPANY ATTORNEY-IN-FACT

State of California)

County of _____)

On _____, before me, the undersigned, a Notary Public in and for

the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California

Acknowledgement by Attorney-in-Fact must be attached.
Corporate seals of Principal and Surety must be attached.

PAYMENT BOND FOR PUBLIC WORKS

KNOW ALL PEOPLE BY THESE PRESENTS: That

WHEREAS, the Santa Clara Valley Transportation Authority ("VTA") and

("Principal") have entered into a Construction Agreement for the furnishing of all materials, labor, services and transportation necessary, convenient and proper to the performance of

**CONTRACT 10074
RE-BID RAMP METERING IMPLEMENTATION PROJECT PHASE III**

and all of the Contract Documents attached to or forming a part of said Agreement are hereby referred to and made a part hereof; and

WHEREAS, said Principal is required by Chapter 5 (commencing at Section 3225) and Chapter 7 (commencing at Section 3247), Title 15, Part 4, Division 3 of the California Civil Code to furnish a bond in connection with said contract;

NOW THEREFORE, we, the Principal and

as Surety, are held and firmly bound unto the Santa Clara Valley Transportation Authority (hereinafter called "VTA") in the penal sum of \$ _____ in lawful money of the United States of America for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal or its subcontractors, heirs, executors, administrators, successors, or assigns, shall fail to pay any of the persons named in Section 3181 of the California Civil Code, amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of the Contractor and Subcontractors pursuant to Section 13020 of the Unemployment Insurance Code with respect to the work and labor, the Surety will pay for the same, in an amount not exceeding the sum hereinabove specified, and also, in case suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court.

This bond shall inure to the benefit of any of the persons named in Section 3181 of the California Civil Code, so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement hereinabove described or pertaining to or relating to the furnishing of labor, materials, or equipment therefor, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement hereinabove described, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be

released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between VTA and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 3110 or 3112 of the California Civil Code, and has not been paid the full amount of its claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF this instrument has been duly executed by Principal and Surety on this _____ day of _____, 20____.

PRINCIPAL:

(Company)

(Signature)

(Name -- Please Print)

(Title)

SURETY:

(Company)

(Signature)

(Name -- Please print)

(Title)

NOTE TO SURETY COMPANY:

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

SURETY COMPANY ATTORNEY-IN-FACT

State of California)
County of _____)

On _____, before me, the undersigned, a Notary Public in and for the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California

Acknowledgement by Attorney-in-Fact must be attached.
Corporate seals of Principal and Surety must be attached.

CONTRACT FORM #4

ACORD		CERTIFICATE OF INSURANCE		ISSUE DATE:	
PRODUCER INSURANCE AGENCY, INC. 1000 MAIN STREET ANYWHERE, CA 93800		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW			
		COMPANIES AFFORDING COVERAGE			
INSURED ACCURATE CONSTRUCTION COMPANY 18935 NORTHWESTERN HIGHWAY SAN JOSE, CA 94999		COMPANY A	ACME INSURANCE COMPANY		
		COMPANY B	DELTA INSURANCE COMPANY		
		COMPANY C	SHIFTING SANDS MUTUAL INSURANCE COMPANY		
		COMPANY	SAMPLE		
		COMPANY			

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

	TYPE OF INSURANCE	POLICY NO.	POLICY EFF. DATE MM/DD/YY	POLICY EXP. DATE MM/DD/YY	ALL LIMITS	
A	GENERAL LIABILITY [x] COMMERCIAL GEN. LIABILITY [] CLAIMS MADE [X] OCCUR.	WTO 00612	07/01/97	07/01/98	GENERAL AGGREGATE PRODUCTS-COMP/OPS AGGREGATE PERSONAL & ADVERTISING INJURY EACH OCCURRENCE	\$2,000,000 \$1,000,000 \$1,000,000 \$1,000,000
B	AUTOMOBILE LIABILITY [X] ANY AUTO [X] ALL OWNED AUTOS [] SCHEDULED AUTOS [X] HIRED AUTOS [X] NON-OWNED AUTOS		07/01/97	07/01/98	COMBINED SINGLE LIMIT	\$1,000,000
A	EXCESS LIABILITY [] UMBRELLA [] OTHER THAN UMBRELLA FORM	XYZ00064	07/01/97	07/01/98	EACH OCCURRENCE \$4,000,000	AGGREGATE \$4,000,000 (Per location)
C	(IF CONTRACT OVER \$75,000) BUILDERS RISK	AZZ57297	07/01/97	07/01/98	ALL RISK	AMOUNT OF CONTRACT
C	WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY	WTC 906221	07/01/97	07/01/98	STATUTORY [X] (Each accident) (Disease-policy limit) (Disease-each employee)	\$1,000,000 \$1,000,000 \$1,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS: CERTIFICATE HOLDER IS AN ADDITIONAL INSURED AS RESPECTS THE ABOVE REFERENCED AUTO LIABILITY, GENERAL LIABILITY AND EXCESS LIABILITY POLICIES. COVERAGE AFFORDED TO THE ADDITIONAL INSURED IS PRIMARY AND NOT EXCESS TO OR CONTRIBUTING WITH ANY OTHER INSURANCE OR SELF-INSURANCE MAINTAINED BY THE ADDITIONAL INSURED.

WAIVER OF SUBROGATION HAS BEEN ENDORSED TO ALL POLICIES AS STATED IN THE CONTRACT DOCUMENTS

CERTIFICATE HOLDER IS LOSS PAYABLE AS RESPECTS THE BUILDERS RISK POLICY.

CERTIFICATE HOLDER SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, ITS OFFICERS, OFFICIALS, EMPLOYEES & VOLUNTEERS 3331 NORTH FIRST STREET SAN JOSE, CA 95134-1906	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 60 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, EXCEPT 10 DAYS NOTICE FOR NON-PAYMENT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.
ACORD 25-S (3/90)	AUTHORIZED REPRESENTATIVE

ALTERNATE
form—W9



**Payer's Request for Taxpayer
Identification Number and Certification**

Name as shown on account (If joint account, must list and circle the name of the person or entity whose number you enter in part 1 below.)

Business Name _____

Address _____

City, State, and ZIP code _____

List account number(s) here _____

PART 1 Taxpayer Identification Number --- For All Accounts

Enter your taxpayer Identification number in the appropriate box. For most individuals, this is your social security number.

Social Security Number		Employer Identification Number
	or	

PART 2 For Payees Exempt From Backup Withholding (See Instructions on IRS form W-9)

PART 3 Certification

Under penalty of perjury, I certify that:

- (1) The Number shown on this form is my correct Taxpayer Identification Number (or I am waiting for a number to be issued to me), and
- (2) I am not subject to backup withholding either because I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or the IRS has notified me that I am no longer subject to backup withholding.

CERTIFICATION INSTRUCTIONS – You must cross out item (2) above if you have been notified by IRS that you are subject to backup withholding because of underreporting interest or dividends on your tax return. However, if after being notified by IRS that you were subject to backup withholding you received another notification from IRS that you are no longer subject to backup withholding, do not cross out item (2).

Please Sign Here:	Signature →	Date
-------------------	-------------	------

Please check one box in each section below that best describes your type of organization and the transaction for which we make payment to you.

ORGANIZATION:

- | | |
|---|---|
| ☐ Individual | ☐ Corporation |
| ☐ Two or more Indiv. (Joint) | ☐ Real Estate Agent |
| ☐ Sole Proprietorship | ☐ Tax-Exempt Organization |
| ☐ Partnership | ☐ Public Entity |
| ☐ Trust /Estate | ☐ Other Organization (Specify) |

TRANSACTION:

- | |
|--|
| ☐ Rents (Space & Machine) |
| ☐ Medical & Health Care Service |
| ☐ Other Services (Specify) |
| ☐ Interest |
| ☐ Goods/Merchandise |
| ☐ Freight |
| ☐ Other Transaction (Specify) |

Contractor: _____

[illegible]

Page 39

5.0 BID FORMS

1. Bid Form, Schedule of Quantities and Prices, Contractor Information
2. **Bidder's Bond ***
3. Designation of Subcontractors – Fair Practices Act
4. Listing of UDBE Prime or Subcontractors
- 4a. Supplemental Prime Contractor and Subcontractor Information
5. References
6. Litigation Disclosure
7. **Affidavit of Non-Collusion ****
8. Declaration of Contractor – Government Code Section 4420
20. Certification of Restrictions on Lobbying
21. Buy America Certification
22. Equal Employment Opportunity Certification

* Form must be acknowledged by a Notary

**Form must be subscribed and sworn to before Notary Public or other Officer

PLEASE NOTE:

These forms are designed to contain essential information concerning the Bidder and the bid, and must be completed such that they can be read. If any of the completed forms are illegible, VTA may, at its option, declare the entire bid unresponsive.

BID FORM #1

CONTRACT 10074

RE-BID RAMP METERING IMPLEMENTATION PROJECT PHASE III

FROM: BIDDER'S NAME _____

TO: THE SANTA CLARA VALLEY TRANSPORTATION AUTHORITY, STATE OF CALIFORNIA

In compliance with your **Invitation to Bid** for this project, the undersigned Bidder, being thoroughly familiar with the terms and conditions of the Contract Documents, hereby proposes and agrees fully to perform the work within the time stated and in strict accordance with the Contract Documents.

The Bidder hereby acknowledges receipt of the following Addenda to the Contract Documents:

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Bidder hereby incorporates by reference all provisions of the Contract Documents which follow this Bid Form.

CONTINUED ON NEXT PAGE ➡

**SCHEDULE OF QUANTITIES AND PRICES
 CONTRACT 10074**

RE-BID RAMP METERING IMPLEMENTATION PROJECT PHASE III

The prices quoted below include all other applicable taxes, fees, permits, delivery and other charges as required.

There is no separate payment for "cleanup", therefore Bidder shall consider and include this in the various items of work on the Bid Schedule. See GC-53 Cleanup. (Note: "i.c.y" = in place cubic yard)

				Bidder's Name:			
ITEM		SPEC REF.	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL
1A		TS-3 TS-4	Modify Inductive Loop at Capitol Expwy (See Sheets E-1 & E-4 and the specifications for details). This bid item includes: Replace inductive loop detector.	1	LS		\$
1B		TS-7	Install WMVDS at Capitol Expwy (See Sheet E-2 and the specifications for details). This bid item includes: - Furnish & install CCI card - Furnish and install AP unit on existing luminaire. - Furnish and install RP unit on existing luminaire. - Furnish and install Outdoor Rated CAT 5E cable in existing conduits. - Furnish and install Outdoor Rated CAT 5E cable in new 2" conduit. - Disconnect existing Q1, Q2, and Q3 dlc's; coil and store in existing cabinet. - Furnish and install WVSN units and center in vehicle lane.	1	LS		\$

2		TS-7	Install WMVDS at Almaden Expwy (See Sheets E-3 & E-5 and the specifications for details). This bid item includes: • Furnish & Install CCI cards • Furnish and Install AP unit on existing CCTV pole. • Furnish and Install Outdoor Rated CAT 5E cable in existing conduits. • Disconnect existing Q1, Q2, and Q3 dlc's; coil and store in existing cabinet. • Furnish and install WVSN units and center in vehicle lane. <u>Please note that this bid item does not include furnishing and installing a 40' CCTV pole with a RP unit.</u> <u>Separate bid items have been provided for this pole with RP unit refer to bid items #3 & #4.</u>	1	LS		\$
3		TS-5, TS-7	Install 2' Diameter Cast-In-Drilled-Hole Concrete Pile at Almaden Expressway (See Sheet E-5 and the specifications for details).	7	FT	\$	\$
4		TS-7	Install 40' CCTV pole with RP unit at Almaden Expressway. (See Sheet E-3 & E-5 and the specifications for details)	1	LS		\$

5		TS-2 TS-3	Traffic Control System This cost includes labor to place traffic control devices, traffic control devices (e.g. cones), and flaggers. Detour Signs and PCMS are not included in this bid item. Bid item cost does not include COZEER. This cost is VTA's responsibility. This Bid item should include traffic control costs to install bid items 1A, 1B, 2, 3, 4, 6, 7, 8, 9, and 10.	1	LS		\$
6		TS-2 TS-3	Detour Sign – See DE-1	1	LS		\$
7		TS-6	Install 8" White Line (Detail 38) (See Sheets PDS-1, PDS-2, & PDS-3 and the specifications for details).	275	FT	\$	\$
8		TS-6	Remove 8" Broken White Line (Detail 37) (See Sheets PDS-1, PDS-2, & PDS-3 and the specifications for details).	275	FT	\$	\$
9		TS-6	Install 8" Broken White Line (Detail 37) (See Sheets PDS-1 and the specifications for details).	275	FT	\$	\$
10		TS-6	Remove 4" Broken White Line (Detail 12) (See Sheets PDS-1 and the specifications for details).	275	FT	\$	\$
11		TS-6	Remove Pavement Marker (Retroreflective) (See Sheets PDS-1 & PDS-2 and the specifications for details).	58	EA	\$	\$
12		TS-6	Relocate Existing Sign (See Sheets PDS-1, PDS-2, & PDS-3 and the specifications for details).	2	EA	\$	\$
Total Contract Bid Price							\$

SUBMITTED BY:

Full and correct name of Bidder:

Business Address:

Phone

Fax

California Contractor's License:

Number:

Class

Expires

CONTRACTOR INFORMATION

The names of all persons as principals interested in the foregoing bid are as follows:

(IMPORTANT NOTICE: If Bidder or other interested person is a corporation, give legal name of corporation, and names of the President and Secretary thereof; if a partnership, give name of the firm, also names of all individual partners composing firm; if Bidder or other interested person is an individual, give first and last names in full. If a Bidder is a joint venture, supply the above information for each joint venture partner.)

The person signing this Bid Form for the Bidder certifies that he or she is authorized by the Bidder to do so and that the Bidder shall be bound contractually by that signature.

Signature _____

Name _____
(Print)

Title _____

Date _____

BIDDER'S BOND

KNOW ALL PEOPLE BY THESE PRESENTS: That

WHEREAS the undersigned, _____

as Principal and _____

as Surety, are held and firmly bound unto the Santa Clara Valley Transportation Authority, a political subdivision of the State of California (hereinafter called "VTA") in the penal sum of **10% of the Total Contract Price** of the Principal above named, submitted by said Principal to VTA for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such that a Bid to VTA for performance of that certain construction described as

CONTRACT 10074

Re-Bid Ramp Metering Implementation Project Phase III

has been submitted by Principal to VTA.

NOW THEREFORE, if the aforesaid Principal shall not withdraw said bid within **60 calendar days** after said opening, and shall within the period specified ☐herefore, or if no period be specified, within **six working days** after the prescribed forms are presented to Principal for signature, enter into a written contract with VTA in the prescribed form in accordance with the Bid as accepted, submit the required insurance certificates and file two bonds with VTA; a Performance Bond in the amount of **100%** of the Contract Amount to guarantee faithful performance of the work under the Contract and a Payment Bond in the amount of **100%** of the Contract Amount to guarantee payment for labor and materials, as required by law, or in the event of the withdrawal of said Bid within the period specified or the failure to enter into such contract and give such bonds and insurance within the time specified, if the Principal shall pay VTA the difference between the amount specified in said Bid and the amount for which VTA may procure the required work, if the latter amount be in excess of the former, together with all costs incurred by VTA in again calling for bids, should that become necessary, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract on the call for Bids, or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation under this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of said Contract or the call for bids, or to the work, or to the specifications.

In the event suit is brought upon this Bond by VTA and judgment is recovered, the Surety shall pay all costs incurred by VTA in such suit, including a reasonable attorney's fee to be fixed by the court in accordance with applicable statutory law.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this _____ day of _____, 20_____.

PRINCIPAL:

(Company)

(Signature)

(Name – Please Print)

(Title)

SURETY:

(Company)

(Signature)

(Name – Please print)

(Title)

NOTE: Signatures of those executing for Surety must be acknowledged by a Notary.

NOTE TO SURETY COMPANY:

The following form of acknowledgement should be used. If any other form of acknowledgement is used, there must be submitted a certified copy of unrevoked resolution of authority for the attorney-in-fact.

SURETY COMPANY ATTORNEY-IN-FACT

State of California)
County of _____)

On _____, before me, the undersigned, a Notary Public in and for

the State, personally appeared _____, known to me to be the duly authorized Attorney-in-Fact of the corporate Surety named in the within instrument, known to me to be authorized to execute that instrument on behalf of said corporation, known to me to be the person whose name is subscribed to such instrument as the Attorney-in-Fact of said corporation, and acknowledged to me that he (she) subscribed the name of said corporation thereto as Surety, and his (her) own name as Attorney-in-Fact and that said corporation executed the same.

WITNESS MY HAND AND OFFICIAL SEAL:

(SEAL)

Notary Public for the State of California

Acknowledgement by Attorney-in-Fact must be attached.
Corporate seals of Principal and Surety must be attached.

Re-Bid Ramp Metering Implementation Project Phase III

Contract 10074

Issued May 14, 2010

BID FORM #4

LISTING OF UDBE PRIME OR SUBCONTRACTORS CONTRACT 10074

Firm (Prime): _____

Street Address: _____

City, State, Zip: _____

Underutilized Disadvantaged Business Enterprise: Yes No _____

Age of Firm: _____ Phone: _____

Fax/ e-mail: _____

Name & Title: _____

Signature: _____

Date: _____

Contract dollar value must exclude work performed by non-DBEs except materials or equipment purchased and used in this contract.

CREDIT FOR UDBE VENDOR of materials or supplies is **limited to 60%** of its expenditures for materials and supplies required under this Contract and obtained from a UDBE regular dealer. Credit for UDBE manufacturers is given at 100% toward the UDBE goal only where the UDBE vendor manufactures or substantially alters the material prior to resale.

CREDIT FOR UDBE BROKERS (Distributor or Representative) is limited to the fees and commissions of the amount paid. All other firms receive 100% credit, less work subcontracted by the UDBE to non-UDBE firms, towards the UDBE Contract Goal.

CREDIT FOR UDBE TRUCKING FIRMS is limited to amount performed by the UDBEs own trucks and drivers and by certified UDBE trucking subhaulers. A UDBE trucking firm must itself own and operate at least one fully licensed, insured and operational truck used on the contract. *A UDBE must be certified or accepted as Certified by VTA.* Refer to 49CFR Part 26.

Name & Address of Certified UDBE	Certification Number	Agency Certifying	Age Of Firm	Type of Firm *	Description of Work	Bid Item	Dollar Value of Contract
							\$

UDBE GOAL IS DETERMINED ON BASE CONTRACT AMOUNT

Base Contract Amount: \$ _____

UDBE Contract Amount: \$ _____

UDBE Amounts and Base Amounts Must Exclude Alternate Bids

*Minority Type: BA-Black American; NA-Native American
AP-Asian Pacific American; W-Woman

UDBE Achieved

UDBE Contract Goal

UDBE Contract Amount X 100 = _____ %

14 %

IMPORTANT! THIS FORM MUST BE SUBMITTED BY 4:00 p.m. THE NEXT WORKING DAY FOLLOWING THE BID OPENING

Ramp Metering Implementation Project Phase III
CONTRACT 10074
Issued May 14, 2010

Bid Form #4a

SUPPLEMENTAL PRIME CONTRACTOR AND SUBCONTRACTOR INFORMATION

Contract 10074

Re-Bid Ramp Metering Implementation Project Phase III

In response to US DOT requirements (49 CFR Part 26.11), all firms bidding on prime contracts and bidding or quoting subcontractors on DOT assisted projects are required to submit the following information to VTA. The form shall be copied by the prime bidder and distributed to all bidders. The completed forms are to be submitted by 4:00pm on the 2nd day following bid opening.

Date: _____					
Contract Name & Number: _____					
Firm Name: _____					
Firm Address: _____					
Phone #: _____					
Fax #: _____					
Age of Firm: _____					
(Check one)					
Annual Gross Receipts					
Indicate bracket of income					
Below \$500K	\$500K - \$1M	\$1M - \$4M	\$4M-\$6M	\$6-\$13M	Above \$19m

Check one: UDBE _____ DBE _____ SBE _____ Non-SBE/DBE _____
 Ethnicity* _____ Gender _____ Work/Trade Category _____
 *A= Asian, AI=Asian Indian, B=Black, C=Caucasian, H=Hispanic, NA=Native American, O=Other

Completed by: _____
Email address: _____

To be completed by prime bidder:

Was this firm selected for a subcontract or purchase for this contract? Yes _____ No _____
 If yes, the dollar value of this subcontract or purchase is: \$ _____
 The description of this firm's work is: _____

Valley Transportation Authority, Office of Small & Disadvantaged Business
3331 North First Street, Building A, San Jose, CA 95134-1927 If you require additional forms or information, call (408) 321-5962

REFERENCES
CONTRACT 10074
Re-Bid Ramp Metering Implementation Project Phase III

Bidder: _____

Bidder shall provide the following information for the last three completed projects of similar scope, size and dollar value.

Name of Owner	Owner's Representative	Owner's Address and Telephone Number
Contractor's Superintendent	Bid Price	Date Started and Date Completed
Name of Owner	Owner's Representative	Owner's Address and Telephone Number
Contractor's Superintendent	Bid Price	Date Started and Date Completed
Name of Owner	Owner's Representative	Owner's Address and Telephone Number
Contractor's Superintendent	Bid Price	Date Started and Date Completed

BID FORM # 6

LITIGATION DISCLOSURE
CONTRACT 10074
Re-Bid Ramp Metering Implementation Project Phase III

Bidder shall list all pending litigation, and any litigation that has been closed in the past three years, for which Bidder's firm has been either a plaintiff or defendant.

Pending Litigation

Litigation settled in the last three years

(Use additional sheets if necessary)

BID FORM #7

NON-COLLUSION AFFIDAVIT
to be executed by Bidder and submitted with bid

CONTRACT 10074
Re-Bid Ramp Metering Implementation Project Phase III

State of California)
)
County of _____) ss.

(Name)
being first duly sworn, deposes and says he or she is

(Position / Title) of _____
(Company)

the party making the foregoing bid and that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid; and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the Bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Signature of Affiant

Subscribed and sworn to before me on this _____ day of _____, 20__

at _____,
(City) (State)

Signature of Notary Public or Officer Taking Oath

Seal of Notary Public or
Officer Taking Oath

BID FORM #8

**CERTIFICATE OF BIDDER
PURSUANT TO GOVERNMENT CODE SECTION 4420**

Bidder certifies the following:

1. Bidder does not have serious and willful violations of Part 1 (commencing with Section 6300) of Division 5 of the Labor Code, during the past five-year period *or*

Bidder is taking appropriate corrective action to prevent further violations of Part 1 of Division 5 of the Labor Code.
2. Bidder's workers' compensation experience modification factor is below 1.25 *or*

Bidder's ex-mod rate is 1.25 to 1.75 and Bidder is taking all appropriate action to reduce employee workplace injuries, illnesses and workers' compensation losses.
3. Bidder has an injury prevention program instituted pursuant to Section 3201.5 or 6401.7 of the Labor Code.

Dated: _____

Bidder:

Signature

Printed Name

Printed Title

BID FORM #20

**CERTIFICATION OF
RESTRICTIONS ON LOBBYING
CONTRACT 10074**

Bidder hereby certifies as follows:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of Bidder, to any person for influencing or attempting to influence an officer or employee of any 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.
2. 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 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, Bidder shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
3. Bidder shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance is 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 Section 1352, Title 31, U.S. Code. 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.

Bidder _____

By _____

Title _____

Date _____

BID FORM # 21

BUY AMERICA CERTIFICATION

(Steel or Manufactured Products)

**CONTRACT 10074
Re-Bid Ramp Metering Implementation Project Phase III**

Certificate of Compliance with Section 165(a)

The bidder hereby certifies that it will comply with the requirements of section 165(a) of the Surface Transportation Assistance Act of 1982, as amended, and the applicable regulations in 49 CFR part 661.

Date _____

Signature _____

Company Name _____

Title _____

Certificate for Non-Compliance With Section 165(a)

The bidder hereby certifies that it cannot comply with the requirements of section 165(a) of the Surface Transportation Assistance Act of 1982, as amended, but it may qualify for an exception to the requirement pursuant to section 165(b)(2) or (b)(4) of the Surface Transportation Assistance Act of 1982 and regulations in 49 CFR 661.7.

Date _____

Signature _____

Company Name _____

Title _____

BID FORM #22

*(THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL
SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE
CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL)*

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____, proposed
subcontractor _____, hereby certifies
that he has ____ has not ____ participated in a previous contract or subcontract subject to the
equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that,
where required, he has filed with the Joint Reporting Committee, the Director of the Office of
Federal Contract compliance, a Federal Government contracting or administering agency, or the
former President's Committee on Equal Employment Opportunity, all reports due under the
applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b)(1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally, only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

6.0 SPECIAL CONDITIONS

6.0 SPECIAL CONDITIONS

SC-1 Indemnification Contractor shall indemnify, defend, and hold harmless VTA, State of California or other person, the Municipality or other entity within whose jurisdiction or on whose property the work is being performed, and their Board of Supervisors, Board of Directors, Councils, officers, agents, consultants and employees from any claim, liability, loss, injury or damage arising out of, or in connection with, the performance of this Contract by Contractor and/or its agents, employees or subcontractors, excepting only loss, injury or damage arising from the sole or active negligence or willful misconduct of such indemnitees, their agents, servants or independent contractors who are directly responsible to the indemnitees, or for defects in design furnished by VTA, its agents, servants or independent contractors who are directly responsible to VTA, as provided in Civil Code §2782 *et seq.* It is the intent of the parties to this Contract to provide the broadest possible coverage for VTA and all indemnitees. Contractor shall reimburse VTA and all indemnitees for all costs, attorneys' fees, expenses and liabilities incurred with respect to any litigation in which Contractor is obligated to indemnify, defend and hold harmless VTA and other indemnitees under this Contract.

SC-2 Insurance (Required for contracts over \$10,000) Without limiting the Contractor's indemnification of VTA, the Contractor shall procure and maintain 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, its agents, representatives, or employees, or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

2.1 Liability and Workers' Compensation Insurance

2.1.1 Minimum Scope of Coverage Coverage shall be at least as broad as:

- a. Commercial General Liability coverage; Insurance Services Office "occurrence" form CG 0001. Liability insurance written on a "claims made" basis is not acceptable.

- b. Business Auto Coverage, Insurance Services Office form number CA 0001, covering Automobile Liability, code 1 "any auto."
- c. Workers' Compensation insurance, as required by the Labor Code of the State of California, and Employers Liability insurance.

2.1.2 Minimum Limits of Insurance

Contractor shall maintain limits no less than:

- a. General Liability (including umbrella/excess liability): \$2,000,000 combined single limit 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/location or the general aggregate limit shall be twice the required occurrence limit.
- b. Automobile Liability (including umbrella/excess liability): \$1,000,000 combined single limit per accident for bodily injury and property damage.
- c. Workers' Compensation and Employers Liability: Statutory Workers' Compensation limits and Employers Liability limits of \$1,000,000 per accident.

2.1.3 Self-Insured Retention Any self-insured retention in excess of \$25,000 must be declared to and approved by VTA. To apply for approval for a level of retention in excess of \$25,000 the proposer/bidder must provide a current financial statement documenting the ability to pay claims falling within the self-insured retention. At the option of VTA, either: the insurer shall reduce or eliminate such self-insured retention as respects VTA, its officers, officials, employees and volunteers; or the proposer/bidder shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

2.2. Work and Materials Insurance The Contractor shall be responsible for all loss or

damage, howsoever caused, to the work and materials until final acceptance by VTA. For contracts in excess of \$75,000 the Contractor shall procure and maintain at its own expense Work and Materials insurance (including but not limited to Builder's Risk, Course of Construction, Installation Floater or similar first-party property insurance covering the interest of the Contractor and VTA) as follows:

2.2.1 Coverage shall be provided on an "all-risk" basis. Coverage does not need to include the perils of earth movement and water damage.

2.2.2 Coverage shall be provided on the work and materials which are the subject of this Agreement, whether in process or manufacture or finished, including "in transit" coverage to the final agreed upon destination of delivery, and including loading and unloading operations, and such coverage shall be in force until the work and materials are accepted by VTA.

2.2.3 Coverage shall be in an amount no less than the full replacement value of the finished work and materials with no periodic reporting requirements.

2.2.4 The deductible shall not exceed \$10,000 per occurrence and shall be borne by the Contractor.

2.2.5 Loss, if any, shall be adjustable with and payable to VTA as trustee for all entities having an insurable interest.

2.3 Other Provisions The policies are to contain, or be endorsed to contain, the following provisions:

2.3.1. General Liability and Automobile Liability

- a. VTA, its officers, officials, employees and volunteers are to be covered as Additional Insureds as respects: liability arising out of activities performed by or on behalf of the Contractor, including VTA's general supervision of the Contractor; products and completed operations of the Contractor and its subcontractors; premises owned,

occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to VTA, its officers, officials, employees, or volunteers.

Note: The above "Additional Insured" requirement is waived if a Railroad Protective Liability policy is required.

- b. The Contractor's insurance coverage shall be primary insurance as respects VTA, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by VTA, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to VTA, its officers, officials, employees, or volunteers.
- d. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

2.4 Acceptability of Insurers Insurance and bonds are to be placed with insurers with a Best's rating of no less than A for general liability, automobile and railroad protective liability and B for workers' compensation unless specific prior written approval has been granted by VTA.

2.5 Certificates of Insurance Contractor shall furnish VTA with a Certificate of Insurance. The certificates for each insurance policy are to be signed by an authorized representative of that insurer. The certificates will be issued on a standard ACORD Form or something substantially similar thereto.

The certificates will (1) identify the underwriters, the types of insurance, the insurance limits and the policy term, (2) specifically list the provisions enumerated for such insurance in Section 2.3 above, and (3) in the "Certificate Holder" box include:

Santa Clara Valley Transportation
Authority
Contracts Office
3331 North First Street, Building A
San Jose, CA 95134-1906

All certificates are to be received and approved by VTA before work commences. VTA reserves the rights to require complete, certified copies of all required insurance policies, at any time.

Each insurance policy required by this Exhibit shall provide that if the policy is canceled or coverage reduced, such cancellation or reduction shall not be effective for 30 days, except for non-payment of premium which shall be 10 days, after receipt by VTA of written notice of such cancellation or reduction.

2.6. Maintenance Of Insurance If Contractor fails to maintain such insurance as is called for herein, VTA, at its option, may suspend payment for work performed and/or may order the Contractor to suspend work at Contractor's expense until a new policy of insurance is in effect.

SC-3 Contract Bonds Prior to execution of the Contract, Contractor shall file with VTA on the forms provided herein, two surety bonds in the amounts and for the purposes noted below, duly executed by a reputable surety company satisfactory to VTA; *provided, however*, that no bonds are required on contracts of \$25,000 or less. Contractor shall pay all premiums and costs relating to required bonds, whether direct or incidental thereto. Both Contractor and surety shall sign each bond.

3.1 Payment Bond The Payment Bond shall be in an amount of **100%** of the Total Contract Price and shall inure to the benefit of persons performing labor or furnishing materials in connection with the work of the proposed Contract. This bond shall be maintained in full force and effect until all work under the Contract is completed and accepted by VTA, and until all claims for materials and labor have been paid.

3.2 Performance Bond The Performance Bond shall be in an amount of **100%** of the Total Contract Price and shall insure the faithful performance by Contractor of all work under the Contract. It shall also insure

the replacing of, or making acceptable, any defective materials or faulty workmanship.

3.3 Surety Requirements Sureties for necessary bonds (including Bid Bond, Performance Bond and Payment Bond) shall meet the following requirements:

3.3.1 For projects not exceeding \$250,000:

A California Admitted Surety OR a current Treasury Listed Surety (Federal Registry) with a current A.M. Best rating of B OR a current Standard and Poors (S&P) rating of BB.

OR

An admitted surety which complies with the provisions of Code of Civil Procedure, Section 995.660.¹

OR

A company that is approved by VTA Risk Manager.

SC-4 Time for Performance The time limit for completion of all work under the Contract is **60 calendar days** commencing on the twentieth (20th) calendar day following issuance of the Notice of Award.

SC-5 Liquidated Damages Contractor agrees that its failure to complete the work or any part thereof within the time periods or by the dates specified in the Contract, as such time periods or dates may be revised by Change Order will result in damages being sustained by VTA. Since it is impractical and infeasible to determine the actual amount of such damage, it is further agreed that Contractor shall pay to VTA, as agreed, fixed and liquidated damages and not as a penalty, the amount specified hereunder for each day of delay or part thereof until such work or part thereof is

¹ California Code of Civil Procedure Section 995.660, in summary, states that an admitted surety must provide: 1) the original, or a certified copy of instrument authorizing the person who executed the bond to do so; 2) a certified copy of the Certificate of Authority issued by the Insurance Commissioner; 3) a certificate from Insurance Manager that Certificate of Authority has not been surrendered, revoked, canceled, annulled or suspended; 4) a financial statement showing the assets and liabilities of the insurer at the end of the quarter calendar year, prior to 30 days next preceding the date of the execution of the bond.

completed and accepted, and Contractor and its surety shall be liable for the amount thereof.

VTa may deduct the sum of liquidated damages from progress or final payment(s) due under this Contract as follows:

- For each 10-minute interval, or fraction thereof past the time specified to reopen lane closures as specified in the "Closure Requirements and Conditions," section of the Technical Specifications.
- All work specified under this contract shall be completed and accepted by VTA within the duration set out in SC-4 Time for Performance. \$2,000 per calendar day thereafter for each and every day beyond the time specified in SC-4, Time for Performance will be assessed.

SC-6 Contract Data Requirements Contractor shall submit to VTA the items shown on the Contract Data Requirement List and the Technical Submittals List (both appearing in this Section 6.0, Special Conditions) in compliance with the times and in the number of copies specified therein. Requirements and procedures for preparing and transmitting items shown on the Technical Submittals List shall conform to the following:

6.1 Drawings Contractor shall prepare working and shop drawings as required by VTA for the performance of the work. Drawings shall be prepared on a reproducible sheet measuring 559 mm x 864 mm, unless otherwise approved. Each drawing shall have a blank area 127mm x 127mm minimum, located above the title block, for the acceptance stamp. The title block shall display the following:

- Contract number and name
- Number and title of drawing
- Date of drawing or revision
- Name of Contractor and Subcontractor originating drawing
- Clear identification of contents and location of work
- Referenced Technical Specifications
- Structural calculations signed and sealed by a California licensed civil engineer, where applicable.

6.2 Detail Drawings Contractor shall furnish detail drawings for temporary work and method of proposed construction for the safe and successful completion of the work.

6.3 Submittal Cover Letter Submittals shall be accompanied by a "Submittal Cover Letter" form neatly and properly filled out. Forms will be furnished by VTA.

6.4 Copies of Drawings Contractor shall submit two reproducible and six legible copies of complete and detailed working and shop drawings, which shall be suitable for microfilming, to VTA. Such drawings shall include but not be limited to:

- Fabrication and erection drawings, schedule drawings and manufacturer's scale drawings. If requested by VTA, Contractor shall furnish calculations and information substantiating the details shown on the drawings satisfactory to VTA.
- Plans for temporary structures, and for such other work as may be required for construction, which does not become an integral part of the completed project. Contractor shall submit two copies of the calculations and other information needed to describe in detail the temporary structures or systems and their intended use.

All submittals for electrical equipment shall conform to the provisions of the appropriate technical specifications of the contract. All electrical materials shall be tagged in conformance with the provisions of GC-49, Certificates of Compliance and Testing, before delivery to the work site. Untagged electrical materials will be rejected.

6.5 Time for Submittal Contractor shall submit drawings and schedules sufficiently in advance of construction requirements as indicated in SC-51. Contractor shall also submit six copies of supporting data such as manufacturers literature for all items.

The approval of drawings and schedules will be general and shall not be construed as:

- Permitting any departure from contract requirements;

- Offering relief from the responsibility for any errors, or omissions including details, dimensions, and materials;
- Approving departures from details furnished by VTA, except as otherwise provided in **Section 8.0 Technical Specifications**.

6.6 Variations If drawings show variations from contract requirements because of standard shop practice or for any other reason, such variations shall be described in the letter of submittal.

- VTA may approve or reject any or all variations.
- If variations result in an adjustment to the contract price or time for performance, the adjustment shall be subject to approval by VTA.
- Failure to describe variations shall not relieve Contractor from the responsibility of executing the work in accordance with the Contract, even though such drawings have been approved.

6.7 Corrections If corrections to the drawings are required, each print will be marked **"MAKE CORRECTIONS NOTED"** or **"AMEND AND RESUBMIT"** and the required corrections will be explained. One print and one reproducible copy will be returned for correction.

6.8 Re-submittals Re-submittals will be handled in the same manner as first submittals, and the same review time shall apply.

- Specific attention shall be directed to revisions other than those requested by VTA on previous submittals by an accompanying letter or on the resubmitted drawings.
- If any corrections shown on the drawings constitute a change of contract requirements, VTA shall be notified, as previously specified.

6.9 Acceptance If accepted by VTA, each copy of the drawing will be stamped and dated indicating acceptance. One print and one reproducible copy will be returned.

6.10 Changes When working and shop drawings have been completed to the satisfaction of VTA, the construction shall be carried out in accordance with such drawings, and no changes

shall be made thereon except upon written direction from VTA.

During execution of the work, Contractor shall use only drawings that are either stamped **"MAKE CORRECTION NOTED"** or **"NO EXCEPTIONS TAKEN"** and bear VTA's signature.

6.11 Damages Contractor shall take responsibility for, and bear all cost of, damages which may result from ordering material or from proceeding with work before approval by VTA.

6.12 Samples Contractor shall furnish samples as specified and requested by VTA as soon as possible after request. Unless otherwise indicated, not less than two identical samples of each type required shall be submitted.

Shipping charges on samples shall be prepaid by Contractor. Products for which samples are requested shall not be used until approved in writing by VTA. Each sample shall be labeled to indicate:

- Name of project and Contract number
- Name of Contractor and Subcontractor or Supplier, if applicable
- Material or equipment represented
- Source
- Name of producer and brand (if any)
- References to the parts of Section 8.0 Technical Specifications and Section 9.0 Plans which are applicable to the sample
- Location of work

Certain samples may be tested by VTA. Approved samples not destroyed in testing may be retained by VTA. Samples not approved will be returned at Contractor's expense, if so requested at the time of submittal.

6.13 Shipment Letter A letter shall be mailed under separate cover submitting each shipment of samples and detailing the information required in the preceding paragraph. A copy of the letter shall be enclosed with the shipment.

6.14 Test Results Documents such as certificates, reports, and test results specified in Section 8.0 Technical Specifications shall be submitted to VTA.

- Three copies of each required shall be submitted, unless specified otherwise.
- Notice of completion of work to hold points specified in the encroachment permit must be given to VTA fourteen calendar days before estimated completion of that work.

6.15 Payment Contractor shall receive no separate payment from VTA for complying with the above requirements and shall include such costs in its bid price.

SC-7 Permits and Fees Contractor shall be responsible for securing a copy of VTA acquired permits from VTA and shall comply with said permits requirements. Contractor shall pay all charges required to comply with the conditions outlined in the permits.

The following permits will be obtained by VTA prior to the notice to proceed unless otherwise specified:

- a) Caltrans Encroachment Permit issued to VTA
- b) Santa Clara County Encroachment Permit issued to VTA

Contractor shall apply for all jurisdictional permits required to perform the work and will include the cost of the required permits in the bid price. Contractor shall maintain a copy of all permits on the project site.

7.1 Caltrans Permit - Contractor shall obtain a copy of the Caltrans Encroachment Permit issued to the Santa Clara Valley Transportation Authority and shall comply with all provisions of said permit. Contractor shall apply for the Caltrans Construction Encroachment Permit within ten (10) days after the Notice of Award. The Contractor obtained Caltrans Construction Encroachment Permit will require, but is not limited to, the following provisions:

- (1) Proof of payment and performance surety bonds.
- (2) In addition to VTA's insurance requirements, Contractor shall maintain in force a policy of Liability Insurance, including coverage of Bodily Injury Liability and Property Damage Liability,

in accordance with Section 7-1.12 of Caltrans Standard Specifications, until completion and acceptance of the project construction contract. Such policy shall contain an additional insured endorsement naming State of California, its officers, agents and employees as additional insureds. Coverage shall be evidenced by a Certificate of Insurance in a form satisfactory to State of California which shall be delivered to State of California before the issuance of an encroachment permit to VTA's contractor.

- (3) Other conditions as stipulated in said permit to be issued by Caltrans to VTA.

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.

SC-8 Materials & Services

SC-8.1 Source of Supply and Quality of Materials Contractor shall furnish all materials required to complete the work, except materials that are designated in the specifications to be furnished by VTA.

Only materials conforming to the requirements of the specifications shall be incorporated in the work.

The materials furnished and used shall be new, except as may be provided elsewhere in these specifications or on the contract plans. The materials shall be manufactured, handled and used in a workmanlike manner to ensure completed work in accordance with the plans and specifications.

Materials to be used in the work will be subject to inspection and tests by VTA or VTA's designated representative. Contractor shall furnish without charge such samples as may be required.

Contractor shall provide VTA with a list of Contractor's sources of materials and the locations at which those materials will be available for inspection. The list shall be submitted on a VTA furnished form and shall be provided to VTA in sufficient time to permit inspecting and testing of materials to be supplied

from the listed sources in advance of their use. VTA furnished materials shall be identified within the baseline schedule as a separate activity as detailed in SC-23, Progress Schedule. VTA may inspect, sample or test materials at the source of supply or other locations, but the inspection, sampling or testing will not be undertaken until VTA is assured by Contractor of the cooperation and assistance of both Contractor and the supplier of the material. Contractor shall assure that VTA or VTA's authorized representative has free access at all times to the material to be inspected, sampled or tested.

It is understood that the inspections and tests if made at any point other than the point of incorporation in the work shall in no way be considered as a guaranty of acceptance of the material nor of continued acceptance of material presumed to be similar to that upon which inspections and tests have been made, and that inspection and testing performed by VTA shall not relieve Contractor or Contractor's suppliers of responsibility for quality control.

Manufacturers' warranties, guaranties, instruction sheets and parts lists, which are furnished with certain articles or materials incorporated in the work, shall be delivered to VTA before acceptance of the contract.

Reports and records of inspections made and tests performed, when available at the site of the work, may be examined by Contractor.

SC-9 Not Used

SC-10 Work Sequence & Constraints

10.1 Work Sequence When required by these Special Conditions, the Technical Specifications, or the plans, Contractor shall follow the sequence of operations as set forth therein.

Attention is directed to "Order of Work" of the Technical Specifications regarding work sequencing and the "Stage Construction/Traffic Handling Plans" for details of the proposed construction sequencing.

Full compensation for conforming to those requirements and to the regulatory permits contained in the appendices will be considered as included in the prices paid for the various items

of work and no additional compensation will be made.

10.2 Coordination Refer to Article GC-39, Cooperation/ Coordination and Work by Others.

Contractor shall coordinate its Work with all other contractors, utility companies, and subcontractors performing work on or adjacent to the site. Contractor shall schedule its work so as to avoid conflicts with other contractors and to avoid damage to completed or incomplete Work. Contractor shall be responsible for any damage to the work of other contractors or subcontractors if Contractor's actions resulted in such damage. Contractor shall take immediate action to remedy such damage so as to not delay the immediate prosecution of the work.

Contractor's attention is directed to Section TS-13, "Obstructions," of the technical specifications.

10.3 Contractor's Work Area Reference is made to **GC-34, Contractors Work Area**. GC-34 is deleted in its entirety and replaced with the following.

The highway right of way shall be used only for purposes that are necessary to perform the required work. Contractor shall not occupy the right of way, or allow others to occupy the right of way, for purposes which are not necessary to perform the required work.

No State-owned parcels adjacent to the right of way are available for the exclusive use of Contractor within the contract limits. Contractor shall secure, at Contractor's own expense, areas required for storage of equipment or materials, or for other purposes.

No area is available within the contract limits for the exclusive use of Contractor. However, temporary storage of equipment and materials on State property may be arranged with the State, subject to the prior demands of State maintenance forces and to other contract requirements. Use of Contractor's work areas and other State-owned property shall be at Contractor's own risk, and the State or VTA shall not be held liable for damage to or loss of materials or equipment located within such areas.

Contractor shall obtain encroachment permits prior to occupying State-owned parcels outside the contract limits. The required encroachment permits may be obtained from the Department of Transportation, Permit Engineer.

Residence trailers will not be allowed within the highway right of way.

Contractor shall remove equipment, materials, and rubbish from the work areas and other State-owned property which Contractor occupies. Contractor shall leave the areas in a presentable condition in conformance with the provisions in **GC-53, Final Clean Up** and **GC-55, Final Inspection and Acceptance of All or a Portion of the Work.**

Contractor shall secure, at Contractor's own expense, areas required for plant sites, storage of equipment or materials or for other purposes, if sufficient area is not available to Contractor within the contract limits, or at the sites designated on the plans outside the contract limits.

SC-11 Survey Requirements Delete in its entirety GC- 44 Survey Requirements.

SC-12 Sound Control Requirements Contractor shall comply with all local sound control and noise level rules, regulations and ordinances that apply to any work performed pursuant to the Contract regardless of the right of way upon which the work is performed. If no maximum noise levels exist in local jurisdictions, the noise level from Contractor's operations, between the hours of 9:00 p.m. and 6:00 am, shall not exceed 86 dBA at a distance of 15 meters.

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.

Contractor shall maintain and operate all equipment consistent with the manufacturer's specifications. Construction equipment will include available noise suppression devices and properly maintained mufflers.

Contractor shall site fixed and mobile equipment to minimize noise emissions outside the right-of-way, and shall provide enclosures and/or heavy-duty mufflers for stationary equipment. All machinery and mobile equipment shall be turned off when not in use, and no unnecessary idling of equipment is permitted. Contractor shall minimize the staging of construction equipment in the vicinity of residences and other sensitive receptors.

Construction equipment shall not be operated, nor shall the engines of this equipment be allowed to run, between the hours of 7:00 p.m. and 7:00 a.m., or on weekends or holidays, except that within the limits of the project and subject to approval of VTA. Equipment may be operated during the restricted hours to:

- A. Service traffic control facilities
- B. Service construction equipment
- C. Perform that work which the contract specifies be done during restricted hours
- D. Saw transverse and longitudinal weakened plane joints in concrete pavement.

Minor deviations from this Section concerning hours of work which do not significantly change the cost of the work may be permitted upon the written request of Contractor, if in the opinion of VTA the work will be expedited and sound levels resulting from this work will not cause public inconvenience. The requirements in this Section shall not relieve Contractor from responsibility for complying with local ordinances regulating noise level outside the limits of the State right of way.

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

Sound and vibratory monitoring devices shall be required for all activities deemed public sensitive such as but not limited to the following:

- a. Pile driving
- b. Sheet Piling
- c. Vibratory compaction

- d. Saw cutting
- e. All demolition

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.

SC-13 Worker's Safety Provisions: Contractor shall take all necessary precautions for the safety of employees on the work, and shall comply with all applicable provisions of Federal, State, and local safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where the work is being performed. To that end, Contractor shall within six days of receipt of Notice of Award submit for review Contractor's Illness and Injury Prevention Program which shall apply to the work and Contractor shall designate a responsible member of its organization on the work whose duty shall be the prevention of accidents. The name and position of the person so designated shall be reported to VTA by Contractor at the preconstruction meeting. Contractor shall submit a Site Specific Safety Plan within 20 days of receiving VTA's Notice of Award.

Contractor shall erect and properly maintain at all times as required by the conditions and progress of the work, all necessary safeguards for the protection of workers and the public and shall post danger signs warning against the hazards created by such features of construction.

Contractor shall comply with the applicable provisions of the California Occupational Safety and Health Act of 1973 and the Labor Code. Contractor's attention is directed to the following:

For those employments or places of employment which by their nature involve a substantial risk or injury, Contractor shall obtain a permit from CAL-OSHA prior to the initiation of any practices, work, method, operation, or process of employment. Such employment or places of employment shall be limited to:

- Construction of any trench or excavation which is five feet or deeper and into which a person is required to descend.

- The construction or demolition of any building, structure, falsework, or scaffolding more than three stories high or the equivalent height.

For the excavation of any trench five feet or more in depth, Contractor shall, in advance of excavation and acceptance by VTA or by a Registered Civil or Structural Engineer employed by VTA to whom authority to accept has been delegated, submit a detailed plan to VTA showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench. If such plan varies from the shoring system standards, the plan shall be prepared by a Registered Civil or Structural Engineer. Nothing in this section shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the CAL-OSHA Construction Safety Orders.

Contractor shall be required at all times during any excavation work to have a CAL-OSHA approved "Competent Person" on the site. VTA will require proof of certification before beginning any excavation work.

SC-14 Hazardous Materials Contractor shall submit Material Safety Data Sheets (MSDS) for all hazardous materials being brought onto the project site, including but not limited to: asphalts, solvents, adhesives, epoxy resins, roofing sealants and bonding agents. Hazardous Materials Controls shall conform to the applicable federal, state and local rules and regulations. All hazardous materials and waste shall be stored in double walled containers in accordance with all applicable federal, state and local HazMat requirements. If volatile and/or noxious substances are being used in spaces that are not naturally ventilated, Contractor shall provide adequate and artificial ventilation.

Full compensation for conformance with the above requirements shall be considered to be included in the contract prices for the various items of work involved and no additional payment will be made therefor.

SC-15 Construction Water Conservation

Contractor shall, whenever possible and not in conflict with other requirements of the Contract, minimize the use of water during construction of the project. Watering equipment shall be kept in good working order; water leaks shall be repaired promptly; and washing of equipment, except when necessary for safety or for the protection of equipment, shall be discouraged. All water used for construction purposes such as dust control, compaction, cleaning streets, etc., may be reclaimed water.

SC-16 Air Pollution Control

The Contractor shall comply with all air pollution control ordinances and statutes which apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances and statutes, specified in Section 11017 of the Government Code and by the Bay Area Air Quality Management District.

Unless otherwise provided in the special provisions, material to be disposed of shall not be burned, either inside or outside the highway right of way.

SC-17 Contractor Cooperation and

Coordination Contractor shall conform to the SC-10.2, **Coordination**, and this section of these special conditions. Contractor shall cooperate with and coordinate its work with any private development work, utility relocation work or any other contractor which may be performing work in the immediate area of this work.

Contractor shall cooperate with VTA as directed to allow for any work adjacent to or within the limits of this project to be conducted during progress of the work on this contract.

Contractor shall provide Engineer 14-day advance notice of proposed work activities impacting ingress/egress to driveways within project limits.

Prior to any site preparation, grading or construction activities, Contractor shall cooperate as directed by VTA to allow a VTA biologist to conduct preconstruction surveys. Contractor shall not commence work until such time as the preconstruction surveys are complete as notified in writing by VTA.

If required Contractor shall attend weekly coordination meetings to review construction status problems, schedule, concerns, etc. and to resolve any outstanding issues, as directed by VTA.

Full compensation for work involved in complying with the requirements of these special conditions shall be considered as included in the contract prices paid for the various items of work involved and no additional time or compensation will be allowed therefor.

SC-18 Not Used

SC-19 Not Used

SC-20 Not Used

SC-21 Increase or Decreased Quantities, and Quantity Variation Reference is made to GC-57, **Increase or Decreased Quantities, and Quantity Variation**. GC-57 is deleted in its entirety and replaced with the following:

If the actual quantity on any item of work paid for on a unit price basis varies from the quantity for such item in the Schedule of Quantities and Prices by 25 percent or less, payment for the item of the work will be made at the contract unit price.

If the actual quantity of such a contract item of the work exceeds the quantity for such item in the Schedule of Quantities and Prices by more than 25 percent, the compensation payable to Contractor for the amount in excess of the 125 percent of the quantity will be reviewed by Contractor and VTA, and an equitable adjustment may be made to the unit price for such excess amount by means of a change order to credit VTA with any reduction in cost or to compensate Contractor for any increase in the cost resulting from the change in quantity. This review of the adjustment will be made on a force account basis in accordance with GC-60 at the time mutually acceptable to VTA and Contractor.

If the actual quantity of such a contract item of the work is less than 75 percent of the quantity for such item in the schedule of quantities and prices, the compensation payable to Contractor will be reviewed by the Contractor and VTA, and an equitable adjustment may be made to the unit price for the entire quantity by means of a change

order credited to VTA with any reduction in cost or compensate Contractor for any increase in cost resulting from the change in quantity. This review of the adjustment will be made on a force account basis in accordance with GC-60 at the time mutually acceptable to VTA and Contractor.

Full compensation for the total pay quantity of the work quantity of the work shall be considered as included in the contract prices paid for the various items of work involved and no additional time or compensation will be allowed therefor.

SC-22 Project Close-Out Requirements - Record Drawings During the project, Contractor shall keep a master set of drawings updated, noting any variation of the Work. Upon completion of the Work, Contractor shall produce a master "Record" set of plans by neatly transferring all such noted variations to blueprint copies of the same drawings, and shall deliver same to VTA for signed receipt, certification, and certification.

SC-23 Progress Schedule Contractor shall submit to VTA a bar chart or CPM schedule within 15 calendar days after Notice of Award. All schedules shall be prepared using the latest version of "Primavera Project Planner", "SureTrak", "Microsoft Project", "Microsoft Excel" or other computerized software acceptable to VTA. Handwritten schedules will not be accepted by VTA. The schedule shall show contract milestones, planned start and completion dates of all activities, submission and review of shop drawings and submittals, fabrication and procurement of material or equipment, delivery of material or equipment including owner-supplied materials, testing and inspection, and punchlist items. No field-type activity shall have duration greater than 15 days. The Contractor shall identify the activities which constitute the controlling operations or critical path. A narrative that describes the basis, assumptions and constraints used to develop the schedule shall accompany the schedule submittal. The schedule narrative shall include a list of anticipated non-work days and holidays.

Once the schedule is reviewed and accepted by VTA, it shall be considered as the Baseline Schedule. The schedule shall be updated regularly throughout the duration of the contract, statused through the end of the progress payment

period, and submitted with each progress payment application. The schedule update shall include a narrative report that describes the job progress, status of critical items, and delays experienced during the period. The Contractor shall request in writing revisions to the schedule and shall provide VTA with a written narrative with a description and reason for each revision. Schedule revisions shall not be incorporated into any schedule until the revisions have been accepted by VTA.

If the schedule update shows a completion date for any contract milestones or for contract completion that is beyond the date identified in the contract, Contractor shall submit a recovery schedule with the schedule update. The recovery schedule shall include a written narrative that describes the Contractor's proposal to recover lost time, basis and assumptions, and proposed methodology. When the Contractor becomes aware of circumstances that he considers a change to the contract, the Contractor shall prepare and submit a Time Impact Evaluation (TIE) which includes both a written narrative and schedule diagram that clearly demonstrate how the changed work affects the controlling operations or critical path. The Contractor shall submit the TIE within seven days of recognition of such change.

The Contractor is solely responsible for requesting a time extension for any change, delay, or disruption that, in the opinion of the Contractor, impacts the critical path of the current schedule update. Time extension will be granted only to the extent that the change, delay, or disruption that impacts the critical path is beyond the control and without fault or negligence of the Contractor or any subcontractor. The Contractor may be entitled to a compensable time extension for VTA-caused delays that are not concurrent with Contractor-caused or other excusable but non-compensable delays (i.e., weather). The Contractor may be entitled to a non-compensable time extension for VTA-caused delays that are concurrent with Contractor-caused or other excusable but non-compensable delays.

Contract time extensions for weather delays will only be considered for such delays which impact activities on the critical path of the contract as defined by the schedule current at the time of the delay. Such time extensions, if approved, will be non-compensable. Weather delays may consist of

days lost to adverse weather conditions, days lost to dry out of exposed soil, and or days lost to site clean-up due to adverse weather.

If a weekly progress meeting is required, the Contractor shall provide and present a time-scaled three-week look-ahead schedule that contains the actual progress for the previous week and planned activities for the upcoming three weeks. The activities in the three-week look-ahead schedule shall be based upon and correlated by activity number to the current schedule. The three-week look-ahead schedule shall form the basis for the progress schedule update.

VTA will review and respond in writing within 14 days of receipt of each schedule submittal. If the schedule is rejected (marked "amend and resubmit"), the Contractor shall resubmit the schedule within 7 days after receiving written notice of rejection.

In addition to the amount retained by VTA from each progress payment as provided for in General Conditions, GC-59, VTA may withhold additional amounts not to exceed 10% of the total progress payment for Contractor's failure to meet the requirements of Special Conditions, SC-23. VTA will pay the Contractor the amount withheld once VTA has determined that the Contractor has satisfactorily complied with the requirements of Special Conditions, SC-23.

SC-24 Minimum ESCAPE Best Management Practices

Refer to Article **GC-10 Erosion And Sediment Control Action plan Element (ESCAPE)** and make the following change: Delete the Article in its entirety and replace with the following:

GC-10 Water Pollution Control Program (WPCP)

The Contractor shall submit within 10 calendar days following Notice of Award a Water Pollution Control Program that complies with Caltrans NPDES General Permit (Order No. 99-06-DWQ, NPDES No. CAS000003) for storm water discharges associated with construction activities. The submittal will utilize the WPCP template located on Caltrans web site at:

http://www2.dot.ca.gov/hq/construc/stormwater/WPCP_Template_071707.doc

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 and no additional compensation will be allowed therefore.

SC-25 Not Used

SC-26 Not Used

SC-27 Final Pay Estimate

VTA will make a proposed final pay estimate in writing of the total amount payable to the Contractor, including an itemization of the total amount, segregated by contract item quantities, extra work and other bases for payment, and shall also show each deduction made or to be made for prior payments and amounts to be kept or retained under the provisions of the contract. Prior estimates and payments shall be subject to correction in the proposed Final Pay Estimate. The Contractor shall submit written approval of the proposed Final Pay Estimate or a written statement of exceptions, and the VTA receives the written approval or statement of exceptions, no later than the close of business of the thirtieth day (30th) after receiving the proposed Final Pay Estimate. If, the thirtieth (30th) day falls on a Saturday, Sunday or legal holiday, then receipt of the written approval or statement of exceptions by the VTA shall not be later than close of business of the next business day. The Contractor's receipt of the proposed Final Pay Estimate shall be evidenced by postal receipt. The VTA's receipt of the Contractor's written approval or statement of exceptions shall be evidenced by postal receipt or the VTA's written receipt, if delivered by hand.

Upon the Contractor's approval, or if the Contractor files no exceptions within the specified period of 30 days, the VTA will issue a Final Pay Estimate in writing, in conformance with the proposed Final Pay Estimate submitted to the Contractor, and within 30 days thereafter VTA will pay the entire sum found to be due. That Final Pay Estimate and payment thereon shall be conclusive and binding against both parties to the contract on all questions relating to

the amount of work done and the compensation payable therefor, except as otherwise provided in GC-59, "Progress Payment."

SC-28 Not Used

SC-29 Final Inspection and Acceptance of Work)

Reference is made to GC-55, Final Inspection and Acceptance of All or a Portion of the Work.

SC-30 Not Used

SC-31 Not Used

SC-32 Highway Construction Equipment
Pursuant to the authority contained in Section 591 of the Vehicle Code, VTA has determined that, within such areas as are within the limits of the project and are open to public traffic, the following requirements of the Vehicle Code will apply: the lighting requirements in Section 25803; the brake requirements in Chapter 3, Division 12; the splash apron requirements in Section 27600; and, when operated on completed or existing treated base, surfacing, pavement or structures, except as otherwise provided in SC-41, Weight Limitations.

SC-33 Not Used

SC-34 Conformity With Contract Documents and Allowable Deviations Work and materials shall conform to the lines, grades, typical cross sections, dimensions and material requirements, including tolerances, shown on the plans or indicated in the specifications. Although measurement, sampling and testing may be considered evidence as to conformity, VTA shall be the sole judge as to whether the work or materials deviate from the plans and specifications, and VTA's decision as to any allowable deviations there from shall be final.

SC-35 Use Of Materials Found On The Work Unless designated as selected material as provided in Section 19-2.07, "Selected Material" of the Caltrans Standard Specifications, Contractor, with the approval of VTA, may use in the proposed construction such stone, gravel, sand or other material suitable in the opinion of VTA as may be found in excavation. Contractor will be paid for the excavation of those materials at the contract price for the excavation, but

Contractor shall replace at Contractor's expense with other suitable material all of that portion of the material so removed and used which was contemplated for use in the work, except that Contractor need not replace, at Contractor's expense, any material obtained from structure excavation used as structure backfill. No charge for materials so used will be made against Contractor. Contractor shall not excavate or remove any material from within the highway location that is not within the excavation, as indicated by the slope and grade lines, without written authorization from VTA.

SC-36 Certificates of Compliance Reference is made to GC-49, Certificates of Compliance. GC-49 is amended to include the following:

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.

SC-37 Not Used

SC-38 Not Used

SC-39 Final Inspection and Acceptance Contractor's attention is directed to GC-55.1, Final Inspection and Acceptance of all the Work. GC-55.1 is amended to include the following:

There will be no portions of the work for which Contractor may be relieved of the duty of maintenance and protection as provided in GC-55.1.

SC-40 Dust Control This work shall consist of applying either water or dust palliative, or both, for the alleviation or prevention of dust nuisance.

Dust resulting from Contractor's work, either inside or outside the right of way, shall be controlled by Contractor in strict conformance with the General Conditions of this contract, in addition to all current San Francisco Bay Area Air Quality Management District regulatory requirements.

It is also understood that this special condition will not prevent Contractor from applying water and/or dust palliative for Contractor's

convenience if so desired. Water shall be applied as provided in Section 17, "Watering" of the Caltrans Standard Specifications and dust palliative shall conform to and be applied as provided in Section 18, "Dust Palliative" of the Caltrans Standard Specifications.

ADDITIONALLY, AIR QUALITY MONITORING SHALL BE REQUIRED FOR THE FOLLOWING ACTIVITIES:

- 1) Earthwork operations
- 2) Saw Cutting
- 3) Sandblasting
- 4) Any additional operations which may contribute to the degradation of ambient air quality, as deemed necessary by VTA.

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.

SC-41 Weight Limitations Unless expressly permitted in **Section 8.0, Technical Specifications**, construction equipment or vehicles of any kind which, laden or unladen, exceed the maximum weight limitations set forth in Division 15 of the Vehicle Code, shall not be operated over completed or existing treated bases, surfacing, pavement or structures in any areas within the limits of the project

SC-42 Public Convenience and Safety

SC-42.1 Public Convenience. This Section defines Contractor's responsibility with regard to convenience of the public and public traffic in connection with Contractor's operations.

Attention is directed **GC-38, Public Convenience and Safety** and **Section 8.0, Technical Specifications** for provisions relating to the passage of traffic around the work over detours.

Attention is directed to **SC-42.2, Public Safety**, for provisions relating to Contractor's responsibility for the safety of the public. The provisions in **SC-42.2** are in addition to the provisions in this **SC-42.1** and Contractor will not be relieved of the responsibilities as set forth

in **SC-42.2** by reason of conformance with any of the provisions in this **SC-42.1**.

Attention is directed to **SC-43, Flagging** and **Section 12, "Construction Area Traffic Control Devices"** of the Caltrans Standard Specifications for provisions concerning flagging and traffic handling equipment and devices used in carrying out the provisions in this **SC-42.1** and **SC-42.2**.

In the event of a suspension of the work, attention is directed to **GC-69, Suspension of Work**.

Contractor shall so conduct operations as to offer the least possible obstruction and inconvenience to the public and shall have under construction no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public.

Unless otherwise provided in the special conditions, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible. Where possible, public traffic shall be routed on new or existing paved surfaces.

Spillage resulting from construction along or across any public traveled way shall be removed immediately by Contractor at Contractor's expense.

Existing traffic signals and highway lighting shall be kept in operation for the benefit of the traveling public during progress of the work, and other forces will continue routine maintenance of existing systems.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.

Convenient access to driveways, houses, and buildings along the line of the work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition. When the abutting property owner's access across the right of way line is to be eliminated, or to be replaced under the contract by other access facilities, the existing access shall not be closed until the replacement access facilities are usable.

Contractor may be required to cover existing signs that regulate or direct public traffic to roadways that are not open to traffic. VTA will determine which signs shall be covered. Except as otherwise provided for construction area signs in Section 12, Construction Area Traffic Control Devices, of the Caltrans Standard Specifications, furnishing, installing and removing covers will be paid for as extra work as provided in **GC-65, Change Requests and Change Notices**, and **GC-66, Change Orders**.

Full compensation covering Construction Area Signs shall be considered as included in the prices paid for Construction Area Signs bid item and no additional compensation will be allowed therefor.

Upon completion of loop repairing, or placing any subsequent layer thereon, the surface of the roadbed shall be brought to a smooth, even condition free of humps and depressions, satisfactory for the use of public traffic.

After the surface of the roadway has been brought to a smooth and even condition for the passage of public traffic as above provided, contractor shall, at Contractor's expense, repair any damage to the roadway including damage caused by Contractor's operations or use by public traffic.

Water or dust palliative shall be applied if ordered by VTA for the alleviation or prevention of dust nuisance as provided in **SC-40, Dust Control**.

In order to expedite the passage of public traffic through or around the work and where ordered by VTA, Contractor shall install signs, lights, flares, temporary railing (Type K), barricades and other facilities for the sole convenience and direction of public traffic. Also where directed by VTA, Contractor shall furnish trained competent flaggers whose sole duties shall consist of directing the movement of public traffic through or around the work. The cost of furnishing and installing the signs, lights, flares, temporary railing (Type K), barricades, and other facilities, will be paid for as bid item number 6, **Maintain Existing Traffic management system elements during Construction**.

The cost of furnishing flaggers for the sole convenience and direction of public traffic will be paid for as provided in **SC-43, Flagging**.

Contractor will be required to pay the cost of replacing or repairing all facilities installed under extra work for the convenience or direction or warning of public traffic that are lost while in Contractor's custody, or are damaged by reason of Contractor's operations to such an extent as to require replacement or repair, and deductions from any moneys due or to become due Contractor will be made to cover the cost.

Whenever a section of surfacing, pavement or the deck of a structure has been completed, Contractor shall open it to use by public traffic if VTA so orders or may open it to use by public traffic if VTA so consents. In either case Contractor will not be allowed any compensation due to any delay, hindrance or inconvenience to Contractor's operations caused by public traffic, but will thereupon be relieved of responsibility for damage to completed permanent facilities caused by public traffic, within the limits of that use. Contractor will not be relieved of any other responsibility under the contract nor will Contractor be relieved of cleanup and finishing operations.

Except as otherwise provided in this **SC-42.1** or otherwise in the special conditions, full compensation for conforming to the provisions in this **SC-42.1** shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

SC-42.2 Public Safety It is Contractor's responsibility to provide for the safety of traffic and the public during construction.

Attention is directed to **GC-45, Protection and Restoration of Property** and **SC-1, Indemnification**.

Attention is directed to **SC-42.1, Public Convenience**, for provisions relating to Contractor's responsibility for providing for the convenience of the public in connection with Contractor's operations.

Attention is directed to **Section 12, Construction Area Traffic Control Devices**, of the Caltrans Standard Specifications, for provisions concerning flagging and traffic-handling equipment and devices used in carrying out the provisions of **SC-42.1** and **SC-42.2**.

Whenever Contractor's operations create a condition hazardous to traffic or to the public, Contractor shall, at Contractor's expense and without cost to VTA, furnish, erect and maintain those fences, temporary railing (Type K), barricades, lights, signs and other devices and take such other protective measures that are necessary to prevent accidents or damage or injury to the public.

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

- (1) Excavations. The near edge of the excavation is 3.6m or less from the edge of the lane, except:
 - (a) Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - (b) Excavations less than 0.3m deep.
 - (c) Trenches less than 0.3m wide for irrigation pipe or electrical conduit, or excavations less than 0.3m in diameter.
 - (d) Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - (e) Excavations in side slopes, where the slope is steeper than 1:4 (vertical:horizontal).
 - (f) Excavations protected by existing barrier or railing.
- (2) Temporarily Unprotected Permanent Obstacles. The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and Contractor elects to install the obstacle prior to installing the protective system; or Contractor, for Contractor's convenience and with permission of VTA, removes a portion

of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.

- (3) Storage Areas. Material or equipment is stored within 3.6m of the lane and the storage is not otherwise prohibited by the provisions of the Caltrans Standard Specifications and these special conditions.

The approach end of temporary railing (Type K), installed in conformance with the provisions in this section and shall be offset a minimum of 4.6m from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than 0.3m transversely to 3m longitudinally with respect to the edge of the traffic lane. If the 4.6m minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.08, Temporary Railing (Type K), of the Caltrans Standard Specifications. Replace the second sentence of 12-3.08 to read, "Exposed surfaces of new and used units shall be freshly coated with a white color paint prior to each use on the project." Temporary railing (Type K), conforming to the details shown on 1995 Standard Plan T3 or 1992 Standard Plan T3, may be used. Temporary railing (Type K) fabricated prior to January 1, 1993, and conforming to 1988 Standard Plan B11-30 may be used, provided the fabrication date is printed on the required Certificate of Compliance.

The fourteenth paragraph of Section 12-3.08, Temporary Railing (Type K), of the Standard Specifications is amended to read: "Each rail unit placed within 3 m of a traffic lane shall have a reflector installed on top of the rail as directed by VTA. A Type P marker panel shall also be installed at each end of railing installed adjacent to a two-lane, two-way highway and at the end facing traffic of railing installed adjacent to a one-way roadbed. If the railing is placed on a skew, the marker shall be installed at the end of

the skew nearest the traveled way. Type P marker panels shall conform to the provisions in Section 82, "Markers and Delineators," except that Contractor shall furnish the marker panels."

Reflectors on temporary railing (Type K) shall conform to the provisions in "Approved Traffic Products" of the Technical Specifications.

Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" of the Technical Specifications.

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

- Approach speed of public traffic (Posted Limit over 72 KPH)- Work areas can be within 1.8m of a traffic lane but not on a traffic lane
- Approach speed of public traffic (Posted Limit between 56 and 72 KPH)- Work areas can be within 0.9 m of a traffic lane but not on a traffic lane

For this project, temporary railing (Type K) will not be allowed to be placed or removed without a lane closure.

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

When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of traffic lane, however, Contractor shall not reduce the width of an existing lane to less than 3.3m without written approval from VTA.

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

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

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

Fences, temporary railing (Type K), barricades, lights, signs, and other devices furnished, erected and maintained by Contractor, at Contractor's expense, are in addition to any construction area traffic control devices for which payment is provided for elsewhere in the specifications.

Contractor shall also furnish such flaggers as are necessary to give adequate warning to traffic or to the public of any dangerous conditions to be encountered, and payment therefor will be made as provided in **SC-43, Flagging**.

Signs, lights, flags, and other warning and safety devices and their use shall conform to the requirements set forth in the current Manual of Traffic Controls. Signs or other protective devices furnished and erected by Contractor, at Contractor's expense, as above provided, shall not obscure the visibility of, nor conflict in intent, meaning and function of either existing signs, lights and traffic control devices or any construction area signs and traffic control devices for which furnishing of, or payment for, is provided elsewhere in the specifications. Signs furnished and erected by Contractor, at Contractor's expense, shall be approved by VTA as to size, wording and location.

The installation of general roadway illumination shall not relieve Contractor of the responsibility for furnishing and maintaining any of the protective facilities herein before specified.

Construction equipment shall enter and leave the highway via existing ramps and crossovers and shall move in the direction of public traffic. All movements of workmen and construction equipment on or across lanes open to public traffic shall be performed in a manner that will not endanger public traffic.

Contractor's trucks or other mobile equipment which leave a freeway lane, that is open to public traffic, to enter the construction area, shall slow down gradually in advance of the location of the turnoff to give following public traffic an opportunity to slow down.

When leaving a work area and entering a roadway carrying public traffic, Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic.

Lanes, ramps and shoulders shall be closed in accordance with the details shown on the plans, the provisions of Section 12, Construction Area Traffic Control Devices of the Caltrans Standard Specifications, and as provided in these specifications.

Contractor shall notify VTA not less than 20 days before the anticipated start of each falsework and girder erection operation whenever the falsework or girders will reduce clearances available to public traffic. Contractor shall notify VTA not less than 20 days before the anticipated reduction of lane width.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic, and at the end of each day's work and at other times when construction operations are suspended for any reason, Contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by public traffic.

Temporary facilities that Contractor uses to perform the work shall not be installed or placed where they will interfere with the free and safe passage of public traffic.

Temporary facilities that could be a hazard to public safety if improperly designed shall comply with design requirements specified in the contract for those facilities or, if none are specified, with standard design criteria or codes appropriate for the facility involved. Working drawings and design calculations for the temporary facilities shall be prepared and signed by an engineer who is registered as a Civil Engineer in the State of California and shall be submitted to VTA for approval pursuant to **SC-51, Technical Submittals**. The submittals shall designate thereon the standard design criteria or

codes used. Installation of the temporary facilities shall not start until VTA has reviewed and approved the drawings.

Should Contractor appear to be neglectful or negligent in furnishing warning devices and taking protective measures as above provided, VTA may direct attention to the existence of a hazard and the necessary warning devices shall be furnished and installed and protective measures taken by Contractor at Contractor's expense. Should VTA point out the inadequacy of warning devices and protective measures, that action on the part of VTA shall not relieve Contractor from responsibility for public safety or abrogate the obligation to furnish and pay for these devices and measures.

Provision for the payment for signs, lights, flares, temporary railing (Type K), barricades, and other facilities by extra work **GC-38, Public Convenience and Safety** or by contract item as provided in Section 12, "Construction Area Traffic Control Devices," of the Caltrans Standard Specifications, shall in nowise relieve Contractor from the responsibility as provided in this **SC-42.2**.

Except as otherwise provided in this **SC-42.2**, full compensation for conforming to all of the provisions in this **SC-42.2** shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

SC-43 Flagging Attention is directed to **SC-42.1, Public Convenience** and **SC-42.2, Public Safety**. Flaggers while on duty and assigned to traffic control or to give warning to the public that the highway is under construction and of any dangerous conditions to be encountered as a result thereof, shall perform their duties and shall be provided with the necessary equipment in conformance with the current "Instructions to Flaggers" of the Department of Transportation. The equipment shall be furnished and kept clean and in good repair by Contractor at Contractor's expense.

Full compensation for flagging, including labor, materials and equipment and incidental, shall be included in the prices for the various contract items of work and no additional compensation will be allowed therefor.

SC-44 Not Used

SC-45 Equipment And Plants Only equipment and plants suitable to produce the quality of work and materials required will be permitted to operate on the project.

Plants shall be designed and constructed in accordance with general practice for the equipment and shall be of sufficient capacity to ensure the production of sufficient material to carry the work to completion within the time limit.

Contractor shall provide adequate and suitable equipment and plants to meet the above requirements, and when ordered by VTA shall remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants.

Contractor shall identify each piece of equipment other than hand tools, by means of an identifying number plainly stenciled or stamped on the equipment at a conspicuous location, and shall furnish to VTA a list giving the description of each piece of equipment and its identifying number. In addition, the make, model number and empty gross mass of each unit of compacting equipment shall be plainly stamped or stenciled in a conspicuous place on the unit. The gross mass shall be either the manufacturer's rated mass or the scale weight, expressed in metric units. The make, model, serial number and manufacturer's rated capacity in metric units for each scale shall be clearly stamped or stenciled on the load receiving element and its indicator or indicators. All meters shall be similarly identified, rated and marked. Upon request of VTA, Contractor shall furnish a statement by the manufacturer, designating sectional and weighbridge capacities of portable vehicle scales.

SC-46 Preservation of Property Attention is directed to GC-45, Protection and Restoration of Property, and these special conditions.

Full compensation for furnishing all labor, materials, equipment and incidentals, and for doing all work involved shall be considered as included in the prices for the various contract items of work and no additional compensation will be allowed therefor.

SC-47 Not Used

SC-48 Time of Completion Refer to article GC-30.

SC-49 Measurement of Quantities

All work to be paid for at a contract price per unit of measurement will be measured by VTA in accordance with the Imperial units.

Unless shipped by rail, material paid for by mass shall be weighed on scales furnished by and at the expense of the Contractor or on other sealed scales regularly inspected by the Division of Measurement Standards or its designated representative.

Weighing, measuring and metering devices used to measure the quantity of materials used in the work shall be suitable for the purpose intended and shall conform to the tolerances and specifications as outlined in Title 4, Chapter 9 of the California Code of Regulations, the provisions of the California Business and Professions Code, Division 5, and these specifications. Devices not Type-approved by the Division of Measurement Standards shall be Type-approved in conformance with the requirements in California Test 109.

Elements of the material plant controller that affect the accuracy or delivery of data shall be made available for the application of security seals. These devices will be inspected and adjusting elements sealed prior to the first production of materials for the contract. The security seals will be furnished by VTA. Material production shall cease when alteration, disconnection or otherwise manipulation of the security seals occur, and production shall not resume until the device is inspected and resealed by VTA.

Weighing, measuring or metering devices used to determine the quantity of materials to be paid for will be considered to be "commercial devices" and shall be sealed by the Division of Measurement Standards or its authorized representative as often as VTA may deem necessary. The installation of all portable vehicle scales must be approved by VTA prior to sealing.

Vehicle scales shall be of sufficient size to permit the entire vehicle or combination of vehicles to rest on the scale deck while being weighed. Combination vehicles may be weighed as separate units provided they are disconnected while being weighed. The maximum concentrated load shall not exceed the manufacturer's designed sectional capacity of the scale.

Weighing, measuring or metering devices required by these specifications for the purpose of proportioning a material or product will be considered to be "non-commercial devices" and shall be tested and approved in conformance with the requirements in California Test 109. This testing shall be done by one of the following, in the presence of a VTA representative, as often as VTA deems necessary:

- (1) A County Sealer of Weights and Measures;
- (2) A Scale Service Agency; or
- (3) A Division of Measurement Standards Official.

The Contractor shall notify VTA at least twenty-four (24) hours in advance of testing the device.

The lever system and mechanical indicating elements of hopper scales shall be rigidly attached to non-yielding supports in such a manner as to prevent any loss in weight due to bending and distortion of the supports.

When a multiple beam type scale is used in proportioning materials, an over and under indicator shall be provided which will give positive visible evidence of the amount of any over and under weight. The indicator shall be so designed that the indicator will operate during the addition of the last 90kg of any weighing. The over-travel of the indicator shall be at least one-third of the loading travel. Indicators shall be enclosed against moisture and dust.

Over and under dials, and other indicators for weighing and measuring systems used in proportioning materials shall be grouped so that the smallest increment for each indicator can be accurately read from the point at which the proportioning operation is controlled.

The Contractor shall bear the expense of all service fees for testing and approving of "non-commercial devices." The cost of the equipment, labor and materials furnished by the Contractor

to assist in the testing of weighing, measuring or metering devices will be considered as included in the contract prices paid for the various contract items of work requiring the weighing, measuring or metering and no separate payment will be made therefor.

Whenever pay quantities of material are determined by weighing, the scales shall be operated by a weighmaster licensed in conformance with the requirements in the California Business and Professions Code, Division 5, Chapter 7. The Contractor shall furnish a Public weighmasters certificate or certified daily summary weigh sheets. A representative of the Department may, at the discretion of VTA, be present to witness the weighing and to check and compile the daily record of the scale weights.

When required by VTA, the operator of each vehicle weighed shall obtain a weight or load slip from the weigher and deliver that slip to VTA at the point of delivery of the material.

If material is shipped by rail, the car mass will be accepted provided that actual mass of material only will be paid for and not minimum car mass used for assessing freight tariff, and provided further that car mass will not be acceptable for material to be passed through mixing plants.

Vehicles used to haul material being paid for by mass shall be weighed empty daily and at additional times as VTA may direct. Each vehicle shall bear a plainly legible identification mark. Vehicles may from time to time be required by VTA to have the mass of the material to be paid for verified by weighing the empty and loaded vehicle on such other scales as VTA may designate.

Materials which are specified for measurement by the cubic meter "measured in the vehicle" shall be hauled in vehicles of such type and size that the actual contents may be readily and accurately determined. Unless all vehicles are of uniform capacity, each vehicle must bear a plainly legible identification mark indicating its water level capacity. Vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery. Loads hauled in vehicles not meeting the above requirements or loads of a quantity less than the capacity of the vehicle,

measured after being leveled off as above provided, will be subject to rejection, and no compensation will be allowed for that material.

When material is to be measured and paid for on a volume basis and it is impractical to determine the volume by the specified method of measurement, or when requested by the Contractor in writing and approved by VTA in writing, the material will be weighed in accordance with the requirements specified for mass measurement and the mass will be converted to volume measurement for payment purposes. Factors for conversion from mass measurement to volume measurement will be determined by VTA and shall be agreed to by the Contractor before that method of measurement of pay quantities will be adopted.

Quantities of material wasted or disposed of in a manner not called for under the contract; or rejected loads of material, including material rejected after it has been placed by reason of the failure of the Contractor to conform to the provisions of the contract; or material not unloaded from the transporting vehicle; or material placed outside of the lines indicated on the plans or established by VTA; or material remaining on hand after completion of the work will not be paid for, and those quantities will be deducted from the final total quantities. No compensation will be allowed for hauling and disposing of rejected material.

The mass of water deducted as provided in this Section will not be paid for.

Full compensation for all expense involved in conforming to the requirements specified in this Section shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional compensation will be allowed therefor.

SC-50 CONTRACT DATA REQUIREMENTS LIST

	Description	Reference *	Due Date/Frequency
1.	Construction Agreement	Section 4.0	No later than(NLT) 6 working days following Notice of Award (NOA)
2.	Performance Bond	SC-3	"
3.	Payment Bond	SC-3	"
4.	Certificate(s) of Insurance	SC-2	"
5.	Alternate Form W-9	Section 4.0	"
6.	Material Suppliers List, including subcontractors.	—	NLT 10 working days following NOA
7.	Authorized Representative to sign Change Orders	GC-24	"
8.	Emergency Contacts	GC-24	"
9.	EEO Officer – Contractor and all subcontractors	GC-13	"
10.	Full time Safety Representative(s) – Name(s) and resume(s) of person(s).	SC-13	"
11.	Prevailing Wages List	GC-8.3	"
12.	Certified Payrolls	GC-58	Weekly
13.	DBE Utilization Reports	GC-13	Within one week following the month when work was performed
14.	Executed Subcontracts	GC-20	NLT 60 calendar days of NOA

* *GC = General Condition*
SC = Special Condition

This list is intended to summarize the requirements for submittal of documents as specified in the Contract Documents. If conflicts exist between the list and the referenced paragraph, the referenced paragraph will take precedence. Contractor shall refer to the Special Conditions, General Conditions and Technical Specifications for required contract data.

For technical documents, refer to Technical Submittals List found in SC-51 of the Special Conditions.

SC-51 TECHNICAL SUBMITTALS LIST

	Item	Reference *	Due Date/ Frequency	Comments
1.	Progress Schedule	GC-31 SC-23	No Later Than (NLT) 14 calendar days following NOA	3 copies
2.	List of Contractor's Sources of Materials	SC-8	NLT 20 working days after Notice to Proceed	6 copies
3.	Illness & Injury Prevention Plan	SC-13	NLT 10 calendar days following NOA	6 copies
4.	Site Specific Safety Plan	GC-38, SC-13	NLT 10 calendar days following NOA	6 copies
5.	Material Safety Data Sheets (MSDS)	SC-14	NLT 20 calendar days following NOA	6 copies
6.	Warranties	GC-73	Before Final Acceptance	As Required
7.	Certificate of Compliance for Portable Changeable Message Sign	TS 2.6	As directed.	3 copies
8.	Operations and Maintenance Manuals	-	Before Final Acceptance	3 copies
9.	Water Pollution Control Program	GC-10	NLT 10 calendar days following NOA	3 copies
10.	Quality Assurance Program	GC-47	NLT 10 calendar days following NOA	3 copies

The above table represents only a partial listing of submittal requirements. The above list is a reminder to the Contractor of his responsibility to submit submittals in a timely manner. Other submittals shall be required in accordance with the Technical Specifications.

The technical submittal list is intended to summarize the requirements for submittal of documents as specified in the Contract Documents. If conflicts exist between the list and the referenced paragraph, the referenced paragraph will take precedence.

VTa may withhold amounts from any payments otherwise due as it determines necessary for Contractor's failure to provide submittals as required. This amount may be up to 10% of the payment or \$10,000.00, whichever is greater for each item. Failure of Contractor to submit any item within 30 days of its due date may result in forfeiture of any or all of the withholding per GC-59.6.h.

7.0 GENERAL CONDITIONS

7.0 GENERAL CONDITIONS

LEGAL RESPONSIBILITIES AND RELATIONSHIPS

GC-1 Applicable Law and Jurisdiction This Contract incorporates provisions required by the laws of the State of California and the Federal Government. It shall be Contractor's responsibility to determine the applicability of State and Federal laws, rules and regulations to the work to be performed under this Contract. This Contract shall be governed by California law. Any lawsuit or legal action arising from this Contract shall be commenced and prosecuted in the courts of Santa Clara County, California.

GC-2 Compliance With Laws and Regulations Contractor shall keep itself informed of, comply with, and shall cause all of its agents, employees, suppliers and subcontractors of any tier, to observe and comply with all applicable Federal, State, and local laws, regulations, and policies, including, but not limited to, all applicable terms and conditions prescribed for third party contracts by the U.S. Department of Transportation (DOT). Contractor shall indemnify, defend, and hold harmless VTA, the Municipality or other entity within whose jurisdiction or on whose property the work is being performed, and their Board of Supervisors, Board of Directors, Councils, officers, agents, consultants and employees from any claim, liability, loss, injury or damage arising out of, or in connection with, the performance of this Contract by Contractor and/or its agents, employees or subcontractors, excepting only loss, injury or damage caused by the active or sole negligence or willful misconduct of personnel employed by the indemnitees.

GC-3 Contractors' Licensing Requirements Contractors are required by law to be licensed in the State of California and are regulated by Contractors' State License Board. Any questions related thereto may be referred to the Registrar of the Board whose address is :

Contractors' State License Board
1020 N Street
Sacramento, CA 95814

GC-4 Independent Contractor Contractor represents that it is fully experienced and properly qualified to perform the class of work provided for herein, and that it is properly licensed, equipped, organized and financed to perform such work. Contractor shall act as an independent contractor and

not as the agent or employee of VTA in performing the Contract, maintaining complete control over its employees. Nothing contained in this Contract or any subcontract awarded by Contractor shall create any contractual relationship between any such subcontractor and VTA, and Contractor shall perform all work in accordance with its own methods subject to compliance with the Contract.

GC-5 Permits, Licenses, Fees and Notices As specified in **Section 6.0 - Special Conditions**, or as otherwise required by law, Contractor shall, before beginning any work which requires a permit or similar authorization, secure and pay for all necessary licenses, fees, bonds, charges, inspections, customs or import duties, permits, and similar authorizations from all governmental authorities required to fulfill the Contract requirements and Contractor's obligations.

GC-6 Nondiscrimination Contractor shall comply with Section 1735 of the California Labor Code, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code, and every contractor for public works violating this section is subject to all the penalties imposed for a violation of this chapter."

In the performance of this Contract, Contractor and its subcontractors shall not unlawfully discriminate, harass or allow harassment, against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), marital status, age (over 40), and the denial of family care leave. Contractor and its subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractor and its subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code §12900 *et seq.*) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 *et seq.*). The applicable regulations of the Fair Employment and

Housing Commission implementing Government Code, Section 12290 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this Contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this Contract. Contractor and its subcontractors shall permit access to all records of employment, employment advertisements, application forms, and other pertinent data and records by the State Fair Employment Practices and Housing Commission, or any other agency of the State of California designated by the State, for the purpose of investigation to ascertain compliance with this clause.

GC-7 Prohibited Interests No VTA board member, officer, employee, or agent shall have any direct or indirect interest in this Contract or its proceeds during, or within one year after, that person's tenure with VTA.

GC-8 Labor Provisions

8.1 Safety Pursuant to Section 107 of the Contract Work Hours and Safety Standards Act and Department of Labor Regulations at 29 CFR Section 1926, no laborer or mechanic working on this Contract shall be required to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous to their health and safety as determined under applicable health standards promulgated by the Secretary of Labor.

In addition to Contractor's own safety procedures, and any safety procedures required under Federal, state, or local laws or regulations, including compliance with the provisions of the California Occupational Safety and Health Act of 1973 and any additional safety requirements contained in **Section 6.0 Special Conditions**, Contractor shall implement and enforce all safety requirements that are determined by VTA's Safety Coordinator to be applicable to the performance of any Work under this Contract.

8.2 Overtime Requirements Neither Contractor nor any subcontractor of any tier shall require or permit any worker to work in excess of eight hours in any day or in excess of 40 hours in any work week (defined as seven sequential calendar days) unless such worker 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 eight hours in any day or in excess of 40 hours in such work week, whichever is greater. Failure to comply with the preceding requirements shall subject Contractor or any subcontractor of any tier to the penalties specified in Labor Code §1813.

8.3 Prevailing Wage Rates Pursuant to appropriate Sections of the Labor Code of the State of California, the Director of the California Department of Industrial Relations has ascertained the general prevailing rate of wages (which rate includes employer payments for health and welfare, vacation, pension, and similar purposes) applicable to the Work to be performed under this Contract, for straight time, overtime, Saturday, Sunday and holiday work. These wage rates are available through the California State Department of Industrial Relations, <http://www.dir.ca.gov>. Contractor shall post a copy of the prevailing wage rates at the jobsite or material staging area.

Workmen employed in the work must be paid at the rates at least equal to the prevailing wage rates as adopted. If Contractor uses a craft or classification not shown on the prevailing wage determinations, Contractor may be required to pay the wage rate of that craft or classification most closely related to it as shown in the general determinations effective at the time of Contract award.

This Contract is also subject to Federal requirements for payment of prevailing wages as determined by the Secretary of Labor. Where there are differences in the rates, the higher shall apply.

8.4 Liability for Unpaid Wages In the event of any violation of the clause set forth in subparagraph (b) (1) of 29 CFR Section 5.5, Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages.

8.5 Withholding for Unpaid Wages and Liquidated Damages DOT or VTA may 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 monies payable on account of work performed by 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 subparagraph (b) (2) of 29 CFR Section 5.5.

8.6 Travel and Subsistence Payments

Pursuant to Labor Code §1773.8, Contractor shall be liable for travel and subsistence payments to each worker needed to execute the Work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with the provisions of Labor Code §1773.8.

8.7 Retention of Labor Records In the performance of the work specified in this Contract, the prime Contractor shall be responsible for compliance with California Labor Code Section 1776 pertaining to payroll records. Contractor and all of its subcontractors of any tier shall maintain all payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract. Such records shall contain the names of all employees, their address, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. These records shall be made available by Contractor or any of its subcontractors of any tier for inspection, copying, or transcription by authorized representatives of DOT, VTA or the Department of Labor, and Contractor or any of its subcontractors of any tier shall permit such representatives to interview employees during working hours on the job.

8.8 Employment of Apprentices In the performance of the work specified in this Contract, the prime Contractor shall be responsible for compliance with California Labor Code Section 1777.5, pertaining to the employment of registered apprentices.

8.9 Subcontracts Contractor shall insert in all of its subcontracts the clauses set forth in this GC-8, **Labor Provisions** and also a clause requiring its subcontractors to include these clauses in any lower tier subcontracts. Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this GC-8, **Labor Provisions**. Pursuant to Public Contract Code §6109, Contractor is prohibited from performing work on the Project with a subcontractor who is ineligible to perform work on a public works project pursuant to Sections 1777.1 or 1777.7 of the California Labor Code.

GC-9 Hazardous Materials or Unusual Conditions In the event underground tanks, vaults, materials or unusual conditions as specified in Public Contract Code §7104(a) are encountered during prosecution of

the Work, Contractor shall immediately, and before disturbing such conditions, notify VTA in writing of any:

- a. Material that Contractor believes may be material that is hazardous waste as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, II or III disposal site in accordance with the provisions of existing law.
- b. Subsurface or latent physical conditions at the site differing from those indicated.
- c. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.

VTA shall promptly investigate the conditions, and if it finds the conditions to be materially different or to involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of the work, shall issue a Change Order under the procedures described in GC-65, **Change Requests and Change Notices** and GC-66, **Change Order**. Any suspension of Work shall be administered in accordance with the provisions of GC-69 – **Suspension of the Work**. If a dispute arises between VTA and Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in Contractor's cost of, or time required for, performance of any part of the work, Contractor shall not be excused from any scheduled completion date provided for by this Contract, but shall proceed with all work to be performed under this Contract; *provided, however*, Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

GC-10 Erosion and Sedimentation Control Action Plan Element (ESCAPE) GC-10 is deleted in its entirety and replaced with following: The Water Pollution Control Program at http://www2.dot.ca.gov/hq/construc/stormwater/WPCP_Template_071707.doc.

Contractor shall submit to VTA a WPCP within 10 calendar days after Notice of Award.

VTA will provide review comments to Contractor within **three working days** after receipt of the WPCP for any necessary revision and preparation of the final document. Contractor shall return a final WPCP document to VTA within **two working days** of receipt of VTA comments.

Contractor shall provide copies of the approved WPCP to its subcontractors and shall keep a copy available at the subject site. Contractor shall provide amendments to the WPCP whenever there is a change in construction, operations, or where storm water runoff conditions may affect the discharge of significant quantities of pollutants to surface waters, groundwater, or separate municipal storm sewer systems. The amended WPCP shall be submitted to VTA for review and approval as soon as practical and Contractor shall retain the amended WPCP onsite.

GC-11 Tree Removal During performance of Work under this Contract, Contractor shall adhere to the tree removal policy of the jurisdiction within whose boundaries the Work takes place. Trees which are required to be removed in order to construct the project will be shown on the plans and jointly marked in the field by VTA and Contractor, as trees to be removed. These will be the only trees whose removal by Contractor shall be permitted by the terms of the Contract and the costs therefor shall be deemed to be included in the appropriate pay items of the Contract. Trimming or removal of any trees not specifically designated on the plans shall only be allowed upon review, conditioning and approval by VTA.

Existing trees, shrubs, and other plants, that are not to be removed and are injured or damaged by reason of Contractor's operations, shall be examined by a certified arborist to determine if the tree, shrub or plant will recover with treatment or must be removed and replaced. The arborist will be retained by VTA for consultation and any required treatment of the tree, shrub or plant, and will be paid for by Contractor. In the event that the arborist recommends removal and replacement, and no jurisdictional tree, shrub or plant replacement policy is applicable, Contractor shall replace in accordance with the following:

The minimum size of the tree replacement for an 18 inch diameter or 52 inch circumference tree removed shall be four 24 inch box trees, and two 24 inch box trees for each tree removed between 12 and 18 inches in diameter. All other trees removed shall be replaced by one 15 gallon tree at a ratio of 1:1.

The minimum size of shrub replacement shall be 15-gallon. Replacement ground cover plants shall be from flats and shall be planted 12 inches on center. Replacement of Carpobrotus ground cover plants shall be from cuttings and shall be planted 12 inches on center.

Replacement planting of injured or damaged trees, shrubs and other plants shall be completed prior to Final Inspection (GC-55). Replacement plants shall be watered as necessary to maintain the plants in a healthy condition.

Damaged or injured plants shall be removed and disposed of outside the limits of work in accordance with the provisions in GC-51 Disposal of Materials. At the option of VTA, removed trees and shrubs (except those which are diseased) may be reduced to chips. VTA may direct that such chipped material be spread within the limits of work at locations designated by VTA.

GC-12 Archaeological/Historical Discoveries If this project has been designated in the Section 1.0 Invitation to Bidders as an archaeological sensitive project, refer to Section 6.0 Special Conditions.

Should any archaeological or historical artifacts or skeletal material be discovered or unearthed during construction activities, all work within ten meters of the find shall be halted. Contractor (Subcontractor) [or Engineer or Inspector as appropriate] shall immediately notify VTA, and VTA will initiate procedures in accordance with 36 CFR 800.11, State Law (California Public Resources Code Section 5097.98, Health and Safety Code Section 7050.5, and Santa Clara County Ordinance Code Sections B6-16 through B6-23. Construction activities within ten meters of the find shall remain halted until authorization is obtained from the Environmental Program Manager, or the Environmental Program Manager's named and designated agent, that construction in the vicinity of the find may resume.

In the event of work suspension pursuant to this section, Contractor shall, within 24 hours, notify VTA of the costs involved resulting from said work stoppage. Contractor shall maintain a log of each such stoppage of work, setting forth the date and time of notification of work stoppage, date and time of actual cessation of operations in the area, and date and time of commencement of operations and costs incurred herein. Contractor shall submit a claim for reimbursement of such costs within 72 hours thereof and shall notify VTA of the anticipated amount of claim within 24 hours of said work suspension. In the event of work suspension thereunder, Contractor shall exert all reasonable efforts to otherwise utilize labor and equipment affected by the suspension in other portions of the project.

GC-13 Disadvantaged Business Enterprise (DBE) Policy And Requirements (49 CFR Part 26)

13.1 Policy It is the policy of the Santa Clara Valley Transportation Authority to ensure that Disadvantaged Business Enterprises (DBEs) as defined in federal regulations at 49 CFR Part 26, have the opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with federal funds.

VTA and its contractors and subrecipients shall abide by the requirements set forth in the federal regulations. VTA agrees to abide by the statements in the federal regulations and such statements shall be included in all VTA agreements assisted by the U.S. Department of Transportation (DOT) in all subsequent contracts between VTA and its contractors.

VTA's Office of Small & Disadvantaged Businesses encourages contractors to call (408) 321-5962 for assistance in identifying eligible DBE firms. Listings of eligible firms are also available on the World Wide Web at:

▪ http://www.dot.ca.gov/hq/bep/dbe_query.htm

13.2 UDBE Goal for this Contract In keeping with VTA's DBE Policy, a 14% Underutilized Disadvantaged Business Enterprises (UDBE) participation goal has been established as stated in the Invitation to Bid and the Bid Forms for this contract. A UDBE is a firm that meets the definition of DBE and is a member of one of the following groups:

1. Black Americans
2. Native Americans
3. Asian Pacific Americans
4. Women

All UDBEs are DBEs, but not all DBEs are UDBEs.

13.3 Mandatory Pre-bid Meeting All Prime Bidders are required/requested to attend the Pre-bid meeting, if a pre-bid meeting is duly scheduled, to meet interested UDBE and DBE sub-bidders.

13.4 Counting UDBE Participation toward the Goal UDBEs may perform as prime contractors, subcontractors to a prime (1st tier), or subcontractor to subcontractor (2nd or greater tier). Only the value of the work actually performed by the UDBE, including materials and supplies, will be counted toward the UDBE goal.

13.5 Award of the Contract VTA will award this contract to the lowest responsible and

responsive bidder as required by federal and California laws and VTA DBE policy.

Following the bid opening and submittal of all documentation, VTA will evaluate all bids and required information submitted by bidders to formulate a recommendation for award of the contract. The bidder with the lowest bid price who also meets the specified UDBE participation goal or demonstrates that sufficient good faith efforts were made to meet the specified UDBE goal will be deemed the lowest responsible and responsive bidder.

13.6 Submittals By 4:00pm on the next working day after the bid opening, the three low bidders shall submit the following:

a) Bid Form #4: A list of UDBE Prime Contractor, Subcontractor(s) or Supplier(s) of all firms bidders intend to use and count toward the UDBE goal, with a complete description of services or supplies to be provided by each, work which the UDBE further subcontracts to non-UDBE firms, and the dollar value of each such subcontracting or supplies transaction (must use Bid Form #4: Listing of UDBE Prime Contractor, Subcontractor(s) or Supplier(s)).

b) Copies of all subbids from UDBE firms listed on Form #4.

c) A list of all sub-bidders on the contract, even if not selected, with the name of each firm, whether the firm is a UDBE or a DBE, address, contact person, telephone and fax numbers, e-mail address, type of work bid, and amount of bid.

e) A bidder not achieving the UDBE goal must submit a report documenting that it made sufficient efforts to meet the UDBE goal in accordance with the good faith efforts provisions below.

All prime contractors submitting bids must submit Form 4a, including all firms submitting bids and subbids for any portion of the work under this contract, by 4:00 pm on the 2nd working day following bid opening.

13.7 Compliance VTA will advise Bidder of its compliance with the contract UDBE goal or with the good faith efforts documentation requirements.

13.8 Good Faith Efforts To determine whether a Bidder that has failed to meet the UDBE contract goal may be awarded the contract, VTA will

decide whether the Bidder made adequate "good faith efforts" to meet the goal.

"Good faith efforts" means all necessary and reasonable steps to achieve the UDBE goal which by their scope, intensity and appropriateness, could reasonably be expected to fulfill the goal. Only those efforts made prior to bid opening will be considered in evaluating good faith efforts. Mere *pro forma* efforts are not sufficient good faith efforts to meet the UDBE contract requirements.

Bidders are expected to be directly responsible for performing the good faith efforts requirements of this contract. Bidder's use of third parties to support its good faith efforts is at Bidder's own risk and does not relieve the Bidder from being responsible for meeting the good faith efforts requirements.

VTA may request ancillary or omitted documentation required to complete Bidder's good faith efforts submittal.

13.8.1 Good Faith Criteria The criteria listed below are reflective of good faith efforts undertaken by a Bidder actively and aggressively seeking to meet the goal:

a) **Pre-Bid Meeting** Bidder attended any pre-solicitation or pre-bid meetings that were scheduled by VTA to inform bidders of the Underutilized Disadvantaged Business Enterprise Program requirements for this contract.

b) **Identification of UDBE Participation Opportunities** Bidder identified and selected specific items of the project to be performed by UDBE firms to provide genuine opportunities for participation by UDBE firms. Bidder shall provide documentation showing the items that were identified and selected and shall describe how such items were utilized by Bidder to solicit UDBE participation. Where appropriate, Bidder broke out contract work to facilitate UDBE participation, even when Bidder preferred to perform this work with its own forces.

c) **Advertisements** At least ten calendar days³ before the bid opening date Bidder solicited sub-bids from UDBE firms for specified categories of work or materials or supplies for the contract through advertisements (not simply the listing of planholders)

³ The time requirements for advertising [Section 7.1c)] and written notice [Section 7.1d)] shall apply only to those contracts for which VTA has issued public notice of the contract at least 15 calendar days prior to bid opening.

placed in two or more of the following media, one of which shall be from each of the following two categories:

Category I

Daily Pacific Builder
1625 Van Ness, 3rd Floor
San Francisco, CA 94109
(888) 686-4711

OR

Daily Construction Service
80 Swan Way, Suite 130
Oakland, CA 94621
(800) 242-9747

Category II

California Small Business Alliance
340 Cumberland Street, Suite C
Pittsburg, CA 94565
(925) 252-9040

OR

Small Business Exchange
703 Market Street, Suite 1000
San Francisco, CA 94103
(415) 778-6250

d) **Written Notice** At least ten calendar days⁴ before the date bids are opened, Bidder provided written notice to a sufficient number of certified UDBE firms in each work category to be subcontracted, and to such UDBE firms in each category for materials or supplies for the project. Written notice to a minimum of 10 UDBE firms, or 10% of the total UDBE firms in each subcontracting category, whichever is greater, shall generally constitute a sufficient number of firms to be notified. If Bidder provides written notice to less than 10 certified firms in each category, Bidder shall submit documentation demonstrating that written notice to a sufficient number of firms was provided. Written notice shall be sent first to local UDBE firms and then, where appropriate, to out-of-area UDBE firms.

e) **Follow-up of Initial Solicitations** Bidder followed up initial solicitations of interest by contacting the UDBE firms to determine with certainty whether the firms were interested in bidding on the project. Such follow-up activity shall be documented with telephone and or fax logs or other

⁴ Ibid.

written documentation that shall be submitted to VTA and that shall set forth, at a minimum, the following information:

- The type of contact; i.e., telephone, meeting, letter, fax, or e-mail;
- The name of the UDBE firm contacted;
- The date and time the UDBE firm was contacted;
- The full name, title, telephone or fax number, and e-mail address of the person at the UDBE firm contacted by Bidder;
- The responses of each of the UDBE firms contacted with regard to its interest in submitting a sub-bid; and
- For each UDBE firm contacted that declined to bid, the reason(s) provided by the UDBE firm for declining to bid.

f) Information Regarding Plans, Specifications, and Requirements Bidder provided interested UDBE firms with information about the plans, specifications and requirements for selected subcontracting or materials or supplies work. Bidder shall describe the information provided to interested firms, report the name of the firms involved, and set forth the date and method of providing such information.

g) Request for Assistance in the Recruitment of UDBEs Bidder requested assistance from federal, state, and local agencies for lists of certified UDBEs, as accepted or approved by VTA, on a case-by-case basis. Bidder is responsible for receiving approval from VTA prior to listing UDBEs of other agencies not certified or approved by VTA or the California Unified Certification Program (UCP). Bidder shall state the agencies contacted, names of persons contacted, date and method of contact, and results of the contacts.

h) Good-Faith Evaluation of and Negotiation with Interested UDBE Firms Bidder evaluated the proposals of and negotiated in good faith with interested UDBE firms, and did not unjustifiably reject UDBE firm(s) as unsatisfactory or unqualified without sound reasons based on a thorough assessment of the capabilities of the firm(s) in question. Bidder shall list all UDBE responses to the solicitation, and all UDBE sub-bids which were received but not used. **NOTE: If no UDBE bids are received, this fact must be stated.** Bidder shall provide, at a minimum, the following information:

- The names, addresses and telephone and fax numbers of UDBE firms, including full name and title of the contact person at the UDBE firm who

responded to the solicitation or submitted sub-bids;

- A summary of the discussions and negotiations between Bidder and each such firm;
- If a bid is rejected by Bidder, the reasons for the rejection;
- A copy of all rejected UDBE sub-bids, along with copies of all bids received by non-UDBE firms for the same or similar scope of work. If the rejected UDBE sub-bids or the other bids received are not in writing, Bidder shall set forth the amount of each such sub-bid or other bid, together with a description of the work bid upon for each; and
- If Bidder rejected a UDBE as unqualified, a description of the assessment conducted by Bidder prior to reaching such conclusion.

The ability of or desire of a prime contractor to perform the work of a contract with its own firm does not relieve the Bidder of the responsibility to make sufficient good faith efforts. Prime contractors are not required to accept higher quotes from UDBEs if the price difference is excessive or unreasonable when compared to industry standards.

i) Advice and Assistance to Interested UDBE Firms Bidder advised and made efforts to assist those UDBE firms requesting help in obtaining bonds, lines of credit or insurance required by VTA or Bidder. Assistance may include, but is not limited to:

- a) Contacting bonding and/or insurance companies on behalf of a UDBE firm;
- b) Arranging with sureties phased or incremental bonding for the UDBE firm;
- c) Waiving bonds or insurance requirements;
- d) Referring UDBE firms to resource agencies which may assist UDBE firms to obtain bonding, insurance or lines of credit, such as the Small Business Administration (SBA) or Small Business Alliance (formerly United Minority Business Entrepreneurs, UMBE); or
- e) Making efforts to assist interested UDBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

Bidder shall state whether any such advice or assistance was given and to whom, the dates of any such advice or assistance, and a description of the advice or assistance provided.

j) Efforts to Obtain UDBE Firms Could Reasonably Be Expected to Meet Goals Bidder's efforts to obtain UDBE firm participation

could reasonably be expected by VTA to produce a level of participation sufficient to meet the goals and requirements of VTA. Bidder shall provide any additional data to support a demonstration of good faith efforts to produce the level of UDBE participation sufficient to meet the goal for the contract.

k) Performance of Other Bidders to be Taken into Account The performance of other bidders in meeting the UDBE goal may be taken into account by VTA. If, for example, the apparent low bidder fails to meet the UDBE goal but other bidders meet the goal, this may be taken into consideration in considering whether the apparent low bidder made good faith efforts to meet the goal.

13.8.2 Presumption Satisfaction of the criteria above will create a rebuttable presumption that Bidder has made an adequate good faith effort to comply with the goal and requirements of VTA for UDBE participation for this contract.

13.8.3 Verification of Information VTA may verify the accuracy or completeness of any or all of the documentation submitted by Bidder by directly contacting the listed UDBE firms or through other means.

13.9 California UCP DBE Database or Another Approved DBE Directory Bidder should utilize the California UCP DBE Database, which is coordinated statewide with all California USDOT certifying agencies, including Caltrans, or any other DBE directories approved by VTA prior to the bid date, to identify certified UDBE firms for solicitation. It is strongly recommended that, prior to initiating its solicitation of UDBE firms for the contract, each Bidder Contact VTA's DBE Administrator at (408) 321-5962 for assistance in complying with the UDBE goal and requirements of this contract.

13.10 Listing of UDBE Subcontractors and Material Suppliers VTA's list of certified DBE contractors, material supply firms, consultants, and service providers which is intended for use by bidders and prime contractors in soliciting subcontractors and material suppliers for sub-bid quotations is referenced in Paragraph 13.1. The listing assures only the DBE certification status of the firm. It does not in any way prequalify the listed firms with respect to licensing, bonding capacity, competence or financial responsibility. Further, it is recognized that not all qualified DBEs are currently listed.

Post Award Activities

13.11 Nondiscrimination The Contractor shall make VTA's contracting requirements known to subcontractors, vendors and suppliers who are certified or accepted as certifiable as disadvantaged business enterprises, as well as to non-DBE businesses, and shall provide a practical opportunity for all firms to participate in the contract.

13.12 Substitution of Subcontractors A UDBE or DBE subcontractor or supplier shall not be replaced without the prior written consent of VTA. Contractor shall make good faith efforts to find another UDBE or DBE subcontractor or supplier to substitute for the original UDBE or DBE that is unwilling or unable to perform the work. The efforts employed by the Contractor shall be those that one could reasonably expect a Contractor to take if the Contractor were actively and aggressively trying to engage a certified UDBE or DBE firm to substitute for a UDBE or DBE firm that has to be replaced and shall include the following:

- a. Contractor shall immediately notify VTA in writing of its intent to replace a UDBE or DBE firm, and of the reasons therefore, prior to any solicitation or advertisement for replacement firms. A copy of the notice shall be provided to the VTA Office of Small & Disadvantaged Businesses (OSDB).
- b. VTA will provide written notice to the UDBE or DBE firm of Contractor's request for substitution and of the reasons therefore and they will be requested to provide any written objections within five working days.
- c. Contractor shall utilize the following source for identifying certified UDBE or DBE firms for solicitation: California DBE Uniform Certification Program (UCP) database.
- d. Contractor shall provide written notice to at least five UDBE or DBE firms, whichever is the case, in each work or material/supply category to be substituted. If Contractor provides written notice to less than five firms, Contractor shall explain to OSDB in writing why the number of firms solicited was sufficient. Written notice shall be sent to UDBE or DBE firms, whichever is applicable, located in the nine (9) counties of the Bay Area plus Sacramento and San Joaquin counties first, and then, where appropriate, to out-of-area UDBE or DBE firms, whichever is applicable.

- e. Contractor shall contact the UDBE or DBE firms solicited to determine with certainty whether the firms are interested in bidding on the project. This follow-up shall be documented with telephone logs, fax logs or other written documentation and submitted to OSDB.
- f. Contractor shall provide OSDB with the following information:
 - A list and copies of all UDBE or DBE responses, whichever is applicable, to the solicitation, including all bids received;
 - If a bid is rejected by Contractor, the reasons for the rejection;
 - If Contractor rejected a UDBE or DBE firm as unqualified, a description of the qualification assessment conducted by Contractor and the factors considered.

A contractor who fails to use good faith efforts to replace a UDBE or DBE firm with another UDBE or DBE firm may be subject to the imposition of a penalty of up to 15% of the value of the work of the subcontractor or supplier replaced.

13.13 Monthly DBE Utilization Report

Prime contractors are required to submit a monthly DBE Utilization Report to the DBE Administrator, VTA Office of Small & Disadvantaged Businesses, within one week following the month when work was performed. These monthly report forms shall be provided by VTA and the contractor will document the work performed by certified DBE firms, the dollar value of payments to DBE firms, and the percentage of the contract completed. VTA will monitor compliance with contract requirements for DBE firms. This report will include UDBEs and other DBEs.

If the DBE Utilization Reports indicate potential problems, such as a failure to comply with the contract UDBE goal, the Prime Contractor shall meet with the appropriate VTA representative(s) to address any deficiencies and discuss appropriate corrective actions. When the contract completion reaches 50% and the UDBE goal completed is less than 50%, a detailed report of the reasons why must be submitted to VTA stating a plan to reach the UDBE goal by contract completion.

Prior to final payment, Contractor will be required to submit a final DBE Utilization Report, which will include UDBEs and other DBEs. In addition to

payments to the DBEs, the final report must include payments to and other information about all other businesses, including non-DBE subcontractors, suppliers of materials, trucking firms, consultants and others.

Contractor must keep adequate UDBE and DBE records and hereby agrees to provide all UDBE or DBE reports requested by VTA.

Failure by Contractor to submit required reports as described above may be considered grounds for a determination by VTA of nonresponsibility in consideration of Contractor's eligibility to bid on or be awarded future work.

13.14 DBE Certifications Not Accepted from Other Agencies VTA will not accept DBE certifications from agencies other than those participating in the California Unified Certification Program (UCP).

13.15 Change Orders, Extra Work and Allowances Including all change or extra work and allowances, Contractor shall maintain the contractual UDBE goal throughout the life of the contract or make good faith efforts to meet the DBE goal.

13.16 Prompt Payment The Contractor must adhere to all Federal and California prompt payment laws and regulations. See also **GC-61, Prompt Payment**. If contractor does not adhere to prompt payment requirements, penalties may apply.

13.17 No retainage will be withheld by the agency from the progress payments due the prime contractor. Retainage by the prime contractor or subcontractors is prohibited and no retainage will be held by the prime contractor from progress due subcontractors. 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 California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual administrative, or judicial remedies otherwise available to the prime Contractor or subcontractor in the event of a dispute involving late payment on nonpayment or deficient subcontract performance, or

noncompliance by a subcontractor. This provision applies to both DBE and non-DBE prime contractors and subcontractors.

The Contractor must include in its subcontract language a provision that it will use appropriate alternative dispute resolution mechanisms to resolve any payment disputes with subcontractors or suppliers.

Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this section.

13.18 Enforcement Actions VTA will bring to the attention of U.S DOT any false, fraudulent, or dishonest conduct in connection with its DBE Program, so that U.S. DOT can take the steps (i.e., referral to the Department of Justice for criminal prosecution, referral to the U.S. DOT Inspector General, action under suspension and debarment or Program Fraud and Civil Remedies rules) provided in 49 CFR 26.107. VTA will consider similar action under its own legal authority, including responsibility determinations in any future contracts.

GC-14 Patent Rights Any discovery or invention which is an integral part of the items being furnished under this Contract, as well as all information, design, specifications, data and findings which arise or is developed in the course of performing the work under this Contract, shall become the property of VTA and the FTA.

GC-15 Intellectual Property, Copyright and Patent Infringement Contractor, upon VTA's request, shall defend VTA and the Municipality against any claim against VTA and/or Municipality for patent, copyright, trademark, trade secret, or other intellectual property infringement based upon VTA's or Municipality's use of any work, goods, or services provided by Contractor pursuant to this Contract. If VTA requests Contractor to defend against such claim, Contractor shall hold VTA and the Municipality harmless from, and indemnify VTA and the Municipality for, any liability arising from the claim. This obligation shall not apply when the alleged infringement arises entirely from modification of the work, goods, or services by VTA or Municipality without Contractor's approval.

GC-16 Rights in Technical Data VTA shall have the right to use, duplicate or disclose, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to use: Any manuals, instructional materials prepared for installation, operation, maintenance or training purposes and technical data pertaining to end items, components or processes which were prepared for the purpose of identifying sources, size, configuration, mating and attachment characteristics, functional characteristics and performance requirements ("form, fit and function" data; e.g., specification control drawings, catalog sheets, outline drawing). The term Technical Data as used herein means technical writing, sound records, pictorial reproductions, drawings, or other graphic representations and works of a technical nature, whether or not copyrighted, which are specified to be delivered pursuant to this Contract. The term does not include financial reports, costs analyses, and other information incidental to contract administration.

For copyrighted material, Contractor agrees to and does hereby grant to VTA and the FTA, and to their officers, agents and employees acting within the scope of their official duties, a royalty-free, nonexclusive and irrevocable license for VTA and FTA to publish, translate, reproduce, deliver, perform, dispose of, and to authorize others to use, all Technical Data now or hereafter covered by copyright.

No such copyrighted matter shall be included in Technical Data furnished hereunder without written notice of the copyright owner granting VTA and FTA consent to use such copyrighted matter in the manner above described.

Contractor shall report to VTA promptly and in reasonable written detail each notice or claim of copyright infringement received by Contractor with respect to any Technical Data delivered hereunder.

VTA reserves the right to use the design and the tooling developed for the furnishing of equipment under this Contract in future contracts based on this specification. Contractor shall maintain design data, including drawings, layouts, and any relevant engineering data, and all necessary tooling in good order for a minimum of four years after final acceptance of the last items furnished under this Contract, and shall transfer that data, including tooling, to VTA upon request at no cost to VTA. All plans, drawings, diagrams, schematics, and specifications shall become the property of VTA and the FTA, unless otherwise designated by VTA.

GC-17 Ownership of Work and Material VTA shall own all materials, work in progress, and finished goods produced by Contractor pursuant to this Contract, for which progress payments have been made and which have been satisfactorily delivered to a designated area. Such ownership shall be free of all encumbrances, or, if it is not, VTA may obtain a priority lien secured pursuant to appropriate sections of the Uniform Commercial Code and other applicable state laws or local ordinances to secure its title rights. Nevertheless, Contractor shall be responsible for risk of loss for those items of Work for which Contractor has care, custody and control, until Final Acceptance.

Unless otherwise specifically provided in this Contract, Contractor shall provide and pay for materials, equipment, tools, utilities, transportation, and other facilities and services necessary for the prosecution of the Work provided for in this Contract.

Contractor will submit to VTA a "Final Release of All Liens and Claims" as a condition precedent to receiving final payment under this Contract.

GC-18 Title and Risk of Loss Unless otherwise provided for, title to the Work and risk of loss shall pass to VTA upon final acceptance of the Work, and Contractor shall furnish or execute all necessary documents of title at that time.

GC-19 Assignment and Delegation Contractor shall not assign any of its rights or delegate any of its responsibilities under this Contract without the prior written consent of VTA.

GC-20 Subcontracts Contractor shall be fully responsible and liable for the products and actions of all subcontractors and suppliers of any tier, and shall include in each subcontract any provisions necessary to make all of the provisions of this Contract fully effective. Contractor shall provide all necessary plans, specifications, schedules, and instructions to its suppliers and subcontractors to enable them to properly perform their work. Contractor shall submit executed copies of all subcontracts entered into pursuant to this Contract to VTA within **60 calendar days** from issuance of a Notice of Award.

In accordance with Public Contract Code Sections 4100 – 4114, **Subletting and Subcontracting Fair Practices Act**, Contractor shall not substitute any subcontractor listed on Bid Forms #3 and #4 without the express written approval of VTA. Further, any substitution of any **#@#S/DBE** subcontractor shall be subject to the requirements of **Section 7.0, General Conditions, Paragraph GC-13**.

GC-21 Waiver and Nonwaiver A waiver by one party of a right to a remedy for breach of this Contract by the other party shall not be deemed to waive the right to a remedy for a subsequent breach by the other party. VTA's acceptance of goods, or services or payment under this Contract, shall not preclude VTA from recovering against Contractor or Contractor's surety for damages due to Contractor's failure to comply with this Contract.

GC-22 Antitrust Claims In entering into a public works contract, or a subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor agrees to assign to the awarding body all rights and title to, and all interest in all causes of action it may have under Section 4 of the Clayton Act, or under the Cartwright Act, arising from the purchases of goods, services, or materials pursuant to the public works contracts or subcontracts. This assignment shall be made and become effective at the time the awarding body tenders final payment to Contractor, without further acknowledgement by the parties.

GC-23 Stop Notices VTA will withhold payments otherwise due Contractor in order to satisfy Stop Notices which have been properly filed, in accordance with the requirements of California Civil Code Title 15, Chapter 4, regarding Stop Notices. Contractor shall include this **GC - 23, Stop Notices** in all subcontracts and similar documents entered into by Contractor for the performance of Work under this Contract.

All Stop Notices, including Preliminary Notices, shall include a reference to the VTA contract number and the title of the contract.

AUTHORIZED REPRESENTATIVES AND COMMUNICATIONS

GC-24 Authorized Representatives Contractor shall designate, in writing, before starting work, an Authorized Representative who, during performance of the Contract, shall have full authority to act on

Contractor's behalf in all matters within the scope of this Contract.

When Contractor is comprised of two or more persons, firms, partnerships, or corporations

functioning on a joint venture basis, said authorized representative shall have the authority to represent and act for the joint venture.

Said authorized representative shall be present at the site of the 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 VTA shall be made for any emergency work which may be required.

Whenever said authorized representative is not present on any particular part of the Work where VTA may desire to give direction, orders will be given by VTA, which shall be received and obeyed by the superintendent or foremen who may have charge of the particular work in reference to which the orders are given.

Except as hereinafter provided, all orders by VTA shall be given in writing. Those not so given shall be considered to be invalid and not binding. Emergency conditions dealing with safety of persons and protection of property are excepted, and such oral directions will be confirmed in writing as soon as possible, but shall be immediately complied with by Contractor.

VTA will similarly designate, in writing, an Authorized Representative to be its formal contact between VTA and Contractor. Said Authorized Representative will be responsible for all matters relating to the execution of work within the scope of this Contract and will decide all questions which may arise as to the quality or acceptability of the Work and as to the manner of performance and rate of progress of the Work; all questions which may arise as to the interpretation of plans and specifications; all questions as to the acceptable fulfillment of the Contract on the part of Contractor; and all questions as to compensation for work performed.

Matters regarding the terms and conditions of this Contract shall be the responsibility of VTA's Contracting Office.

Written notification to the other party shall be provided, in advance, of changes in the name or address or the scope of authority vested in such Authorized Representative.

Each Authorized Representative may, from time to time, delegate to other named individuals certain authority and responsibilities. The names of such individuals, the scope of their authority and responsibility, and the designation of their titles will be communicated to the other party in writing.

The designation of Authorized Representatives of the parties and their delegates as outlined above shall take place at the pre-construction meeting as specified in **GC-26, Pre-Construction Meeting**.

GC-25 Notices and Communications

25.1 Notices All notices and other communications concerning this Contract shall be written in English, shall bear the number assigned to this Contract by VTA and shall follow VTA's correspondence format and reference system. Notices and other communications may be delivered personally, by telegram, by private package delivery, by FAX, or by regular, certified, or registered mail.

The names of the individuals for each of the parties and their addresses to which other communications and correspondence should be delivered will be established and made known to the other party at the pre-construction meeting as specified in **GC-26, Pre-Construction Meeting**.

A notice to VTA will be effective only if it is delivered to VTA's Authorized Representative at the address to be made known to Contractor at the pre-construction meeting as specified in **GC-26, Pre-Construction Meeting**.

A notice to VTA will be effective only if it is delivered to VTA's Authorized Representative at the address to be made known to Contractor at the pre-construction meeting as specified in **GC-26, Pre-Construction Meeting**.

A notice to Contractor will be effective only if it is delivered to Contractor's Authorized Representative at the address to be made known to VTA at the pre-construction meeting as specified in **GC-26, Pre-Construction Meeting**.

25.2 Drawing/Plan Clarification An answer from the owner, in response to an inquiry from Contractor, intended to make some requirement(s) of the drawings or plans clearly understood. Drawing clarifications/plan clarifications may be sketches, drawings or in narrative form and will not change any requirement of the drawings or plans. Responses to Contractor inquiries shall be as outlined in the Article "Requests for Information" of these General Conditions.

25.3 Requests for Information (RFIs) In the event that Contractor, subcontractor or supplier, at any tier, determines that some portion of the drawings, specifications or other contract

documents requires clarification or interpretation by the owner, Contractor shall submit a Request for Information (RFI) in writing to VTA. Requests for Information may only be submitted by Contractor and shall only be submitted on the Request for Information form provided by VTA. Contractor shall clearly and concisely set forth the issue for which clarification or interpretation is sought and why a response is needed from VTA. In the Request for Information Contractor shall set forth its own interpretation or understanding of the requirement along with the reasons why it has reached such an understanding.

VTA will review all Requests for Information to determine whether they are Requests for Information within the meaning of this Contract. If VTA determines that the document is not a Request for Information it will be returned to Contractor, unreviewed as to content, for resubmittal as the appropriate document required by the subject matter.

Responses to Requests for Information shall be issued within five (5) working days of receipt of the request from Contractor unless VTA determines that a longer period of time is necessary to provide an adequate response. If a longer period of time is determined necessary by VTA, VTA will, within five (5) working days of receipt of the request notify Contractor of the anticipated response time. The five (5) working days referred to herein will start on the date stamped received "In From Contractor" by VTA and depends on the date stamped "Out to Contractor" by VTA. If Contractor submits a Request for Information on an activity with five (5) working days or less of float on the current project schedule, Contractor shall mark the Request for Information as "Critical." Contractor shall not be entitled to any time extension due to the time it takes VTA to respond to such Critical request provided that VTA responds within the five (5) working days set forth above.

Responses from VTA will not change any requirement of the Contract documents unless so noted in the response to the Request for Information. In the event Contractor believes that a response to a Request for information will cause a change to the

requirements of the Contract, Contractor shall immediately give written notice to VTA in accordance with GC-65, Change Requests and Change Notices. Failure to give such written notice shall waive Contractor's right to seek additional time or cost in accordance with Section GC-65.1 of the Contract documents.

GC-26 Pre-Construction Meeting Prior to issuance of a Notice to Proceed, a pre-construction meeting will be held at a time and place to be designated by notice from VTA. At this meeting, detailed procedures will be discussed for handling the following items:

- Authorized Representative
- Correspondence
- Notices
- Change requests and change notices
- Change orders
- Submittals
- Approvals
- Progress payments
- Schedules
- Community relations
- Inspection plans
- Requests for information (RFI)
- Other pertinent agenda items

GC-27 Project Meetings VTA will schedule and preside over all meetings (including but not limited to weekly, pre-production, periodic, and special meetings) throughout the progress of the Work. Agendas for the meetings may include, but are not necessarily limited to, discussions of performance observations, problems, conflicts, schedules, delivery schedules, supplier fabrication, quality standards, Contract modifications, and any other topics that VTA determines to be relevant to the project. Contractor attendance at these meetings is mandatory.

GC-28 Publicity Releases All publicity releases or releases of reports, papers, articles, maps, or other documents in any way concerning this Contract or the Work hereunder which Contractor or any of its subcontractors desires to make shall be subject to approval by VTA prior to release.

TIME FOR PERFORMANCE OF WORK

GC-29 Notice to Proceed Contractor shall commence performance of Work under this Contract immediately after receipt of the Notice to Proceed issued by VTA, and shall continuously and diligently prosecute the Work to completion on or before the time or times set forth in **Section 6.0 Special Conditions** of this Contract. Any work performed or expenses incurred by Contractor prior to Contractor's

receipt of Notice to Proceed shall be entirely at Contractor's risk.

A 48-hour advance notice will be required before starting work. Contract personnel will be allowed on the job site only during normal VTA working hours unless otherwise authorized by VTA.

GC-30 Time of Completion Time is of the essence in this Contract. Contractor's failure to perform Work, deliver goods, or provide services on time and in accordance with the approved progress schedule shall be a material breach of this Contract.

Time periods measured in days shall be computed by excluding the day upon which the period begins to run and including the last day of the period unless the last day is Saturday, Sunday, or a U. S. legal holiday, in which case the period shall run until, and shall include, the next day that is not a Saturday, Sunday, or U.S. legal holiday. All time periods measured in days shall be based upon calendar days unless specified otherwise.

A "working day" is defined to mean any day not a Saturday, Sunday, or U.S. legal holiday. In addition, during actual construction, a calendar day shall not be a "working day" if Contractor is specifically required by the Contract Documents to suspend construction operations, or if Contractor is prevented by inclement weather or otherwise, as determined by VTA and agreed to by Contractor, from proceeding with the Work as anticipated by the parties.

GC-31 Progress Schedule Contractor shall develop and maintain progress schedules in CPM format identifying critical events involved in the performance of the Work under the Contract in accordance with the requirements of **Section 6.0 Special Conditions**.

GC-32 Excusable Delays and Extensions of Time Except with respect to defaults of Subcontractors, neither Contractor nor VTA shall be considered in default by reason of any failure to perform in accordance with the Contract schedule if such failure arises out of causes beyond the control and without

the fault or negligence of the defaulting party. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the government in its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes or other labor disputes, freight embargoes, and unusually severe weather, but in every case the failure to perform must be beyond the control and without the fault or negligence of the defaulting party. If the failure to perform of either Contractor or VTA is caused by the default of a Subcontractor or a third party Contractor to VTA, and if such default arises out of causes beyond the control of all the parties, and without the fault or negligence of any of them, neither Contractor nor VTA shall be in default by reason of any such failure to perform. As used herein, the terms "Subcontractor" and "Subcontractors" mean Subcontractor(s) or Supplier(s) to Contractor at any tier.

Should Contractor suffer delay because of cause(s) as described herein, VTA may, upon receiving Contractor's fully documented and supported written request timely made, make an equitable revision in the Contract schedule or other terms of the Contract as appropriate.

GC-33 Failure to Complete the Work on Time If the Work is not completed by Contractor in the time specified, as that time may be extended as authorized elsewhere in the Contract, it is understood that VTA will suffer damage; and, it being impracticable and extremely difficult to determine the amount of actual damage, it is agreed that Contractor shall pay as fixed and liquidated damages, and not as a penalty, the sum set forth in **Section 6.0 Special Conditions** of the Contract for each calendar day of delay until the Work is completed and accepted, and Contractor and its surety shall be liable for the amount thereof.

PERFORMANCE OF WORK

GC-34 Contractor's Work Area VTA will designate space for Contractor's working, storage, and laydown areas, if available. Contractor shall be responsible for all security, utilities and upkeep of such laydown areas and for their restoration to a condition equal to that which existed when Contractor began using such areas. Such restoration shall be complete before final payment is made to Contractor. If VTA areas are not available to Contractor, Contractor shall be responsible for furnishing whatever areas it deems necessary to perform Work under this Contract, at no additional cost to VTA.

Contractor shall confine its equipment, storage of materials, and construction operations to such limits as may be directed by VTA and shall not

unreasonably encumber the premises and roads with its materials and equipment. Contractor shall enforce the instructions of VTA regarding signs, advertising, fires, danger signals, barricades, and smoking, and shall require all persons employed on the Work to comply with all building or institutional regulations, vehicle, street and highway codes while on the premises and roads.

GC-35 Temporary Construction Facilities and Utilities Contractor shall furnish all temporary construction facilities, utilities, and services which are necessary to prosecute the Work. This includes, but is not limited to fencing, flagmen, sanitary facilities, security, power, water and weather protection. Contractor shall remove all temporary facilities upon

completion of the Work or when they are no longer needed for Contractor's purposes, whichever is earlier.

GC-36 Character of Workmen If any Subcontractor or person employed by Contractor shall appear to VTA to be incompetent or to act in a disorderly, improper or unsafe manner, such person shall be discharged immediately on the request of VTA, and such person shall not again be employed on the Work.

GC-37 Working Environment Contractor shall ensure and maintain a working environment free of personal harassment and intimidation between Contractor's forces and VTA employees and members of the public at all VTA project sites and in all VTA facilities at which Contractor's forces are assigned to work. Conduct that creates an intimidating, hostile, or offensive working environment is prohibited. Failure to comply with the above will be considered a material breach of this Contract.

GC-38 Public Convenience and Safety Contractor shall so conduct its operations as to offer the least possible obstruction and inconvenience to the public and shall have under construction no greater length or amount of work than can be prosecuted properly with due regard to the rights of the public. Unless otherwise provided in the Contract, all public traffic shall be permitted to pass through the Work with as little inconvenience or delay as possible. Where possible, such traffic shall be routed on new or existing paved surfaces. Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately by Contractor at its expense. Existing traffic signal and highway lighting systems shall be kept in operation for the benefit of the traveling public during progress of the Work, and other forces will continue routine maintenance of existing systems.

Contractor shall install signs, lights, flares, barricades, and other facilities for the sole convenience and direction of public traffic and shall furnish competent flaggers or a uniformed police officer whose sole duties shall consist of directing the movement of public traffic through or around the Work.

Work shall be performed in such a manner as to eliminate unnecessary noise, obstructions and other annoyances to occupants. The Contractor will not encumber premises with materials, equipment, and/or parking of cars; Contractor shall store materials, equipment and park cars in designated areas.

See **Section 8.0 Technical Specifications** for additional traffic control requirements, if any.

GC-39 Cooperation/Coordination and Work by Others Contractor shall coordinate its Work with all other contractors and subcontractors performing Work on the site. Contractor shall schedule its Work so as to avoid conflicts with other contractors and to avoid damage to completed or incomplete Work. Contractor shall be responsible for any damage to the Work of other contractors or subcontractors if Contractor's actions resulted in such damage and are a) willful or b) negligent and the proximate cause. Contractor shall take immediate action to remedy such damage so as to not delay the immediate prosecution of the Work.

GC-40 Security Contractor shall provide and be responsible for all security at the job site which is required to protect its material and equipment and all Work in place. Contractor shall also be responsible for providing all security and traffic control required by any city having jurisdiction in the area where Work is being performed.

GC-41 Product Options, Supplier Approval and Substitutions For products specified in this Contract or in Contractor's submittals by brand name or manufacturer, whether or not followed by the words "or approved equal," Contractor shall select any product or manufacturer named, or shall submit a request to substitute an equal product or manufacturer. As required by the California Public Contracts Code §3400, such request shall be made within **35 calendar days** from date of the Notice of Award in order to receive consideration, unless later submission of a request is agreed to by VTA. Contractor shall submit a separate request for each substitution. The burden of proof as to the equality of any material, process or article shall rest with Contractor. VTA's determination of the equality or superiority of an article proposed for substitution shall be based upon but need not be limited to consideration of such factors as are specified in the Technical Specifications; dimensional compatibility with other materials with which it combines to produce a unified design system; all aspects of finished appearance including form, texture, and color, as it affects other design elements. In the event an approved substitution is more expensive than the specified materials, process or article, the difference in cost of such material, process or article so furnished shall be borne by Contractor. Contractor may not make a substitution without VTA's prior written approval. If applicable, specific requirements

for the submittal of such requests will be contained in **Section 6.0 Special Conditions**.

VTA shall approve or disapprove Contractor's request for substitution of suppliers or products within 30 days of VTA's receipt of all information required by VTA for such determination.

GC-42 Source of Materials Contractor shall be completely responsible for locating, identifying, and furnishing all materials required to be furnished under this Contract, except for VTA furnished materials specified in **Section 6.0 Special Conditions**. VTA shall perform or cause to be performed all tests required to demonstrate to VTA's satisfaction that the proposed materials satisfy the requirements of the Contract.

GC-43 Submittal of Shop Drawings, Product Data and Samples Working and shop drawings may consist of drawings, diagrams, schedules, or other data prepared by Contractor, or any subcontractor of any tier, manufacturer, supplier or distributor, as are necessary to adequately control the Work or to illustrate or detail some portion of the Work. No change shall be made by Contractor in any working or shop drawing after it has been approved by VTA.

Working Drawings for any part of the permanent Work shall include, but not be limited to: stress sheets, anchor bolt layouts, shop details, erection plans, equipment lists and any other information specifically required elsewhere in the Contract.

Working drawings for cribs, cofferdams, falsework, temporary support systems, haul bridges, centering and form work and for other temporary work and methods of construction Contractor proposes to use, shall be submitted when required by the Contract or ordered by VTA.

Product data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, or other information furnished by Contractor to illustrate materials, products, systems, or equipment for some portion of the Work.

Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work shall be judged.

Working drawings and shop drawings, product data, samples, and similar submittals shall not modify any Contract requirement, except as expressly allowed by this Contract. The purpose of their submittal is to demonstrate, for those portions of the Work for which submittals are required, the way Contractor proposes to comply with Contract requirements.

Contractor shall review, approve, and submit to VTA all working and shop drawings, product data, samples, or similar submittals required by this Contract, or that are necessary for its proper completion, in accordance with the Schedule for Technical Submittals shown in **Section 6.0 Special Conditions** and **Section 8.0 Technical Specifications**, in a sequence that causes no delay in the Work, or in the work of VTA or any other VTA contractor.

By approving and submitting working and shop drawings, alternative construction methods, product data, samples, or similar submittals, Contractor represents that it has determined and verified all related materials, measurements, and construction criteria, and that it has checked and coordinated the information contained within its submittals with the requirements of the Work and this Contract.

Contractor shall not be relieved of responsibility for any deviation from the requirements of this Contract by VTA's approval of shop and working drawings, product data, samples, plans, programs, schedules, or similar submittals unless Contractor has specifically informed VTA at the time of submittal in writing of the deviation and VTA has given written approval of the specific deviation. Contractor shall not be relieved of responsibility for errors or omissions in working and shop drawings, product data, samples, plans, programs, schedules or similar submittals by VTA's approval of the submittal. Contractor shall not deviate from approved working and shop drawings, product data, samples, or similar submittals without VTA's written approval.

Contractor shall not commence any portion of the Work requiring submission of shop or working drawings, product data, samples, or similar submittals until the required submittal has been approved by VTA.

Contractor shall direct specific attention, in writing or on resubmitted shop and working drawings, product data, samples, or similar submittals, to revisions other than those required by VTA on previous submittals.

Specific requirements for the submittal of shop and working drawings, product data and samples are contained in **Section 6.0- Special Conditions**.

Full compensation for furnishing all working and shop drawings, product data and samples shall be considered as included in the prices paid for the Contract items of Work to which such drawings relate and no additional compensation will be allowed.

GC-44 Survey Requirements

44.1 Lines and Grades VTA will set such stakes or marks as it determines to be necessary to establish the lines and grades required for the performance of the work specified in the Contract.

When Contractor requires such stakes or marks to be set by VTA, Contractor shall notify VTA of its requirements in writing, allowing for a reasonable length of time in advance of starting the operations that require such stakes or marks. In no event, shall a notice of less than two days be considered a reasonable length of time.

Stakes and marks set by VTA shall be carefully preserved by Contractor. If such stakes and marks are destroyed or damaged, they will be replaced or restored by VTA as necessary and Contractor will be charged for the cost of such replacement or restoration. This charge will be deducted from any moneys due or to become due to the Contractor.

44.2 Monument Preservation For the purposes of this General Condition the word Contractor refers to the General Contractor assigned to VTA's project and the professional surveyors under the employ of said General Contractor.

Contractor shall notify VTA of any existing monuments which will be disturbed or destroyed during the course of construction and Contractor will be responsible – and bear the full costs – for tying out the existing monuments and setting new monuments, per the currently amended Sections 8771 through 8773 of the State of California Professional Land Surveyors' Act.

Contractor shall place new monuments (when possible) in a location to minimize traffic exposures for surveyors. Existing monuments to be replaced by the new monuments shall be removed and disposed of by the Contractor. New monuments shall be established before existing monuments are removed so that vertical and horizontal control shall be available at all times. The following guidelines will be used as part of the monument preservation process:

Pertaining to existing, undisturbed monuments: The Contractor will reset the monument box (with cover) to final grade. If there is no monument box for the monument then the contractor will set a new one at grade to preserve the monument and to make it accessible. If the monument is higher than final grade then the Contractor's professional land surveyor will

set ties to the monument and reset it below final grade and set the monument box accordingly.

Pertaining to destroyed or disturbed monuments: The Contractor must notify VTA Survey, in advance, of any monuments that will be disturbed and/or destroyed.

1. The Contractor will replace all monuments that VTA's Survey Department determines are of future value to professional surveyors in retracing original surveys of record and will be set according to VTA specifications. Contractor may be asked by VTA to also contact the City Engineering/Survey Department or other agency/s (e.g., County, Caltrans, Santa Clara Valley Water District, etc.) for additional information regarding monument and monument box specifications.

2. Monuments shall be constructed in accordance with the appropriate City or other agency's Standard Provisions, to the dimensions and details shown on the appropriate City or other agency's Standard Details.

3. Any monument that the Contractor cannot replace in its original position due to obstruction or improvements must be replaced with a witness monument that is tied into the original monument by bearing and distance. This witness monument will be perpetuated by witness ties (a minimum of three). See the "TYPICAL WITNESS MONUMENT" Drawings A, B & C on file in the Office of VTA's Survey Department.

4. The Contractor will then establish project coordinates for all new monuments and witness monuments, adjust by least squares method and furnish VTA Survey with the results and the calculation sheets.

Note: These standards are VTA standards and the Contractor is not only bound by these standards but also the most recent update of the State Land Surveyors Act and the standards currently established by the appropriate City or other agency (e.g., County, Caltrans, Santa Clara Valley Water District, etc.). VTA and the appropriate City or other agency must be allowed to review all Corner Records and/or relevant documentation before the Contractor's first submittal to the County Surveyor.

The Contractor will bear the full expense of all work related to the above described monument preservation program. If the above specified

"advance" notice is not given to the VTA Survey Department and/or the survey monuments are disturbed or destroyed without reference points having been set, VTA will re-establish the original position of the survey monuments (and all necessary tie monuments) and the associated land surveying costs will be deducted from the Contractor's budget amount.

GC-45 Protection and Restoration of Property In addition to any other requirements imposed by law, Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations and other parts of all existing structures adjacent to and adjoining the site of the Work which are in any way affected by Contractor's operations. Whenever any notice is required to be given by VTA or Contractor to any adjoining or adjacent landowner or other party before beginning any Work under this Contract, such notice shall be given by Contractor.

Any damage arising from or in consequence of the performance of the Contract, to improvements or property, whether above or below ground, private or public, within or adjacent to the project limits, shall be repaired at once by Contractor. If the best interests of VTA requires such repair to be made prior to the execution of any part of the Work included in this Contract, VTA will so notify Contractor who shall delay or discontinue the performance of that part of the Work until the necessary repair has been made. Such delay shall not be considered unavoidable, and no extension of time for completion of the Contract will be made.

When ordered by VTA to make any such repair, Contractor shall start work thereon within four hours and shall prosecute the same with diligence to completion. Upon failure of Contractor to so comply with such order, or upon Contractor's failure to make immediate emergency repairs which are necessary in the best interests of VTA or of the Public, VTA shall have the authority to cause such repair to be made and to deduct the costs thereof from any money due, or which may become due Contractor.

In any emergency affecting the safety of life or property including adjoining property, Contractor, without special instructions or authorization from VTA, is authorized to act at Contractor's discretion to prevent such threatened loss or injury, and Contractor shall so act whether or not it is instructed to do so by VTA.

GC-46 Utility Paint Markings Contractor shall completely remove all utility paint markings at project completion. Removal shall be by use of the

high water pressure method only. Payment for removal of all utility paint markings shall be considered as included in the price paid for other items of work and no additional compensation will be allowed therefor.

GC-47 Quality Assurance Program Contractor shall, at its expense, arrange, submit for VTA's review and approval, and implement a quality assurance program consistent with the requirements of VTA's Quality Assurance Program.

GC-48 Inspection VTA shall at all times have access to the Work and shall be furnished every reasonable facility for verifying that the materials and workmanship conform to the requirements of the Contract. VTA may test and inspect, either at Contractor's, subcontractor's or supplier's facility, all components, subsystems or workmanship prior to assembly of such components into the Work and prior to acceptance of the Work by VTA. Following such testing and inspection, VTA will issue a deficiency list to Contractor listing those items which fail to comply with the Contract. VTA may either reject or require correction of defective material, workmanship, or nonconformity to this Contract. Contractor shall, at its own expense, make available tools, pits, hoists, scaffolds, platforms, other equipment, facilities, drawings, and assistance as may be necessary for inspections or tests.

Costs of the Inspectors shall be borne by VTA and shall not be a part of the Contract Price. Costs of re-inspection shall be backcharged to Contractor. The performance of, or the failure to perform, such inspection shall not relieve Contractor of any responsibility for complete Contract performance. Where shop inspection is required by the terms of the Contract, Contractor shall not ship materials until VTA releases such materials for shipment.

The contractor shall not cover any work until inspected and released by VTA. Re-examination of covered and questioned work may be ordered by the Authorized Representative at any time prior to final acceptance. If so ordered, the work shall be uncovered by the Contractor. The testing and uncovering or removal, replacement and recovering shall be at Contractor's expense.

GC-49 Certificates of Compliance and Testing

49.1 General VTA has adopted methods for testing the quality of materials and work. These methods are identified by number and are referred to in the specifications as California Test. Copies of

individual California Tests are available and will be furnished to interested persons upon request.

Whenever the specifications require compliance with specified values for the following properties, tests will be made by the California Test indicated unless otherwise specified:

<i>Properties</i>	<i>California Test</i>
Relative Compaction.....	216 or 231
Sand Equivalent	217
Resistance (R-value)	301
Grading (Sieve Analysis)	202
Durability Index	229

Whenever a reference is made in the specifications to a California Test by number, it shall mean the California Test in effect on the day the Notice of Award for the work is dated.

Whenever the specifications provide an option between 2 or more tests, VTA will determine the test to be used.

Whenever a reference is made in the specifications to a specification, manual, or test designation either of the American Society of Testing and Materials, the American Association of State Highway and Transportation Officials, Federal Specifications, or any other recognized national organization, and the number or other identification representing the year of adoption or latest revision is omitted, it shall mean the specification, manual, or test designation in effect on the day the Notice to Bidders is dated. Whenever said specification manual or test designation provides for test reports (such as certified mill test reports) from the manufacturer, copies of such reports, identified as to the lot of material, shall be furnished to VTA. When material which cannot be identified with specific test reports is proposed for use, VTA may, at its discretion, select random samples from the lot for testing. Test specimens from the random samples, including those required for retest, shall be prepared in accordance with the referenced specification and furnished by Contractor at their own expense. The number of such samples and test specimens shall be entirely at the discretion of VTA.

When requested by VTA, Contractor shall furnish, without charge, samples of all materials entering into the work, and no material shall be used prior to approval by VTA, except as provided in **GC-49 Certificates of Compliance and Testing**. Samples of material from local sources shall be taken by or in the presence of VTA, otherwise the samples will not be considered for testing.

49.2 Certificates of Compliance When so authorized in the Contract or when permitted by VTA, the use of certain materials or assemblies shall be allowed if accompanied by a Certificate of Compliance. VTA reserves the right to refuse to permit the use of material on the basis of a Certificate of Compliance. If such use is permitted, the form of the Certificate of Compliance and its disposition shall be as directed by VTA. The certificate shall be signed by the manufacturer of the material or the manufacturer of assembled materials and shall be furnished with each lot of material delivered to the Work and the lot so certified must be clearly identified in the Certificate.

All materials used on the basis of a Certificate of Compliance may be sampled and tested by VTA at any time. The fact that material is used on the basis of a Certificate of Compliance shall not relieve Contractor of responsibility for incorporating material in the Work which conforms to the requirements of the Contract and any such material not conforming to such requirements will be subject to rejection whether in place or not.

49.3 Testing Contractor shall obtain the services of an independent testing company to perform all testing of materials and work in accordance with the contract documents. All material testing shall be paid for by Contractor.

VTA may, at its discretion, perform or cause to be performed test of materials and work independent of the contractor's responsibility above. When VTA exercises its discretion the contractor shall furnish without cost adequate samples of all materials necessary for testing, and shall also designate the source of such material where appropriate

GC-50 Removal of Rejected or Unauthorized Work All work which has been rejected shall be remedied, or removed and replaced by Contractor in a manner acceptable to VTA, and no compensation will be made for such removal, replacement or remedial work.

Any work performed outside of the limits of Work shown on the drawings or established by VTA, or any extra work done without written authorization of VTA will not be paid for. Upon order of VTA such unauthorized work shall be remedied, removed or replaced at Contractor's expense.

If Contractor fails to comply within a period of seven days (or such longer period as VTA may authorize in writing) after receipt of notice from VTA specifying such failure, VTA may cause the rejected or

unauthorized work to be removed, replaced, or remedied, and to deduct the costs thereof from any moneys due to Contractor.

GC-51 Disposal of Materials Except for materials generated pursuant to **GC-9, Hazardous Materials**, Contractor shall be responsible for the disposal of all excess materials generated during the performance of this Contract. When any material is to be disposed of outside the project area, other than a public dump, Contractor shall first obtain a written permit from the property owner on whose property the disposal is to be made and he shall file with VTA said permit or a certified copy thereof together with a written release from the property owner absolving VTA from any and all responsibility in connection with the disposal of material and said property, and before any material is disposed of on said property, Contractor shall obtain written permission from VTA to dispose of the material at the location designated in said permit.

GC-52 Protection of Completed Portions of Work Contractor shall protect completed portions of the Work until final acceptance of the Work by VTA. Contractor shall take prompt action to remedy or repair any and all damage sustained to Work that is partially or wholly complete and has not yet been accepted by VTA.

GC-53 Cleanup In addition to any requirements which may be included in **Section 8.0- Technical Specifications**, Contractor shall at all times during performance of Work under this Contract, keep the site clean from all rubbish and debris. Before final inspection of the Work, Contractor shall clean the material sites and all ground occupied by it in connection with the Work of all rubbish, excess materials, falsework, forms, temporary structures, and equipment. All parts of the Work shall be left in a neat and presentable condition.

GC-54 Redlined Construction Drawings Drawings showing all approved changes made during construction which differ from the approved drawing set for construction, shall be furnished by Contractor prior to the acceptance of the Work. Final construction drawings submitted to VTA shall be in the form of redlined drawings clearly and neatly indicating all changes made with the approval of VTA and other field changes made which reflect the as-built condition of the Contract. During the construction period, redlined construction drawings shall be maintained by Contractor and made available to VTA for review on a daily basis.

GC-55 Final Inspection and Acceptance of All or a Portion of the Work

55.1 Final Inspection and Acceptance of all the Work. When Contractor considers that all of the Work covered under this Contract has reached final completion, Contractor shall so inform VTA in writing. If necessary and required, acceptance tests on the Work will be performed as set forth in **Section 8.0 - Technical Specifications**. VTA will prepare a punchlist covering the Work that fails to pass the acceptance tests or is otherwise unacceptable and will reject such Work. Contractor shall proceed immediately to correct or replace unsatisfactory, incomplete or unacceptable work. For items of Work not completed by Contractor VTA may proceed to have the items corrected or completed using VTA or third party forces **in accordance with GC-50**. The costs of such corrections shall be deducted from compensation due Contractor.

Unless otherwise stipulated, title to such rejected Work and risk of loss shall remain with Contractor, and Contractor shall have the responsibility and bear all costs to correct all defects or damage. All acceptance testing of Work which has been rejected previously shall be at Contractor's expense and costs incurred by VTA to perform such re-tests shall be deducted and withheld by VTA from payments otherwise due to Contractor.

Final acceptance of all of the Work deemed complete will occur after successful completion of all testing and deficiency and punchlist items, and VTA's determination that the Work conforms in all respects to all the Contract requirements. VTA shall inform Contractor of such acceptance of the Work by issuing a written notification stating that the Work has been completed in accordance with the Contract requirements and is accepted under the terms and conditions thereof. After VTA has formally accepted the Work, Contractor will be relieved of the duty of maintaining and protecting the accepted Work and will not be required to perform any further Work thereon; and Contractor shall be relieved of its responsibility for injury to persons or property or damage to the Work which occurs after formal acceptance by VTA. Acceptance of the Work shall not relieve Contractor from responsibility for errors, improper fabrication, non-conformance to a Contract requirement, latent defects, or for deficiencies within Contractor's control. Unless otherwise stipulated, all warranties begin with the date of such acceptance of all of the Work. Coincident with such acceptance, VTA may record a Notice of Completion.

55.2 Final Inspection and Acceptance of a Portion of The Work. VTA may at its discretion

accept a discrete portion of the Work covered under this contract. When VTA considers that a discrete portion of the Work covered under this Contract has reached final completion, VTA shall inform the Contractor in writing. If necessary and required, acceptance tests on the discrete portion of Work will be performed as set forth in **Section 8.0 - Technical Specifications**. VTA will prepare a punchlist covering any part of the discrete portion of Work that fails to pass the acceptance tests or is otherwise unacceptable and will reject such Work. Contractor shall proceed immediately to correct or replace unsatisfactory, incomplete or unacceptable Work. For items of Work not completed by Contractor VTA may proceed to have the items corrected or completed using VTA or third party forces in accordance with **GC-50**. The costs of such corrections shall be deducted from compensation due Contractor.

Unless otherwise stipulated, title to such rejected Work and risk of loss shall remain with Contractor, and Contractor shall have the responsibility and bear all costs to correct all defects or damage. All acceptance testing of Work which has been rejected previously shall be at Contractor's expense and costs incurred by VTA to perform such re-tests shall be

deducted and withheld by VTA from payments otherwise due to Contractor.

Final acceptance of a discrete portion of Work deemed complete will occur after successful completion of all testing and deficiency and punchlist items, and VTA's determination that the Work conforms in all respects to all the Contract requirements. VTA shall inform Contractor of such acceptance of the Work by issuing a written notification stating that the Work has been completed in accordance with the Contract requirements and is accepted under the terms and conditions thereof. After VTA has accepted the Work, Contractor will be relieved of the duty of maintaining and protecting the accepted Work and will not be required to perform any further Work thereon and Contractor shall be relieved if its responsibility for injury to persons or property or damage to the Work which occurs after formal acceptance by VTA. Acceptance of a discrete portion of the Work shall not relieve Contractor from responsibility for errors, improper fabrication, non-conformance to a Contract requirement, latent defects, or for deficiencies within Contractor's control. Unless otherwise stipulated, all warranties begin with the date of such acceptance of the particular discrete portion of the Work.

COMPENSATION, PAYMENTS, RECORDS AND AUDIT

GC-56 Compensation Contractor shall accept the compensation set out in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to properly perform and satisfactorily complete all the Work included under this Contract.

Neither the payment of any progress payment nor any retained percentage shall relieve Contractor of any obligation to make good any defective work or material.

No compensation will be made in any case for the loss of anticipated profits.

GC-57 Increased or Decreased Quantities, and Quantity Variation Increases or decreases in the quantity of a contract item of Work will be determined by comparing the total performed quantity of that item of Work with the quantity in the **Schedule of Quantities and Prices**.

If the total performed quantity of any item of Work required under the contract varies from the quantity in the **Schedule of Quantities and Prices** by 25 percent or less, payment will be made for the quantity of Work of the item performed at the contract unit price.

Should the total performed quantity of any item of Work required under the contract be less than 75 percent of the quantity in the **Schedule of Quantities and Prices**, an adjustment in compensation pursuant to this Section will not be made unless the Contractor so requests in writing. If the Contractor so requests, the quantity of the item performed, unless covered by an executed contract change order specifying the compensation payable therefore, will be paid for by adjusting the contract unit price as hereinafter provided, or at the option of VTA, payment for the quantity of the Work of the item performed will be made on the basis of force account as provided in **GC-60**, provided however, that in no case shall the payment for that Work be less than that which would be made at the contract unit price.

The adjustment of the contract unit price will be determined as hereinafter provided, of the total performed quantity of the item, including fixed costs. The actual unit cost will be determined by VTA in the same manner as if the Work were to be paid for on a force account basis as provided in **GC-60**; or the adjustment will be as agreed to by the Contractor and VTA.

The payment for the total performed quantity of the item of Work will in no case exceed the payment, which would be made for the performance of 75 percent of the quantity in the **Schedule of Quantities and Prices** for the item at the original contract unit price

If the total performed quantity of any item of Work required under the contract varies from the quantity in the **Schedule of Quantities and Prices** by more than 25 percent, in the absence of any executed contract change order specifying the compensation to be paid, the compensation payable to the Contractor will be determined in accordance with **GC-57**.

Should the total performed quantity of any item of Work required under the contract exceed the quantity in the **Schedule of Quantities and Prices** by more than 25 percent, the Work in excess of 125 percent of the quantity in the **Schedule of Quantities and Prices** and not covered by an executed contract change order specifying the compensation to be paid therefore will be paid for by adjusting the contract unit price, as hereinafter provided, or at the option of VTA payment for the Work involved in the excess will be made on the basis of force account as provided in **GC-60**.

The adjustment of the contract unit price will be the difference between the contract unit price and the actual unit cost, which will be determined as hereinafter provided, of the total performed quantity of the item. If the costs applicable to the item of Work included fixed costs, the fixed costs will be deemed to have been recovered by the Contractor by the payments made for 125 percent of the quantity in the **Schedule of Quantities and Prices** and in computing the actual unit cost; the fixed costs will be excluded. Subject to the above provisions, the actual unit cost will be determined by VTA in the same manner as if the Work were to be paid for on force account basis as provided in **GC-60**; or the adjustment will be as agreed to by the Contractor and VTA.

When the compensation payable for the number of units of an item of Work performed in excess of 125 percent of the quantity in the **Schedule of Quantities and Prices** is less than \$5,000.00 at the applicable contract unit price, VTA reserves the right to make no adjustment in the contract unit price if VTA so elects, except that an adjustment will be made if requested in writing by the Contractor.

GC-58 Certified Payrolls Contractor shall submit weekly for each week in which any Contract Work is performed a certified copy of all payrolls for its

employees and a certified copy of all of its subcontractor's payrolls to VTA within one week following the week when work was performed. The payrolls submitted shall conform to the requirements of 29 CFR Sec. 5.5 (a) (3) (i) and shall be in a form acceptable to VTA.

GC-59 Progress Payments

59.1 Schedule of Values If the Contract is bid on a Lump Sum basis, or there are Lump Sum line items in the Schedule of Quantities and Prices, within 10 working days following Notice of Award, Contractor shall prepare and submit a detailed Schedule of Values giving a complete breakdown of all Lump Sum prices, setting forth the estimated value of the various subdivisions of the work. Each item in the Schedule of Values shall include its proportionate share of overhead and profit. A proposed Schedule of Values may be rejected if any item is determined by VTA to be unbalanced or VTA deems it to be incomplete. VTA may request a detailed cost breakdown of any items. The Schedule of Values shall be for the purpose of enabling the Contractor and VTA to agree upon progress payment documents as described below. Notice to Proceed shall not be given until the Schedule of Values is approved by VTA.

59.2 Progress Payment Processing Once per month, on an agreed-upon and consistent date during the Contract, Contractor and VTA shall agree upon an estimate of the work performed and materials delivered. VTA shall submit the agreed-upon estimate to the Contractor on a document entitled "Progress Payment - Form B" (Form B). Contractor shall review and certify that all items, units, quantities and prices shown on the Form B are correct and that all work has been performed and materials supplied in accordance with the terms of the Contract and shall return the Form B, along with an Invoice for the total amount due on Contractor's letterhead to VTA Accounts Payable. No payment shall be due until Contractor returns the certified Form B and accompanying Invoice to VTA.

59.3 Full Compensation Payment for various bid items listed in the Schedule of Quantities and Prices (Bid Form #1) shall constitute full compensation to complete the Work in conformity with the Contract. All costs for Work shown or indicated in the Contract Documents, even if not specifically provided for by a bid item in the Schedule of Quantities and Prices shall be included. Except for relief provided by **GC-65, Change Requests and Change Notices, GC-66, Change Order, and GC-67, Differing Site Conditions**, the

Contractor will not be entitled to additional compensation for providing any activity or material necessary for the completion of the Work in accordance with the Contract even though the activity or material is not included in a specific bid item or indicated in the Contract.

59.4 Materials on Hand Acceptable materials on hand consist of materials or equipment furnished and delivered by Contractor to its facility or the jobsite but not yet incorporated in the Work, and properly stored in a location acceptable to VTA.

In order for materials on hand to be approved for payment, Contractor shall request payment for them on VTA-furnished forms accompanied by documentation as therein required including evidence of purchase, if appropriate. The materials must be separated from other like materials and must be physically identified as the property of VTA for use only on this contract. VTA may enter upon the premises of the Contractor for the purpose of inspection, checking or auditing, or for any other purpose, as VTA considers necessary.

59.5 Exclusion of Retention In conformance with 49 CFR, Part 26, Subpart B, Section 26.29.1(b)(10), the retention of proceeds required by Public Contract Code Section 10261 shall not apply. In conformance with Public Contract Code Section 7200(b), in subcontracts between the Contractor and a subcontractor and in subcontracts between a subcontractor and any subcontractor thereunder, retention proceeds shall not be withheld, and the exceptions provided in Public Contract Code Section 7200 (c) shall not apply. At the option of the Contractor, subcontractors shall be required to furnish payment and performance bonds issued by an admitted surety.

59.6 Special Withholding VTA may withhold moneys from any payments otherwise due to Contractor as it determines necessary to cover:

- a) Payments which may be past due and payable for just claims against Contractor or any Subcontractor for labor or materials furnished in performance of the Work under the Contract;
- b) For defective work not remedied;
- c) For failure of Contractor to make proper payments to any of its Subcontractors;
- d) A reasonable doubt that Contractor will complete the Work within the Contract time limits;

- e) Damage to other work or property caused by Contractor or its Subcontractor of any tier; if applicable.
- f) An amount, not less than 10 percent of the total progress payment, due to the failure to abate, within 1 working day or immediately in cases of imminent danger, infractions of VTA's Injury and Illness Prevention Program (VTA/IIPP), Contractor's Safety Plan, CAL/OSHA, FEDERAL OSHA, ANSI or other applicable safety standards.
- g) An amount not to exceed 20 percent of the total progress payment, due to four or more repeated infractions in a single payment period of VTA/IIPP, Contractor's Safety Plan CAL/OSHA, FEDERAL OSHA, ANSI and all other applicable safety standards.
- h) Items listed in **Section 50, Special Conditions** and **SC-51, Special Conditions** that are not received within the time specified. The amount withheld shall be 10% of the total progress payment or \$10,000, whichever is greater. Contractor's failure to submit any required items may subject it to the remedies of **GC-71, Termination for Default**.
- i) Any and all other circumstances in which VTA determines that it is necessary to protect its interests.

Whenever VTA withholds special retention, written notice of the amount withheld and the reason(s) shall be given Contractor. When Contractor removes the grounds for such withholding, VTA will include the amount so withheld in the next scheduled progress payment.

GC-60 Force Account Payment If work is directed by VTA to be performed on a force account basis, compensation shall be made as set forth in this provision. Such payment shall constitute full compensation to Contractor for work directed to be performed on force account and no additional compensation will be allowed therefor. Labor, materials and equipment used in the performance of work on a force account basis shall be approved daily by VTA.

60.1 Work performed by Contractor Contractor will be paid the direct costs for labor, materials and equipment used in performing the Work as hereinafter provided except where agreement has been reached to pay in accordance with **GC-60.7**. A markup may be added to the total of the direct costs

computed as provided in GC-60.2, 60.3, 60.4. The added markup shall not exceed 20 percent of the cost of labor, 15 percent of the cost of material, 15 percent of the equipment rental and 5 percent of the cost of subcontractors.

The above markups shall constitute full compensation for all overhead costs (general overhead, supervision, office expenses, field office facilities, utilities, and transportation) which shall be deemed to include all items of expense not specifically designated as cost or equipment rental in accordance with the subsections entitled "Labor," "Materials," and "Equipment Rental."

When work paid for on a force account basis is performed by forces other than Contractor's organization, Contractor shall reach agreement with such other forces as to the distribution of the payment made by VTA for such work. No additional payment therefor will be made by VTA by reason of the performance of the Work by a subcontractor or other forces.

60.2 Labor Contractor will be paid the cost of labor for the workmen (including foremen when authorized by VTA) used in the actual and direct performance of the Work. The cost of labor, whether the employer is Contractor, subcontractor, or other forces, will be the sum of the following:

- a) **Actual Wages** The actual wages paid shall include any employer payments to or on behalf of the workmen for health and welfare, pension, vacation, insurance, overtime, plus other additives in accordance with collective bargaining agreements.
- b) **Labor Surcharge** To the actual wages, as defined above, will be added a Labor Surcharge as set forth in the State of California Department of Transportation publication entitled *Labor Surcharge & Equipment Rental Rates*, which was in effect on the date upon which the Work was accomplished. Said labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined above and the actual subsistence and travel allowance. Provided, however that any costs for workers compensation insurance provided by VTA shall be deducted from the above Labor Surcharge total.

60.3 Materials VTA reserves the right to furnish such materials as it deems advisable, and

Contractor shall have no claims for costs and markup on such materials.

Only materials furnished by Contractor and necessarily used in the performance of the Work will be paid for. The cost of such materials will be the cost to the purchaser, whether Contractor, subcontractor or other forces, from the supplier thereof, except as the following are applicable:

- If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to VTA notwithstanding the fact that such discount may not have been taken.
- If materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by VTA. No markup except for actual costs incurred in the handling of such materials will be permitted.
- If the materials are obtained from a supply or source owned wholly or in part by the purchaser, payment therefor will not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or the current wholesale price for such materials delivered to the jobsite, whichever price is lower.
- If the cost of such materials is, in the opinion of VTA, excessive, then the cost of such material shall be deemed to be the lowest current wholesale price at which such materials are available in quantities concerned delivered to the jobsite, less any discounts as provided above.

60.4 Equipment Rental Compensation for equipment used on force account work shall be determined from the latest schedule of equipment rental rates listed in the State of California, Department of Transportation, Business and Transportation Agency Publication entitled *Labor Surcharge & Equipment Rental Rates*, and in use at the time the equipment is used. The equipment rental rates listed in said publication shall be used regardless of ownership and any rental or other agreement, if such may exist for the use of such equipment entered into by Contractor. If it is deemed necessary by VTA to use equipment not listed in the said publication, a suitable rental rate for such equipment will be established by VTA prior to the work being done. Contractor shall furnish any cost data which might assist VTA in the establishment of such rental rate.

The rental rate paid as above provided shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of

any kind, depreciation, storage, insurance and all incidentals.

Operators of rental equipment will be paid for as provided in the Subsection entitled "Labor."

All equipment shall, in the opinion of VTA, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

Individual pieces of equipment or tools having a replacement value of \$250 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor. Rental time will not be allowed while equipment is inoperative due to breakdowns.

60.5 Equipment at the Site of the work The rental time to be paid for equipment on the Work shall be the time the equipment is in operation on the Work being performed, and in addition, shall include the time required to move the equipment to the location of the Work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the Work on other than such work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the Work on other than such Work. The following shall be used in computing the rental time of equipment on the Work:

- When hourly rates are listed, less than 30 minutes of operation shall be considered to be one-half hour of operation.
- When daily rates are listed, less than 4 hours of operation shall be considered to be one-half day of operation.

60.6 Equipment Not at the Site of the Work For the use of equipment moved onto the site of the Work and used exclusively for work paid for on a force account basis Contractor will be paid the rental rates as determined in the Subsection entitled "Equipment Rental" and for the cost of transporting the equipment to the location of the Work and its

return to its original location, all in accordance with the following provisions:

- The original location of the equipment to be hauled to the location of the Work shall be agreed to by VTA in advance.
- VTA will pay the cost of loading and unloading such equipment.
- The cost of transporting equipment in low bed trailers shall not exceed the hourly rates listed in the State of California Department of Transportation publication entitled *Labor Surcharge & Equipment Rental Rates*.
- The cost of transporting equipment shall not exceed the applicable minimum established rates of the Public Utilities Commission.

The rental period shall begin at the time the equipment is unloaded at the site of the Work, shall include each day that the equipment is at the site of the Work, excluding Saturdays, Sundays, and VTA holidays unless the equipment is used to perform the Work on such days, and shall terminate at the end of the day on which VTA directs Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

Hours of Operation	Hours to be paid
0.....	4
0.5.....	4.25
1.....	4.5
1.5.....	4.75
2.....	5
2.5.....	5.25
3.....	5.5
3.5.....	5.75
4.....	6
4.5.....	6.25
5.....	6.5
5.5.....	6.75
6.....	7
6.5.....	7.25
7.....	7.5
7.5.....	7.75
8.....	8
Over 8.....	Actual hours in operation

The hours to be paid for equipment which is operated less than 8 hours due to breakdowns, shall not exceed 8 less the number of hours the equipment is inoperative due to breakdowns.

When hourly rates are listed, less than 30 minutes of operation shall be considered to be one-half hour of operation. When daily rates are listed, payment for

one-half day will be made if the equipment is not used. If the equipment is used, payment will be made for one day. The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

Should Contractor desire the return of the equipment to a location other than its original location, VTA will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the Work.

Payment for transporting, and loading and unloading equipment, as provided above, will not be made if the equipment is used on the Work in any other way than upon Work paid for on a force account basis.

When work, other than work specifically designated as Work in the Contract Documents, is to be paid for on a force account basis and VTA determines that such work requires Contractor to move on to the site equipment which could not reasonable have been expected to be needed in the performance of the Contract, payment for the use of such equipment at equipment rental rates in excess of those listed as applicable for the use of such equipment will be made subject to the following additional conditions:

- VTA shall specifically approve the necessity for the use of particular equipment on such Work.
- Contractor shall establish to the satisfaction of VTA that such equipment cannot be obtained from its normal equipment source or sources and those of its subcontractors.
- Contractor shall establish to the satisfaction of VTA that the proposed equipment rental rate for such equipment from its proposed source is reasonable and appropriate for the expected period of use.
- VTA shall approve the equipment source and the equipment rental rate to be paid by VTA before Contractor begins work involving the use of said equipment.

60.7 Work Performed by Special Forces or Other Special Services When VTA and Contractor, by mutual agreement, determine that a special service or an item or work cannot be performed by the forces of Contractor, or those of any of its subcontractors, such service or work item may be performed by a specialist. Invoices for such service or item of work, performed by a specialist on the basis of the current market price thereof, may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the

special service industry to provide such complete itemization.

In those instances wherein a Contractor is required to perform work necessitating a fabrication or machining process in a fabrication or machine shop facility away from the jobsite, the charges for that portion of the Work performed in such a facility, may by mutual agreement, be accepted as a specialist billing.

In lieu of the percent markups provided above in the Subsection entitled **“Work Performed by Contractor”**, a 15 percent markup will be added to the specialist price, less a credit to VTA for any cash or trade discount offered or available, whether or not such discount may have been taken.

60.8 Owner-Operated Equipment When “Owner-Operated Equipment” is used to perform work to be paid on a force account basis, Contractor will be paid for the equipment and operator, as follows:

- Payment for the Equipment will be made in accordance with the Subsection herein entitled **“Equipment Rental.”**
- Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by Contractor to other workmen operating similar equipment already on the project or, in the absence of such other workmen, at the rates for such labor established by collective bargaining agreements for the type of workmen and location of the Work, whether or not the “Owner-Operator” is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein, in accordance with the provisions of Subsection entitled **“Labor Surcharge.”**
- To the direct cost of equipment rental and labor, computed as provided herein, will be added the markups for labor and equipment rental as provided in Subsection entitled **“Work Performed by Contractor.”**

If, at any time after Contractor commences the force account work, a method of compensation other than that specified in this Article has been agreed upon for the force account work or a portion of such work, such compensation shall be made in accordance with such agreement.

Contractor shall keep accurate daily records of the actual cost to Contractor for all work performed pursuant to this Article and shall make them available to VTA upon reasonable notice and request. Such

records shall be maintained in such a manner so as to be completely discernible from records associated with the basic Contract scope.

GC-61 Prompt Payment

61.1 Payment to Contractor Public Contract Code Section 20104.50 requiring prompt payment to contractors is applicable to this contract. Undisputed and properly submitted payment requests shall be paid within 30 days of receipt by VTA. Any undisputed and properly submitted payment request not paid within 30 days shall accrue interest at the legal rate set forth in Code of Civil Procedure Section 685.010.

A certified Progress Payment – Form B document, as described in **GC-59, Progress Payments** shall constitute a payment request. Any payment request determined by VTA not to be a proper payment request suitable for payment shall be returned to Contractor within seven days of receipt setting forth in writing the reasons why the payment request is not proper.

61.2 Payment to Subcontractors Contractor shall adhere to all federal and California prompt payment laws and regulations including Business and Professions Code Section 7108.5 requiring Contractor to pay subcontractors within 10 days of receipt of each progress payment to the extent of each subcontractor's interest therein, unless otherwise agreed to in writing.

GC-62 Final Payment Final payment shall not become due until the following actions have been satisfactorily completed:

a) Contractor submittal to VTA of:

- An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work have been paid or otherwise satisfied, and

- A release of liens and claims arising out of the Contract, to the extent and in the form designated by VTA. If a claim remains unsatisfied after all payments are made, Contractor shall reimburse VTA for all monies that VTA may be compelled to pay in discharging the claim, including all costs and reasonable attorney's fees.

b) Final Acceptance of the work.

The acceptance of final payment by Contractor shall constitute a waiver of all claims against VTA arising under the Contract.

GC-63 Project Records Comprehensive records and documentation relating to this project shall be kept by Contractor. The records shall include, but are not limited to Contract Documents, Drawings, Specifications, Addenda, Shop Drawings and Submittals, Change Orders, Modifications, Test Records, redlined construction plans, As-Built Drawings, and cost and pricing data. Contractor shall maintain a complete set of records relating to this Contract for a period of seven years from final payment for this Work. The cost records shall be complete and in sufficient detail to allow evaluation of the accuracy and completeness, and currency of the costs or prices. Contractor shall permit the authorized representatives of VTA, the U.S. Department of Transportation, and the Comptroller General of the United States to examine and audit all such records and any subcontracts under this Contract during the time period so specified. In addition, every contract involving the expenditure of public funds in excess of ten thousand dollars (\$10,000) entered into by a public entity in the State of California shall be subject to the examination and audit of the State Auditor, at the request of the public entity or as part of any audit of the public entity, for a period of three years after final payment under the contract.

CONTRACT MODIFICATIONS, DISPUTES AND CLAIMS

GC-64 Not Used

GC-65: Change Requests and Change Notices

65.1 Change Requests. Contractor may make a written request to VTA to modify the Contract (Change Request) based upon the receipt of, or the discovery of information that changes the scope, price, schedule, level of performance, or other facet of the Contract.

Contractor shall deliver a document entitled "Change Request" to VTA within 30 calendar days after receipt of, or the discovery of, information (other than receipt of a "Change Notice") that Contractor believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Contract. Upon receipt of a Change Notice, Contractor shall follow the procedures of **GC-65.2**. All Change Requests, and any Claims based thereon including any request or claim for cumulative impact costs shall be deemed waived unless a Change

Request is delivered to VTA within the 30 calendar days specified herein.

The Change Request shall include information necessary to substantiate the effect of the change and any impacts to the work, including any change in schedule or Contract Price, and shall include all existing documentation or a description of anticipated documentation. In addition, the Change Request shall contain a detailed description of the proposed adjustment to the Contract Price or currently approved progress schedule, or both, and shall reference any other provisions of the Contract that will require modification because of the change. If a Change Request proposes an adjustment in the Contract Price, upon request of VTA, Contractor shall submit a complete breakdown of costs including detailed pricing information and back up for all work and any impacts thereto contemplated by the change.

The unavailability of all information necessary to quantify the change shall not excuse the timely submission of the Change Request. Contractor shall supplement the Change Request with additional information or documentation, as it becomes available. If VTA has not received sufficient substantiating documentation or information within a reasonable time after receipt of the Change Request, such insufficiency may be grounds to deny the Change Request.

If a Change Request or portions thereof are acceptable to VTA, VTA will issue a Contract Change Order consistent therewith. If a Change Request or portions thereof are not acceptable to VTA, VTA shall notify the Contractor in writing.

Any request by Contractor to modify the contract must first be submitted to VTA and proceed as a Change Request pursuant to these provisions. The Contractor may submit the matter as a Claim pursuant to **GC-68, Claims** only if, i) the Change Request has been denied by VTA in whole or in part, or ii) the Change Request has not been resolved within 90 days after receipt by VTA.

In the event of a dispute, Contractor shall proceed with the Work without delay, as directed by VTA.

65.2 Change Notice VTA may, at any time during performance of the Contract notify Contractor of changes to the Contract by issuing a **Change Notice** to that effect. Contractor shall, within 15 calendar days after receipt of such Change Notice, provide to VTA a written response identifying any proposed adjustment in Contract Price, including any

adjustment for cumulative impact costs and schedule to perform the changes identified in the Change Notice, unless another time period for response is specified in the Change Notice. VTA shall then issue an appropriate Change Order.

If VTA directs Contractor to perform additional work, the basis for compensation for such work shall be either: 1) extension of Contract items, 2) negotiated lump sum price, or 3) force account, as determined by VTA. The markups described in **GC-60.1** shall be the maximum allowed for all additional work directed by VTA.

VTA retains the right to direct Contractor to complete a portion of the Work at a time different than that specified in the Contract or reflected in the currently approved progress schedule. Such direction will be in writing and will provide for an equitable adjustment in the compensation to be paid to Contractor, if any. If such direction modifies the amount of compensation or time required for the completion of the Work, an appropriate change order will be issued.

If the Contractor and VTA cannot agree on the appropriate adjustment to the Contract Price or schedule, Contractor may either accept VTA's determination or identify and submit the matter as a Claim pursuant to the provisions of **GC-68, Claims**. In the event of a dispute, Contractor shall proceed with the Work without delay as directed by VTA.

GC-66 Change Order. A Change Order is a written document issued by VTA, that:

- Changes the Contract Price, as modified by any previously executed Change Orders, or
- Alters the scope of Work under the Contract, or
- Alters the schedule for performance of the Work under the Contract as set forth in the currently approved schedule, or
- Makes any other change to the Contract, or makes a combination of any of the aforementioned Contract changes.

GC-67 Differing Site Conditions

67.1 Soil Boring or Other Data. Where VTA has included soil boring information or other data in the Contract, they are included for Contractor's information only and VTA does not guarantee the accuracy of the information contained therein.

67.2 Notice of Differing Conditions. Contractor shall promptly and before such conditions are disturbed, notify VTA in writing of subsurface or

latent physical conditions at the site differing materially from those indicated in the Contract, or unknown physical conditions at the site, of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract.

All Change Requests involving differing site conditions and any Claims based thereon shall be deemed waived unless the Contractor has given written notice before the conditions are disturbed as specified herein.

VTA will, as soon as practicable, investigate or cause to be investigated the items noted by Contractor and, if it is determined that such conditions do materially so differ and cause an increase or decrease in Contractor's cost of or time required for the performance of any part of the Work under the Contract, whether or not changed as a result of such conditions, an equitable adjustment will be made and the Contract modified.

GC-68 Claims

68.1 Claim Defined "Claim" means a separate demand by Contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or that Contractor is not otherwise entitled to, or (C) an amount the payment of which is disputed by VTA.

68.2 Claim Requirements:

1. Any submittal intended by the Contractor to be evaluated by VTA as a Claim shall be entitled "Claim".
2. All claims shall be submitted by the Contractor within 30 days after the date of the event giving rise to the Claim, such as, for example, the denial by VTA of a Change Request, the failure of VTA to respond to a Change Request within 90 days after receipt of required substantiating information and documentation, or the issuance by VTA of a disputed Change Order. Any Claim not submitted within the specified 30 days shall be deemed waived.
3. Claims shall be in writing and must be submitted with all documents

necessary to substantiate the Claim. A Claim must state in as much detail as possible the basis for the Claim and the additional compensation or extra time to which Contractor believes it is entitled. If the Claim is silent regarding entitlement to extra time, Contractor shall be entitled to no extra time in connection with the Claim. If the Claim is silent regarding additional compensation, Contractor shall be entitled to no additional compensation in connection with the Claim.

4. Contractor must notify VTA promptly in writing of any changes in its estimates of additional compensation or extra time, and the notification must state the reasons for the changes.
5. All Claims and any amendments thereto shall include the fully executed certification set forth below. Any Claim submitted without a fully executed certification shall be rejected by VTA and returned to the Contractor.

I, _____,
BEING THE _____ (MUST BE
AN _____ OFFICER)
OF _____ (CONTRACT
OR), DECLARE UNDER PENALTY OF PERJURY
UNDER THE LAWS OF THE STATE OF
CALIFORNIA, AND DO PERSONALLY CERTIFY
AND ATTEST THAT I HAVE THOROUGHLY
REVIEWED THE ATTACHED CLAIM FOR
ADDITIONAL COMPENSATION AND/OR
EXTENSION OF TIME, AND KNOW ITS
CONTENTS, AND SAID CLAIM IS MADE IN
GOOD FAITH; THE SUPPORTING DATA IS
TRUTHFUL AND ACCURATE; THAT THE
AMOUNT REQUESTED ACCURATELY
REFLECTS THE CONTRACT ADJUSTMENT
FOR WHICH THE CONTRACTOR BELIEVES
THE OWNER IS LIABLE; AND, FURTHER,
THAT I AM FAMILIAR WITH CALIFORNIA
PENAL CODE SECTION 72 AND CALIFORNIA
GOVERNMENT CODE 12650, ET SEQ,
PERTAINING TO FALSE CLAIMS, AND
FURTHER KNOW AND UNDERSTAND THAT
SUBMISSION OR CERTIFICATION OF A FALSE
CLAIM MAY LEAD TO FINES,
IMPRISONMENT, AND/OR OTHER SEVERE
LEGAL CONSEQUENCES.

By _____

applies to civil actions filed to resolve claims of \$375,000 or less:

6. No Claims shall be filed later than the date of final payment.

68.3 Claim Review. VTA shall respond in writing to Contractor's Claim within 45 calendar days after VTA's receipt of the Claim or VTA may request in writing, within 30 days of receipt of the Claim, any additional information or documentation supporting the Claim or relating to defenses to the Claim VTA may have against the Contractor. For claims exceeding \$375,000 VTA may, at its option, notify Contractor of extended time periods for review and response.

VTA's written response to the Claim, as further documented, shall be submitted to Contractor within 15 days after receipt of the further information or documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

68.4 Meet and Confer If Contractor disputes VTA's written response, or if VTA fails to respond within the time prescribed, Contractor may so notify VTA, in writing, either within 15 days of receipt of VTA's response or within 15 days of VTA's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, VTA shall schedule a meet and confer conference within 30 days for settlement of the dispute.

Following the meet and confer conference, if the Claim or any portion remains in dispute, Contractor may file a Government Code claim as provided in Chapter 1 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a Government Code claim must be filed shall be tolled from the time Contractor submits its written Claim pursuant to the above provisions until the time the Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

The above procedures do not apply to Government Code claims for tort damages and are not intended, and shall not be construed, to change the time for filing such claims.

68.5 Procedures for Civil Actions As required by law VTA sets forth below the provisions of Public Contract Code Section 20104.4, which

(a) Within 60 days, but no earlier than 30 days, following the filing of responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b) (1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

The above claims procedures are also subject to Public Contract Code § 20104.6, which provides:

(a) *No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.*

(b) *In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.*

SUSPENSION OF WORK, CONTRACT TERMINATION

GC-69 Suspension of the Work In addition to the right of VTA to suspend Work under any other provision of this Contract, VTA may require Contractor to suspend all or part of the Work called for by this Contract at any time for up to **90 days** after a written Suspension Order is delivered to Contractor, and for any further period to which the parties may agree. The Suspension Order shall include the following:

- A clear description of the Work to be suspended;
- Guidance as to the action to be taken on subcontracts; and
- Other requests for minimizing costs.

Upon receipt of a Suspension Order, Contractor shall comply with its terms immediately and take all reasonable steps to minimize cost allocable to the Work covered by the Order during the period of work stoppage. Within the period specified by the Order, or within any extension of that period to which the parties may agree, VTA may:

- Terminate the Work covered by the Order as set forth in this section.
- Cancel the Suspension Order; or
- Allow the period of the Suspension Order to expire.

Contractor shall resume work upon the cancellation or expiration of a Suspension Order. An equitable adjustment shall be made in the Work scope, Contract Price, or Contract time, as appropriate, and the Contract shall be modified in writing in accordance with **GC-32, Excusable Delays and Extensions of Time** and **GC-69, Suspension of the Work** if:

- The Suspension Order results in an increase in the time required for, or in Contractor's cost properly allocable to, the performance of any part of this Contract; and
- Contractor asserts a claim for an adjustment within 30 days after the end of the period of work stoppage; and
- The Suspension Order was not caused by Contractor's default or other act or omission within the control or responsibility of Contractor.

In preparation for and during suspensions of work, Contractor shall take every reasonable precaution to prevent damage to or deterioration of the Work. Contractor shall repair or replace, at no cost to VTA, Work that is damaged or deteriorated during a work suspension due to Contractor's failure to comply with this duty. If VTA determines that Contractor is not taking reasonable precautions and Contractor fails to take the corrective action within five days after written notice from VTA, VTA may cause such action to be taken and recover the reasonable cost thereof from Contractor.

GC-70 Termination for Convenience or in the Public Interest VTA may terminate this Contract in whole or in part at any time by written notice to Contractor if VTA determines that termination is in the best interest of VTA or the public. If this Contract is so terminated, Contractor shall be entitled to payment for all Work performed acceptably and to payment for all acceptable goods or services ordered by and delivered to Contractor before termination, and to all reasonable costs of closing-out the Contract, provided that Contractor provides a final itemized invoice, including all necessary documentation to substantiate all costs incurred, for the above amounts within 30 days after receiving the termination notice.

GC-71 Termination for Default VTA may, by written notice of default to Contractor, terminate Contractor's right to proceed with the Work under the Contract, in whole or with regard to any part:

- if Contractor fails to supply an adequate working force, or materials of proper quality, or otherwise refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will ensure its completion within the time specified in this Contract, or authorized extension thereof; or
- if Contractor fails to make prompt payment to its subcontractors or suppliers upon receipt of progress payments from VTA; or
- if Contractor persistently disregards laws, ordinances, or instructions of VTA, and
- if Contractor does not cure such failure within a period of seven days (or such longer period as

VTA may authorize in writing) after receipt of notice from VTA specifying such failure.

In the event of such termination for default, VTA may take over the Work and prosecute the same to completion, by contract or otherwise, and may take possession of and use all or any part of Contractor's material, tools, equipment, and appliances as may be on the site of the Work and which are necessary for performance of the Work. Upon completion of such work, Contractor is entitled to return of all unused materials and its equipment, tools and appliances, except that there shall be no claim on account of usual and ordinary depreciation, loss, or wear and tear.

If Contractor's right to proceed is so terminated, Contractor shall not be entitled to receive any further payment until the Work is completed. Contractor and its surety(s) shall be liable to VTA for any additional costs of completion of the Work, including compensation for additional managerial and administrative services, plus liquidated damages accruing under the terms of this Contract from the Contract completion date, as extended by authorized time extensions, to the date of final completion.

If, after termination for failure to fulfill contract obligations, it is determined that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of VTA.

GC-72 Contractor's Duties Upon Termination

After receipt of a Notice of Termination, either for default or convenience, Contractor shall:

- stop work under the Contract on the date and to the extent specified in the Notice of Termination;
- place no further orders or subcontracts for materials, services, or facilities, except as may be necessary for completion of such portion of the Work under the Contract as is not terminated;
- terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;
- assign to VTA in a manner, at the times, and to the extent directed by VTA, all of the right, title, and interest of Contractor under the orders and subcontracts so terminated.

WARRANTY PROVISIONS

GC-73 Warranty It is a condition of this Contract that the equipment, materials or design furnished, and workmanship performed by the Contractor or any subcontractor or supplier at any tier, shall conform to the requirements of this contract and shall be free of any defect. Neither inspection, testing and acceptance by VTA of such equipment, materials, design or work performed, partial or final payment, nor any provisions of the Contract shall relieve the Contractor from responsibility for any latent defect, gross mistakes or fraud. The Contractor and its surety(s) shall warrant, regardless of the warranties obtained from the Subcontractors, all equipment, materials, design and workmanship for a period of one year from the date of Final Acceptance by VTA of all of the work under the Contract or any discrete portion thereof. The Contractor's warranty with respect to work repaired or replaced shall also run for one year from the date of repair or replacement. In addition, the Contractor shall furnish a written guarantee covering all or certain items of work and shall extend any warranty from a subcontractor or supplier that exceeds the above warranty period. If such additional or varying guarantees are required, they will be specified in Section 6.0 - Special Conditions of this contract. VTA retains the right, at its sole discretion, to assign to a third Party any warranty received under this Contract.

GC-74 Warranty Work The Contractor is responsible for all warranty-covered repair work during the warranty period as specified above. The Contractor shall provide at its own expense, all spare products and tools required for repairs. To the extent practicable, the VTA will allow the Contractor or its designated representative to perform such work. When warranty repairs are required, VTA and the Contractor's representative shall agree on the most appropriate remedy to be performed within a reasonable time. If the Contractor fails to remedy any failure or defect within a reasonable time, VTA shall have the right to replace, repair, or otherwise remedy the failure or defect at the Contractor's expense. At its discretion, VTA may also perform such work if it deems necessary to do so to meet its operational commitments or other requirements. The Contractor shall reimburse VTA of all expenses for such work including materials and labor. The hourly shop labor rates shall be based on VTA's current labor cost accounting system. The Contractor shall reimburse VTA for such work within sixty days of receipt of warranty claim.

GC-75 Warranty on Replaced Parts Any materials, parts or components which are used for replacement under the initial warranty period shall be warranted again for the total original warranty period of the replaced particular material, part or component.

GC-76 Systematic Failures In the event that, during the warranty period, repairs or modifications necessitated by defective design, material, or workmanship occur to an extent in excess of 10% of the components used for the same function in the same assembly or subsystem purchased under this Contract, Contractor shall promptly furnish all necessary labor and material to effect such repairs

and modifications for every system delivered under the Contract under the terms and conditions outlined, including systems in which the item has not yet failed. When requested by VTA, the Contractor will be required to provide a written failure analysis report for defective products supplied under this contract and which occurred during the warranty period. The report shall be received by VTA within 45 days from the date of request.

8.0 TECHNICAL SPECIFICATIONS

8.0 TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

TS-1 GENERAL PROVISIONS
TS-2 CONSTRUCTION TRAFFIC CONTROL
TS-3 EXISTING FACILITIES
TS-4 TRAFFIC MANAGEMENT SYSTEM (TMS)
TS-5 PILING
TS-6 PAVEMENT DELINEATION & SIGNAGE
TS-7 WIRELESS MAGNETOMETER VEHICLE DETECTION SYSTEM (WMVDS)



David Kobayashi, PE
Registered Civil Engineer

TS-1 GENERAL PROVISIONS

The work embraced herein shall conform to the provisions in the Standard Specifications dated May 2006 and the Standard Plans dated May 2006 of the Department of Transportation and as amended, insofar as the same may apply and these special provisions.

TS-1.1 STANDARD PLAN

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. Applicable Revised Standard Plans (RSP) and New Standard Plans (NSP) indicated below are included in the project plans as individual Standard Plan sheets.

Standard Plans List	
Plan No.	Plan Title
	<u>ACRONYMS, ABBREVIATIONS AND SYMBOLS</u>
A10A	Acronyms and Abbreviations (Sheet 1 of 2)
A10B	Acronyms and Abbreviations (Sheet 2 of 2)
A10C	Symbols (Sheet 1 of 2)
A10D	Symbols (Sheet 2 of 2)
	<u>PAVEMENT MARKERS & TRAFFIC LANES</u>
A20C	Pavement Markers and traffic Lines – Typical Details
	<u>OBJECT MARKERS, DELINEATORS, CHANNELIZERS AND BARRICADES</u>
A73A	Object Markers
A73B	Markers
A73C	Delineators, Channelizers and Barricades
	<u>TEMPORARY TRAFFIC CONTROL SYSTEMS</u>
T10	Traffic Control System for Lane Closure On Freeways and Expressways
T10A	Traffic Control System for Lane and Complete Closures on Freeways and Expressways
T11	Traffic Control System for Lane Closure on Multilane Conventional Highways
T12	Traffic Control System for Lane Closure on Multilane Conventional Highways
T13	Traffic Control System for Lane Closure on Two Lane Conventional Highways
T14	Traffic Control System for Ramp Closure
	<u>ROADSIDE SIGNS</u>
RS1	Roadside Signs, Typical Installation Details No. 1
RS2	Roadside Signs – Wood Post, Typical Installation Details No. 2
RS3	Roadside Signs – Laminated Wood Box Post Typical Installation Details No. 3
RS4	Roadside Signs, Typical Installation Details No. 4
	<u>ELECTRICAL SYSTEMS – SYMBOLS AND ABBREVIATIONS</u>
RSP ES-1A	Electrical Systems (Symbols and Abbreviations)

RSP ES-1B	Electrical Systems (Symbols and Abbreviations)
RSP ES-1C	Electrical Systems (Symbols and Abbreviations)
	<u>ELECTRICAL SYSTEMS – DETECTORS</u>
RSP ES-5A	Electrical Systems (Detectors)
ES-5B	Electrical Systems (Detectors)
ES-6B	Electrical Systems (Lighting Standard Types 15 & 21 barrier Rail Mounted Details)
ES-7M	Electrical Systems (Signal and Lighting Standards Details No. 1)
	<u>ELECTRICAL SYSTEMS – FOUNDATION DETAILS</u>
ES-11	Electrical Systems (Foundation Details)
	<u>ELECTRICAL SYSTEMS – SPLICING, WIRING DETAILS AND FUSE RATINGS</u>
ES-13A	Electrical Systems (Splicing Details)
ES-13B	Electrical Systems (Wiring Details and Fuse Ratings)
	<u>ELECTRICAL SYSTEMS – CLOSED CIRCUIT TELEVISION PLOE AND FOUNDATION DETAILS</u>
ES-16A	ELECTRICAL SYSTEMS – (CLOSED CIRCUIT TELEVISION PLOE AND FOUNDATION DETAILS)

TS-1.2 ORDER OF WORK AND SCOPE OF WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these special provisions.

The first order of work shall be to place the order for the electrical equipment / materials. The Engineer shall be furnished a statement from the vendor that the order for the electrical equipment / materials have been received and accepted by the vendor.

• TS-2 CONSTRUCTION TRAFFIC CONTROL

Attention is directed to the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications and these special provisions.

TS-2.1 MAINTAINING TRAFFIC

Maintaining traffic shall conform to the provisions in Sections 7-1.08, "Public Convenience," Section 7-1.09, "Public Safety," and Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, "Public Safety" of these special provisions and these special provisions.

Closure is defined as the closure of a traffic lane or lanes, including shoulder, ramp or connector lanes, within a single traffic control system.

Closures shall conform to the provisions in "Traffic Control System for Lane Closure" of these special provisions.

TS-2.2 MAINTENANCE OF PUBLIC TRAFFIC AND PERMITTED HOURS OF CLOSURE

Work that interferes with public traffic shall be limited to the hours when lane closures are allowed, except for work required under Sections 7-1.08, "Public Convenience," and Section 7-1.09, "Public Safety."

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

Local authorities shall be notified at least 5 business days before work begins. The Contractor shall cooperate with local authorities to handle traffic through the work area and shall make arrangements to keep the work area clear of parked vehicles.

Lane closure charts are for the installation of vehicle detection loops, and other related vehicle loop repair work as approved in writing by the Engineer.

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

When work vehicles or equipment are parked within 6 feet of a traffic lane to perform active construction, the shoulder area shall be closed.

When complete freeway, expressway or conventional highway closure is required, only one detour for each direction of travel will be allowed for the following operations: installation and repair of vehicle loop detection.

Re-Bid Ramp Metering Implementation Project Phase III
CONTRACT 10074
 Issued May 14, 2010

Chart No. 1 – Location 1 Complete Ramp Closure Hours/Ramp Lane Requirements																															
County: Santa Clara										Route/Direction: NB SR-87										PM: 1.54											
Closure Limits: Northbound off-ramp to Capitol Expressway																															
FROM HOUR TO HOUR 24 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 17 18 19 20 21 22 23 24																															
Mondays through Thursdays										C	C	C	C	C	C																
Fridays										C	C	C	C	C	C																
Saturdays											C	C	C	C	C	C															
Sundays											C	C	C	C	C	C	C														
Legend: C Ramp may be closed completely. No complete freeway or expressway closure is permitted. Work permitted within project right of way where shoulder or lane closure is not required.																															
REMARKS: "See Lane Closure Restriction for Designated Legal Holidays and Special Days table in Maintain Traffic of these special provisions for additional closure restrictions."Refer to DE-2 for the Detour Plans.																															

TS-2.3 CLOSURE REQUIREMENTS AND CONDITIONS

Closures shall conform to the provisions in "Maintaining Traffic" of these special provisions and these special provisions.

CLOSURE SCHEDULE

A written schedule of planned closures for the next week period, defined as Sunday noon through the following Sunday noon, shall be submitted by noon each Monday. A written schedule shall be submitted not less than 14 days and not more than 60 days before the anticipated start of any operation that will:

1. Reduce horizontal clearances, traveled way, including shoulders, to two lanes, including ramp closure due to loop repair.

The Closure Schedule shall show the locations and times of the proposed closures. The Closure Schedule request forms furnished by the Engineer shall be used. Closure Schedules submitted to the Engineer with incomplete or inaccurate information will be rejected and returned for correction and resubmittal. The Contractor will be notified of disapproved closures or closures that require coordination with other parties as a condition of approval.

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

The Engineer shall be notified of cancelled closures 2 business days before the date of closure.

Closures that are cancelled due to unsuitable weather may be rescheduled at the discretion of the Engineer.

CONTINGENCY PLAN

A detailed contingency plan shall be prepared for reopening closures to public traffic. If required by "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions, the contingency plan shall be submitted to the Engineer before work at the job site begins. Otherwise, the contingency plan shall be submitted to the Engineer within one business day of the Engineer's request.

LATE REOPENING OF CLOSURES

If a closure is not reopened to public traffic by the specified time, work shall be suspended in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. No further closures are to be made until the Engineer has accepted a work plan, submitted by the Contractor, that will insure that future closures will be reopened to public traffic at the specified time. The Engineer will have 2 business days to accept or reject the Contractor's proposed work plan. The Contractor will not be entitled to compensation for the suspension of work resulting from the late reopening of closures.

For each 10-minute interval, or fraction thereof past the time specified to reopen the closure, the Department will deduct the amount per interval shown below from moneys due or that may

become due the Contractor under the contract. Damages are limited to 5 percent of project cost per occurrence and will not be assessed when the Engineer requests that the closure remain in place beyond the scheduled pickup time.

Type of Facility	Route or Segment	Period	Damages/interval (\$)
Mainline	NB Route 87	1st half hour 2nd half hour 2nd hour and beyond	\$ 1,034/ 10 minutes \$1,550 / 10 minutes \$2,067 / 10 minutes

COMPENSATION

The Engineer shall be notified of delays in the Contractor's operations due to the following conditions, and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of those conditions, and the Contractor's loss due to that delay could not have been avoided by rescheduling the affected closure or by judicious handling of forces, equipment and plant, the delay will be considered a right of way delay and will be compensated in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications:

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

Should the Engineer direct the Contractor to remove a closure before the time designated in the approved Closure Schedule, delay to the Contractor's schedule due to removal of the closure will be considered a right of way delay and compensation for the delay will be determined in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

TS-2.4 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE

A traffic control system shall consist of closing traffic lanes in conformance with the details shown on the plans, the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, the provisions under "Maintaining Traffic" and "Construction Area Signs" of these special provisions, and these special provisions.

The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take measures as may be necessary to comply with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications.

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

When lane closures are made for work periods only, at the end of each work period, components of the traffic control system, except portable delineators placed along open trenches or excavation adjacent to the traveled way, shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations designated by the Engineer within the limits of the highway right of way.

MEASUREMENT AND PAYMENT

The contract lump sum price paid for traffic control system for lane closure shall include full compensation for furnishing all labor, flagging, materials (including signs), tools, equipment, and incidentals, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of the components of the traffic control system and for furnishing and operating the pilot car, (including driver, radios, other equipment, and labor required), as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The adjustment provisions in Section 4-1.03, "Changes," of the Standard Specifications shall not apply to the item of traffic control system. Adjustments in compensation for traffic control system will be made only for increased or decreased traffic control system required by changes ordered by the Engineer and will be made on the basis of the cost of the increased or decreased traffic control necessary. The adjustment will be made on a force account basis as provided in Section 9-1.03, "Force Account Payment," of the Standard Specifications for increased work and estimated on the same basis in the case of decreased work.

TS-2.5 TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURES

At the times and locations specified under "Maintaining Traffic" of these special provisions, ramps shall be closed in conformance with the details shown on the plans, the provisions in Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, and these special provisions.

The provisions in this section will not relieve the Contractor of the responsibility to provide additional devices or take measures as may be necessary to comply with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications.

If components used for closing a ramp are displaced or cease to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

When ramp closures are made for work periods only, at the end of each work period, components used for the ramp closure, except portable delineators placed along open trenches or excavation adjacent to the traveled way, shall be removed from the traveled way and shoulder. If the Contractor so elects, the components may be stored at selected central locations designated by the Engineer within the limits of the highway right of way.

RAMP CLOSED signs [SC6-3(CA)] shall be used to inform motorists of the temporary closing of a freeway or expressway entrance or exit ramp for not more than one day.

RAMP CLOSED signs [SC6-4(CA)] shall be used to inform motorists of the temporary closing of a freeway or expressway entrance or exit ramp for more than one day.

The SC6-3(CA) or SC6-4(CA) signs shall be installed at least 7 calendar days prior to closing the ramp, but not more than 14 days in advance of the ramp closure. The Contractor shall notify the Engineer not less than 2 calendar days prior to installing the SC6-3(CA) or SC6-4(CA) signs. The SC6-3(CA) or SC6-4(CA) signs shall be stationary mounted at locations shown on the plans and shall remain in place and visible to motorists during ramp closures.

The Contractor shall be responsible for maintaining accurate and timely information on the SC6-3(CA) or SC6-4(CA) signs. The SC6-3(CA) or SC6-4(CA) signs, when no longer required or when the information becomes outdated, shall be immediately covered or removed, or the sign message shall be updated.

MEASUREMENT AND PAYMENT

Full compensation for providing traffic control systems for ramp closures shown on the plans, including furnishing, flagging, installing, maintaining, covering, and removing SC6-3(CA) and SC6-4(CA) signs, shall be considered as included in the contract prices paid for the various items of work involved and no separate payment will be made therefor.

The contract unit price paid per each for detour signing includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, installing, maintaining, covering and removing detour signs as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

TS-2.6 PORTABLE CHANGEABLE MESSAGE SIGNS

Work includes furnishing, placing, operating, maintaining, and removing portable changeable message signs.

Comply with Section 12-3.12 "Portable Changeable Message Signs," of the Standard Specifications.

Definitions

"Useable shoulder area": Paved or unpaved contiguous surface adjacent to the traveled way with:

1. Sufficient weight bearing capacity to support portable changeable message sign
2. Slope not greater than 6:1 (horizontal:vertical)

Submittals

Upon request, submit a Certificate of Compliance for each portable changeable message sign under Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

Quality Control and Assurance

Comply with the manufacturer's operating instructions for portable changeable message sign.

Approaching drivers must be able to read the entire message for all phases at least twice at the posted speed limit before passing portable changeable message sign. You may use more than 1 portable changeable message sign to meet this requirement.

Only display the message shown on the plans or ordered by the Engineer or specified in these special provisions.

MATERIALS

The text of the message displayed on portable changeable message sign must not scroll, or travel horizontally or vertically across the face of the message panel.

CONSTRUCTION

Continuously repeat the entire message in no more than 2 phases of at least 3 seconds per phase.

If useable shoulder area is at least 15 feet wide, the displayed message on portable changeable message sign must be minimum 18-inch character height. If useable shoulder area is less than 15 feet wide, you may use a smaller message panel with minimum 12-inch character height to prevent encroachment in the traveled way.

Start displaying the message on portable changeable message sign 5 minutes before closing the lane.

Place portable changeable message sign in advance of the first warning sign for:

1. Each stationary lane closure
2. Each off-ramp closure
3. Each connector closure
4. Each shoulder closure
5. Each speed reduction zone

Place portable changeable message sign as far from the traveled way as practicable where it is legible to traffic and does not encroach on the traveled way. Place portable changeable sign before or at the crest of vertical roadway curvature where it is visible to approaching traffic. Avoid placing portable changeable message sign within or immediately after horizontal roadway curvature. Where possible, place portable changeable message sign behind guardrail or temporary railing (Type K).

Except where placed behind guardrail or temporary railing (Type K) use traffic control for shoulder closure to delineate portable changeable message sign.

Remove portable changeable message sign when not in use.

MEASUREMENT AND PAYMENT

The contract unit price paid per each for portable changeable message signs includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing, placing, operating, modifying messages, maintaining portable changeable message signs, complete in place, including transporting from location to location, removing, and repairing or replacing defective or damaged portable changeable message signs, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

TS-2.7 CONSTRUCTION ZONE ENHANCED ENFORCEMENT

Construction zone enhanced enforcement will be provided by the VTA as directed by the Engineer and in conformance with these Technical Specifications. Construction zone enhanced enforcement shall consist of the presence of the California Highway Patrol (CHP) within and near the limits of construction during specified stages of work to control the movement of public traffic within the work zone.

Construction zone enhanced enforcement will be required during the performance of the following stages of work:

- A. Any work requiring closure of highway traffic lanes.
- B. Any work requiring closure of highway connectors.
- C. Any work requiring closure of highway.
- D. First traffic operation day after a major shift in traffic lanes.

In addition to stages of work requiring CHP presence, the Engineer will provide additional CHP support as deemed appropriate by the Engineer.

The Contractor shall submit a schedule to the Engineer at least fifteen (15) days prior to the performance of work requiring construction zone enhanced enforcement. The schedule shall include all activities requiring construction zone enhanced enforcement and the estimated hours of CHP support required for each activity. The work shall be performed within the numbers of hours allocated for CHP support.

The Engineer shall make all arrangements with the CHP for scheduled and requested additional construction zone enhanced enforcement.

CHP support shall be scheduled in compliance with the provisions in "Closure Requirements and Conditions" of these Technical Specifications. The Contractor will be notified in writing of assigned CHP support when the Contractor is informed of the approval of requested closures.

Cancellations to previously approved closures schedules to include construction zone enhanced enforcement shall be submitted in writing to the Engineer at least thirty-six (36)-hours prior to the time when the closure is to be in place. Written notices of cancellation for a closure shall be delivered to the Engineer between the hours of 7:00 a.m. and 3:00 p.m., Monday through Friday, excluding designated legal holidays.

The presence of the California Highway Patrol will not relieve the Contractor of responsibility of providing for the safety of the public in conformance with the requirements in Section 7-1.09, "Public Safety," nor relieve the Contractor from responsibility for damage in conformance with the requirements in Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

MEASUREMENT AND PAYMENT

Compliance with Construction Zone Enhanced Enforcement requirements as specified herein will not be measured separately for payment and Contractor will not be charged for Construction Zone Enhanced Enforcement unless cancelled as follows:

Cancellations with less than the thirty-six (36)-hour written notice may result in charges from the CHP. The Contractor shall bear any costs and expenses resulting from cancellations with less than the thirty-six (36)-hour written notice, except cancellations due to weather or circumstances beyond the control of the Contractor, as determined by the Engineer. The CHP shall be compensated not less than \$84.00 per hour and no greater than four (4) hours of overtime pay per CHP Officer scheduled to participate in the Construction Zone Enhanced Enforcement that is canceled. The costs and expenses incurred for late cancellations will be deducted from moneys due or that may become due to Contractor.

Closure hours are not anticipated to exceed twenty (20) hours. The Contractor may request additional CHP support for other times and in support of other work activities. The Contractor shall bear the costs and expenses for additional CHP support. The CHP shall be compensated at an agreed rate of \$84 per hour per CHP Officer (two officers per shift) with a mileage rate of \$0.74 per mile. The agreed rate shall be considered full compensation for each hour, or portion thereof, that a CHP officer is performing construction area enhanced enforcement. There will be no markup applied to any expenses connected with CHP support. The cost and expenses for requested additional CHP support will be deducted from moneys due to the Contractor.

TS-3 EXISTING FACILITIES

Attention is directed to the provisions in Section 15, "Existing Highway Facilities," of the Standard Specifications and these special provisions.

TS-3.1 EXISTING LOOP DETECTORS

The existing inductive loop detectors other than those listed in Section 1.2 – Work of Order Work shall remain in place.

If part of the loop conductor, including the portion leading to the adjacent pull box, is damaged by the Contractor's operations, the entire detector loop shall be replaced at the Contractor's expense. Adjacent loops damaged during the replacement shall also be replaced.

TS-3.2 MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION

Traffic Management System (TMS) elements include, but are not limited to ramp metering (RM) system, communication system, traffic monitoring stations, video image vehicle detection system (VIVDS), microwave vehicle detection system (MVDS), loop detection system, changeable message sign (CMS) system, extinguishable message sign (EMS) system, highway advisory radio (HAR) system, closed circuit television (CCTV) camera system, roadway weather information system (RWIS), visibility sensor, and fiber optic system.

Existing TMS elements, including detection systems, identified on the plans and located within the project limits shall remain in place, and be protected from damage. If the construction activities require existing TMS elements to be nonoperational or off line, and if temporary or portable TMS elements are not shown on the plans, the Contractor shall provide for temporary or portable TMS elements. The Contractor shall receive the Engineer's approval on the type of temporary or portable TMS elements and installation method.

The Contractor shall obtain written approval from the Engineer, at least 72 hours before interrupting existing TMS elements' communication with the TMC that will result in the elements being nonoperational or off line. The Contractor shall notify the Engineer at least 72 hours before starting excavation activities.

If existing TMS elements shown on the plans or identified during the pre-construction operational status check, except traffic monitoring stations, are damaged or fail due to the Contractor's activity, where the elements are not fully functional, the Engineer shall be notified immediately. If the Contractor is notified by the Engineer that existing TMS elements have been damaged, have failed or are not fully functional due to the Contractor's activity, the damaged or failed TMS elements, excluding Structure-related elements, shall be repaired or replaced, at the Contractor's expense, within 24 hours. For a Structure-related elements, the Contractor shall install temporary or portable TMS elements within 24 hours. For nonstructure-related TMS elements, the Engineer may approve temporary or portable TMS elements for use during the construction activities.

The Contractor shall demonstrate that repaired or replaced elements operate in a manner equal to or better than the replaced equipment or as directed by the Engineer. If the Contractor fails to perform required repairs or replacement work, as determined by the Engineer, the State may perform the repair or replacement work and the cost will be deducted from monies due to the Contractor.

A TMS element shall be considered nonoperational or off line for the duration of time that active communications with the TMC is disrupted, resulting in messages and commands not transmitted from or to the TMS element.

PAYMENT

The contract lump sum price paid for maintaining existing traffic management system elements during construction shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in maintaining existing traffic management system elements as shown on the plans, specified in the Standard specifications and these special provisions, and as directed by the Engineer.

Furnishing and installing temporary or portable TMS elements that are not shown on the plans, but are required when an existing TMS element becomes nonoperational or off line due to construction activities, will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

• **TS-4 TRAFFIC MANAGEMENT SYSTEM (TMS)**

Attention is directed to Section 86, "Signals, Lighting, and Electrical Systems," of the Standard Specifications and these special provisions.

TS-4.1 DETECTORS

Loop wire shall be Type 2.

Loop detector lead in cable shall be Type B.

Slots shall be filled with elastomeric sealant or hot melt rubberized asphalt sealant.

At the Contractor's option, where a Type A or a Type B loop is designated on the plans, a Type E loop may be substituted.

For Type E detector loops, sides of the slot shall be vertical and the minimum radius of the slot entering and leaving the circular part of the loop shall be 1 1/2 inches. Slot width shall be a maximum of 5/8 inch. Loop wire for circular loops shall be Type 2. Slots of circular loops shall be filled with elastomeric sealant or hot melt rubberized asphalt sealant.

The depth of loop sealant above the top of the uppermost loop wire in the sawed slots shall be 2 inches, minimum.

Slots in hot mix asphalt pavement shall be filled with asphaltic concrete sealant as follows:

- A. After conductors are installed in the slots cut in the pavement, tack coat shall be applied to the vertical surfaces of slots in conformance with the provisions in Section 39, "Hot Mix Asphalt," of the Standard Specifications.
- B. Temperature of sealant material during installation shall be above 21°C. Air temperature during installation shall be above 10°C. Sealant placed in the slots shall be compacted by use of a 8 inch diameter by 1/8 inch thick steel hand roller or other tool approved by the Engineer. Compacted sealant shall be flush with the pavement surface. Minimum conductor coverage shall be one inch. Excess sealant remaining after rolling shall not be reused. On completion of rolling, traffic will be permitted to travel over the sealant.

Slots in portland cement concrete shall be filled with elastomeric sealant or hot melt rubberized asphalt sealant, or shall be filled with an epoxy sealant conforming to the provisions in Section 95 2.09, "Epoxy Sealant for Inductive Loops," of the Standard Specifications.

MEASUREMENT AND PAYMENT

The contract unit price paid per each for detector loops includes full compensation for installation of detector loops and furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in maintaining existing traffic management system elements including wiring and cables as shown on the plans, specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The contract lump sum price for detector lead-in cable shall include full compensation for installation of detector lead-in cables, and furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in maintaining existing traffic management system elements including wiring and cables as shown on the plans, specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

TS-5 CAST-IN-DRILLED-HOLE CONCRETE PILES

Cast-in-drilled-hole concrete piling shall conform to the provisions in Section 49-4, "Cast-In-Place Concrete Piles," of the Standard Specifications and these technical specifications. The provisions of "Welding" of these technical specifications shall not apply to temporary steel casings.

Measurement and payment

Measurement and payment for cast-in-drilled-hole concrete pile foundations for sign structures shall conform to the provisions of Section 56-1, "Overhead Sign Structures," of the Standard Specifications.

TS-6 PAVEMENT DELINEATION & SIGNAGE

REMOVE PAVEMENT MARKER

Existing pavement markers, including underlying adhesive, when no longer required for traffic lane delineation as determined by the Engineer, shall be removed and disposed of.

REMOVE TRAFFIC STRIPE AND PAVEMENT MARKING

This work includes removing existing traffic stripe and pavement marking at the locations shown on the plans.

Submit a lead compliance plan under Section 7-1.07, "Lead Compliance Plan," of the Standard Specifications.

Waste residue from removal of thermoplastic and painted traffic stripe and pavement marking is a non-hazardous waste residue and contains lead in average concentrations less than 1000 mg/kg total lead and 5 mg/L soluble lead. This waste residue does not contain heavy metals in concentrations that exceed thresholds established by the Health and Safety Code and 22 CA Code of Regs and is not regulated under the Federal Resource Conservation and Recovery Act (RCRA), 42 USC § 6901 et seq.

RELOCATE ROADSIDE SIGN

Existing roadside signs shall be removed and relocated to the new locations shown on the plans.

Each roadside sign shall be installed at the new location on the same day that the sign is removed from its original location.

Two holes shall be drilled in each existing post as required to provide the breakaway feature shown on the plans.

PAVEMENT MARKERS

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

Attention is directed to "Traffic Control System For Lane Closure" of these special provisions regarding the use of moving lane closures during placement of pavement markers with bituminous adhesive.

The Contractor shall furnish the Engineer certificates of compliance for the pavement markers in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

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

THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)

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

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

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

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

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

Sprayable thermoplastic material shall be applied to the pavement at a minimum thickness of 0.039-inch and a minimum rate of 0.13-lb/ft. The minimum application rate is based on a solid stripe of 4 inches in width.

Sprayable thermoplastic material shall be applied to the pavement at a temperature between 351° F and 401° F, unless a different temperature is recommended by the manufacturer.

Sprayable thermoplastic traffic stripes shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

If permanent tape is placed instead of sprayable thermoplastic traffic stripes, the tape will be measured and paid for by the linear foot as thermoplastic traffic stripe (sprayable). Sprayable thermoplastic traffic stripes will be measured by the linear foot along the line of the traffic stripes, without deductions for gaps in broken traffic stripes. A double traffic stripe, consisting of two 4-inch wide yellow stripes, will be measured as one traffic stripe.

The contract price paid per linear foot for thermoplastic traffic stripe (sprayable) shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in applying sprayable thermoplastic traffic stripes (regardless of the number, widths, and patterns of individual stripes involved in each traffic stripe) including establishing alignment for stripes, and layout work, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

TS-7 WIRELESS MAGNETOMETER VEHICLE DETECTION SYSTEM (WMVDS)

CAST-IN-DRILLED-HOLE CONCRETE PILE FOUNDATIONS

GENERAL

Summary

This work includes constructing cast-in-drilled-hole concrete pile foundations for traffic signal and lighting standards.

Comply with Section 86-2.03, "Foundations," of the Standard Specifications.

MATERIALS

Concrete must contain not less than 590 pounds of cementations material per cubic yard.

CONSTRUCTION

For standards located in sidewalk areas, the pile foundation must be:

1. Placed to final sidewalk grade before the sidewalk is placed
2. Square for the top 4 inches

CONDUCTORS, CABLES, 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.

Conductors shall be wrapped around projecting end of conduit in pull boxes, as shown on the plans. Cables shall be secured to the projecting end of conduit in pull boxes to prevent pulling of cables without removing the securing device.

STANDARDS, STEEL PEDESTALS, AND POSTS

Standards, steel pedestals, and posts for traffic signal and lighting standards shall conform to the provisions in Section 86-2.04, "Standards, Steel Pedestals and Posts," of the Standard Specifications, "Steel Structures" of these special provisions, and the following requirements.

Steel bolts not designated on the plans as high-strength (HS) or stainless steel shall be for general applications and shall conform to the requirements in ASTM Designation: A 307.

Anchor bolts shall conform to the requirements in ASTM Designation: F 1554, Grade 36. High-strength (HS) anchor bolts shall conform to the requirements in ASTM Designation: F 1554, Grade 105.

Handhole reinforcement rings for standards, steel pedestals, and posts shall be continuous around the handholes.

WMVDS EQUIPMENT

This work consists of furnishing and installing wireless magnetometer vehicle detection system (WMVDS).

This specification sets forth the minimum requirements for a system to detect vehicles on a roadway by using battery-powered magnetometer-type sensors that communicate their detection data by radio to a roadside communications hub before the data is relayed to a local traffic controller, a central software system, and/or a data server as required by the application.

Materials List and Drawing

The detection system shall provide accurate roadway information as needed to support traffic management. The Wireless Battery-Powered Magnetometer Vehicle Detection System shall consist of one or more of the following:

1. Battery-powered sensors installed in-pavement in each traffic lane
2. Access Points (APs) mounted on the side of the roadway, serving as the communications hub for the installation
3. Wireless Repeaters (RPs) mounted on the side of the roadway, serving to extend the radio range of an AP
4. Contact Closure Interface (CCI) cards to support the interface between an AP and a standard traffic controller using contact closure signals
5. Software to control and configure the sensors, APs, and RPs
6. Software to store and retrieve detection data

7. Communications between the sensors and the AP or RP and between the RP and AP shall be via radio
8. As an option, detection data shall be capable of being relayed from each AP to a local traffic controller for real-time vehicle detection using contact closure signals
9. As an option, data shall be capable of being relayed from each AP to a central software system or central server over standard IP (Internet Protocol) networks

Functional Requirements

The section of specifications describes functional requires for the WMDVS.

Technical Requirements

Each sensor shall detect a vehicle by measuring changes in the earth's magnetic field near the sensor as caused by a stopped or passing vehicle (i.e., magnetometer-type detection). Each sensor shall have following functional capabilities:

1. The sensor shall sample the earth's magnetic field at a rate of 128 Hz
2. The sensor shall communicate time-stamped ON and OFF vehicle detection events
3. As an option, the sensor shall provide a mode where the complete XYZ magnetic signatures of detected vehicles are transmitted as data
4. Each sensor shall automatically recalibrate in the event of a detector lock

Each sensor shall communicate by radio to a nearby AP or RP. Each sensor shall conform to the following functional requirement:

1. Each sensor shall transmit its detection data within 150 ms of a detected event
2. Each sensor shall automatically retransmit a detected event if no acknowledgement is received from the AP
3. Each sensor may stop retransmission after 8 attempts
4. Each sensor shall transmit a unique identifying code
5. Each sensor shall respond within 100 seconds when the AP is powered on
6. When no AP or RP is present or powered on, the sensors are not required to detect vehicles

The radio links between each sensor and AP or RP and between each RP and AP shall conform to the following:

1. The physical layer of the radio links (i.e., the over-the-air data rate(s), modulation type(s), forward error correction, bit interleaving, channel coding, and other aspects of the transmitted signal) shall conform to published standards (e.g., IEEE, ITUT, etc.)
2. The center frequencies, bandwidths, and transmit power levels of the radio links shall allow operation in an unlicensed frequency band
3. Frequency channels shall be employed by the sensors, APs, and RPs to avoid interference with other devices operating in the unlicensed band
4. Frequency channels shall be user-configurable
5. At least 16 frequency channels shall be supported
6. The link budget (i.e., transmit power plus transmit antenna gain plus receive antenna gain minus receive sensitivity, where receive sensitivity shall assume a 1% packet error rate) for all radio links shall be 93 dB or greater

7. The maximum distance between a sensor installed in the roadway and an AP or an RP with a clear line-of-sight between devices shall be:
 - I. At least 150 feet / 45.7 meters for an AP or RP installed 24 feet / 7.3 meters above the roadway.
 - II. At least 100 feet / 30.5 meters for an AP or RP installed 18 feet / 5.5 meters above the roadway.
 - III. At least 75 feet / 22.9 meters for an AP or RP installed 12 feet / 3.7 meters above the roadway.
8. The maximum distance between an AP and an RP shall be at least 750 feet / 228.6 meters when both units are installed 18 feet / 5.5 meters above the roadway and with a clear line-of-sight between devices.

If detection data is relayed to a central software system or central server, each installation of the Wireless Battery-Powered Magnetometer Vehicle Detection System shall provide the following measurements, as required by the application:

1. Vehicle volume (count) per lane over a specified time interval
2. Lane occupancy (percent) over a specified time interval
3. Vehicle speed (mph or kph) when more than one sensor is deployed in a lane
 - I. Per-vehicle speed
 - II. Median speed over a specified time interval
 - III. Mean speed over a specified time interval
 - IV. Distribution of speeds over a specified time interval, with a resolution of 1 mph / 2 kph
4. Vehicle classification when more than one sensor is deployed in a lane
 - I. Per-vehicle length
 - II. Distribution of vehicle lengths over a specified time interval, with a resolution of 1 foot / 0.5 meters.
5. The time interval for measurements shall be selectable, including at least the following intervals:
 - I. 30 seconds
 - II. 1 minute
 - III. 5 minutes
 - IV. 15 minutes
 - V. 1 hour
 - VI. 24 hours

An AP shall support the relay of sensor detection data through several interfaces as required by the application such as following:

1. Detection data shall be communicated to a standard roadside traffic controller via Contact Closure Interface cards capable of being installed in standard contact closure input shelves, where the following controller types shall be supported:
 - I. Type 170
 - II. Type 2070 ATC
 - III. NEMA TS1
 - IV. NEMA TS2

2. As an option, detection data shall be communicated over TCP/IP via an integrated 10/100BaseT Ethernet interface.
3. As an option, detection data shall be communicated as IP data over GSM-based cellular data services via an integrated GPRS cellular modem.
4. As an option, detection data shall be communicated as IP data over CDMA-based cellular data services via an integrated 1xRTT cellular modem.
5. The AP shall be capable of simultaneously communicating detection data via the contact closure interface, optional Ethernet interface, and optional cellular data modem interface.

Each sensor, AP, and RP shall be capable of accepting software and firmware upgrades.

The Wireless Battery-Powered Magnetometer Vehicle Detection System shall provide software operating on conventional notebook/portable PCs to support the following:

1. Configuration of a sensor
2. Configuration of an AP
3. Configuration of an RP
- Storage and retrieval of detection data

The sensor hardware shall conform the following:

1. All sensor components shall be contained within a single housing and comply with the following:
 - I. The sensor housing shall conform to NEMA Type 6P and IEC IP68 standards.
 - II. The sensor components shall be fully encapsulated within the housing to prevent moisture from degrading the components.
 - III. The sensor housing shall be capable of being installed in a 4inch / 10cm diameter hole approximately 2 ¼ inches / 5.7 cm deep.
2. A sensor shall operate at temperatures from 37 °F / 38.3 °C to +176 °F / +80 °C
3. A sensor shall be battery-powered with an average lifetime of ten (10) years when the sensor is configured for and operating under normal traffic conditions.

The Access Point (AP) hardware shall conform to the following:

1. An AP shall support at least 48 sensors
2. An AP shall be factory-configurable to support at least two (2) different power options:
 - I. Power shall be supplied via an isolated nominal 48 VDC (3658 VDC) input, consuming a maximum of 3W and providing 1500 V isolation and 5 kV surge protection.
 - II. Power shall be supplied via a non-isolated nominal 12 VDC (1015 VDC) input, consuming a maximum of 2W.
3. An AP shall operate at temperatures from 37 °F / 38.3 °C to +176 °F / +80 °C.
4. All AP components shall be contained within a single housing.
5. The AP housing shall conform to NEMA Type 4X and IEC IP67 standards.
6. An AP shall be no larger than 12" H x 8" W x 4" D / 30 cm H x 20 cm W x 10 cm D.

7. An AP shall weigh no more than 4 pounds / 1.8 kg.

The Repeater (RP) hardware shall conform to the following:

1. An RP shall support at least 10 sensors
2. An RP shall be battery-powered
3. The RP battery shall be field replaceable
4. An RP shall operate at temperatures from 37 °F / 38.3 °C to +176 °F / +80 °C
5. All RP components shall be contained within a single housing and conform to the following:
 - I. The RP housing shall conform to NEMA Type 4X and IEC IP67 standards
 - II. An RP shall be no larger than 5" H x 4" W x 4" D / 12.7 cm H x 10 cm W x 10 cm D
 - III. An RP shall weigh no more than 4 pounds / 1.8 kg

The Contact Closure Interface (CCI) Card Hardware shall conform to the following:

1. Each CCI card shall provide detector data as contact closure signals to the traffic controller and conform to the following:
 - I. A CCI card shall directly plug in to standard 170/2070 input files or NEMA detector racks.
 - II. One or more CCI cards shall provide up to 256 channels of detection data from a single AP's supported sensors, where each channel comprises an optically isolated contact closure relay and, if configured for TS2 operation, an additional contact closure relay to indicate the channel status.
2. Each CCI card shall be configurable.
3. A CCI card shall provide contact closure signals in either presence or pulse mode.
4. A CCI card shall provide up to 31 seconds of delay timing.
5. A CCI card shall provide up to 7.5 seconds of extension (carryover) timing.
6. The CCI card front panel shall provide status LEDs to monitor:
 - I. Detection channel status
 - II. Line Quality
 - III. Fault Monitor
7. The CCI card front panel shall provide switches to select and configure:
 - I. Presence or pulse mode
 - II. Delay timing
 - III. Extension timing
8. A CCI card shall be powered by the traffic controller backplane via an 1126 VDC input.
9. A CCI card shall be surge protected to GR1089 standards.
10. A CCI card shall operate at temperatures from 37 °F / 38.3 °C to +176 °F / +80 °C
11. A CCI card shall operate in humidity up to 95% (non-condensing)

Construction

Each sensor shall be installed in the roadway using the following procedure:

1. The roadway shall be core drilled to provide a 4" diameter hole, 2.25" deep
2. A small layer of sand or epoxy sufficient to cover the bottom of the hole shall be applied
3. The sensor shall then be placed on top of this layer of sand in the correct orientation as clearly marked on the sensor
4. The sensor shall be fully encapsulated with the epoxy to the lip of the cored hole

Each installation of the Wireless Battery-Powered Magnetometer Vehicle Detection System shall consist of one or more sensors installed in the center of each traffic lane, avoiding sources of magnetic noise such as underground power cables, overhead high tension power cables, light rail or subway tracks, and power generation stations and substations.

The placement of sensors in roadway shall conform to following additional requirements:

1. The sensors shall be located as specified by the intersection plans.
2. For count applications, sensors shall be placed in areas with minimum stop-and-go traffic flow.
3. Each sensor's supporting AP or RP shall be installed no farther than the maximum range indicated in these special provisions for the WMVDS.
4. If vehicle speeds are to be determined by the system, then at least two sensors are required in each lane, separated according to the anticipated average vehicle speed
5. If the anticipated average vehicle speed is less than 25 mph / 40 kph, the spacing between sensors shall be approximately 10 feet / 3 meters (and measured precisely at the time of installation in order to properly configure the system).
6. If the anticipated average vehicle speed is greater than 25 mph / 40 kph but less than 45 mph / 75 kph, the spacing between sensors shall be approximately 10 to 12 feet / 3.1 to 3.7 meters (and measured precisely at the time of installation in order to properly configure the system)
7. If the anticipated average vehicle speed is greater than 45 mph / 75 kph, the spacing between sensors shall be approximately 20 to 24 feet / 6.1 to 7.3 meters (and measured precisely at the time of installation in order to properly configure the system)
8. If detection data is to be relayed from the AP to a local traffic controller for real-time speed detection, two contact closure signals shall be use to simulate an inductive loop speed trap.

TESTING

Accuracy of the WWMVDS system shall be verified by comparing the WMVDS vehicle counts to recorded video image counts for the same period. The video camera shall be located and oriented so that traffic is visible in all lanes. Video images shall be time stamped and analysis periods recorded to a DVD or CD media for viewing on a PC. The video field of view shall totally encompass the area in which vehicles are detected. The Contractor shall provide a means for synchronizing the test start and test ending times or provide software that displays time stamped WMVDS data along with the video images of the moving vehicles. The Contractor shall provide the Engineer with the original recording medium and documentation that supports the accuracy analysis and make a copy of these materials for their own use.

The accuracy test shall take place during a complex traffic period as specified by the Engineer. The following video recording and analysis options that depend on the available traffic

conditions are acceptable; however the heaviest expected traffic conditions should be used, if possible. The minimum recording period shall be 30 minutes when the recording includes congested traffic (vehicles traveling at less than 20 mph for five or more minutes in any lane). The minimum recording period shall be 45 minutes when the traffic flow exceeds 1500 vehicles per hour in any lane during the test period. The minimum recording period shall be 60 minutes when the flow is less than 1500 vehicles per hour in every lane. The analysis shall be based on a minimum of 100 detected vehicles in every lane and cover the same time period for all lanes. The time period within the selected video will be selected by the Engineer. The total vehicle count for every lane shall be used and include the first and last partial vehicles for each lane. Errors in the start and finish of the WMVDS and manual counts are included in the performance criterion specified in these special provisions.

WMVDS unit count shall be compared to vehicle counts under traffic conditions of the prior paragraph. Vehicles licensed for use on State roads shall be counted by the WMVDS. The data accuracy shall be determined by the formula $100\{1 - [(TC - MC)/TC]\}$ where TC = Traffic Count derived from the media recording, MC = WMVDS reported count over the same period of time, and where the resulting fraction is expressed as an absolute value.

The accuracy of each WMVDS unit shall be determined and documented so that each unit may be approved or rejected separately by the Engineer. Failure to submit the materials at the conclusion of testing invalidates the test. The recorded media serves as acceptance evidence and shall not be used for calibration. The calibration shall have been completed prior to testing and verification.

The Engineer will review the accuracy data findings and accept or reject the results within 15 days. Determination of vehicle anomalies or unusual occurrences will be decided by the Engineer. Data or counts that are not accepted by the Engineer shall be considered errors and count against the WMVDS unit's calibration. If the Engineer finds that the WMVDS does not meet performance requirements, the Contractor shall re-calibrate and re-test the unit and re-submit new test data within 10 days. Following three failed attempts, the Contractor shall replace the WMVDS detector with a new unit.

In addition to the accuracy analysis performed by the Contractor, the Contractor shall provide equipment, software, documentation, support equipment, and any other materials, personnel and devices that may be required for acceptance testing by the Engineer. The Contractor shall notify the Engineer 15 days before the WMVDS unit is ready for acceptance testing. Testing shall be scheduled to be accomplished before the end of the normal work shift.

TRAINING

The Contractor shall provide a minimum of ____ hours of training by a certified manufacturer's representative for up to ____ students selected by the Engineer. The content of the training shall include instruction on how to align, program, adjust, calibrate and maintain the WMVDS. The Contractor shall provide materials and equipment for the training. The Contractor shall give the Engineer 15 days notice prior to the training. The time and location of the training shall be agreed upon by the Engineer and the Contractor. If no agreement can be reached, the Engineer shall determine the time and location.

PAYMENT

The contract lump sum price paid for the WMVDS system shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing wireless magnetometer vehicle detection system, complete in place, including initial site analysis, set-up and configuration of the system, calibration of the device performance, verification of detector accuracy, training of State personnel, testing, and re-testing of failed units, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Full compensation for hauling and stockpiling electrical materials 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 therefor

9.0 CONTRACT DRAWINGS / PLANS

9.0 CONTRACT DRAWINGS / PLANS

LEGEND:

- TEMPORARY SIGN LOCATION
- ===== CONSTRUCTION AREA
- RAMP CLOSURE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCL	87	1.3 /N.A.		

DAVID K. 02/01/2010
 REGISTERED CIVIL ENGINEER (DATE)

PLANS APPROVAL DATE

*"The State of California or its officers
 or agents shall not be responsible for
 the accuracy or completeness of electronic
 copies of this plan sheet."*

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
 3331 N. FIRST STREET, B-2
 SAN JOSE, CA 95134-1927

REGISTERED PROFESSIONAL ENGINEER
 DAVID ISAMU KOBAYASHI
 No. 65284
 Exp. 9/30/11
 CIVIL
 STATE OF CALIFORNIA



SIGN NO.	SIGN CODE	PANEL SIZE (IN)	NO. OF POSTS & SIZE	NO. OF SIGNS
1	C (SPECIAL)	118x60	2 - (4 x 4)	7
2	PCMS	118x60	2 - (4 x 4)	7
3A	SC3 (UP)	48x18	MIN. 4' H. TRIPOD	8
3B	SC3 (LT)	48x18	MIN. 4' H. TRIPOD	6
3C	SC3 (RT)	48x18	MIN. 4' H. TRIPOD	6
3S	SC3 (SPECIAL)	48x18	MIN. 4' H. TRIPOD	1
4	M4-8A	30x18	MIN. 4' H. TRIPOD	2
5	E5-2A	48x36	MIN. 4' H. TRIPOD	1
6	SC6-3	48x48	MIN. 4' H. TRIPOD	1
TOTAL				39

SCALE: NO SCALE **DE-1**

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

DATE	REVISD	BY	DATE	REVISD	BY
10/09			12/18		
DIK			MJ		
CALCULATED/DESIGNED BY			CHECKED BY		

NOTES:

1. FOR GENERAL NOTES, ABBREVIATIONS, LEC NOTES PLEASE REFER TO SHEET E-1.

PROJECT

PROJECT NOTES (THIS SHEET ONLY):

1

FURNISH AND INSTALL CCI CARD IN EXISTING MODEL 334 CABINET WITH MODEL 170 CONTROLLER.

2

REMOVE AND SALVAGE EXISTING QUEUE LOOP DETECTOR SENSOR UNITS.

3

FURNISH AND INSTALL AP UNIT ON EXISTING LUMINAIRE #01442. FOR INSTALLATION DETAILS SEE DETAIL A ON SHEET E-4.

4

FURNISH AND INSTALL RP UNIT ON EXISTING LUMINAIRE #16N142. FOR INSTALLATION DETAILS SEE DETAIL B ON SHEET E-4.

5

FURNISH AND INSTALL WYSN AND CENTER IN VEHICLE LANE. FOR INSTALLATION DETAILS SEE DETAIL C ON SHEET E-4.

6

EXISTING 2-3 1/2"C, 2#6 (SERVICE TO RAMP METER, 120V), 2#10 (METER ON-SIGN, 120V), 6 PAIR #19 (CCTV CABLE), 3#14 (CCTV POWER), 6#14 (SIGNAL 120V), 3#14 SPARES, 1#8 (SIGNAL NEUTRAL), 21 DLC. FURNISH AND INSTALL OUTDOOR RATED CATEGORY 5E CABLE.

7

FURNISH AND INSTALL 2"C, OUTDOOR RATED CATEGORY 5E CABLE.

8

EXISTING LOOP DETECTORS TO REMAIN.

9

DISCONNECT EXISTING Q1, Q2, AND Q3 DLC'S; COIL AND STORE Q1, Q2, AND Q3 DLC'S WITHIN EXSTING CABINET; AND CAP END OF THE EXISTING DLC'S.

EXIST. UTILITIES MAY NOT ALL BE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT U.S.A. 1-800-642-2444 48 HOURS PRIOR TO EXCAVATION TO VERIFY EXIST. UTILITY LINE LOCATIONS AND DEPTHS.

DIST

COUNTY

ROUTE

POST MILES TOTAL PROJECT

SHEET NO.

TOTAL SHEETS

04

SCL

87

1.4 /N.A.

REGISTERED CIVIL ENGINEER

02/01/2010

(DATE)

PLANS APPROVAL DATE

"The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet."

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

3331 N. FIRST STREET, B-2

SAN JOSE, CA 95134-1927

REGISTERED PROFESSIONAL ENGINEER

DAVID ISMAIL KORIYASHA

No. 65284

Exp. 9/30/11

CIVIL

STATE OF CALIFORNIA

CAPITOL EXPRESSWAY

NARVAEZ AVENUE

NB ROUTE 87

EXISTING RAMP METERING CONTROLLER CABINET NO. E37BT

01-1

02-1

03

04

05

06

07

08

09

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

0 1 2 3

TRAFFIC OPERATIONS SYSTEM

WMVDS

(CAPITOL EXPRESSWAY)

SCALE: 1" = 50'

E-2

FORM DC-05

1. FOR GENERAL NOTES, ABBREVIATIONS, LEGEND, AND PROJECT NOTES PLEASE REFER TO SHEET E-1.



SCALE: NO SCALE **E-4**

CU	EA
----	----

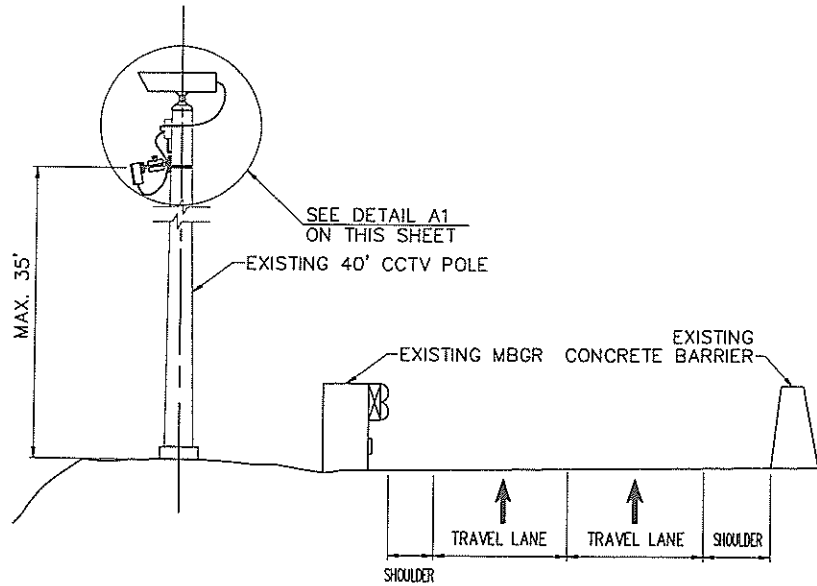
NOTES:

1. FOR GENERAL NOTES, ABBREVIATIONS, LEGEND, AND PROJECT NOTES PLEASE REFER TO SHEET E-1.

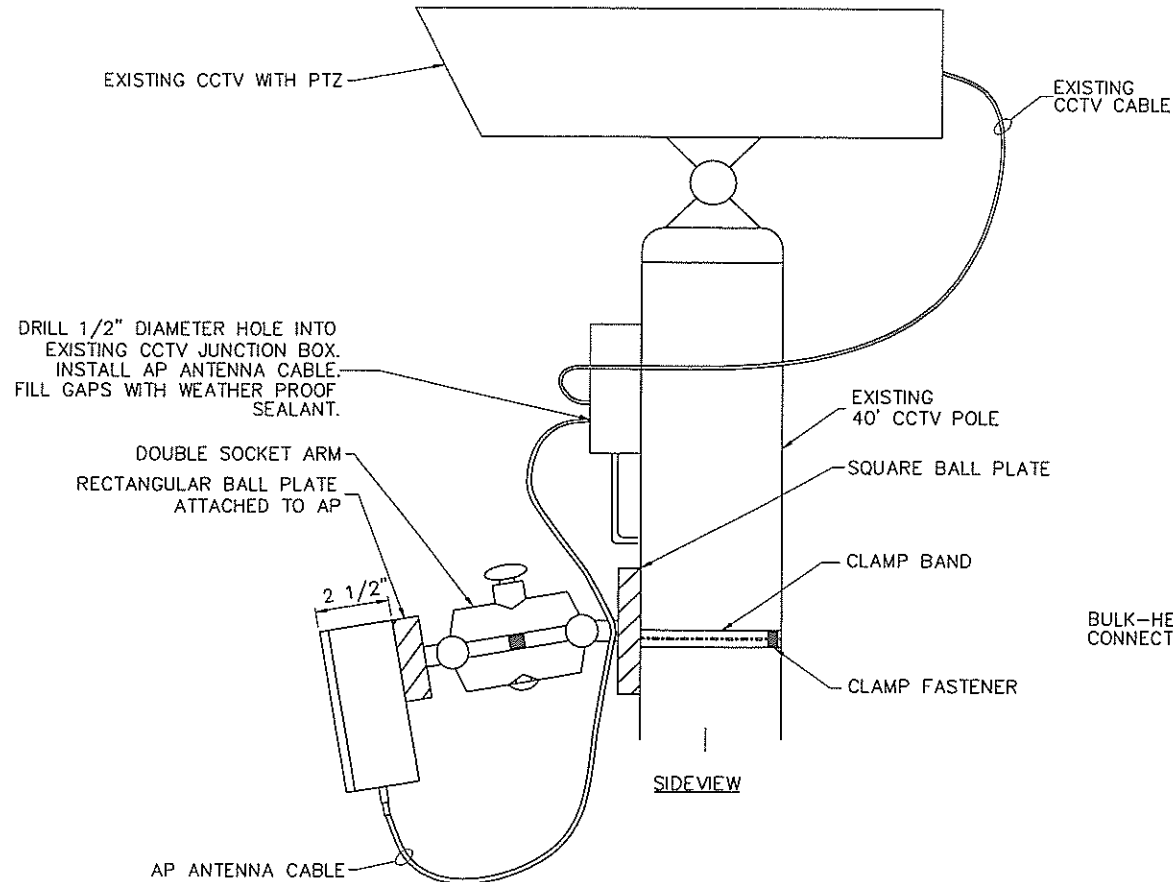
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCL	87	3.5/N.A.		

REGISTERED CIVIL ENGINEER (DATE) 02/01/2010
PLANS APPROVAL DATE
"The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet."
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
3331 N. FIRST STREET, B-2
SAN JOSE, CA 95134-1927

PROFESSIONAL ENGINEER
DAVID ISHII KOBAYASHI
No. 65284
Exp. 9/30/11
CIVIL
STATE OF CALIFORNIA

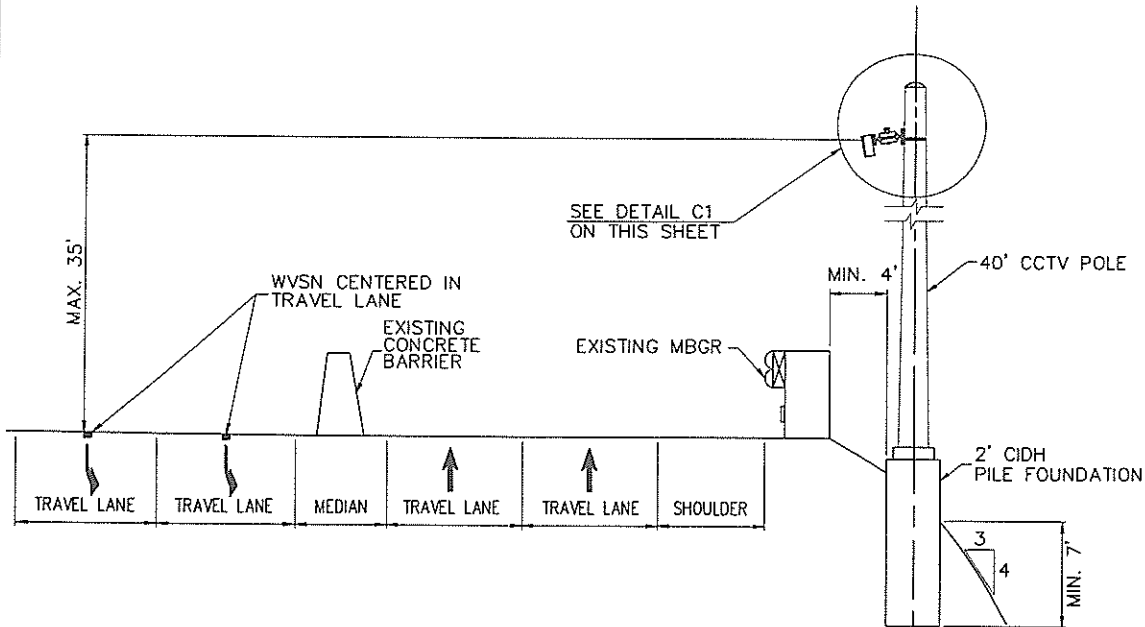


DETAIL A: ACCESS POINT MOUNTING ON EXISTING CCTV POLE

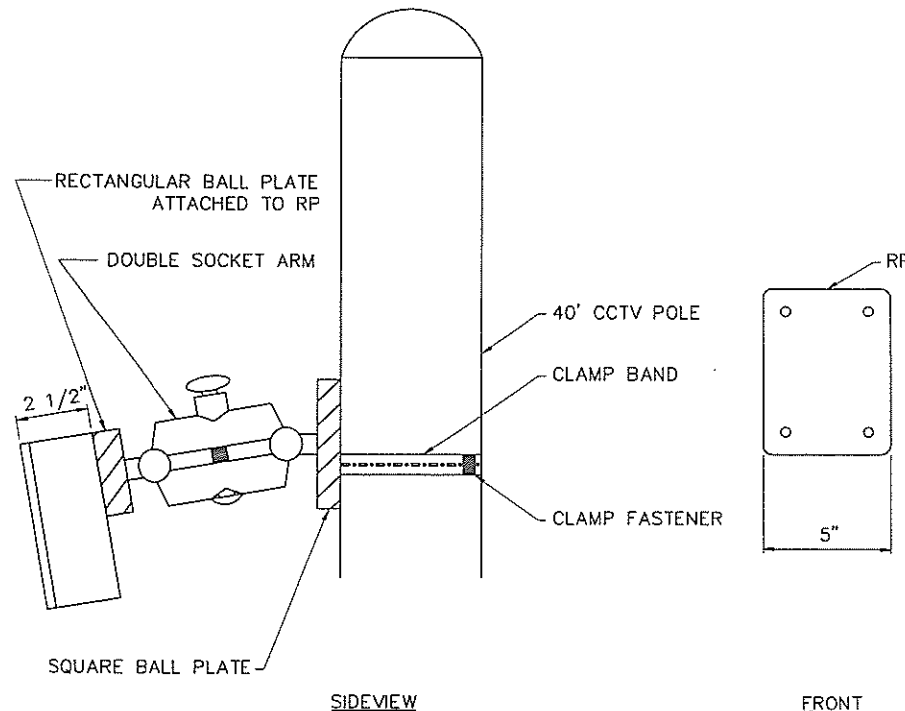


DETAIL A1: ACCESS POINT (AP) MOUNTING DETAIL

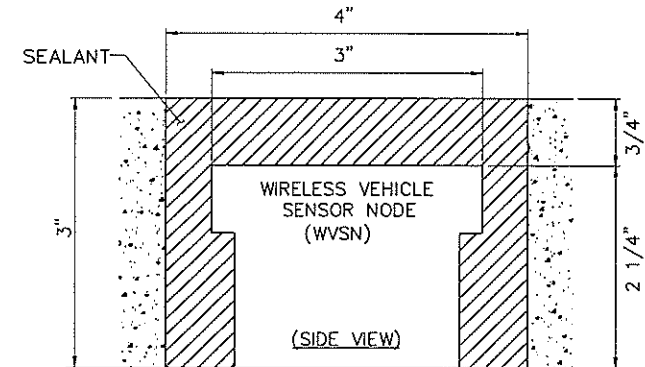
EXIST. UTILITIES MAY NOT ALL BE SHOWN ON THESE PLANS.
THE CONTRACTOR SHALL CONTACT U.S.A. 1-800-642-2444
48 HOURS PRIOR TO EXCAVATION TO VERIFY EXIST.
UTILITY LINE LOCATIONS AND DEPTHS.



DETAIL C: REPEATER POINT MOUNTING ON 40' CCTV POLE



DETAIL C1: REPEATER POINT (RP) MOUNTING DETAIL



DETAIL B: WIRELESS VEHICLE SENSOR NODE (WVSN) INSTALLED IN ROADWAY

TRAFFIC OPERATIONS SYSTEM
WMVDS
(ALMADEN EXPRESSWAY DETAILS)

SCALE: NO SCALE E-5

NOTES:

1. SEE SHEET PDS-1 FOR GENERAL NOTES AND LEGEND.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCL	87	N.A./N.A.		

02/01/2010

REGISTERED CIVIL ENGINEER

(DATE)

PLANS APPROVAL DATE

"The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet."

DAVID ISAMU KOBAYASHI

No. 65284

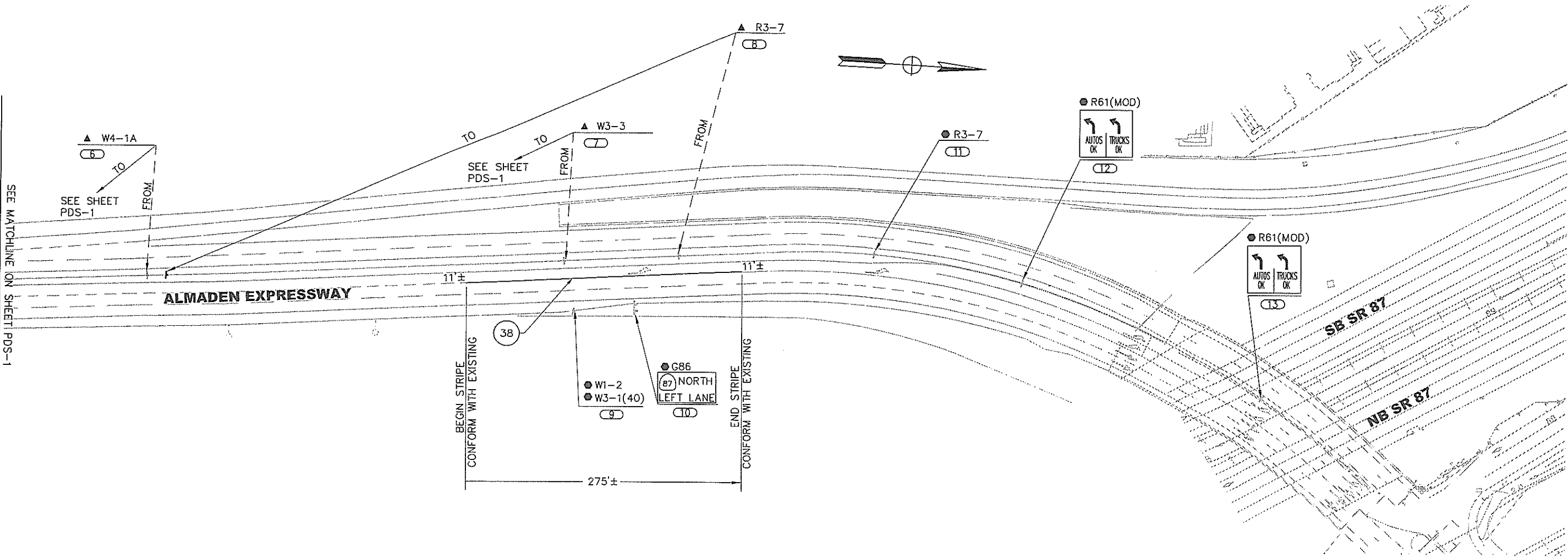
Exp. 9/30/11

CIVIL

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

3331 N. FIRST STREET, B-2

SAN JOSE, CA 95134-1927



PAVEMENT DELINEATION
& SIGNING

SCALE: 1" = 50' PDS-2

THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION & SIGNING ONLY.

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

DATE	REVISD	BY	DATE	REVISD	BY
10/09			12/18		
DIK			MJ		
CALCULATED/DESIGNED BY			CHECKED BY		

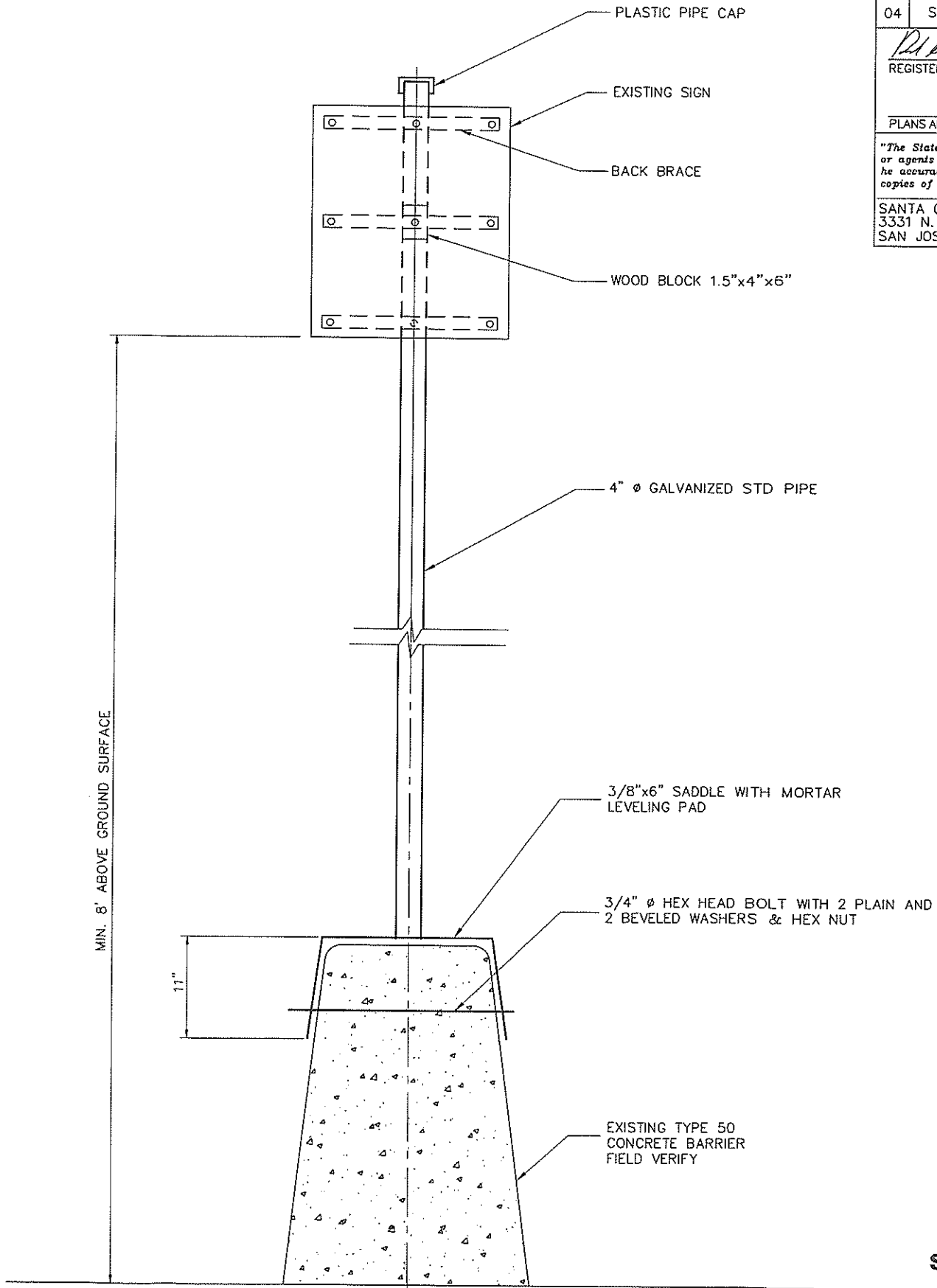
NOTES:

1. SEE SHEET PDS-1 FOR GENERAL NOTES A END.

ROADWAY SIGN QUANTITIES

SHEET NO.	SIGN NO.	CODE	REMOVE	RELOCATE	REMARK
PDS-1	1	G86 W61G			TO REMAIN
	2	W13-2(25)			TO REMAIN
	3	R1-1 N MARKER			TO REMAIN
	4	G86			TO REMAIN
	5	R6-1			TO REMAIN
	6	W4-1A		1	ON BARRIER**
	7	W3-3		1	ON BARRIER**
PDS-2	8	W4-1A		1	ON BARRIER**
	9	W3-3		1	ON BARRIER**
	10	R3-7		1	ON BARRIER**
	11	W1-2 W3-1(40)			TO REMAIN
	12	G86			TO REMAIN
	13	R3-1			TO REMAIN
	14	R61(MOD)			TO REMAIN
	15	R61(MOD)			TO REMAIN

** INDICATES RELOCATED SIGN TO BE INSTALLED NEW BARRIER MOUNTED SIGN POST. SEE DETAIL A ON THIS SHEET FOR BARRIER MOUNTED SIGN POST DETAILS



DETAIL A: BARRIER MOUNTED SIGN POST

NOT TO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
04	SCL	87	N.A./N.A.	

02/01/2010
(DATE)

REGISTERED CIVIL ENGINEER

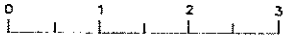
DAVID ISABEL KORYATASHA
No. 65284
Exp. 9/30/11
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

"The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet."

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY
3331 N. FIRST STREET, B-2
SAN JOSE, CA 95134-1927

SIGN QUANTITIES
& DETAILS
PDS-3



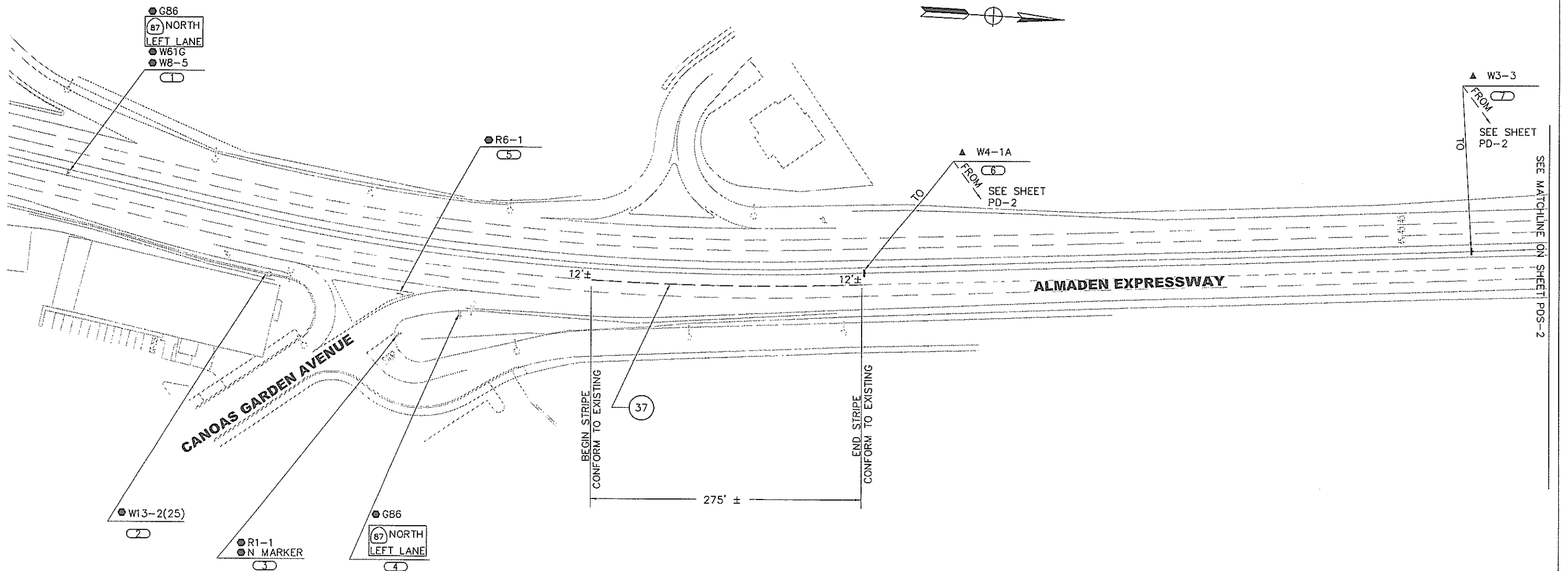
FORM DC-OE-92-PF (REV. 3/88)

1. EXACT LOCATION OF PAVEMENT DELINEATION, MARKING, AND SIGNAGE ARE TO BE DETERMINED BY ENGINEER.
2. REMOVE ALL CONFLICT PAVEMENT DELINEATION, MARKINGS AND SIGNAGE.
3. REFER TO THE MUTCD 2003 AND MUTCD CALIFORNIA SUPPLEMENT FOR PLACEMENT, GUIDANCE ON USAGE AND SIZE OF SIGNS.
4. REFER TO CALTRANS STANDARD PLANS 2006 -A20A, A20B, A20C, A20D, A20A, AND A24E FOR PAVEMENT DELINEATION DETAILS.

● EXISTING SIGN TO REMAIN. ☐ SIGN NO.
 ▲ RELOCATE EXISTING SIGN.
 ○ REMOVE AND SALVAGE SIGN

PAVEMENT DELINEATION & SIGNING

SCALE: 1" = 50' **PDS-1**



THIS PLAN IS ACCURATE FOR PAVEMENT DELINEATION & SIGNING ONLY.

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES

CU	EA
----	----

10.0 APPENDICES

- A Federal Requirements – Form 1273
- B Encroachment Permit

Appendix A

**FEDERAL REQUIREMENTS
FORM 1273**

TABLE OF CONTENTS

Section	Page
FEDERAL REQUIREMENTS – FORM 1273	1
I. GENERAL	1
II. NONDISCRIMINATION.....	1
III. NONSEGREGATED FACILITIES.....	5
IV. PAYMENT OF PREDETERMIND MINIMUM WAGE.....	6
V. STATEMENTS AND PAYROLLS	10
VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR.....	11
VII. SUBLETTING OR ASSIGNING THE CONTRACT	12
VIII. SAFETY: ACCIDENT PREVENTION.....	12
IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS	13
X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT	14
XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELEGIBILITY AND VOLUNTARY EXCLUSION.....	14
XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING	17

FEDERAL REQUIREMENTS – FORM 1273

I. GENERAL

1. 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.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4, and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

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, and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3

and the provisions of the American Disabilities Act of 1990 (42 U.S.C.12101et 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO 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 minority group employees.

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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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 his 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 his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best 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 SHA 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 minority and women 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 minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.

8. **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.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 26, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. **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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA

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

(1) The number 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;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers 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 (29 CFR)] issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c) the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

b. 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.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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. Said 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.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

- (1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
 - (2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
 - (3) 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 journeyman-level 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 for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
 - (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of a apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by the regular employees until an acceptable program is approved.
- b. Trainees:
- (1) 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 DOL, Employment and Training Administration.
 - (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.
 - (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. **Helpers:**

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2.

Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. 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.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as 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 SHA contracting officer 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.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices

or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

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

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such 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 the Regulations, 29 CFR 3;

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

e. 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 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
 - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
 - c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

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 State. 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).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.
 - 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 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 VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

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 SHA 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. 333).

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. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice 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:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

"Whoever being an officer, agent, or employee of the United States, or 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 not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL-ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

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

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary 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 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to

other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. 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.

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.

* * * * *

**CERTIFICATION REGARDING DEBARMENT,
SUSPENSION, INELIGIBILITY AND VOLUNTARY
Exclusion—Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-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;

c. 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 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary 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 Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

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.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

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 COVERED TRANSACTIONS**

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 participation in this transaction 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.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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

Re-Bid Ramp Metering Implementation Project

CONTRACT 10074

Issued May 14, 2010

Appendix A

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 his or her bid or proposal that he or she 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.

Re-Bid Ramp Metering Implementation Project
CONTRACT 10074
Issued May 14, 2010

Appendix B
ENCROACHMENT PERMIT

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT
TR-0120

In compliance with (Check one):

- ☒ Your application of October 2, 2009
- ☐ Utility Notice No. _____ of _____
- ☐ Agreement No. _____ of _____
- ☐ R/W Contract No. _____ of _____

TO: ☐ Valley Transportation Authority
3331 North First Street
San Jose, CA 95134

☐ Attn: Michelle Jiang
Phone: (408)952-4290 ☐ , PERMITTEE

Permit No.

0409-NMC1661

Dist/Co/Rte/PM

04-SCL-87 R1.3/3.5

Date

March 3, 2010

Fee Paid

\$

Deposit

\$

Performance Bond Amount (1)

Payment Bond Amount (2)

Bond Company

Bond Number (1)

Bond Number (2)

and subject to the following, **PERMISSION IS HEREBY GRANTED** to:

Install Wireless Magnetometer Detection System (WMVDS) for ramp meter queue loop detection on State Highway 04-SCL-87, Post Mile 1.3/3.5 at Capital and Almaden Expressway in the City of San Jose.

A minimum of one week prior to the start of work under this permit, notice shall be given and advance approval of construction detail, operation, public safety and traffic control shall be obtained from State Representatives, Jim Wong, 500 Queens Lane, San Jose 95112, (408) 452 7131, weekdays and Mazen Arabi at (408) 254-5814, between 7:30 AM and 4:00 PM .

At least five working days before starting work on any signal or lighting facilities under this permit, State's Permit Electrical Engineer Jess Tubon shall be contacted at (415) 330-6544 for approval of construction and operational details.

The following attachments are also included as part of this permit (Check applicable):

- | | | |
|---|--|---|
| ☒ Yes | ☐ No | General Provisions |
| ☐ Yes | ☒ No | Utility Maintenance Provisions |
| ☒ Yes | ☐ No | Storm Water Special Provisions |
| ☐ Yes | ☒ No | A Cal-OSHA permit required prior to beginning work: |
| | | # _____ |

In addition to fee, the permittee will be billed actual costs for:

- | | | |
|---|--|------------|
| ☐ Yes | ☒ No | Review |
| ☒ Yes | ☐ No | Inspection |
| ☒ Yes | ----- | Field Work |

(If any Caltrans effort expended)

☐ Yes ☒ No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before December 31, 2010.

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.

No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

KR

CC: Bob Salazar (2), J.Wong
Dist. Traffic Manager/P. Chan
TMC/ J. Richardson, Traffic System/P. Chan
Elec. Mtce. / J. Tubon
Traffic System / L. Lee – Mazen Arabi

APPROVED:

BIJAN SARTIPI, District Director

BY:

MICHAEL D. CONDIE, District Permit Engineer

All permitted work requires the permittee to apply for and obtain a work authorization number prior to the start of work. See the attached "Encroachment Permit Project Work Scheduling Procedures" and the attached "Permit Project Work Scheduling Request Form". Additional time beyond the minimum seven day advanced notice required in the above paragraph may be required for obtaining approval .

When approved, traffic control performed under this permit shall be in accordance with the appropriate State Standard Plans T-10 through T-14. Where required by the plan, the use of a flashing arrow-board is MANDATORY.

See attached Standard Plan(s) T-11 and T-14. For shoulder closures, see Standard Plan Sheet T-10. Parking may be restricted, as needed.

Route 87 -Capital Express off-ramp may be closed between 10:00 PM to 5:00AM Sunday through Thursday, holidays excepted.

Ramp closure information signs shall be posted at least 72 hours in advance and adequate detour must be provided and clearly posted.

The site of the work shall be enclosed by suitable barricades, signs and lights, as approved by State's representative, to warn and protect traffic effectively.

Excavations made within the limits of the highway shall be backfilled before leaving the work for the night unless otherwise authorized by State's representative. After backfilling the trench, temporary surfacing shall be placed if required by State's representative.

Trench backfill shall conform to Section 19-3.06 of the State's Standard Specifications and the current edition of the Standard Plans. Tests for relative compaction of structure backfill material used in backfilling trenches may be made in accordance with Test Method No. California 231 (Nuclear gauge). Any base, surfacing or pavement shall be replaced in kind, or as otherwise required by State's representative.

Traffic striping, pavement markings and signs shall be furnished and placed by the permittee and the cost shall be borne by the permittee. Where new asphalt concrete has been placed, painted striping and pavement markings shall be installed within 24 hours. After 30 days curing time, thermoplastic materials shall be in compliance with section 84 of the Standard Specifications.

Any damage to the existing State facilities shall be repaired at permittee's expense.

Certain details of work authorized hereby are shown on permittee's plan submitted with request for permit and approved by caltrans.

All Permittee's personnel shall wear appropriate personal protective equipment, including hard hats and bright-colored vests, shirts or jackets with retro-reflective material while on State highway right-of-way.

Water Pollution Control Plan (WPCP) must comply with the Standard Specifications Section 7-1G-Water Pollution.

Notwithstanding General Provision N0.4, your contractor is required to apply for and obtain an encroachment permit prior to starting work. A fee of \$4100.00 is required at the time of application. Permittee's contractor shall be billed for any additional inspection cost at the current Caltrans rate of \$82.00 per hour.

All Permittee's personnel shall wear appropriate personal protective equipment, including hard hats and bright-colored vests, shirts or jackets with retro-reflective material while on State highway right-of-way.

All utility work shall be performed in accordance with the appropriate provisions contained in the Department of Transportation Encroachment Permit Utility Provisions dated January, 2007.

AS BUILT PLAN REQUIREMENTS:

Upon completion of the work provided herein, the permittee shall send one vellum or paper set of As-Built plans, to the State representative. Mylar or paper sepia plans are not acceptable. In addition, the permittee shall to provide the State representative a complete set of acceptable full-

sized reproducible As-Built plans on a CD-ROM (MicroStation.dgn file Release 5.0 or later) complying with STATE's current CADD Users Manual and STATE's, current Drafting and Plans Manual including all contract records, survey documents and all corrected original full size structure plans.

All changes in the work shall be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.

The plans are to be stamped or otherwise noted AS BUILT by the permittee's representative who was responsible for overseeing the work. Any original plan that was approved by a state stamp, or Caltrans representative signature, shall be used for producing the As-Built plans.

If "As-Built" plans include signing and striping, the dates of signing or striping removal, relocation or installation shall be shown on the plans when required as a condition of the permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage shall show the removal, relocation or installation dates of the appropriate staged striping and signing .

As-Built plans shall contain the Permit Number, County, Route, Post Mile and Kilometer Post on each sheet.

Disclaimer statement of any kind, that differ from the obligations and protection provided by Sections 6735 through 6735.6 of the California Business and Professions Code, shall not be included on the As-Built plans. Such statements constitute non-compliance with Encroachment Permit requirements, and may result in the Department of Transportation retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may result in denial of future permits, or a provision for a public agency to supply additional bonding.

Immediately following completion of the work permitted herein, the permittee shall fill out and mail the notice of completion attached to this permit.

SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT
ENCROACHMENT PERMIT # 30 090269

INSPECTIONS REQUIRED!

TO SCHEDULE INSPECTIONS CALL 408-573-2429
24 HOURS BEFORE STARTING ANY WORK



30 090269

KEEP THIS PERMIT ON JOBSITE
SEE ATTACHMENTS FOR PERMIT REQUIREMENTS

Permit Number	Date Issued	*Expiration Date
30 090269	28-Jul-09	28-Jul-10

PERMITTEE

Name	Michelle Jiang	Phone: (408) 952-4290
Company	Valley Transportation Authority	Fax:
Mailing Address:	3331 N. First Street	
City:	San Jose	State Ca Zip 95134

Issued By: *Ted C Nguyen*
Ted Nguyen

DATE COMPLETED

DATE CANCELLED

Construction Insp. By

Electrical Insp. By

Permit Office Final

Date

LOCATION OF WORK

Address	Road Name:	Cross Street:
	Almaden Exp.@Capitol Ex. and Oregon Ex@Hwy 101	2 locations:Capitol,hwy 101

Work Order No:	Locaide:	791-D4	Zone 1
----------------	----------	--------	--------

DESCRIPTION OF WORK

Perform Traffic Detour to install detect loops near Almaden Expressway and Oregon Expressway as shown on the attached plans. Night work only. Work hours are from 10:00 PM to 6:00 AM.

SPECIAL PROVISIONS

General Conditions and Special Provisions Attached as Required

Locations: Almaden Exp.@ RT 87/Capitol Ex. and Oregon Expressway @ Hwy 101/Embarcadero. Maintain traffic control according to the latest edition of the CALTRANS Manual of Traffic Controls. Protect street surface from damage during construction. Fee waived per Ananth Prasad

FEES

Plan Check	Inspection	Trench Cut	Permit Fee	**Deposit Amount	☐ No Fee
\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

*EXPIRATION DATE WILL BE BASED ON FEE SCHEDULE SHOWN IN SPECIAL PROVISIONS

** IF PERMIT HAS A WBS NO. THE TOTAL ENCROACHMENT PERMIT FEE IS ESTIMATED; REFUND OR ADDITIONAL FEE WILL BE DETERMINED AFTER ENCROACHMENT PERMIT IS SIGNED OFF AND ACCOUNTING IS

BONDS	AMOUNT	TYPE	RELEASE DATE
	\$0.00		

Roads Dept Engineer

Plan ID No

SP #: 09-44

**WBS: 603-90-

GENERAL PROVISIONS

I. WORK REQUIREMENTS

1. **Legal Enforcement** - All provisions applicable to encroachment permits in the California Streets and Highways Code, the Santa Clara County Ordinance Code and Cal O.S.H.A. shall apply to this Permit whether or not they are set forth herein.
2. **General Instructions** - All work to be completed in accordance with the provisions stipulated by the Roads & Airports Department and any attachments made hereto. Approved plans are on file in the Roads & Airports Department. The Director may require modification of these plans as needed because of special field conditions. In additional engineering, soils or geological investigations are required, they shall be provided by Permittee. Any required surveying and construction staking shall be provided by Permittee.
3. **Emergency Contacts** - Names and telephone numbers of two (2) responsible persons will be furnished to the Permit Office prior to start of work for emergency contacts, twenty-four (24) hours a day, seven (7) days a week. The contractor or Permittee will have a supervisory representative available for contact on the project at all times during the construction duration.
4. **On Site** - This Permit shall be kept at the site of work and must be shown to any authorized representative of the Roads & Airports Department or any law enforcement officer upon demand.
5. **Material Storage** - No material will be stored near the edge of pavement, the traveled way, or within the shoulder line which would create a hazardous condition to the traveling public.
6. **Traffic Protection** - The Permittee shall make adequate provisions for the protection of the traveling public. Two (2) copies of a proposed traffic control procedure shall be submitted to the Land Development Permit Office for approval prior to any change in traffic patterns on any roads. 24 hours prior to starting work that involves an approved traffic detour, the Permittee shall inform Santa Clara County. Communications at (408) 299-2501 and the appropriate local garbage collection company of the date(s), time(s) and details of the detour.
7. **Traffic Lanes** - Two (2) 12-foot traffic lanes shall be open to The traveling public during all hours of darkness, and on all weekends and holidays. One Lane, one-way traffic may be permitted under the control of not less than two (2) competent flagmen during normal working hours. No work within a traveled roadway shall be undertaken until all materials, equipment, and labor forces are available to pursue the work to completion within five (5) work days, unless prior approval is obtained from the Department.
8. **Signs** - Any signs to be constructed in the execution of this Permit are to be approved by the Land Development & Permits Office of the County of Santa Clara prior to placement of signs.
9. **Traffic Control Signs** - Traffic control and warning signs shall be installed in accordance with the latest issue of "Manual of Traffic Controls for Construction & Maintenance Work Zones" of the State of California, Department of Transportation.(Caltrans).
10. **Drainage** - If the work performed by the Permittee interferes with the established surface drainage pattern, ample provision shall be made by the Permittee to provide for said drainage and approval by the Land Development & Permit Office is required.
11. **Permanent Monuments** - Any property corner stake, street monument or other permanent survey monument that will be disturbed during construction shall be shown on the plans for the work and referenced, removed and reset by competent persons legally qualified to perform this work.
12. **Inspection** - The Permittee shall request final inspection from land Development & Permits within ten (10) days from the date of completion for construction acceptance of the work.
13. **Facility Relocation** - Permittee shall be responsible for any required relocation, and cost thereof, of existing utilities or encroachments which may be affected by this Permit.
14. **Monument Corner Records** - Section 8771 of the Business and Professional Code, and Section

732, 149.5, and 810.5 of the Streets and Highways Code, Rev. 1995, mandates that prior to any reconstruction or relocation of streets or highways, all survey monuments are to be located and referenced to stable objects outside the construction area by or under the direction of a person authorized to practice land surveying. A corner record which shows the reference ties is to be filed in the office of the County Surveyor. After construction, permanent monuments are to be reset and a second corner record shall be filed.

15. **Sight Distance** - As related to and affected by the improvements covered by this encroachment permit, permittee shall provide adequate sight distance per Caltrans standards. Typical compliance may include, but not limited to, trimming and/or removal of vegetation to provide for adequate sight distance.

II. PERMIT PROVISIONS

1. **Revocation** - this Permit is revocable in accordance with the procedures and requirements of California Streets and Highways Code.
2. **Indemnification** - The Permittee shall fully indemnify, defend, and hold harmless the County of Santa Clara (hereinafter "County"), its officers, agents and employees from any claim; liability, loss, injury or damage arising out of, or in connection with, performance of this Agreement by the Permittee, its contractor and/or its agents, employees or sub-contractors, excepting only loss, injury or damage caused by the sole negligence or willful misconduct of personnel employed by the County. It is the intent of the parties to this Agreement to provide the broadest possible coverage for the County. The Permittee shall reimburse the County for all costs, attorneys' fees, expenses and liabilities incurred with respect to any litigation in which the Permittee is obligated to indemnify, defend and hold harmless the County under this Agreement.
3. **Insurance** - the Permittee shall obtain insurance as required by the Department in the attached exhibit and shall provide a certificate of insurance verifying such insurance. The County, its officers, employees and agents shall be named as additional insureds.
4. **Bonds** - The Permittee shall obtain the performance bond in the amount indicated when required by the Department in the attached exhibit and shall provide a certified copy of the bond verifying such bond in The amount required by the Department.
5. **Bond Release** - If a faithful performance bond is posted, it will be released by the Roads & Airports Department after a written request for a final inspection and verification by the Department that the work has been satisfactorily completed subject to any maintenance bond requirements.
6. **Damages Caused By Permittee/Repairs** - All necessary road repairs resulting from the encroachment permit work shall be made in accordance with County standards and specifications at the sole expense of the Permittee. The Permittee is required to repair any damage caused by the Permittee or its contractors as a consequence of labor performed under the Permit within the time indicated by the County. If the Permittee fails to make the repairs within the time indicated, the County at its sole option is authorized to repair the damage and may recover all cost incurred, including overhead and administrative costs, from the Permittee, its surety or insurance carrier.
 - A. Prior to any construction activity in the vicinity of the fiber-optic facilities (i.e., conduit, fiber-optic cable, pullbox, splice enclosure, termination panel, and any related fiber-optic improvements), the Permittee or its Contractor shall pothole to locate, identify, and provide necessary precautionary measures to protect the existing fiber-optic facilities within the Project limits from being damaged by construction activities. Potholing in dirt area shall be performed by hand and no power tool/equipment shall be permitted.
 - B. If the fiber-optic facilities are damaged by the Permittee's or its Contractor's operations, the Permittee or its Contractor shall make the necessary repair to the damaged fiber-optic facilities in accordance with Section 86.01.06 "Maintaining Existing and/or Temporary Electrical Systems and Traffic Communication Systems" of the County Standard Specifications and the following. The interim and permanent repairs of the damaged fiber-optic cable and related facilities shall be in accordance with the requirements specified below.
 - C. Interim Repair and Replacement of Damaged Fiber-optic Cable and Related Facilities.
 - a. Within 48 hours of the damage occurrence, the Permittee or its Contractor shall temporarily

splice the fiber-optic cable using mechanical or fusion splicing, at the sole discretion of the County. After completion of temporary repairs, the County will determine whether the end equipment operates satisfactorily. If not, the County may direct the Permittee to replace the temporary mechanical splice with a fusion splice within 48 hours. This shall be considered an interim repair only to restore the County's Traffic Management System (TMS). The Permittee or its Contractor shall permanently repair other damaged facilities, such as conduit and pullbox, unless approved otherwise by the County. The repair shall be undertaken in the nearest junction box, by pulling available slack in the cable. If, in the determination of the County, insufficient slack is available, a new junction box shall be installed as directed.

- b. Within 30 days after the acceptance of the interim repair by the County, the Permittee or its Contractor shall obtain a modified encroachment permit and replace the damaged cable between the system's end-to-end splice points installed during the initial installation (as shown on the Fiber Splicing Details Map available for review in the Engineering Office of Traffic and Electrical Operations). During this permanent repair process, the fiber-optic cable shall not be disconnected or the equipment communicating on the cable shall not become non-operational for more than 48 hours. A seven-day notice shall be given to the Permit Inspection Unit of the Roads & Airports Department by calling (408) 573-2461 or faxing to (408) 441-0275 prior to any work associated with the permanent repair of the fiber-optic cable. The replacement cable shall be of length and type equivalent to the replaced cable. Cable material, installation and testing shall meet the requirements of the County Standard Specifications as follows:

- Section 86.02.08E "Fiber-optic Cable",
- Section 86.02.09C "Installation of Fiber-optic Cable",
- Section 86.02.090 (1) "Fiber-optic Connectors,
- Section 86.02.09E (2) "Fiber-optic Cable Splicing,
- Section 86.02.09G "Fiber-optic Cable Splice Enclosure", and
- Section 86.02.13D "Fiber-optic Cable Testing". OTDR and power meter tests shall be done after the repair to assure that a light loss is within the maximum allowable loss. This loss shall be determined by comparison of the test results with OTDR test results on file at the County, derived from the most recent test on each fiber. The OTDR test shall be performed on each fiber strand. The power meter test shall be performed only on fibers terminated on both ends. Both tests shall be done at 1550 nm and 1310 nm.

- D. In the event that the Permittee or its Contractor fails to make the necessary repairs and/or replacement of the fiber-optic facilities within the timeframe as specified herein, the County at its sole option may perform the necessary repairs and/or replacement, interim and permanent, of the damaged facilities and recover all costs and expenses in accordance with the conditions of the Permit.
- E. The Permittee or its Contractor shall guarantee the repair work for a period of one year from the date of acceptance by the County in accordance with Section 5.17 "Correction of Work & Guarantee- of the County Standard Specifications.
7. **Private Property** - This Permit shall not be construed as authorization for excavation and grading on private property adjacent to the encroachment or any other work for which a separate permit may be required.
8. **Relocation Responsibility** - In the event future improvement of the road necessitates relocation of the encroachment authorized by this Permit, the Permittee shall relocate same at his/her sole expense.
9. **Contracts and Agreements** - This permit does not release the Permittee from any liabilities contained in other agreements or contracts with the County or municipal agencies.
10. **Acceptance** - Commencement of any work under this Permit shall constitute acceptance of the conditions and requirements of the Permit for the installation or future maintenance of the encroachment whether or not the Permit is signed by said person or an authorized representative of said person, firm or corporation.

ENCROACHMENT PERMIT NO. 30090269

LOCATION ALMADEN EX., OREGON EX

ADDITIONAL SPECIAL PROVISIONS -EXPRESSWAYS ONLY

Work is subject to County Ordinance Code B-17, County Standard Specifications, County Standard Plans and Details, State of California, Dept. of Transportation (CALTRANS) Standard Specifications and Standard Plans, latest issue.

Only boxes which are ☒ apply to this permit.

Warning signs and public safety and safe work practices:

- ☒ 1. Construction in road right-of-way shall be signed in accordance with the "Manual of Warning Signs, Lights and Devices", latest issue from State of California, Dept. of Transportation (CALTRANS).
- ☒ 2. Hours of work and lane closures shall be in accordance with approved Traffic Control Plans.
- ☒ 3. All construction work shall be performed in accordance with CAL O.S.H.A. Safety Orders, latest issue.

Expressway work by Permit:

- ☒ 1. The expressway pavement shall not be cut.
- ☐ 2. Allowed pavement cuts shall be sawcut, backfilled in accordance with section 19.03 of the County Standard Specifications and paved with Type A Asphalt, 3/4" coarse asphalt concrete, placed in lifts of 6", 6" and a 3" final lift (surface course) of 1/2" medium asphalt concrete.
- ☒ 3. Installation of pipes and conduit shall be by boring and jacking or directional bore methods.
- ☒ 4. If removal of existing fence or wall is required, it shall be replaced in kind.
- ☒ 5. No equipment or materials shall be stored in right-of-way overnight, unless prior written permission is obtained from the Roads and Airports Department.
- ☒ 6. Flagmen shall be required any time equipment or men are crossing or working within the expressway area.
- ☒ 7. All landscaping removed or damaged shall be replaced in kind and approved by the County Inspector in the field.

Pavement damage caused by construction shall be repaired. Temporary or permanent lane realignment requiring removal of pavement stripes, markings and/or markers, or other construction activities causing pavement surface damage shall be repaired by use of Caltrans standard slurry seal Type 2. The placement of slurry seal, as part of the corrective repairs to a damaged roadway and/or lane realignment, shall involve sealing the entire area. Pavement cracked and/or depressed by construction equipment or methods shall be removed and replaced in kind.

NOTICE

INDIAN BURIAL SITES

Upon discovering or unearthing any burial site as evidenced by human skeletal remains or artifacts, the person making such discovery shall immediately notify the County Coroner at (408) 793-1900 and the Office of Human Relations at 299-2206. No further disturbance of the site may be made except as authorized by the County coordinator of Indian affairs in accordance with the provisions of state law and Chapter 2, Division B6 of the County Ordinance Code.

UNDERGROUND UTILITIES

Notify U.S.A. Location Service at 800-227-2600, 48 hours prior to any trenching or excavations in the road right-of-way.

DETOURS

For information regarding detours, contact Roads Engineering at 299-2372.

MATERIAL SUBMITTALS

Material submittals are required, in accordance with the County's Standard Specifications, Section 86.01.04 "Submittals", for work involving County maintained signals, lighting and electrical systems. Submittals shall be furnished to the County Roads and Airports Department's right of way project inspector. Materials furnished and/or installed without the Roads and Airports Department's prior approval may be subject to rejection and/or removal at the permittee's expense.

