

REQUEST FOR PROPOSALS (RFP) 0-1769

**Video Surveillance System (VSS) at the
Tustin Metrolink Station**



**ORANGE COUNTY TRANSPORTATION AUTHORITY
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584
(714) 560-6282**

Key RFP Dates

Issue Date:	September 10, 2010
Pre-Proposal Conference Date:	September 23, 2010
Question Submittal Date:	September 28, 2010
Proposal Submittal Date:	October 13, 2010
Interview Date:	November 3, 2010

**U.S. Department of Transportation
FTA Project No. CA-04-0078**

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September 10, 2010

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SUBJECT: NOTICE OF REQUEST FOR PROPOSALS

**RFP 0-1769: "Video Surveillance System (VSS) at the
Tustin Metrolink Station**

Gentlemen/Ladies:

The Orange County Transportation Authority invites proposals from qualified consultants to furnish all design, labor, materials, tools, and equipment as required, for the Metrolink Service Expansion Program (MSEP) Video Surveillance System (VSS) at the Tustin Metrolink Station within the City of Tustin, California.

Proposals must be received in the Orange County Transportation Authority's office at or before 2:00 p.m. on October 13, 2010.

Proposals delivered in person or by a means other than the U.S. Postal Service shall be submitted to the following:

**Orange County Transportation Authority
Contracts Administration and Materials Management
600 South Main Street, 4th Floor
Orange, California 92868
Attention: John Mathis, Senior Contracts Administrator**

Proposals delivered using the U.S. Postal Service shall be addressed as follows:

**Orange County Transportation Authority
Contracts Administration and Materials Management
P.O. Box 14184
Orange, California 92863-1584
Attention: John Mathis, Senior Contracts Administrator**

Proposals and amendments to proposals received after the date and time specified above will be returned to the Offerors unopened.

Firms interested in obtaining a copy of this Request For Proposals (RFP) 0-1769 may do so by faxing their request to (714) 560-5792, or e-mail your request to rfp_ifb_Requests@octa.net or calling (714) 560-5922. Please include the following information:

- Name of Firm
- Address
- Contact Person
- Telephone and Facsimile Number
- Request For Proposal (RFP) 0-1769

All firms interested in doing business with the Authority are required to register their business on-line at CAMM NET, the Authority's interactive website. The website can be found at www.octa.net. From the site menu, click on CAMM NET to register.

To receive all further information regarding this RFP 0-1769, firms must be registered on CAMM NET with at least one of the following commodity codes for this solicitation selected as part of the vendor's on-line registration profile:

Commodities for this solicitation are:

<u>Category(s):</u>	<u>Commodity(s):</u>
Maintenance Services - Facility	Electrical Services
Construction	Electrical Installation
Security, Safety & Health	Surveillance Systems
Equipment	
Computer: Hardware & Software	Operating Systems and Network Software

A pre-proposal conference will be held on September 23, 2010, at the Authority's Administrative Office, 600 South Main Street, Orange, California, in Conference Room . All prospective Offerors are encouraged to attend the pre-proposal conference.

The Authority has established November 3, 2010 as the date to conduct interviews. All prospective Offeror's will be asked to keep this date available.

Offerors are encouraged to subcontract with small businesses to the maximum extent possible.

All Offerors will be required to comply with all applicable equal opportunity laws and regulations.

The award of this contract is subject to receipt of federal, state and/or local funds adequate to carry out the provisions of the proposed agreement including the identified Scope of Work.

Sincerely,

A handwritten signature in black ink, appearing to be 'John Mathis', with a long horizontal flourish extending to the right.

John Mathis
Senior Contracts Administrator

SECTION I

INSTRUCTIONS TO OFFERORS

SECTION I. INSTRUCTIONS TO OFFERORS

A. PRE-PROPOSAL CONFERENCE

A pre-proposal conference will be held on September 23, 2010, at 10 a.m. at the Tustin Metrolink Station, located at 2975 Edinger Avenue, Tustin, California 92780. All prospective Offerors are encouraged to attend the pre-proposal conference.

B. EXAMINATION OF PROPOSAL DOCUMENTS

By submitting a proposal, Offeror represents that it has thoroughly examined and become familiar with the work required under this RFP and that it is capable of performing quality work to achieve the Authority's objectives.

C. ADDENDA

Any Authority changes to the requirements will be made by written addendum to this RFP. Any written addenda issued pertaining to this RFP shall be incorporated into the terms and conditions of any resulting Agreement. The Authority will not be bound to any modifications to or deviations from the requirements set forth in this RFP as the result of oral instructions. Offerors shall acknowledge receipt of addenda in their proposals.

D. AUTHORITY CONTACT

All questions and/or contacts with Authority staff regarding this RFP are to be directed to the following Contract Administrator:

Contracts Administration and Materials Management Department
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584
Phone: 714.560.5478, Fax: 714.560.5792
Email: jmathis@octa.net

E. CLARIFICATIONS

1. Examination of Documents

Should an Offeror require clarifications of this RFP, the Offeror shall notify the Authority in writing in accordance with Section E.2. below. Should it be found that the point in question is not clearly and fully set forth, the Authority will issue a written addendum clarifying the matter which will be sent to all firms registered on CAMM NET under the commodity codes specified in this RFP.

2. Submitting Requests

- a. All questions, including questions that could not be specifically answered at the pre-proposal conference must be put in writing and must be received by the Authority no later than 5:00 p.m., on September 28, 2010.
- b. Requests for clarifications, questions and comments must be clearly labeled, "Written Questions". The Authority is not responsible for failure to respond to a request that has not been labeled as such.
- c. Any of the following methods of delivering written questions are acceptable as long as the questions are received no later than the date and time specified above:
 - (1) U.S. Mail: Orange County Transportation Authority, 550 South Main Street, P.O. Box 14184, Orange, California 92863-1584.
 - (2) Personal Courier: Contracts Administration and Materials Management Department, 600 South Main Street, 4th Floor, Orange, California 92868.
 - (3) Facsimile: The Authority's fax number is (714) 560-5792.

E-Mail: John Mathis, Senior Contracts Administrator e-mail address is jmathis@octa.net.

3. Authority Responses

Responses from the Authority will be posted on CAMM NET, the Authority's interactive website, no later than 5:00 p.m. on September 30, 2010. Offerors may download responses from CAMM NET at www.octa.net/cammnet, or request responses be sent via U.S. Mail by e-mailing or faxing the request to John Mathis, Senior Contracts Administrator.

To receive e-mail notification of Authority responses when they are posted on CAMM NET, firms must be registered on CAMM NET with at least one of the following commodity codes for this solicitation selected as part of the vendor's on-line registration profile:

Commodities for this solicitation are:

Category(s):

Maintenance Services - Facility
Construction

Commodity(s):

Electrical Services
- Electrical Installation

Security, Safety & Health Surveillance Systems
Equipment
Computer: Hardware & Software Operating Systems and Network
Software

Inquiries received after 5:00 p.m. on September 28, 2010, will not be responded to.

F. SUBMISSION OF PROPOSALS

1. Date and Time

Proposals must be received in the Orange County Transportation Authority's office at or before 2:00 p.m. on October 13, 2010.

Proposals received after the above-specified date and time will be returned to Offerors unopened.

2. Address

Proposals delivered in person or by a means other than the U.S. Postal Service shall be submitted to the following:

**Orange County Transportation Authority
Contracts Administration and Materials Management (Camm)
600 South Main Street, 4th Floor
Orange, California 92868
Attention: John Mathis, Senior Contracts Administrator**

Or proposals delivered using the U.S. Postal Services shall be addressed as follows:

**Orange County Transportation Authority
Contracts Administration and Materials Management (Camm)
P.O. Box 14184
Orange, California 92863-1584
Attention: John Mathis, Senior Contracts Administrator**

Firms must obtain a visitor badge from the receptionist in the lobby of the 600 Building prior to delivering any information to Camm.

3. Identification of Proposals

Offeror shall submit an **original and 6 copies** of its proposal in a sealed package, addressed as shown above, bearing the Offeror's name and address and clearly marked as follows:

"RFP 0-1769: Video Surveillance System (VSS) at the Tustin Metrolink Station"

4. Acceptance of Proposals

- a. The Authority reserves the right to accept or reject any and all proposals, or any item or part thereof, or to waive any informalities or irregularities in proposals.
- b. The Authority reserves the right to withdraw or cancel this RFP at any time without prior notice and the Authority makes no representations that any contract will be awarded to any Offeror responding to this RFP.
- c. The Authority reserves the right to postpone proposal openings for its own convenience.
- d. Proposals received by Authority are public information and must be made available to any person upon request.
- e. Submitted proposals are not to be copyrighted.

G. PRE-CONTRACTUAL EXPENSES

The Authority shall not, in any event, be liable for any pre-contractual expenses incurred by Offeror in the preparation of its proposal. Offeror shall not include any such expenses as part of its proposal.

Pre-contractual expenses are defined as expenses incurred by Offeror in:

1. Preparing its proposal in response to this RFP;
2. Submitting that proposal to the Authority;
3. Negotiating with the Authority any matter related to this proposal; or
4. Any other expenses incurred by Offeror prior to date of award, if any, of the Agreement.

H. JOINT OFFERS

Where two or more firms desire to submit a single proposal in response to this RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The Authority intends to contract with a single firm and not with multiple firms doing business as a joint venture.

I. TERM USAGE

The terms "Contractor" and "Consultant" are used interchangeably throughout this solicitation.

J. TAXES

Offerors' proposals are subject to State and Local sales taxes. However, the Authority is exempt from the payment of Federal Excise and Transportation Taxes.

K. PROTEST PROCEDURES

The Authority has on file a set of written protest procedures applicable to this solicitation that may be obtained by contacting the Contract Administrator responsible for this procurement. Any protests filed by an Offeror in connection with this RFP must be submitted in accordance with the Authority's written procedures.

L. CONTRACT TYPE

It is anticipated that the Agreement resulting from this solicitation, if awarded, will be a firm-fixed price contract specifying firm-fixed prices for individual tasks specified in the Scope of Work, included in this RFP as Exhibit A.

M. PREVAILING WAGES

Certain labor categories under this project are subject to prevailing wages as identified in the State of California Labor Code commencing in Section 1770 et. seq. It is required that all mechanics and laborers employed or working at the site be paid not less than the basic hourly rates of pay and fringe benefits as shown in the current minimum wage schedules. Offerors must use the wage schedules applicable at the time the contract is awarded.

N. CONFLICT OF INTEREST

All Offerors responding to this Request For Proposals must avoid organizational conflicts of interest which would restrict full and open competition in this procurement. An organizational conflict of interest means that due to other activities, relationships or contracts, an Offeror is unable, or potentially unable to render impartial assistance or advice to the Authority; an Offeror's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or an Offeror has an unfair competitive advantage. Conflict of Interest issues must be fully disclosed in the Offeror's proposal.

O. CODE OF CONDUCT

CONSULTANT agrees to comply with the AUTHORITY's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. CONSULTANT agrees to include these requirements in all of its subcontracts.

SECTION II

PROPOSAL CONTENT

SECTION II. PROPOSAL CONTENT**A. PROPOSAL FORMAT AND CONTENT****1. Format**

Proposals should be typed with a standard 12 point font, double-spaced and submitted on 8 1/2" x 11" size paper, using a single method of fastening. Charts and schedules may be included in 11"x17" format. Offers should not include any unnecessarily elaborate or promotional material. Lengthy narrative is discouraged and presentations should be brief and concise. Proposals should not exceed fifty (50) pages in length, excluding any appendices.

2. Letter of Transmittal

The Letter of Transmittal shall be addressed to John Mathis, Senior Contracts Administrator and must, at a minimum, contain the following:

- a. Identification of Offeror that will have contractual responsibility with the Authority. Identification shall include legal name of company, corporate address, telephone and fax number. Include name, title, address, and telephone number of the contract person identified during period of proposal evaluation.
- b. Identification of all proposed subcontractors including legal name of company, whether the firm is a Disadvantaged Business Enterprise (DBE), contact person's name and address, phone number and fax number; relationship between Offeror and subcontractors, if applicable.
- c. Acknowledgement of receipt of all RFP addenda, if any.
- d. A statement to the effect that the proposal shall remain valid for a period of not less than 120 days from the date of submittal.
- e. Signature of a person authorized to bind Offeror to the terms of the proposal.
- f. Signed statement attesting that all information submitted with the proposal is true and correct.

3. Technical Proposal

a. Qualifications, Related Experience and References of Offeror

This section of the proposal should establish the ability of Offeror to satisfactorily perform the required work by reasons of: experience in performing work of a similar nature; demonstrated competence in the services to be provided; strength and stability of the firm; staffing capability; work load; record of meeting schedules on similar projects; and supportive client references.

Offeror to:

- (1) Provide a brief profile of the firm, including the types of services offered; the year founded; form of the organization (corporation, partnership, sole proprietorship); number, size and location of offices; and number of employees.
- (2) Provide a general description of the firm's financial condition and identify any conditions (e.g., bankruptcy, pending litigation, planned office closures, impending merger) that may impede Offeror's ability to complete the project.
- (3) Describe the firm's experience in performing work of a similar nature to that solicited in this RFP, and highlight the participation in such work by the key personnel proposed for assignment to this project. Describe experience in working with the various government agencies identified in this RFP.
- (4) Identify subcontractors by company name, address, contact person, telephone number and project function. Describe Offeror's experience working with each subcontractor.
- (5) Provide as a minimum three (3) references for the projects cited as related experience, and furnish the name, title, address and telephone number of the person(s) at the client organization who is most knowledgeable about the work performed. Offeror may also supply references from other work not cited in this section as related experience.

b. Proposed Staffing and Project Organization

This section of the proposal should establish the method, which will be used by the Offeror to manage the project as well as identify key personnel assigned.

Offeror to:

- (1) Provide education, experience, and applicable professional credentials of project staff.
- (2) Furnish brief resumes (not more than two [2] pages each) for the proposed Project Manager and other key personnel.
- (3) Indicate adequacy of labor resources utilizing a table projecting the labor-hour allocation to the project by individual task.
- (4) Identify key personnel proposed to perform the work in the specified tasks and include major areas of subcontract work. Include the person's name, current location, proposed position for this project, current assignment, level of commitment to that assignment, availability for this assignment and how long each person has been with the firm.
- (5) Include a project organization chart, which clearly delineates communication/reporting relationships among the project staff.
- (6) Include a statement that key personnel will be available to the extent proposed for the duration of the project acknowledging that no person designated as "key" to the project shall be removed or replaced without the prior written concurrence of the Authority.

c. Work Plan

Offeror should provide a narrative, which addresses the Scope of Work, and shows Offeror's understanding of Authority's needs and requirements.

Offeror to:

- (1) Describe the approach to completing the tasks specified in the Scope of Work. The work plan shall be of such detail to demonstrate the Offerors ability to accomplish the project objectives and overall schedule.
- (2) Outline sequentially the activities that would be undertaken in completing the tasks and specify who would perform them.
- (3) Furnish a project schedule for completing the tasks in terms of elapsed weeks from the project commencement date.
- (4) Identify methods that Offeror will use to ensure quality control as well as budget and schedule control for the project.

- (5) Identify any special issues or problems that are likely to be encountered in this project and how the Offeror would propose to address them.
- (6) Offeror is encouraged to propose enhancements or procedural or technical innovations to the Scope of Work that do not materially deviate from the objectives or required content of the project.

d. Exceptions/Deviations

State any exceptions to or deviations from the requirements of this RFP, segregating "technical" exceptions from "contractual" exceptions. Where Offeror wishes to propose alternative approaches to meeting the Authority's technical or contractual requirements, these should be thoroughly explained. If no contractual exceptions are noted, Offeror will be deemed to have accepted the contract requirements as set forth in Exhibit C.

4. Cost and Price Proposal

As part of the cost and price proposal, the Offeror shall submit proposed pricing to provide the services for each work task described in Exhibit A, Scope of Work.

The Offeror shall complete the "Price Summary Sheet" form included with this RFP (Exhibit B), and furnish any narrative required to explain the prices quoted in the schedules. It is anticipated that the Authority will issue a firm-fixed-price contract specifying firm-fixed-prices for individual tasks.

5. Appendices

Information considered by Offeror to be pertinent to this project and which has not been specifically solicited in any of the aforementioned sections may be placed in a separate appendix section. Offerors are cautioned, however, that this does not constitute an invitation to submit large amounts of extraneous materials. Appendices should be relevant and brief.

B. FORMS**1. Party and Participant Disclosure Forms**

In conformance with the statutory requirements of the State of California Government Code Section 84308, part of the Political Reform Act and Title 2, California Code of Regulations 18438 through 18438.8, regarding campaign contributions to members of appointed Boards of Directors, Offeror is required to complete and sign the Party and Participant Disclosure Forms provided in this RFP and submit as part of the proposal. Offeror is required to submit only **one** copy of the completed form(s) as part of its proposal and it should be included in only the **original** proposal. The prime consultant and subcontractors must complete the form entitled "Party Disclosure Form". The form entitled "Participant Disclosure Form" must be completed by lobbyists or agents representing the prime consultant. Therefore, the prime consultant, subcontractors and agents will be required to report all campaign contributions from the proposal submittal date up and until the Board of Directors makes a selection, which is currently scheduled for December 31, 2010.

2. Status of Past and Present Contracts Form

Offeror is required to complete and sign the form entitled "Status of Past and Present Contracts" provided in this RFP and submit as part of the proposal. Offeror shall list the status of past and present contracts where the firm has either provided services as a prime contractor or a subcontractor during the past five (5) years and the contract has ended or will end in a termination, settlement, or litigation. A separate form must be completed for each contract. Offeror shall provide an accurate name and telephone number for each contract and indicate the term of the contract and the original contract value. If the contract was terminated, Offeror must list the reason for termination. Offeror must identify and state the status of any litigation, claims or settlement agreements related to any of the contracts. Each form must be signed by the Offeror confirming the information that the information provided is true and accurate. Offeror is required to submit **one** copy of the completed form(s) as part of its proposals and it should be included in only the **original** proposal.

3. CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS – EXHIBIT F

Primary Participant and Lower-Tier Participants

a. Policy

Unless otherwise permitted by law, any person or firm that is debarred, suspended, or voluntarily excluded, as defined in the Federal Highway Administration (FHWA) Circular 2015.1, may not take part in any federally funded transaction, either as a participant or a principal, during the period of debarment, suspension, or voluntary exclusion. Accordingly, the Authority, may not enter into any transaction with such debarred, suspended, or voluntarily excluded persons or firms during such period.

A certification process has been established by 49 CFR Part 29, as a means to ensure that debarred suspended or voluntarily excluded persons or firms do not participate in Federally assisted projects. The inability to provide the required certification will not necessarily result in denial of participation in a covered transaction. A person or firm that is unable to provide a positive certification as required by this solicitation, must submit a complete explanation attached to the certification. FHWA will consider the certification and any accompanying explanation in determining whether or not to provide assistance for the project. Failure to furnish a certification or an explanation may disqualify that person or firm from participating in the project.

b. Submission Requirements

Each Offeror shall complete the certification, "Certification of Primary Participant Regarding Debarment, Suspension and other Responsibility Matters," Exhibit F, included in this RFP, for itself and its principals, and submit this certification with its proposal. Failure to do so may result in rejection of the proposal.

If the Offeror plans to use subcontractors on the project, the Offeror, shall have all subcontractors with contracts in excess of \$100,000 complete a certification for lower-tier participation and submit the certification with its proposal.

If a prime or subcontractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances, immediate written notice shall be provided to the Authority.

4. RESTRICTIONS ON LOBBYING FORM – EXHIBIT G

As a recipient of federal funds, the Authority is required to certify compliance with the influencing restrictions and efforts of Offeror to influence federal officials regarding specific procurements in excess of \$100,000.00 that must be disclosed pursuant to section 1352, Title 31, U.S. Code.

This RFP includes, under Exhibit G, the following: a certification form entitled "Certification of Restrictions on Lobbying," the Office of Management and Budget (OMB) Standard Form LLL entitled "Disclosure of Lobbying Activities," and a document entitled "Limitation on Payments to Influence Certain Federal Transactions."

The Offeror to this solicitation will be required to complete and submit to the Authority in their proposal, the certification form entitled "Certification of Restrictions on Lobbying" whether or not any lobbying efforts took place. If the Offeror did engage in lobbying activities, then OMB Standard Form LLL "Disclosure of Lobbying Activities" must also be completed and submitted to the Authority.

5. DBE SOLICITATION PROVISIONS – DBE PARTICIPATION LISTING FORM EXHIBIT H-2, AND BIDDERS LIST EXHIBIT H-3

Offeror shall complete Exhibit H-2 and Exhibit H-3 per the instructions set forth in Section I: "Instructions to Offerors" and Exhibit H: "Disadvantaged Business Enterprises".

SECTION III
EVALUATION AND AWARD

SECTION III. EVALUATION AND AWARD

A. EVALUATION CRITERIA

The Authority will evaluate the offers received based on the following criteria:

- 1. Qualifications of the Firm 20%**

Technical experience in performing work of a closely similar nature; experience working with public agencies; strength and stability of the firm; strength, stability, experience and technical competence of subcontractors; assessment by client references.
- 2. Staffing and Project Organization 15%**

Qualifications of project staff, particularly key personnel and especially the Project Manager; key personnel's level of involvement in performing related work cited in "Qualifications of the Firm" section; logic of project organization; adequacy of labor commitment; concurrence in the restrictions on changes in key personnel.
- 3. Work Plan 45%**

Depth of Offeror's understanding of Authority's requirements and overall quality of work plan; logic, clarity and specificity of work plan; appropriateness of labor distribution among the tasks; ability to meet the project deadline; reasonableness of proposed schedule; utility of suggested technical or procedural innovations.
- 4. Cost and Price 20%**

Reasonableness of the total price and competitiveness of this amount with other offers received; adequacy of data in support of figures quoted; reasonableness of individual task budgets; basis on which prices are quoted (FFP, CPFF, T & E).

B. EVALUATION PROCEDURE

An evaluation committee will be appointed to review all proposals received for this RFP. The committee is comprised of Authority staff and may include outside personnel. The committee members will evaluate the written proposals using criteria identified in Section III A. A list of top ranked proposals, firms within a competitive range, will be developed based upon the totals of each committee members' score for each proposal.

During the evaluation period, the Authority may interview some or all of the proposing firms. The Authority has established November 13, 2010, as the date

to conduct interviews. All prospective Offerors will be asked to keep this date available. No other interview dates will be provided, therefore, if an Offeror is unable to attend the interview on this date, its proposal may be eliminated from further discussion. The interview may consist of a short presentation by the Offeror after which the evaluation committee will ask questions related to the firm's proposal and qualifications.

At the conclusion of the proposal evaluations, Offerors remaining within the competitive range may be asked to submit a Best and Final Offer (BAFO). In the BAFO request, the firms may be asked to provide additional information, confirm or clarify issues and submit a final cost/price offer. A deadline for submission will be stipulated.

At the conclusion of the evaluation process, the evaluation committee will recommend to the appropriate Board Committee, the Offeror with the highest final ranking or a short list of top ranked firms within the competitive range whose proposal(s) is most advantageous to the Authority. The Board Committee will review the evaluation committee's recommendation and forward its decision to the full Board of Directors for final action.

C. AWARD

The Authority will evaluate the proposals received and will submit, with approval of the December 9, 2010 Committee, the proposal considered to be the most competitive to the Authority's Board of Directors, for consideration and selection. The Authority may also negotiate contract terms with the selected Offeror prior to award, and expressly reserves the right to negotiate with several Offerors simultaneously and, thereafter, to award a contract to the Offeror offering the most favorable terms to the Authority.

The Authority reserves the right to award its total requirements to one Offeror or to apportion those requirements among several Offerors as the Authority may deem to be in its best interest. In addition, negotiations may or may not be conducted with Offerors; therefore, the proposal submitted should contain Offeror's most favorable terms and conditions, since the selection and award may be made without discussion with any Offeror.

D. NOTIFICATION OF AWARD AND DEBRIEFING

Offerors who submit a proposal in response to this RFP shall be notified via CAMM NET of the contract award. Such notification shall be made within three (3) days of the date the contract is awarded.

Offerors who were not awarded the contract may obtain a debriefing concerning the strengths and weaknesses of their proposal. Unsuccessful Offerors, who wish to be debriefed, must request the debriefing in writing or electronic mail and the Authority must receive it within three (3) days of notification of the contract award.

EXHIBIT A

COST AND PRICE FORMS

PRICE SUMMARY SHEET

REQUEST FOR PROPOSALS (RFP) 0-1769

Enter below the proposed price for each of the work phases described in the Scope of Work, Exhibit A. Prices shall include direct costs, indirect costs, and profits. The Authority's intention is to award a firm-fixed price contract. Please denote the basis on which the prices are quoted.

TASK 1: Design	\$ _____
TASK 2: Equipment	\$ _____
TASK 3: Installation	\$ _____
TASK 4: Warranty (5 Years)	\$ _____
Total:	\$ _____ =====

The above prices are quoted on the following basis (check one):

Firm-Fixed Price X Cost-Plus-Fixed-Fee Time and Expense

1. I acknowledge receipt of RFP 0-1769 and Addenda No.(s) _____
2. This offer shall remain firm for _____ days from the date of proposal
(Minimum 120)

COMPANY NAME _____

ADDRESS _____

TELEPHONE _____

EMAIL _____

SIGNATURE OF PERSON
AUTHORIZED TO BIND OFFEROR _____

SIGNATURE'S NAME AND TITLE _____

DATE SIGNED _____

EXHIBIT B
SCOPE OF WORK

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DIVISION 1

GENERAL REQUIREMENTS

01000	General Requirements (8 pages)
01010	Summary of Work (2 pages)
01025	Measurement and Payment (2 pages)
01035	Contract Modification (5 pages)
01040	Coordination (2 pages)
01045	Cutting and Patching (3 pages)
01050	Field Engineering (2 pages)
01060	Regulatory Requirements (2 pages)
01095	Reference Standard and Abbreviations (10 pages)
01200	Project Meetings (3 pages)
01340	Shop Drawings, Product Data, Samples (5 pages)
01360	Quality Control Submittals (3 pages)
01370	Schedule of Values (2 pages)
01400	Quality Control (6 pages)
01600	Product Requirements (9 pages)
01700	Contract Closeout (4 pages)
01710	Final Cleaning (2 pages)
01720	Project Record Documents (3 pages)
01732	Selective Demolition (7 pages)
01740	Warranties and Bonds (11 pages)

DIVISIONS 2-8

NOT USED

DIVISION 9

FINISHES

09900	Paints and Coatings (10 pages)
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DIVISIONS 10-15

NOT USED

DIVISION 16

ELECTRICAL

16000	Electrical Specifications (5 pages)
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DIVISION 17

VIDEO SURVEILLANCE SYSTEM (VSS)

17000	VSS Specifications (16 pages)
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OCTA Safety Regulations

(8 pages)

SCRRRA Forms

(42 total pages)

SCRRRA Safety Regulations

(20 pages)

Form 6

(13 pages)

Form 37

(9 pages)

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SECTION 01000

GENERAL REQUIREMENTS

1.1 SCOPE OF WORK

Work of this contract includes furnishing all design, labor, materials, tools, and equipment as required, for the Metrolink Service Expansion Program (MSEP) Video Surveillance System (VSS) at the Tustin Metrolink Station within the City of Tustin, California. The Orange County Transportation Authority (OCTA) "Authority" in coordination with the City of Tustin is requesting proposals for a new Video Surveillance System (VSS) at the Metrolink Station site. The VSS will be procured as a design/install approach to project delivery.

The Metrolink Station is geographically located at 2975 Edinger Avenue, Tustin, CA 92780. The nearest cross street/intersection to the property is Edinger Avenue Jamboree Road, (California State Route 261, aka: Eastern Transportation corridor).

The site contains an under-the-tracks pedestrian tunnel, two 600-foot platforms, lighted surface parking lot and bus destination/transfer a lighted five-level covered parking garage, and a pedestrian access to the station from Dow Avenue to the north of the station across the tracks utilizing an abandoned railroad wye corridor. .

Empty conduit to incorporate CCTV camera cabling will be installed in the parking garage and along the abandoned wye corridor for use by this contract. In addition, empty conduits will be routed underground from the parking garage to the existing communications building. Based on as-built drawings it appears there are existing empty conduits between the existing communications building and the train platforms and abandoned wye corridor. This contract will utilize these conduits to route CCTV camera cabling to the garage VSS room. This contract will provide new conduit as required to the train platform cameras that do not have an existing conduit rough in to provide a fully operational system. The contractor shall field verify all existing conduit conditions prior to submitting bid.

The Tustin Metrolink Station functions as an inter-modal transportation facility along the Orange railroad subdivision, within the Los Angeles San Diego (LOSSAN) corridor. The Metrolink Station serves only OCTA Metrolink commuter/passengers seven days per week, 24 hours a day. Although there is an Amtrak rail line in the corridor, the train does not make a stop here. Specifically, it serves Metrolink's Orange County and Inland Empire-Orange County commuter rail service lines, Local OCTA and OCTA Station Link bus service is available at or in the immediate vicinity of the Metrolink Station.

This is a non-staffed station with Metrolink ticket vending machines on site, but no security guard service. Sworn law enforcement patrols of and first responders to the Metrolink Station are the responsibility of the City of Tustin Police Department.

There is an existing security equipment room located on the second level of the parking structure. This room will house the VSS power supplies, network, and

recording equipment. This is a controlled (conditioned) equipment room. The main telecom room for the parking structure is located on level one. On the third through the fifth levels of the parking structure, there are storage/equipment rooms located at the northeast corner that will serve as telecom connection centers for those levels.

It is anticipated that the VSS will enhance security capabilities of the Tustin Metrolink Station, serve as a physical deterrent to undesirable activities, ensuring a comfortable environment for Metrolink passengers and business patrons. Initially the VSS will provide video recording capability of Metrolink activity; no on-site or remote monitoring is included with the initial project. The overt CCTV cameras will provide a deterrent to crime and the recorded video will be used for investigative purposes.

The VSS shall be a network based IP CCTV system using Common Off The Shelf (COTS) network components (LAN switches, Storage Area Network, Network Video Recording Application Software). The VSS shall be expandable and capable of incorporating video analytics, local and remote monitoring. It is anticipated that as funds become available the VSS will be expanded by adding new cameras, local monitoring, and a connection to the Tustin Police Department's Command Monitoring Center.

The VSS shall be equipped to provide continuous recording capability of all cameras and storage of video for at least one year in accordance with the California Public Utilities Commission requirements.

1.2 INTENT OF PLANS AND SPECIFICATIONS

The intent of the drawings and specifications is to provide a basis of design for the design, construction, and completion of the work, which the Contractor undertakes to perform in accordance with the terms of the contract. The drawings and specifications are preliminary design documents that depict the conceptual level requirements for the project. The Contractor shall furnish all design, labor, materials, tools, equipment, programming, documentation, training and demonstration and incidentals. All the work involved in executing the contract in a satisfactory and workmanlike manner.

1.3 PERMITS AND LICENSES

The Contractor shall obtain all permits and licenses, pay all charges and fees and give all notices, obtain all inspections necessary and incident to the due and lawful prosecution of the work from all agencies having jurisdiction over the work including but not limited to City of Tustin, County of Orange, and CAL-OSHA.

1.4 BEGINNING AND COMPLETION OF THE WORK

The Contractor shall begin work within 7 calendar days after receiving the Notice to proceed. The Contractor shall notify the Authority 72 hours prior to the start of any work.

1.5 COOPERATION

The Contractor shall cooperate fully with all forces of the Authority. Contractor shall arrange his work and space requirements to offer the least interference with the existing bus operations and maintenance of this facility. All bus and vehicle travel path and route around the base to remain open at all times. Provide all traffic cones, barricades, signs for delineating traffic through work area. Provide steel traffic plates over excavations of construction for traffic to pass through construction areas at all times

1.6 EXAMINATION OF PREMISES

Before bidding of this work, Contractors shall make a careful examination of the premises and shall thoroughly familiarize themselves with the requirements of the contract. By the act of submitting a bid for the work included in this contract, the Contractor shall be deemed to have made such study and examination, and that, he is familiar with and accepts all conditions of the site.

1.7 DAMAGE TO THE FACILITY

The Contractor shall be responsible for damages to the existing property, building, ground pavement, landscaping, equipment, utilities, and related appurtenances caused by his faulty workmanship. He shall repair at his own expense all damages so caused.

1.8 TRAFFIC CONTROL

The Contractor shall provide flagmen, barricades, warning signs or other means to control the traffic and maintain access for buses, vehicles, and pedestrians as required for other activities and existing facility operations to remain in full operation during construction. Work is to be done in phases as shown on the drawings. Provide clear traffic lane (minimum 20 feet wide) for traffic to pass through construction area.

1.9 PRECONSTRUCTION MEETING

After issuing the Notice to Proceed, the Engineer will set a date and arrange for and conduct a preconstruction meeting with members of the Contractor's organization before beginning the construction work.

1.10 COOPERATION

The Contractor shall cooperate fully with all forces of the public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities within or adjacent to the limits of the work so as to minimize interference with said relocation, altering, or other rearranging of facilities.

1.11 CONTRACTOR DRAWINGS

The Authority will furnish the Contractor three (3) sets of RFP Drawings and Specifications without charge. Additional sets will be furnished upon request at the actual cost of reproduction.

All drawings, specifications, and other contract documents, and copies thereof furnished by the Authority are its property. They are not to be used on other work and with the exception of signed contract sets are to be returned to it upon request at the completion of the work.

The location of the work, its general nature, and extent, and the form and general dimensions of the project and appurtenant works are shown on the RFP drawings, which are hereby made a part of these specifications as listed herein. Drawings and specifications developed by the Contractor shall bear the common title "Orange County Transportation Authority, Metrolink Service Expansion Program (MSEP), Tustin Metrolink Station Video Surveillance System (VSS)."

1.12 LIST OF RFP DRAWINGS

<u>Drawing No.</u>	<u>Description</u>
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Cover Sheet	Key Map
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Sheets #1-12	Site Plan Areas of Coverage
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1.13 CONTRACTOR'S SCHEDULES

At the Preconstruction meeting, the Contractor shall prepare and submit to the Engineer for approval a schedule of work. This schedule shall indicate the number of days the Contractor anticipates working on each phase of the project.

The schedule shall reflect the requirements on the "Plan of Sequence of Work". The dates of all key phases of the Plan shall appear clearly on the schedule.

The schedule shall orderly show planned sequences of operations, and the dates for commencement and completion of all salient feature of the work.

- A. The schedule shall be comprehensive, covering engineering design, design review submittals, code review submittals, activities at the site of the work, procurement, and construction. The schedule shall be orderly and realistic, and shall be revised as necessary to meet this requirement. The schedule shall also include all of the key requirements of the "Plan of Sequence of Work". The Contractor shall promptly advise the Engineer of any occurrence requiring substantial revision of the schedule and shall furnish a revised schedule within 7 days of such occurrence.
- B. The schedule and each revision thereof shall be subject to approval by the Metrolink Service Expansion Program (MSEP) Stations Manager for conformity with the requirements of this article. The Contractor shall assist the Engineer in reviewing and evaluating each schedule furnished. Disapproved schedules will be

returned to the Contractor, shall be revised to correct the defects noted, and shall be resubmitted to the Engineer within 7 days after returned.

The Contractor shall submit 3 copies of each schedule and revised schedule furnished.

The schedules shall be of the bar chart, critical path method, or precedence types, at the Contractor's option. The critical path method type schedule shall be in the form of a network diagram and activity listing. The precedence type schedule shall be in the form of a network diagram, activity listing, and input listing.

1.14 NOT USED

1.15 MOBILIZATION

Mobilization shall include the moving onto the site of all the Contractor's plant and equipment, for furnishing and erecting plants, temporary buildings, and other construction facilities; all as required for the proper performance and completion of the work; bonds, appropriate insurance certificates, fees and permits, cost breakdown, and progress schedule.

1.16 GENERAL TECHICAL REQUIREMENTS

A. Project Appearance

1. The Contractor shall maintain a neat appearance of work. Debris developed during clearing and grubbing shall be disposed of concurrently with its removal. Remove debris daily from site. Keep bus traffic lanes clear of debris, construction equipment, and activities.
2. Items that are to be reused shall be stacked neatly concurrently (daily) with their removal. The location of the stacks shall not interfere with the operation of the maintenance facility.
3. Dust Control

Attention is directed to Section 10, "Dust Control" of the Standard Specifications State of California Department of Transportation, Latest Edition.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the bid price and no additional compensation will be allowed therefore.

1.17 APPLICABLE STANDARD SPECIFICATIONS

The Contractor shall design and construct the work specified herein in accordance with the requirements of the RFP Documents and the referenced portions of the following listed Standards and Specifications and such other documents, which are specified in, appropriate sections of the Specifications.

- A. "Standard Specifications". The Standard Specifications of the State of California Business and Transportation Agency, Department of Transportation known as SSCT or Standard Specifications for Public Work Construction known as SSPWC as specified herein, Latest Edition, including all current supplements, addenda, and revisions thereof.

If reference is made only as to the Standard Specifications, it shall be interpreted as referenced to SSCT. In lieu of the definitions and terms specified in the Standard Specifications, wherever in said Standard Specifications the following definitions and terms are used, the intent and meaning shall be as follows

1. State of California, or Department of Transportation, or "Department" shall mean the Authority as defined in Paragraph B, following.
 2. Director of Transportation, or "Director" shall mean the Engineer as defined herein.
 3. Department of Transportation, or Division of Highways shall mean the Authority as defined in Paragraph B, following.
 4. Engineer shall mean the Project Manager of the Orange County Transportation Authority, acting either directly or through properly authorized agents or representatives acting within the scope of the particular duties entrusted to them.
 5. Laboratory shall mean a recognized private materials testing laboratory, approved by the Authority.
 6. Plans shall be defined as provided in Section 1-1.29 of the Standard Specifications.
 7. Special Provisions shall mean these specific clauses setting forth conditions or requirements peculiar to the work and supplementary to the Standard Specifications and shall include the General Provisions, the Technical Provisions, the Bidding and Contractual Documents, and all additions, deletions, modifications, and appendices and all addenda as prepared prior to the date of bid opening.
- B. In addition to the definitions and terms specified in the Standard Specifications, wherever the following definitions and terms are used, the intent and meaning shall be as follows.
1. Authority or Owner: The Orange County Transportation Authority, a legal entity organized and existing in the County of Orange under and by virtue of the laws of the State of California. All necessary action by the Authority pertaining to the contract will be taken by legally constituted authorities empowered to on behalf of the Orange County Transportation Authority. Following construction and acceptance of the VSS, the system will be turned

over to the City of Tustin, a legal entity organized and existing by virtue of the laws of the State of California.

2. Special Deputy Inspector or Special Inspector shall mean an inspector who has been certified by the State of California as a Special Inspector to furnish required continuous inspection in designated specialty areas of construction in accordance with the provisions of Section 305 (a) and (b) of the Uniform Building Code.
3. The term General Conditions shall mean General Provisions.
4. DOT shall mean the U.S. Department of Transportation.
5. FTA shall mean the Federal Transit Administration of the United States Department of Transportation.
6. Contractor: shall mean the individual, partnership, corporation, or other legal entity entering into contract with the Authority to perform the work covered by the contract documents, and these specifications.
7. Subcontractor: The individual, partnership, corporation or other legal entity entering into a contract with the Contractor to perform a portion of the work.

C. References herein to "OSHA Regulations for Construction" of CAL-OSHA" shall mean State of California, Department of Industrial Relations, Construction Safety Orders, as amended to June 30, 1980, and all changes and amendments thereto which are effective as of the date of construction and supplemented by Title 29, part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

1.18 COORDINATION AND INTERPRETATION OF DRAWINGS, SPECIFICATIONS AND STANDARD SPECIFICATIONS

These Specifications, the Standard Specifications, the RFP Drawings, the Standard Plans, contract change orders and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary, and to describe and provide for a complete work.

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these Specifications or the drawings, the Contractor shall apply to the Engineer for such further explanations as may be necessary and shall conform to them as part of the contract. In the event of any doubt or question arising respecting the true meaning of these Specifications, the special provisions or the drawings, the Engineer's decision thereon shall be final.

PART 2- PROJECT CLOSEOUT

2.1 FINAL CLEANUP

- A. After completion of all work on the project, and before making application for acceptance of the work, the Contractor shall clean the construction site, including all areas under the control of the Authority that have been used by the Contractor in connection with the work on the project, and remove all debris, surplus material, and equipment, and all temporary construction or facilities of whatever nature, unless otherwise approved by the Authority. Final acceptance of the work by the Authority will be withheld until the Contractor has satisfactorily complied with the foregoing requirements for final cleanup of the project site.
- B. Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the bid price and no additional compensation will be allowed therefore.

PART 3- MAINTENANCE AND GUARANTY

3.1 GUARANTY

A guaranty form to be signed and delivered to the Engineer before acceptance of the Contract is included in the Bidding and Contractual Documents.

Contractor guarantees that the work performed and materials furnished hereunder by Contractor or subcontractors or suppliers will be free from defects in design, material, and workmanship for a period of at least one year from the date of final acceptance.

The Contractor shall make all repairs and replacements at Contractor's own expense promptly upon the request of the Engineer. If the Contractor fails to make such repairs or replacements promptly, the Authority reserves the right to do the work and the Contractor and surety shall be liable to the Authority for the cost thereof.

3.2 COMPENSATION

Full compensation for conforming to the provisions in the Section, not otherwise provided for, shall be considered as included in the lump sum prices entered on the Bid Sheet and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 01010

SUMMARY OF WORK

1.1 SCOPE OF THE WORK

- A. The Project work consist of final design, labor, materials, trenching, conduit, cabling, electrical power branch circuits, interface with existing infrastructure, equipment, miscellaneous supplies and testing as required to complete the installation of a Video Surveillance System (VSS) at the Tustin Metrolink Station located at 2975 Edinger Avenue, Tustin, CA 92780. All miscellaneous system components including, but not limited to, cameras, camera mounting brackets and hardware, power supplies, servers, workstations, network switches, copper to fiber media converters, network storage devices, software, user training, licenses, cables, termination equipment, punch blocks, patch panels, conduit, painting, and any other related items shall be furnished and installed complete under this contract, such that the system shall perform all functions listed herein in compliance with all of the specified requirements, and such other items not mentioned that are required by the Contract Documents, law and governmental codes and regulations.
- B. The Tustin Metrolink Station is open 24 hours per day for access to the Ticket Vending Machines but trains only operate between approximately 4 AM and 8 PM, seven days per week. Contractor may work during Tustin Metrolink Station normal business hours but work must be planned and coordinated with Tustin Metrolink Station personnel to minimize conflicts with existing operations
- C. The Contractor shall follow City of Tustin design standards. The most current standards and seed files for electronic plan submittal can be found on the City Public Works website <http://www.tustinca.org/departments/pubworks>
- D. The Contractor shall comply with Southern California Regional Rail Authority (SCRRA) Safety Regulations and Construction Provisions. Contractor shall file all applicable SCRRA applications and forms prior to commencement of construction activities. SCRRA regulations, applications, and forms are included in Appendix A.
- E. All design elements shall be based on the requirements of local, state, and national codes and standards and requirements herein. Contractor shall make the following submittals: Initial design one line to be submitted with the proposal, 60% design review, 95% design review, 100% code compliance and construction permit review.
- F. The code review shall include listing and discussion of Fire Prevention Methods, Occupancy Separations, Construction Type, Area Classifications, Best Available Control Technology, and Best Management Practices.
- G. Project is located at the Tustin Metrolink Station located at 2975 Edinger Avenue, Tustin, CA 92780. Location is shown approximately on the Key Map in the Drawings.
- H. The Project is titled, Tustin Metrolink Station Video Surveillance System.

- I. Additional general information concerning the Project is provided on the Contract Drawings.

2.1 PERMITS, LICENSES, AND FEES

- A. Permits: Contractor shall obtain and pay for all permits, City licenses, from all authorities having jurisdiction and from utility companies and agencies as required. Fees for City of Tustin permits shall be waived.
- B. VSS contractor is responsible to obtain necessary permits, execute, and meet requirements of required permits/agreements, and to coordinate all work in, around, over, and adjacent to the railroad tracks and its right-of-way with the Southern California Regional Rail Authority (SCRRA).
- C. Licenses: Contractor shall obtain and pay for all licenses required by all jurisdiction associated with the approval and requirements of this project.

5.1 CONTRACTOR USE OF SITE AND PREMISES

- A. Site Access: Limit construction to allow uninterrupted access for regular patron access to the station as well as OCTA buses, and other transit vehicles. If routes and access points are not indicated, access shall be as approved by the Engineer. Keep bus and car traffic ways open at all times.
- B. Construction Limit: Limit construction activities to phase of work. Fence area around construction work. Work shall be coordinated with Parking Structure construction.
- C. Utility Outages and Shutdowns: Unless otherwise directed, provide two (2) days notice of all utility outages and shutdowns. Duration of outages and shutdowns shall not hinder normal operations of the Metrolink Station or train operations. In case of accidental damage to power or utility lines, repair power or utility line immediately. Provide alternate source of power to keep facility operational during disruption of power during construction.

END OF SECTION 01010

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Procedures for preparation and presentation of Applications for Payment.

1.2 RELATED DOCUMENTS AND SECTIONS

- A. General Provisions: Requirements for Progress Payments and Final Payment.
- B. Section 01035 - Contract Modification Procedures: Accounting of costs for changes to the Work.
- C. Section 01700 - Contract Closeout: Final Payment procedures.

1.3 FORM

- A. Payment Application Form: Applications for Payment using the form as provided by the Project Engineer, and cost breakdown as submitted by the contractor. Submit progress payment by the 25th of the month for all work done during the month. Payment request must follow the cost breakdown previously submitted by the Contractor. Sign progress payment request. Submit other documentation such as certified payroll, monthly labor utilization form, and waivers as required by contract. Materials on site but not installed in construction should not be included in Progress Payment, and will not be paid by OCTA.

1.4 PREPARATION OF APPLICATIONS FOR PAYMENT

- A. Preparation of Applications for Payment: Comply with requirements in the General Provisions and specific directions of the Engineer.
 - 1. Payment Application Forms: Use forms as directed by the Engineer and provided by the Authority, and cost breakdown as submitted by the contractor. Mobilization cost not to exceed 10%
 - 2. Final Payment: Prepare Application for Final Payment in compliance with requirements in the General Provisions, as directed by the Engineer and as specified in Section 01700 - Contract Closeout.
- B. Payment Period: Comply with requirements in the General Provisions and contract documents.

PART 2 - PRODUCTS

Not Applicable to this Section.

PART 3 - EXECUTION

Not Applicable to this Section.

END OF SECTION 01025

SECTION 01035
CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Administrative requirements for changes in the Work.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Construction Change Directives.
- E. Change Orders.
- F. Execution of Change Orders.
- G. Reconciliation of Change Orders.

1.2 RELATED DOCUMENTS AND SECTIONS

- A. General Provisions: Governing requirements for changes in the Work, in Contract Sum and Contract Time.
- B. Section 01025 - Measurement and Payment: Applications for payment.
- C. Section 01600 - Product Requirements: Submittals, Product options, substitutions, omissions and mis-descriptions.
- D. Section 01700 - Contract Closeout: Project record documents.

1.3 ADMINISTRATIVE REQUIREMENTS FOR CHANGES IN THE WORK

- A. Responsible Person for Contractor: Submit name of the individual authorized to receive construction change documents, and who is responsible for informing others in Contractor's employ or subcontractors of changes in the Work.
- B. Change Order Forms: Forms shall be as required by the Authority and will be provided by the Project Engineer.

1.4 DOCUMENTATION OF CHANGES IN AGREEMENT PRICE AND AGREEMENT TIME

- A. Documentation of Changes in Contract Sum and Contract Time: Provide full information required for evaluation of proposed changes and to substantiate costs of changes in the Work.
 - 1. Maintain detailed records of Work completed on time and material basis.

2. Document each quotation for a change in Contract Sum and Contract Time, with sufficient data to allow evaluation of the quotation.
 3. Provide details of cost of all material used for change in work. Provide detail of labor hours expended in change of work, and wage rate or worker. Provide total of hours equipment was used in the work, and hourly rate of the equipment.
- B. Additional Data: Upon request by the Engineer, provide additional data to support computations:
1. Quantities of products, material, labor, and equipment.
 2. Overhead and profit (20% includes all superintendence, taxes, insurance, bonds, overhead and profit, etc.). 20% to be divided between Contractor and sub-contractor equally.
 3. Justification for change in Contract Time, if claimed.
 4. Credit for deletions from Contract, similarly documented.

1.5 CHANGE PROCEDURES

- A. Change Procedures, General: The following describe administrative procedures to be followed in complying with provisions of the Conditions of the Contract for changes in the Work.
- B. The Engineer's Supplemental Instructions: Minor changes in the Work, not involving an adjustment in either the Contract Sum or Contract Time, as authorized by the Conditions of the Contract. The Contractor shall take prompt action on such instructions.
- C. Authority-Initiated Changes: The Authority may initiate a change by the Engineer issuing a Bulletin/Proposal Request, which includes a detailed description of a proposed change with supplementary or revised Drawings and Specifications.
1. Such Bulletin/Proposal Request may include an estimate of additions or deductions in Contract Sum or Contract Time for executing the change and may include stipulations regarding overtime work and the period of time the requested response from the Contractor shall be considered valid.
 2. Contractor shall prepare and submit a response to the Bulletin/Proposal Request within 7 days.

1.6 CONSTRUCTION CHANGE DIRECTIVES

- A. Construction Change Directives: In accordance with provisions of the Conditions of the Contract, the Authority may direct the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order, by the Engineer issuing a Construction Change Directive, signed by the Authority and the Engineer.

1. The Construction Change Directive will describe changes in the Work, and will designate the method of determining if any, change is due in the Contract Sum or Contract Time.
 2. Contractor shall promptly execute the change in the Work.
- B. Changes Based on Stipulated Sum or Time: Construction Change Directive shall be based on stipulated adjustment in Contract Sum and Contract Time as mutually acceptable to the Authority and Contractor and the change shall be performed immediately. A Change Order for this amount shall be executed at the earliest convenience of all parties. Contractor shall provide a cost estimate based on section 1.4 B of this section
- C. Changes Based on Unit Costs or Quantities: When scope of change cannot be accurately determined in advance, a Construction Change Directive shall be executed based on mutually acceptable quantities and pre-determined unit prices. Actual costs shall be determined after completion of the Work and a Change Order for this amount shall be executed.
- D. Changes Based on Time and Material Costs: If directed for changes for which amounts are not defined or are disputed, a Construction Change Directive will be issued by the Authority and Contractor shall execute the Work, keeping accurate records of time, both labor and calendar days, and cost of materials.
1. Contractor shall prepare and submit an itemized account and supporting data after completion of changed Work, within the time limits indicated in the Conditions of the Contract.
 2. Contractor shall provide full information as required and requested for the Authority and Engineer to evaluate and substantiate costs for changes in the Work.
 3. When the Authority and Contractor determine mutually acceptable amounts for changes in Contract Sum and Contract Time, a Change Order shall be executed for these amounts based on contractor's cost estimate prepared per section 1.4 B of this section.
- E. Cost and Time Resolution: If amounts for changes in Agreement price and Agreement time cannot be agreed upon by the Authority and Contractor, amounts shall be resolved in accordance with requirements of the Conditions of the Contract for resolution of disputes.

1.7 CHANGE ORDERS

A. Change Orders, General:

1. In accordance with provisions of the Conditions of the Contract, the Engineer and Authority will review Contractor's response to a Bulletin/Proposal Request or a Construction Change Directive and determine with the Contractor the acceptable amount, if any, of the change in Contract Sum and Contract Time.

2. When agreement is reached on the change in Contract Time and Sum, the Engineer will prepare a Change Order, with supplementary documents (Contractor's cost estimate) as necessary to describe the change and the associated costs and schedule impacts.
3. The Authority and Contractor will sign the Change Order indicating acceptance and approval of the change.

1.8 EXECUTION OF CHANGE ORDERS

- A. Execution of Change Orders: Project Engineer shall prepare Change Order documents for review by the Authority and Contractor, and obtain signature by the parties as provided in the Conditions of the Contract. Provide three original sets of each Change Order cost estimate, with complete supplementary information as necessary.

1.9 RECONCILIATION OF CHANGE ORDERS

- A. Schedule of Values: Promptly revise the Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjustment to the Contract Sum.
- B. Schedules: Promptly revise progress schedules to reflect changes in Contract Time, revising sub-schedules to adjust time for other items of Work as may be affected by the change. Submit revised schedules at the next Application for Payment following approval and acceptance of the Change Order.
- C. Change in work due to request for information, or any other reason shall not be reason for claims of delays by the contractor. Contractor shall allow the Consultant seven (7) days to respond to request for information, and additional fourteen (14) days to the Authority to make necessary changes to resolve changes in work and change orders. Allow Authority 30 days for final Change Order approval

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01035

SECTION 01040

COORDINATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Coordination of Work under Contract.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of the Project: Various types of Work to be coordinated.
- B. Section 01600 - Product Requirements: Coordination of products, especially general requirements for system completeness and product substitutions.

1.3 COORDINATION

- A. Coordination: Contractor shall coordinate the Work as stated in the Conditions of the Contract.
- B. Relationship of Contract Documents: Drawings, Specifications, and other Contract Documents are intended to be complementary. What is required by one shall be as if required by all. What is shown or required, or may be reasonably inferred to be required, or which is usually and customarily provided for similar work, shall be included in the Work.
- C. Discrepancies in Contract Documents: In the event of error, omission, ambiguity, or conflict in the Drawings or Specifications, Contractor shall bring the matter to the Engineer's attention in a timely manner, for the Engineer's determination and direction in accordance with provisions of the Conditions of the Contract.
- D. Construction Interfacing and Coordination: Layout, Phasing, and sequencing of Work shall be solely the Contractor's responsibility. Contractor shall bring together the various parts, components, systems, and assemblies as required for the correct interfacing and integration of all elements of Work. Contractor shall coordinate Work to correctly and accurately connect abutting, adjoining, overlapping, and related elements, including utilities, for a complete operational system to the satisfaction of the Authority, agencies, and companies. Provide adequate access for transit vehicles and cars to pass through all areas at all times. Do not block non-construction areas.
- E. The VSS Contractor shall work, coordinate, and schedule VSS and HVAC work to fit into the daily operations of the train station building, parking structure, bus bays, and the station. The VSS project shall not delay the general public in any way.

The VSS contractor shall be responsible to coordinate with the general public by installing traffic delineations and signage as approved by the Engineer in areas/locations where work will be completed.

- F. VSS Contractor and its sub-contractors shall coordinate and adhere to all requirements of the Southern California Regional Rail Authority (SCRRA).

1.4 COORDINATION OF SUBCONTRACTS

- A. Superintendence of Work: Contractor shall appoint a field superintendent and a project manager, who shall directly and full time supervise and coordinate all Work required by the Drawings and Specifications.
- B. Subcontractors, Trades and Materials Suppliers: Contractor shall require all subcontractors, trades, crafts, and suppliers to coordinate their portions of Work with the Superintendent to prevent scheduling, sequencing, dimensional and other conflicts, and omissions.
- C. Contractor will be allowed to work in one phase at a time only as shown on the drawings. Contractor will coordinate work in such a way that that train operations are not hampered. Contractor will retain flagging services for Metrolink trains as needed for work within or adjacent to the Metrolink right-of-way as noted in the SCRRA Forms.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01040

SECTION 01045
CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Requirements and limitations for cutting and patching of Work.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of the Project:
- B. Section 01120 - Special Project Procedures: Additional general requirements for Project involving alterations to existing construction.
- C. Individual Product Specification Sections:
 - 1. Cutting and patching incidental to Work specified in the Section.
 - 2. Coordination with Work specified in other Sections for openings required to accommodate Work specified in those other Sections.
- D. Include:
 - 1. Identification of Project.
 - 2. Location and description of affected Work.
 - 3. Explanation of necessity for irregular cutting and patching procedures.
 - 4. Description of proposed special work and alternate products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on existing construction and, if applicable, work being performed for the Authority under separate contracts.
 - 7. Date and time Work will be executed.
 - 8. Written permission of affected separate contractor.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Primary Products: As required for original installation and to match surrounding construction.
- B. Product Substitution: For each proposed change in materials, submit request for substitution under provisions of Section 01600 - Product Requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examination, General: Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.
- B. After uncovering existing Work, inspect conditions affecting proper accomplishment of Work.
- C. Beginning of cutting or patching shall be interpreted to mean that existing conditions were found by Contractor to be acceptable.

3.2 PREPARATION

- A. Temporary Supports: Provide devices and methods to protect other portions of Project from damage by providing temporary supports.

3.3 CUTTING AND PATCHING

- A. Cutting and Patching:
 - 1. Execute cutting, fitting, patching, excavation, and fill, to complete Work.
 - 2. Coordinate installation or application of products for integrated Work.
- B. Remedial Work: Remove and replace defective or non-conforming Work.

3.4 PERFORMANCE

- A. Cutting and Patching:
 - 1. Execute demolition, cutting and patching by methods to avoid damage to adjoining Work, and which will provide appropriate surfaces to receive final finishing.
 - 2. Saw cut asphalt concrete paving for smooth edges. Do not overcut corners.
 - 3. Contractor is required to take all precautions during construction to prevent damage to OCTA buses, property, Equipment, utilities, and OCTA personnel and City of Tustin property, Equipment, utilities, and personnel. All precautions are to taken per CAL-OSHA code to prevent accidents, and damage to

adjacent OCTA property and appurtenances.

B. Restoration:

1. Restore Work with new Products as specified in individual Sections.
2. Where affected or uncovered by construction work, Finish adjacent surfaces to condition before construction. Finish adjacent surfaces and background to condition before construction. Match material and paint and finish to nearest joint. Re-Paint all curbs, traffic striping, legends, parking stalls, numbers, and paving as existed before construction. Damage to adjacent City, SCRRA, or OCTA property shall be repaired to a condition as existed before construction.

C. Finishing: Refinish (material and paint) surfaces to match adjacent and similar finishes as used for the Project. (match material and paint finish)

For continuous surfaces, refinish with material and paint to nearest intersection or natural break or joint. Replace equipment or appurtenances damaged due to demolition, cutting or patching work during construction. Provide material quality that existed before construction started

END OF SECTION 01045

SECTION 01050
FIELD ENGINEERING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Layout of the Work.
- B. Other engineering services as necessary to accomplish the Work.

1.2 RELATED DOCUMENTS AND SECTIONS

- A. General Provisions: Basic site engineering requirements.
- B. Section 01400 - Quality Control: Contractor quality control responsibilities.
- C. Section 01700 - Contract Closeout: Project record documents, incorporate layout data on As-Built drawings.

1.3 LAYOUT OF WORK

- A. Refer to plans and specifications. Verify dimensions and work before actually proceeding with construction. Promptly notify the Engineer of discrepancies discovered. Review OCTA Record drawings for underground utilities before begin of demolition work.
- B. Utilities: Contractor shall identify the location of available VSS conduit and other applicable utilities prior to construction. The locations of utilities have been provided where available on the plans.

1.4 EXAMINATION

- A. Verify locations of work prior to starting Work.
- B. Promptly notify the Engineer of discrepancies discovered.

1.5 GENERAL

- A. Contractor shall locate and protect all adjacent areas, utilities, equipment, buses, cars, and appurtenances.
- B. Control area of work, so that it does not interrupt station operations, train operations, or vehicle traffic flow on the site. Provide barricade and traffic signs around work area, excavations, and contractor's equipment. Provide flashing lights from dusk to dawn all sides of construction work.
- C. Promptly report and repair to the Engineer's satisfaction disruption in utilities caused by construction work. Repair disruption of utilities immediately.
- D. Make no changes without prior written notice to the Engineer.

1.6 REQUIREMENTS

- A. Field Engineering: Provide field-engineering services as necessary. Utilize recognized engineering practices.
- B. Barricade project area on all sides at end of workday, and provide flashing lights on all sides of project area from dusk to dawn.

1.7 SUBMITTALS

- A. Submit name and address of Sub contractor to Engineer.
- B. On request of Engineer, submit field data, and documentation to verify accuracy of field engineering work.
- C. Submit data certifying that elevations and locations of improvements are in conformance, or non-conformance, with Contract Documents.
- D. Contractor shall provide As-built drawings to the Authority at the completion of the Project.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01050

SECTION 01060

REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 AUTHORITY AND PRECEDENCE OF CODES, ORDINANCES, AND STANDARDS

- A. Authority and Precedence of Codes, Ordinances and Standards: All codes, ordinances, and standards referenced in the Drawings and Specifications shall have the full force and effect as though printed in their entirety in the Specifications.
- B. Precedence:
 - 1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
 - 2. Where the Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, the Drawings and Specifications shall take precedence.
 - 3. Where no requirements are identified in the Drawings or Specifications, comply with all requirements of applicable codes, ordinances, and standards of authorities having jurisdiction.

1.2 APPLICABLE CODES, LAWS, AND ORDINANCES

- A. Building Codes:
 - 1. Performance of the Work shall meet or exceed the minimum requirements of California Code of Regulations (CCR), Title 24, including the following:
 - a. CCR Title 24, Part 2: Uniform Building Code (UBC), latest edition, with State of California amendments; referenced as California Building Code (CBC).
 - b. CCR Title 24, Part 3: National Fire Protection Association (NFPA) 13 - National Electrical Code (NEC), latest edition, with State of California Amendments, referenced as California Electrical Code (CEC).
 - c. CCR Title 24, Part 4: California Mechanical Code, latest edition, with State of California Amendments, referenced as California Mechanical Code (CMC).
 - d. CCR Title 24, Part 9: Uniform Fire Code (UFC), latest edition, with State of California Amendments, referenced as California Fire Code (CFC).
 - e. CCR Title 24, Part 12: Uniform Building Code Standards (UBC Standards), latest edition, with State of California Amendments; referenced as California Building Standards Code (CBSC).
 - 2. Performance of the Work shall also comply with applicable requirements of California Code of Regulations (CCR), as follows:

- a. Title 19 - Public Safety.
 - b. Title 22 - Social Security.
 - c. Title 24 - Building Standards, Parts 2 through 7, and Title 25 as applicable.
3. References on the Drawings or in the Specifications to "code", "Code" or "building code" similar terms, not otherwise identified, shall mean the codes specified above, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction (City of Garden Grove) having authority over the Project.
 4. The applicable edition of all codes shall be that adopted at the time of issuance of permits by the jurisdiction having authority and shall include all modifications and additions adopted by that Authority.

B. Other Applicable Laws, Ordinances, and Regulations:

1. Work shall be accomplished in conformance with all applicable laws, ordinances, rules and regulations of Federal, State and local governmental agencies and jurisdictions (City of Tustin, SCRRRA, County of Orange, AQMD, CAL-OSHA) have authority over the Project.
2. Work shall be accomplished in conformance with all rules and regulations of public utilities, utility districts, and public agencies providing utility services.
3. Where such laws, ordinances, rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Sum And Contract Time, except where changes in laws, ordinances, rules and regulations occur subsequent to the execution date of the Agreement.
4. Contractor shall pay for and obtain all permits required by all agencies having jurisdiction over the work. Contractor shall be required to pay for all temporary utility connections and use to the respective utility company during construction.

PART 2 - PRODUCTS

Not Applicable to this Section.

PART 3 - EXECUTION

Not Applicable to this Section.

END OF SECTION 01060

SECTION 01095

REFERENCE STANDARDS AND ABBREVIATIONS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Use of references in Drawings and Specifications, including requirements for copies of reference standards at Project site.
- B. Definitions of terms used in Specifications and Drawings.
- C. Abbreviations, Acronyms, Names and Terms which may be used in Specifications.

1.2 USE OF REFERENCES

- A. References: The Drawings and Specifications contain references to various standards, standard specifications, codes, practices and requirements for products, execution, tests and inspections. These reference standards are published and issued by the agencies, associations, organizations and societies listed in this Section or identified in individual product specification Sections.
- B. Relationship to Drawings and Specifications: Such references are incorporated into and made a part of the Drawings and Specifications to the extent applicable.
- C. Referenced Grades Classes and Types: Where an alternative or optional grade, class or type of product or execution is included in a reference but is not identified on the Drawings or in the Specifications, provide the highest, best, and greatest of the alternatives or options for the intended use and prevailing conditions.
- D. Copies of Reference Standards:
 - 1. Reference standards are not furnished with the Drawings and Specifications because it is presumed that the Contractor, subcontractors, manufacturers, suppliers, trades and crafts are familiar with these generally-recognized standards of the construction industry.
 - 2. Copies of reference standards may be obtained from publishing sources. The Engineer will furnish, upon request, information on how to obtain copies.
- E. Jobsite Copies:
 - 1. Contractor shall obtain and maintain at the Project site copies of reference standards identified on the Drawings and in the Specifications in order to properly execute the Work.

2. At a minimum, the following shall be readily available at the site:
 - a. Local and State Building Codes: As referenced in Section 01060 - Regulatory Requirements.
 - b. Safety Codes: State of California, California Code of Regulations (CCR), Title 8 - Industrial Relations, Chapter 4, Subchapter 7, General Industry Safety Orders.
 - c. General Standards: UBC Standards, other model Code standards, UL Building Products Listing, FM Approval Guide and ASTM Standards in Building Codes.
 - d. Fire and Life Safety Standards: All referenced standards pertaining to fire rated construction and exiting.
 - e. Common Materials Standards: American Concrete Institute (ACI), American Institute of Steel Construction (AISC), American Welding Society (AWS), Gypsum Association (GA), National Fire Protection Association (NFPA), Tile Council of America (TCA) and Woodwork Institute of California (WIC) standards to the extent referenced within the Contract Specifications.
 - f. Research Reports: ICBO Evaluation Service (ICBO ES) Research Reports and CABO National Evaluation Service Reports (NER), for products not in conformance to prescribed requirements stated in Building Code.
 - g. Product Listings: Approval documentation, indicating approval of authorities having jurisdiction for use of product with City of Tustin.

F. Edition Date of References:

1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date indicated on the Drawings and Specifications.
2. All amendments, changes, errata and supplements as of the effective date shall be included.

G. ASTM and ANSI References: Specifications and Standards of the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision or amendment. It is presumed that the Contractor is familiar with and has access to these nationally- and industry-recognized specifications and standards.

1.3 DEFINITIONS OF TERMS

- A. Words and Terms Used on Drawings and in Specifications: Additional words and terms may be used in the Drawings and Specifications and are defined as follows:
1. Applicable: As appropriate for the particular condition, circumstance or situation.

- B. Approved: The term "approved," when used in conjunction with the Engineer's action on the Contractor's submittals, applications, and requests, is limited to the Engineer's duties and responsibilities as stated in the Conditions of the Contract.
1. Approved: Limited to duties and responsibilities of the Authority and the Engineer as stated in the Conditions of the Contract, for actions performed in the professional judgment of the Engineer or the Engineer's responsible design consultant, in conjunction with submittals, applications, and requests. Approvals shall be valid only if obtained in writing and shall not apply to matters regarding the means, methods, techniques, sequences and procedures of construction. Approval action shall not relieve the Contractor from responsibility to fulfill Contract requirements.
 2. And/or: If used, shall mean that either or both of the items so joined are required.
 3. Directed: Limited to duties and responsibilities of the Engineer as stated in the Conditions of the Contract, and meaning as instructed by the Engineer, in writing, regarding matters other than the means, methods, techniques, sequences and procedures of construction. Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean "directed by the Engineer", "requested by the Engineer", and similar phrases. No implied meaning shall be interpreted to extend the Engineer's responsibilities into the Contractor's supervision of construction.
 4. Equal or Equivalent: As determined by the Engineer as being equivalent, considering such attributes as durability, finish, function, suitability, quality, utility, performance and aesthetic features.
 5. Furnish: Means "supply and deliver, to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."
 6. Indicated: The term "indicated" refers to graphic representations, notes, or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown", "noted", "scheduled", and "specified" are used to help the reader locate the reference. There shall be no limitation on location.
 7. Install: Describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.
 8. Installer:
 - a. "Installer" refers to the Contractor or an entity engaged by the Contractor, such as an employee, subcontractor, or sub-subcontractor, for performance of a particular construction activity, including installation, erection, application and similar operations. Installers shall be adequately

skilled and experienced in the operations they are engaged to perform.

- b. Experienced Installer: The term "experienced," when used with "installer" shall mean having a minimum of 5 previous Projects similar in size to this Project, knowing the precautions necessary to perform the Work, and being familiar with requirements of authorities having jurisdiction over the Work.
9. Jobsite: Same as "Site."
10. Necessary: With due consideration of the conditions of the Project and, as determined in the professional judgment of the Engineer as being necessary for performance of the Work in conformance with the requirements of the Contract Documents, but excluding matters regarding the means, methods, techniques, sequences and procedures of construction.
11. Noted: Same as "Indicated."
12. Per: In accordance with or in compliance with.
13. Products: Material, system or equipment.
14. Project Site: Same as "Site."
15. Proper: As determined by the Engineer as being proper for the Work, excluding matters regarding the means, methods, techniques, sequences and procedures of construction, which are solely the Contractor's responsibility to determine.
16. Provide: "Furnish and install, complete and ready for the intended use."
17. Regulation: Includes laws, ordinances, statutes and lawful orders issued by authorities having jurisdiction, as well as and rules, conventions and agreements within the construction industry that control performance of the Work.
18. Required: Necessary for performance of the Work in conformance with the requirements of the Contract Documents, excluding matters regarding the means, methods, techniques, sequences and procedures of construction, such as:
- a. Regulatory requirements of authorities having jurisdiction.
 - b. Requirements of referenced standards.
 - c. Requirements generally recognized as accepted construction practices of the locale.
 - d. Notes, schedules and graphic representations on the Drawings.
 - e. Requirements specified or referenced in the Specifications.
 - f. Duties and responsibilities stated in the Bidding and Contract Requirements.

19. Scheduled: Same as "Indicated."
20. Selected: As selected by the Engineer or Authority from the full selection of the manufacturer's products, unless specifically limited in the Contract Documents to a particular quality, color, texture or price range.
21. Shown: Same as "Indicated."
22. Site: Same as "Jobsite", "Site of the Work" or "Project Site;" the area or areas or spaces occupied by the Project and including adjacent areas and other related areas occupied or used by the Contractor for construction activities, either exclusively or with others performing other construction on the Project. The extent of the Project Site is shown on the Drawings, and may or may not be identical with the description of the land upon which the Project is to be built.
23. Testing Laboratory or Laboratories: Same as "Testing and Inspection Agency."
24. Testing and Inspection Agency: An independent entity engaged to perform specific inspections or tests, at the Project Site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.

1.4 ABBREVIATIONS, ACRONYMS, NAMES AND TERMS, GENERAL

- A. Abbreviations, Acronyms, Names and Terms: Where acronyms, abbreviations names and terms are used in the Drawings, Specifications or other Contract Documents, they shall mean the recognized name of the trade association, standards generating organization, authority having jurisdiction or other entity applicable.
- B. Abbreviations: The following are commonly-used abbreviations which may be found on the Drawings or in the Specifications:

AC or ac Alternating current or air conditioning (depending upon context)

AMP or amp	Ampere
C	Celsius
CFM or cfm	Cubic feet per minute
CM or cm	Centimeter
CY or cy	Cubic yard
DC or dc	Direct current
DEG or deg	Degrees
F	Fahrenheit
FPM or fpm	Feet per minute
FPS or fps	Feet per second
FT or ft	Foot or feet
Gal or gal	Gallons
GPM or gpm	Gallons per minute
IN or in	Inch or inches
Kip or kip	Thousand pounds

KSI or ksi	Thousand pounds per square inch
KSF or ksf	Thousand pounds per square foot
KV or kv	Kilovolt
KVA or kva	Kilovolt amperes
KW or kw	Kilowatt
KWH or kwh	Kilowatt hour
LBF or lbf	Pounds force
LF or lf	Lineal foot
M or m	Meter
MPH or mph	Miles per hour
MM or mm	Millimeter
PCF or pcf	Pounds per cubic foot
PSF or psf	Pounds per square foot
PSI or psi	Pounds per square inch
PSY or psy	Per square yard
SF or sf	Square foot
SY or sy	Square yard
V or v	Volts

C. Undefined Abbreviations, Acronyms, Names and Terms: Words and terms not otherwise specifically defined in this Section, in the Instructions to Bidders, in the Conditions of the Contract, on the Drawings or elsewhere in the Specifications, shall be as customarily defined by trade or industry practice, by reference standard and by specialty dictionaries such as the following:

1. The American Institute of Architects (AIA) Document M101, "Glossary of Construction Industry Terms".
2. The Construction Specifications Institute (CSI) Technical Document TD 2-4, "Abbreviations".
3. Dictionary of Architecture and Construction, (Cyril M. Harris, McGraw-Hill Book Company, 1975).
4. Encyclopedia of Associations, published by Gale Research Co., available in most libraries.

1.5 ABBREVIATIONS FOR AGENCIES, ASSOCIATIONS, CODES AND STANDARDS

A. Abbreviations for Associations, Codes and Standards: The following abbreviations and acronyms may be used in the Drawings and Specifications. When used, the abbreviation or acronym shall mean the full name of the applicable agency, association, organization, society or standard.

ACI	American Concrete Institute 22400 W. 7 Mile Road PO Box 19150 Detroit, MI 48219
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313/532-2600

ADA	Americans with Disabilities Act ADA Information Office US Department of Justice, Civil Rights Division PO Box 66738 Washington, DC 20035 202/514-0301
ANSI	American National Standards Institute 11 West 42nd St., 13th Floor New York, NY 10036 212/642-4900
ASTM	American Society for Testing and Materials 1916 Race St. Philadelphia, PA 19103-1187 215/977-9679
CBM	Certified Ballast Manufacturers Association Hanna Building, No. 772 1422 Euclid Ave. Cleveland, OH 44115-2851 216/241-0711
CSI	The Construction Specifications Institute 601 Madison St. Alexandria, VA 22314 703/684-0300 FAX 703/684-0465
ETL	ETL Testing Laboratories, Inc. PO Box 2040 Route 11, Industrial Park Cortland, NY 13045 607/753-6711
FM	Factory Mutual Research Organization 1151 Boston-Providence Turnpike PO Box 9102 Norwood, MA 02062 617/762-4300
ICBO	International Conference of Building Officials 5360 S. Workman Mill Road Whittier, CA 90601 213/699-0541

ISO	International Organization for Standardization 1 Rue De Varembe, Case Postale 56 CH-1211 Geneva 201, Switzerland 412/234-1240
NEC	National Electrical Code (NFPA 70) National Fire Protection Association One Batterymarch Park PO Box 9101 Quincy, MA 02269-9101 617/770-3000 800/344-3555
NECA	National Electrical Contractors Association 7315 Wisconsin Ave. Bethesda, MD 20814 301/657-3110
NEMA	National Electrical Manufacturers Association 2101 L St., NW, Suite 300 Washington, DC 20037 202/457-8400
NFC	National Fire Code 3310 Harrison St. Topeka, KS 66611 913/266-7014
NFPA	National Fire Protection Association One Batterymarch Park PO Box 9101 Quincy, MA 02269-9101 617/770-3000 800/344-3555
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) N3647 200 Constitution Ave., NW Washington, DC 20210 202/219-8148
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077 708/966-6200
SFM	State Fire Marshal (California)

SMACNA Sheet Metal and Air Conditioning Contractors National Association, Inc.
4201 Lafayette Center Dr.
Chantilly, VA 22021
703/803-2980

TCA Tile Council of America
PO Box 326
Princeton, NJ 08542
609/921-7050

UBC Uniform Building Code
International Conference of Building Officials
5360 S. Workman Mill Road
Whittier, CA 90601
213/699-0541

UFC Uniform Fire Code
International Conference of Building Officials

and

Western Fire Chiefs Association
5360 S. Workman Mill Road
Whittier, CA 90601
213/699-0541

UL Underwriters Laboratories, Inc.
333 Pfingsten Rd.
Northbrook, IL 60082
708/272-8800

UMC Uniform Mechanical Code
International Conference of Building Officials (ICBO)
5360 S. Workman Mill Road
Whittier, CA 90601
213/699-0541

and

International Association of Plumbing and Mechanical Officials (IAPMO)
5032 Alhambra Avenue
Los Angeles, CA 90032-3490
213/223-1471

UPC Uniform Plumbing Code
International Association of Plumbing and Mechanical Officials (IAPMO)
5032 Alhambra Avenue

Los Angeles, CA 90032-3490
213/223-1471

WIC Woodwork Institute of California
1833 Broadway
Fresno, CA 93773
209/233-9035

PART 2 - PRODUCTS

Not Applicable to this Section.

PART 3 - EXECUTION

Not Applicable to this Section.

END OF SECTION 01095

SECTION 01200
PROJECT MEETINGS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Pre-construction conference.
- B. Construction progress meetings.
- C. Pre-installation conferences.

1.2 RELATED REQUIREMENTS

- A. Section 01400 - Quality Control: General requirements for construction quality, to be reviewed at Project Meetings.
- B. Section 01340 - Shop Drawings, Product Data, and Samples: General requirements for submittals schedule, to be reviewed at Project Meetings.

1.3 PRE-BID CONFERENCE

- A. Pre-bid Conference: The Authority will administer the pre-bid meeting within 2 weeks of the release of the RFP. Pre-bid meeting shall take place at the site.

1.4 PRE-CONSTRUCTION CONFERENCE

- A. Pre-construction Conference: The Authority will administer the pre-construction meeting after execution of the Agreement, if not already executed, and exchange of preliminary submittals and other data. Contractor shall submit schedule, submittals, and cost breakdown for review by Authority and City of Tustin.
- B. Schedule: Project Engineer will schedule Pre-construction meeting within 7 days after issue of Notice to Proceed.
- C. Location: Pre-construction conference will be held at the office of the Orange County Transit Authority, unless otherwise directed.

1.5 SITE MOBILIZATION CONFERENCE

- A. Site Mobilization Conference: The Authority will administer a site mobilization conference for clarification of responsibilities of the Authority, Engineer, Facility Maintenance, and the Contractor of use of site, and procedures of mobilization
- B. Schedule: Site mobilization conference shall occur within 7 days of Notice to Proceed, unless otherwise directed.
- C. Location: At Project site, unless otherwise directed.

D. Agenda: Site Mobilization Conference shall cover the following topics as a minimum.

1. Special Project Procedures: Procedures for alteration work, traffic coordination, and to maintain existing operations at the facility.
2. Subcontractors List: Distribute and discuss list of subcontractors and suppliers.
3. Construction Schedule: Distribute and discuss initial construction schedule and critical work sequencing of major elements of Work, including work under separate contracts by serving utility agencies and companies and Authority. Schedule has to be approved by Facility and Bus Maintenance Supervisor of Garden Grove Base.
4. Project Communication Procedures: Review requirements and administrative procedures for written and oral communications.
5. Contract Modification Procedures: Review requirements and administrative procedures for Change Orders, Construction Change Directives, the Engineer's supplemental instructions, and Contractor's Requests for Information.
6. Coordination: Review requirements for Contractor's coordination of Work; review sequence and schedule for work being performed for Authority under separate contracts.
7. Submittals Administration: Review administrative procedures for shop drawings, product data and samples submittals and review of preliminary submittals schedule.
8. Project Record Documents: Review requirements and procedures for project record drawings and specifications.
9. Construction Facilities and Temporary Utilities: City of Tustin (Tustin Metrolink Station) will designate storage, staging, and parking areas, review temporary utility provisions.
10. Materials and Equipment: Review substitution requirements; review schedule for major material purchases and deliveries. If material deliveries are made to site from factory, Contractor shall be present to receive them.
11. Site Access by the Authority and Engineer: Review requirements and administrative procedures Contractor may wish to institute for identification and reporting purposes.
12. Testing and Inspection: Review tests and inspections to be performed by the following.
 - a. Independent testing and inspection agency.
 - b. Manufacturers and installers.
 - c. Serving utilities and public agencies.
 - d. Authorities having jurisdiction.

13. Permits and Fees: Review Contract requirements and review schedule and process for obtaining permits and licenses and paying fees.

1.6 CONSTRUCTION PROGRESS MEETINGS

- A. Schedule: Project meetings shall be periodically (bi-weekly) scheduled throughout progress of the Work. Frequency shall be as determined necessary for progress of Work, and may be called by any Party.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01200

SECTION 01340

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Administrative requirements for Submittals, shop drawings, product data and samples submittals.
- B. Submittals Schedule.
- C. Contractor's review of submittals.
- D. Engineer's review of submittals.
- E. Product data submittals.
- F. Shop drawing submittals.
- G. Sample submittals.
- H. Maintenance and operation data submittals.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of the Work
- B. Section 01025 - Measurement and Payment: Supporting data submittals.
- C. Section 01035 - Contract Modification Procedures: Supporting data.
- D. Section 01200 - Project Meetings: Submittal status review at meetings.
- E. Section 01360 - Quality Control Submittals: Reports of field inspections and tests.
- F. Section 01400 - Quality Control: Test and inspection reports.
- G. Section 01700 - Contract Closeout: Submittals for occupancy, Acceptance and Final Payment.

1.3 DEFINITIONS

- A. Shop Drawings, Product Data and Samples: Instruments prepared and submitted by Contractor, for Contractor's benefit, to communicate to the Engineer the Contractor's understanding of the design intent, for review and comment by the Engineer on the conformance of the submitted information to the general intent of the design. Shop drawings, product data and samples are not Contract Documents.

- B. Shop Drawings: Drawings, diagrams, schedules and illustrations, with related notes, specially prepared for the Work of the Contract, to illustrate a portion of the Work.
- C. Product Data: Standard published information ("catalog cuts") and specially prepared data for the Work of the Contract, including standard illustrations, schedules, brochures, diagrams, performance charts, instructions and other information to illustrate a portion of the Work.
- D. Samples: Physical examples that demonstrate the materials, finishes, features, workmanship and other characteristics of a portion of the Work. Accepted samples shall serve as quality basis for evaluating the Work.
- E. Other Submittals: VSS Site Plan, HVAC Basis of Design, Conduit Plan

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Administrative Requirements for Submittals: Submittals shall be made in accordance with requirements specified herein and in product Sections of the Specifications.
- B. Transmission of Submittals: Transmit all submittals through the Project Engineer, unless otherwise directed. Include all information specified below for identification of submittal and for monitoring of review process. The Engineer will provide sample Letter of Transmittal, if requested.
- C. Timing of Submittals: Make submittals at time of pre-construction meeting to allow shipping, handling and review by the Engineer and the Engineer's consultants. Allow three weeks for Consultant to review and approve submittals.
- D. Submittals Identification: Identify each submittal by Specification Section number followed by a number indicating sequential submittal for that Section. Re-submittals shall use same number as original submittal, followed by a letter indicating sequential re-submittal.
 - 1. Title each submittal with Project name, the Authority's Project number, Submittal number, Sequence number of Submittal, Contractor's Project number and submission date.
 - 2. Identify each element on submittal by reference to Drawing sheet number, detail, schedule, number, assembly or equipment number, Specifications article and paragraph, and other pertinent information to clearly correlate submittal with Contract Drawings.
- E. Grouping of Submittals: Unless otherwise specifically permitted by the Engineer, make all submittals in groups containing all associated items. The Engineer may reject partial submittals as incomplete or hold them until related submittals are made.
- F. Unsolicited Submittals: Unsolicited submittals will be returned un-reviewed.

- G. Record Submittals: When record submittals are specified, submit three copies or sets only. Record submittals will not be reviewed but will be retained for historical and maintenance purposes.

1.5 SUBMITTAL SCHEDULE Submit at Pre-construction meeting

- A. Format: Prepare Submittal Schedule in a format comparable to and coordinated with Construction Schedule.
- B. Content: List all items specified to be submitted, indicating submittal number (see instructions above), submittal type (i.e., product data, shop drawings, samples, quality control reports, maintenance and operation data, etc.), scheduled date of submittal and date review should be complete in order to maintain construction on schedule.
- C. Administration:
 - 1. Submit initial Submittal Schedule at time of pre-construction meeting.
 - 2. After review and return by Engineer, resubmit Submittal Schedule within 7 days.

1.6 CONTRACTOR'S REVIEW OF SUBMITTALS

- A. Contractor's Review of Submittals: Prior to submission to the Engineer for review, Contractor shall review each submittal for completeness and conformance to specified requirements. Contractor shall stamp each submittal with a review action stamp and sign each copy certifying that:
 - 1. Field measurements have been determined and verified.
 - 2. Field construction criteria have been verified.
 - 3. Catalog numbers and similar data are correct.
 - 4. Conformance with requirements of Contract Drawings and Specifications is confirmed.
 - 5. All deviations from requirements of Drawings and Specifications have been identified and noted, and product is available.
- B. Changes in Work: Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work. Changes shall only be authorized by separate written direction, in accordance with the Conditions of the Contract and Section 01035 - Contract Modification Procedures.

1.7 ENGINEERS REVIEW OF SUBMITTALS

- A. Engineers Review of Submittals: Submittals shall be a communication aid between Contractor and the Engineer by which interpretation of Contract Documents

requirements may be confirmed in advance of construction. Reviews by the Engineer and the Engineer's consultants shall be only for general conformance with the design concept of the Project and general compliance with the information given in the Drawings and Specifications.

- B. Contract Requirements: Review actions by the Engineer and the Engineer's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications. Changes shall only be authorized by separate written Change Order or Construction Change Authorization, in accordance with the Conditions of the Contract and Section 01035 - Contract Modification Procedures.

1.8 PRODUCT DATA SUBMITTALS

- A. Copies: Submit 3 copies, minimum, of original catalog pages or dry-process copies only, with applicable data highlighted and cross-referenced to Drawings and Specifications requirements.
- B. Modifications to Standard Product Data: Modify manufacturer's standard catalog data to indicate precise conditions of the Project. Comply with requirements as for shop drawings. Provide space for review action stamps and, if required by authorities having jurisdiction, license seal of the Engineer and Engineer's responsible design consultant, if applicable.

1.9 SHOP DRAWINGS SUBMITTALS

- A. Copies: Prepare shop drawings on minimum sheet size of 17-inches by 22-inches, or smaller, a multiple of 8-1/2 inches by 11-inches. Submit one reproducible and one print, typically, except as noted in product Specifications Sections.
- B. Preparation: Shop drawings shall be original drawings prepared for submittal review, fabrication and execution of Work. Direct copies and modified reproductions of Contract Drawings will not be accepted for review. Provide space for review action stamps and, if required by authorities having jurisdiction, license seal of the Engineer and Engineer's responsible design consultant, if applicable.
- C. Coordination: Show all field dimensions and relationships to adjacent or critical features of Work.

1.10 SAMPLES SUBMITTALS

- A. Quantity: Submit minimum of three samples of each of color, texture and pattern. Submit one item only of actual assembly or product. Unless otherwise noted, full-size and complete samples will be returned and may be incorporated into field mock-ups and the Work.
- B. Samples: The Engineer will review and select materials for Project only after all materials are received, so that materials may be properly coordinated.
- C. Copies: Submit actual samples. Photographic or printed reproductions will not be accepted.

PART 2 - PRODUCTS

Not applicable to this Section.

PART 3 - EXECUTION

Not applicable to this Section.

END OF SECTION 01340

SECTION 01360

QUALITY CONTROL SUBMITTALS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Administrative requirements for submittals reporting results of tests and inspections, during field Work.

1.2 RELATED SECTIONS

- A. Section 01010 - Summary of the Work.
- B. Section 01200 – Project Progress Meetings: Quality control reports at meetings.
- C. Section 01340 - Shop Drawings, Product Data, and Samples: Quality control submittals for products prior tested and inspected to fieldwork.
- D. Section 01400 - Quality Control: Test and inspection procedures.
- E. Section 01700 - Contract Closeout: Quality control submittals Substantial Completion, Acceptance, and Final Payment.

1.3 ADMINISTRATIVE REQUIREMENTS

- A. Quality Control Submittals, General: Technical data, test reports, calculations, surveys, and certifications based on field tests and inspections by independent testing and inspection agency and Inspector of Record. Quality control submittals shall not be considered Contract Documents.
- B. Administration: Make all submittals through the Engineer, unless otherwise directed.
- C. Submittals Identification: Identify each submittal by Specification Section number followed by a number indicating sequential submittal for that Section. Coordinate submittal numbers with submittals specified in Section 01340 - Shop Drawings, Product Data, and Samples. Re-submittals shall use same number as original submittal, followed by a letter indicating sequential re-submittal. For example:

17000-1 First submittal for Section 17000 – Video Surveillance System

17000-2 Second submittal for Section 17000 – Video Surveillance System

17000-2-A Resubmittal of second submittal for Section 17000 – Video

Surveillance System

- D. Project Identification: Title each submittal with Project name, Authority's Project number, Submittal number, Sequence number of submittal, Contractor's Project number and date of submission.
- E. Copies: Submit 3 copies, minimum, of reports of quality control reports, on dry-process xerographic copies only.
- F. Administrative Requirements for Submittals: Submittals shall be made by Contractor in accordance with requirements specified herein and in individual Sections.
 - 1. Indicate clearly on each submittal the specified or referenced values or results obtained for each quality control activity and the values obtained are satisfactory.
 - 2. Contractor shall note clearly and sign each submittal certifying that reported quality control activity results "Conforms" or "Does Not Conform".
 - 3. Transmit all submittals to the OCTA Project Engineer unless otherwise directed.
- G. Changes and Deviations: Identify all deviations from requirements of Drawings and Specifications. Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work. Changes shall only be authorized by separate written Change Order or Construction Change Directive, in accordance with the Conditions of the Contract and Section 01035 - Contract Modification Procedures.
- H. Record Submittals: When record submittals are specified, submit three copies or sets only. Record submittals will not be reviewed but will be retained for historical and maintenance purposes.
- I. Unsolicited Submittals: Unsolicited submittals will be returned un-reviewed.

1.4 QUALITY CONTROL SUBMITTALS SCHEDULE

- A. Schedule Format: Include quality control submittals on Submittals Schedule specified in Section 01340 - Shop Drawings, Product Data, and Samples.
- B. Schedule Content: List all tests, inspections results and reports specified to be submitted; indicating submittal number, submittal type (field test, field inspection, fabrication inspection, etc.), scheduled date of quality control activity and the date report was made.

1.5 ENGINEER'S REVIEW

- A. Engineer's Review of Submittals: Review by Engineer and Engineer's consultants shall be only for general conformance with the design concept and requirements based on the information presented. Neither Engineer nor Engineer's consultants will validate submitted quality control data.
- B. Contract Requirements: Review by Engineer and Engineer's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications. Changes shall only be authorized by separate written Change Order or Construction Change Authorization, in accordance with the General Conditions and Section 01035 - Contract Modification Procedures.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01360

SECTION 01370
SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Submit to the OCTA's Representative a Schedule of Values (Cost breakdown) allocated to the various portions of the Work, within seven days after award of Contract.
- B. Upon request of the OCTA's Representative, support the values with data, which will substantiate their correctness.
- C. The Schedule of Values shall be used only as the basis for the Contractor's Applications for Progress Payment.
- D. Related Requirements in Conditions of the Contract.

1.2 RELATED REQUIREMENTS

- A. Section 01025 Measurements and Payment.

1.3 FORM AND CONTENT OF SCHEDULE OF VALUES

- A. Type schedule on 8-1/2 inch x 11-inch white paper; Contractor's standard forms and automated printout will be considered for approval by the OCTA's Project Engineer upon Contractor's request. Identify schedule with:
 - 1. Title of Project and Location;
 - 2. Project Number;
 - 3. Name and Address of Contractor;
 - 4. Contract designation; and
 - 5. Date of submission.
- B. Schedule shall list the installed value of the component parts of the Work in sufficient detail to serve as a basis for computing values as itemized in the Cost Breakdown for progress payments during construction. Percentage of completed items will be paid
- C. Follow the table of contents of the Project Technical Specifications as the format for listing component items.
 - 1. Identify each item with the number and title of the respective major section of the specifications.

- D. For each major line item, list sub-values of major products or operations under the item.
- E. Provide a line item to identify each of the following:
 - 1. Bonds
 - 2. Insurance premiums;
 - 3. Field supervision
- F. For the various portions of the Work:
 - 1. Each item shall include a directly proportional amount of Contractor's overhead and profit, which will not be paid separately.
- G. The sum of all values listed in the schedule shall equal the total contract Sum.

END OF SECTION 01370

SECTION 01400
QUALITY CONTROL

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Regulatory requirements for testing and inspection.
- B. Contractor's quality control.
- C. Quality of the Work.
- D. Inspector of Record.
- E. Inspections and tests by authorities having jurisdiction.
- F. Inspections and tests by serving utilities.
- G. Inspections and tests by manufacturer's representatives.
- H. Inspections by independent testing and inspection agency.

1.2 RELATED SECTIONS

- A. Section 01040 - Coordination: Coordination of Work under Contract.
- B. Section 01060 - Regulatory Requirements: Compliance with applicable codes, ordinances, and standards.
- C. Section 1360 - Quality Control Submittals: Administrative requirements for submittals reporting results of tests and inspections during fieldwork.
- D. Section 01600 - Product Requirements: Product options, substitutions, transportation and handling requirements, storage and protection requirements, and system completeness requirements.

1.3 REFERENCES

- A. ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection Used in Engineering Design and Construction.

1.4 REGULATORY REQUIREMENTS FOR TESTING AND INSPECTION

- A. Regulatory Requirements for Testing and Inspection: Inspections, testing and approvals as required by authorities having jurisdiction. Refer to Section 01060 - Regulatory Requirements.

1. California Code of Regulations (CCR) - Title 24, State Building Code (Uniform Building Code with State of California Amendments), latest edition, as adopted and interpreted by authorities having jurisdiction.
2. California Code of Regulations (CCR) - Title 22, Sections 94065, 94067 and 94069.

1.5 CONTRACTOR'S QUALITY CONTROL

- A. Contractor's Quality Control: Contractor shall ensure that products, services, workmanship, and site conditions comply with requirements of the Drawings and Specifications by coordinating, supervising, testing and inspecting the Work and by utilizing only suitably qualified personnel.
- B. Quality Requirements: Work shall be accomplished in accordance with quality requirements of the Drawings and Specifications, including, by reference, all Codes, laws, rules, regulations and standards. When no quality basis is prescribed, the quality shall be in accordance with the best-accepted practices of the construction industry for the locale of the Project, for projects of this type.
- C. Quality Control Personnel: Contractor shall employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.

1.6 QUALITY OF THE WORK

- A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects, and fit for the intended use.
- B. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements. New material shall be installed so that drainage merges with existing flow patterns on the site towards the drains.
- C. Protection of Existing and Completed Work: Take all measures necessary to preserve and protect existing and completed Work free from damage, deterioration, soiling and staining, until Acceptance by the Authority.
- D. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting and finishing Work.
- E. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.

- F. Verification of Quality: Work shall be subject to verification of quality by the Authority or Engineer in accordance with provisions of the Conditions of the Contract.
1. Contractor shall cooperate by making Work available for inspection by the Authority or Engineer or their designated representative.
 2. Such verification may include mill, plant, shop, or field inspection as required. OCTA designated Inspector shall access to material inspection.
 3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.
 4. Provide all information and assistance as required, including that by and from subcontractors, fabricators, materials suppliers, and manufacturers, for verification of quality by the Authority or Engineer.
 5. Contract modifications, if any, resulting from such verification activities shall be governed by applicable provisions in the Conditions of the Contract.
- G. Observations by the Engineer and Engineer's Consultants: Periodic and occasional observations of Work in progress may be made by the Engineer and Engineer's consultants as deemed necessary to review progress of Work and general conformance with design intent.
- H. Limitations on Inspection, Test, and Observations: Neither employment of an Inspector of Record, independent testing and inspection agency, or observations by the Engineer and Engineer's consultants shall in no way relieve Contractor of obligation to perform Work in full conformance to all requirements of Contract Documents and applicable Building Code and other regulatory requirements.
- I. The Engineer's Acceptance and Rejection of Work: The Engineer reserves the right to reject all Work not in conformance to the requirements of the Drawings and Specifications.
- J. Correction of Non-Conforming Work: Non-conforming Work shall be modified, replaced, repaired, or redone by the Contractor at no change in Contract Sum or Contract Time.
- K. Acceptance of Non-Conforming Work: Acceptance of non-conforming Work, without specific written acknowledgement and approval of the Authority, shall not relieve the Contractor of the obligation to correct such Work.
- L. Contract Adjustment for Non-conforming Work: Should the Authority or Engineer determine that it is not feasible or in Authority's interest to require non-conforming Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between the Authority and Contractor. If equitable amount cannot be agreed upon, a Construction Change Directive will be issued and the amount in dispute resolved in accordance with the Conditions of the Contract.

- M. Non-Responsibility for Non-Conforming Work: The Engineer and the Engineer's consultants disclaim any and all responsibility for Work produced not in conformance with the Drawings and Specifications.

1.7 INSPECTIONS AND TESTS BY AUTHORITIES HAVING JURISDICTION

- A. Inspections and Tests by Authorities Having Jurisdiction: Contractor shall cause all tests and inspections required by authorities having jurisdiction to be made for Work under this Contract, Public Works Department, Fire Department, Health Department, AQMD, SCRRA, SCE, and similar agencies. Except as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

1.8 INSPECTIONS AND TESTS BY SERVING UTILITIES

- A. Inspections and Tests by Serving Utilities: Contractor shall cause all tests and inspections required by serving utilities to be made for Work under this Contract. Scheduling, conducting, and paying for such inspections shall be solely the Contractor's responsibility.

1.9 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES

- A. Inspections and Tests by Manufacturer's Representatives: Contractor shall cause all tests and inspections specified to be conducted by materials or systems manufacturers to be made. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

1.10 INSPECTIONS BY INDEPENDENT TESTING AND INSPECTION AGENCY

- A. Inspections by Independent Testing and Inspection Agency or Agencies: The following applies to tests and inspections.
1. The Authority will select and pay for independent testing and inspection agency or agencies, to conduct tests and inspections as indicated on Drawings or Specifications and as required by authorities having jurisdiction.
 2. Costs for additional tests, inspections and related services, due to the following, shall be reimbursed to the Authority by the Contractor and no change in Contract Time shall result.
 - a. Failure to properly schedule or notify testing and inspection agency or authorities having jurisdiction.
 - b. Changes in sources, lots, or suppliers of products after original tests or inspections.
 - c. Changes in means methods, techniques, sequences, and procedures of construction that necessitate additional testing, inspection and related services.
 - d. Changes in material after review and acceptance of submittal.

- B. Test and Inspection Reports: After each inspection and test, one copy of report shall be promptly submitted to the Engineer, Engineer's consultant (as applicable), Authority, City of Tustin Inspector of Record, Contractor and to agency having jurisdiction (if required by Code).

1. Reports shall clearly identify the following:
 - a. Date issued.
 - b. Project name and number.
 - c. Identification of product and Specifications Section in which Work is specified.
 - d. Name of inspector.
 - e. Date and time of sampling or inspection.
 - f. Location in Project where sampling or inspection was conducted.
 - g. Type of inspection or test.
 - h. Date of test.
 - i. Results of tests.
 - j. Comments concerning conformance with Contract Documents and other requirements.
2. Test reports shall indicate specified or required values and shall include statement whether test results indicate satisfactory performance of products.
3. Samples taken but not tested shall be reported.
4. Test reports shall confirm that methods used for sampling and testing conform to specified test procedures.

C. Contractor Responsibilities in Inspections and Tests:

1. Notify testing and inspection agencies 24 hours in advance of expected time for operations requiring inspection and testing services.
2. Deliver to laboratory or designated location, adequate samples of materials proposed to be used which require advance testing, together with proposed mix designs.
3. Cooperate with independent testing and inspection agency personnel, Inspector of Record, Authority, Engineer, and Engineer's consultants. Provide access to Work areas and off-site fabrication and assembly locations, including during weekends and after normal work hours.
4. Provide incidental labor and facilities to provide safe access to Work to be tested and inspected, to obtain and handle samples at the Project site or at source of products to be tested, and to store and cure test samples.
5. Provide, at least 15 days advance notice of first test or inspection of each type, a schedule of tests or inspections indicating types of tests or inspections and their scheduled dates.

6. Provide 24 hours advance notice of each test and inspection to the Inspector of Record, Authority, Engineer, and Engineer's consultants of each test and inspection, as directed.
7. Obtain all Inspections required by the City of Tustin, and provide The Authority a final sign-off of the project from the City of Tustin.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01400

SECTION 01600

PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. General requirements for products used for the Work:

1. Product options.
2. Substitutions.
3. System completeness.
4. Transportation and handling requirements.
5. Storage and protection.

1.2 RELATED SECTIONS

- A. Section 01060 - Regulatory Requirements: Codes and standards applicable to product specifications; minimum requirements.
- B. Section 01095 - Reference Standards and Abbreviations: References to various standards, standard specifications, codes, practices and other requirements.
- C. Section 01340 - Shop Drawings, Product Data, and Samples: Requirements applicable to submittals for "or equal" and substitute products.

1.3 PRODUCTS

- A. Products: Items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock, and include materials, equipment, assemblies, fabrications, and systems.
1. It is OCTA policy that all manufactured products and supplies be provided by United States manufacturing industries in agreement with related Union organizations. Therefore, in the performance of the contract, Contractor shall give United States made products preference.
 2. Named Products: Items identified by manufacturer's product name, including make or model designations indicated in the manufacturer's published product data.
 3. Materials: Products that are shaped, cut, worked, mixed, finished, refined, or otherwise fabricated, processed, or installed to form a part of the Work.

- B. Specific Product Requirements: Refer to requirements of Section 01400 - Quality Control and individual product Specifications Sections in Divisions 2 through 16 for specific requirements for products.
- C. Minimum Requirements: Specified requirements for products are minimum requirements.
- D. Product Selection: Provide products that fully comply with the Contract Documents, are undamaged and unused at installation.
- E. Standard Products: Where specific products are not specified, provide standard products of types and kinds that are suitable for the intended use in similar conditions and that have been used successfully on similar projects. Products shall be as selected by Contractor and subject to review and acceptance by the Engineer.
- F. Product Completeness: Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect.
- G. Code Compliance: All products, other than commodity products prescribed by Code, shall have a current ICBO Evaluation Service (ICBO ES) Research Report or CABO National Evaluation Report (NER).
- H. Interchangeability: To the fullest extent possible, provide products of the same kind from a single source. Products required to be supplied in quantity shall be the same product and interchangeable throughout the Work. When options are specified for the selection of any of two or more products, the product selected shall be compatible with products previously selected.
- I. Nameplates:
 - 1. Except for require labels and operating and safety instructions, do not attach manufacturer's identifying nameplates or trademarks on surfaces exposed to view in occupied spaces or to the exterior.
 - 2. Provide a permanent nameplate on each item of service-connected or power-operated equipment. Nameplates shall contain identifying information and essential operating data such as the following example:
 - Name of manufacturer
 - Name of product
 - Model and serial number
 - Capacity
 - Power Characteristics
 - Speed

1.4 PRODUCT OPTIONS

- A. Products Specified by Description: Where Specifications describe a product, listing characteristics required, with or without use of a brand name, provide a product that provides the characteristics and otherwise complies with the specified requirements.
- B. Products Specified by Performance Requirements: Where Specifications require compliance with performance requirements, provide product(s) that comply with performance requirements and are recommended by the manufacturer for the intended application. Verification of manufacturer's recommendations may be by product literature or by certification of performance from manufacturer.
- C. Products Specified by Reference to Standards Only: Where Specifications require compliance with a standard, provided product shall fully comply with the standard specified.
- D. Products Specified by Identification of Manufacturer and Product Name or Number:
 - 1. Specified Manufacturer: Provide the specified product(s) of the specified manufacturer. If only one manufacturer is specified, provide only the specified product(s). Substitutions will not be considered unless "or equal" provisions is indicated.
 - 2. Acceptable Manufacturer(s): Product(s) of the manufacturers named as acceptable manufacturers, which are determined to be equivalent to the specified product(s) of the specified manufacturer, will be accepted in accordance with the provisions specified below in paragraph titled "Or Equal" provisions and in Article titled "SUBSTITUTIONS", except time and cost requirements will not be waived.
 - 3. Unnamed manufacturers: Product(s) of unnamed manufacturers will not be considered unless reference is made to "Or Equal" provision in identifying acceptable manufacturers.
 - 4. Quality Standard: Product(s) of the specified manufacturer shall serve as the standard by which substitute products of named acceptable manufacturers and unnamed substitute manufacturers will be evaluated. Where the characteristics of the product are described, performance characteristics are identified, and reference standards are listed in addition to identification of specified manufacturer and product name(s) or number(s), such characteristics are specified to identify the most significant attributes that will be considered in evaluation of the substitution.
- E. Products Specified by Combination of Methods: Where products are specified by a combination of described characteristics, performance characteristics, reference standards and manufacturer identification, provide products conforming to all such characteristics.
- F. "Or Equal" Provision: Where "or equal" is included after named manufacturer(s) and product(s), equivalent products of unnamed manufacturers will be considered in accordance with requirements specified in Article titled "SUBSTITUTIONS".

1. Prior to submitting "Or Equal" product(s) for consideration, Contractor shall review and determine that product(s) meet or exceed the minimum quality and warranty provisions of the specified product.
 2. Cost and time considerations will be waived for products and manufacturers submitted under the "Or Equal" provision, except no increase in Contract Sum or Contract Time shall result.
 3. Contractor's attention is called to the substitution provisions of the Conditions of the Contract.
- G. Visual Matching: Where Specifications require visual matching a sample, the decision by the Engineer on whether a proposed product matches shall be final. Where no product matches and complies with other requirements, comply with provisions for "SUBSTITUTIONS" for selection of a matching product in another category.
- H. Visual Selection: Where requirements include the phrase "as selected from manufacturer's standard colors, patterns, textures", or a similar phrase, selections of products will be made by the Consultant or Engineer. The Engineer will select color, pattern, and texture from the product line of submitted manufacturer, if all other specified provisions are met.

1.5 SUBSTITUTIONS

- A. Substitutions: Requests by Contractor to deviate from specified requirements for products, materials, equipment, and methods, or to provide products other than those specified, shall be considered requests for substitutions except under the following conditions:
1. Substitutions are requested during the bidding period, and accepted prior to execution of the Contract.
 2. Revisions to Contract Documents requested by the Authority or the Engineer.
 3. Specified options of products and construction methods stated in the Contract Documents.
 4. Compliance with regulations and orders issued by governing authorities having jurisdiction.
- B. Substitution Provisions: Refer to substitution provisions of the Conditions of the Contract, in addition to the following specific requirements.
- C. Substitution Submittal Period:
1. Time Limit: Only within 14 days of the Notice to Proceed will the Authority and Engineer consider requests for substitutions.
 2. Product Availability Waiver: Substitutions will be considered after 21 days of execution of the Agreement only when a product becomes unavailable due to

no fault of Contractor. Failure to place orders for specified products sufficiently in advance of required date for incorporation into the Work will not be considered as a valid reason for which Contractor may request a substitution or deviation from requirements of the Drawings and Specifications.

D. Provisions for Consideration and Acceptance of Substitutions:

1. Documentation: Substitutions will not be considered when they are indicated or implied on shop drawing, product data, or sample submittals without a separate written request, or when acceptance will require substantial revision of the Contract Documents.
2. Cost and Time Considerations: Substitutions will not be considered unless a net reduction in the Contract Sum Or Contract Time results to the Authority's benefit, including redesign costs, life cycle costs, changes in related Work and overall performance of building systems.
3. Data: It shall be the responsibility of the Contractor to provide adequate data demonstrating the merits of the proposed substitution, including cost data and information regarding changes in related Work.
4. Engineer's Determination: The Engineer will determine the acceptability of proposed substitutions, and notify the Contractor in writing, within a reasonable time, whether the proposed substitution is accepted or rejected.
5. Substitution Limitation: Only one request for substitution will be considered for each product.
6. Non-Acceptance: If a proposed substitution is not accepted, provide the specified product.

E. Substitution Submittal Process:

1. Submit the intended substitution to the Engineer for review and approval. Submit a minimum of 3 copies.
2. Submit product data, including drawings and descriptions of products, fabrication details, and installation procedures. Include samples where applicable or requested.
3. Include appropriate product data of the specified product(s) of the specified manufacturer, suitable for use in comparison.
4. Submit a comparison of significant characteristics of the proposed substitution with those of the specified product. Include a list of changes or modifications needed to other parts of the Work and to construction to be performed by the Authority and separate Contractors that will be necessary if the proposed substitution is accepted.

5. Submit a statement indicating the substitution's effect on the Construction Schedule compared to the Schedule without approval of the substitution. Indicate the effect of the proposed substitution on overall Contract Time.
6. Submit cost information, including a proposal of the net change, if any, in the Contract Sum.
7. Submit certification that the substitution is equivalent or superior in every respect to that required by the Contract Documents, and that the substitution is suited for and can perform the purpose or application for the particular use intended in the Contract Documents. Include Contractor's waiver of rights to additional payment or time that may be necessary because of the substitution's failure to perform adequately.
8. If, in the Engineer's opinion, sufficient data has not been submitted to enable a full and thorough review of the intended substitution, the substitution may be denied.

F. Contract Document Revisions:

1. Should a Contractor-proposed substitution or alternative sequence or method of construction require revision of the Contract Drawings or Specifications, including revisions for the purposes of determining feasibility, scope, cost, or revisions for the purpose of obtaining review and approval by governing authorities having jurisdiction, revisions will be made by the Engineer, or other consultants of the Authority who are the design professionals of record, only as approved in advance by the Authority.
2. Services of the Engineer, or consultants of the Authority, including time spent in researching and reporting on proposed substitutions or alternative sequence and method of construction, shall be paid by Contractor when such activities are considered additional services to the design services contracts of the Authority.
3. Costs of services by the Engineer, or other consultant of the Authority, shall be paid on a time and materials basis, based on current hourly fee schedules, with reproduction, long distance telephone, and shipping costs reimbursable.
4. Such fees shall be paid whether or not the proposed substitution or alternative sequence or method of construction is ultimately accepted by the Authority and a Change Order is executed.
5. Such fees shall be paid from the Contractor's portion on savings, if a net reduction in Contract Sum results. If fees exceed Contractor's portion of net reduction, Contractor shall pay all remaining fees unless otherwise agreed in advance by the Authority.
6. Such fees owed shall be deducted from the amount owed the Contractor on the Application for Payment next made following completion of revised Contract Drawings and Specifications or completion of research and other services. Contractor will then pay the Engineer or other consultants of the Authority.

1.6 TRANSPORTATION, DELIVERY, AND HANDLING

- A. Comply with manufacturer's instructions and recommendations for transportation, delivery, and handling, in addition to the following.
- B. Transportation: Transport products by methods to avoid product damage.
- C. Schedule delivery to minimize long-term storage and prevent overcrowding construction spaces. Coordinate with installation to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
- D. Deliver products in undamaged condition in manufacturer's original sealed container or packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing. Contractor is responsible and should be present at work site for receiving his material delivery at site of work.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, marring, or other damage.
- F. Promptly inspect products on delivery to ensure that products comply with contract documents, quantities are correct, and to ensure that products are undamaged and properly protected.

1.7 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Periodically inspect to ensure products are undamaged, and are maintained under required conditions.
 - 2. Products damaged by improper storage or protection shall be removed and replaced with new products at no change in Contract Sum or Contract Time.
- B. Store products to facilitate inspection and measurement of quantity or counting of units.
- C. Store heavy materials away from the structure in a manner that will not endanger supporting construction.
- D. Store moisture-sensitive products in a weather tight enclosure or covered with an impervious sheet covering. Provide adequate ventilation to avoid condensation. Maintain product storage within temperature and humidity ranges required by manufacturer's instructions.
 - 1. For exterior storage of fabricated products, place on sloped supports above ground.

2. Store loose granular materials on solid surfaces in a well-drained area. Prevent mixing with foreign matter. Prevent material from flowing or blowing away to other areas of the site. Provide covers for sand, aggregate base, and debris so that wind does not cause it to blow away.
3. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.

E. Protection:

1. Provide barriers, flashing lights, substantial coverings and notices to protect installed Work from traffic and subsequent construction operations.
2. Remove protective measures when no longer required and prior to Acceptance of the Work.

1.8 SYSTEM COMPLETENESS

- A. The Contract Drawings and Specifications are not intended to be comprehensive directions on how to produce the Work. Rather, the Drawings and Specifications are instruments of service prepared by the responsible design professional to describe the design intent for the completed Work.
- B. It is intended that materials, equipment, systems, and assemblies be complete and fully functional even though not fully described. Provide all products and operations necessary to achieve the design intent described in the Contract Documents.
- C. Contractor shall report to the Engineer immediately when elements essential to proper execution of the Work are discovered to be missing or misdescribed in the Drawings and Specifications or if the design intent is unclear.
- D. Should an essential element be discovered as missing or misdescribed prior to receipt of bids, and Addendum or Clarification will be issued so that all costs may be accounted for in the Contract Sum.
- E. Should an obvious omission or misdescription of a necessary element be discovered and reported after execution of the Agreement, the Contractor shall provide the element as though fully and correctly described, and a no-cost Change Order shall be executed.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 - EXECUTION

3.1 INSTALLATION OF PRODUCTS

- A. Installation of Products:

1. Comply with manufacturer's instructions and recommendations for installation of products.
2. Anchor each product securely in place, accurately located and aligned with other Work.
3. Clean exposed surfaces and provide protection to ensure freedom from damage and deterioration at time of Substantial Completion review.

END OF SECTION 01600

SECTION 01700
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Contract closeout procedures.
- B. Project record documents.

1.2 RELATED SECTIONS

- A. Section 01340 - Shop Drawings, Product Data, and Samples: General requirements for submittals.
- B. Section 01500 - Construction Facilities and Temporary Controls: Progress cleaning.
- C. Section 01710 - Final Cleaning: Cleaning as part of Contract closeout.

1.3 FINAL COMPLETION ACTIONS

- A. Final Application for Payment: In the Application for Payment that coincides with the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed substantially complete.
- B. Warranties, Bonds, and Certificates: Submit specified warranties, guarantees, workmanship bonds, maintenance agreements, final certifications, and similar documents.
- C. Tests and Instructions: Remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.

1.4 SUBSTANTIAL COMPLETION REVIEW

- A. Preliminary Punch List Review: At Contractor's request, the Engineer will attend a preliminary Contract closeout review, not earlier than 14 days prior to anticipated Substantial Completion review date.
 - 1. Project Engineer shall provide at preliminary review, a typewritten list (Preliminary Punch List) of items to be completed and corrected.
 - 2. List shall identify items by location
 - 3. Segregate Work on separate lists according to categories used for Drawings. For example, provide lists for Architectural, Structural, Mechanical, Plumbing, Electrical, Special Equipment, and other disciplines.

4. The Engineer and Contractor shall conduct a brief walk-through of Project to review scope and adequacy of list.
- B. Contractor's Certification: When determined by Contractor, submit to the Engineer written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Substantial Completion review by the Engineer. Provide three working days notice to the Engineer that Work is substantially complete according to Contractor.
- C. Punch List Review: The Authority and the Engineer, and the responsible design consultants, as may be necessary, will attend a Contract closeout review and conduct a walk-thorough of Project to review the updated list of items to be completed and corrected (Punch List).
 1. Contractor shall prepare a list and record additions, deletions, and revisions as noted by the Engineer for completion or correction.
 2. Contractor shall retype and distribute the revised Punch List to the Engineer.
 3. Costs of additional visits to the site by the Engineer, and the design consultants, to review completion and correction of Work, shall be reimbursed to the Authority by the Contractor.
- D. Cleaning and Clearing: Prior to Substantial Completion review, execute cleaning and clear site of temporary facilities and controls, as specified in Section 01500 - Temporary Facilities and Controls and in Section 01710 - Final Cleaning.
- E. Testing and Inspection: Prior to Substantial Completion review, complete all testing, inspection, balancing, sterilization, and cleaning of the Work. Obtain final City Inspection and City sign-off
- F. Engineer's Certification: The Engineer determines that the list of items to be completed and corrected (Punch List) is sufficiently complete for the Authority to occupy the Project area for the use to which it is intended.
- G. Notice of Completion: The Authority, after receipt of the Engineer's certification, will record a Notice of Completion with the county.

1.5 FINAL COMPLETION SUBMITTALS

- A. Agency Document Submittals: Submit to the Engineer all documents required by governing authorities, utilities and other agencies, including permit cards, signed as final by the inspectors, and certifications of inspections and tests.
- B. Final Specifications Submittals: Submit to the Engineer all documents and products required by Specifications to be submitted, including the following, which apply:
 1. Project record drawings
 2. Maintenance data.

2. Guarantees, warranties, and bonds.
 3. Test reports and certificates of compliance.
 5. City of Tustin final Sign-off
- C. Certificates of Compliance and Test Report Submittals: Submit to the Engineer certificates and reports as specified, as required by manufacturers for warranty and guarantee purposes, and as required by authorities having jurisdiction.
- D. Subcontractor List: Submit to the Engineer five copies of updated Subcontractor and Materials Supplier List.
- E. Warranty Documents: Prepare and submit to the Engineer warranties and bonds as specified in Section 01740 - Warranties and Bonds
- F. Final Payment: After completion of all items listed for completion and correction, submission of all documents and products and final cleaning, submit final Application for Payment, identifying the total adjusted Contract Sum, previous payments and the remaining Sum due.

1.6 PROJECT RECORD DOCUMENTS

- A. Project Record Documents, General: Maintain on site, one set of the following record documents and record actual construction and all revisions to the Work:
1. Contract Drawings.
 2. Project Manual, with Specifications, Addenda, Change Orders, and other instruments modifying the Contract.
 3. Reviewed shop drawings, product data and samples.
 4. Store Record Documents separate from documents used for construction.
- B. Record Specifications: In PART 2 - PRODUCTS in each Section, legibly mark and record actual Products installed or used, including:
1. Manufacturer's name and product model or catalog number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda, Change Orders and other instruments modifying the Contract.
- C. Project Record Drawings: Record information continuously as Work progresses. Do not conceal Work permanently until all required information is recorded. Legibly and to scale, mark a reproducible set of Contract Drawings to record actual construction, including:

1. Measured dimensions and cross section of work.
 2. Measured horizontal and vertical locations of underground utilities, ducts, and vents from specific wall locations.
 3. Field changes of dimension and detail.
 4. Details not on original Contract Drawings (Changes of location of utilities, equipment, and other accessories). References to written changes such as RFI's of Field Directives should be clouded on the drawings with a copy of the written direction attached to the set of drawings.
 5. Reproducible set of Contract Drawings will be provided to Contractor by the Authority and Engineer for mark-up.
- D. Submission: Submit Record Documents to the Engineer prior to final Application and Certificate for Payment.

PART 2 – PRODUCTS

Not Applicable to this Section

PART 3 – EXECUTION

Not Applicable to this Section

END OF SECTION 01700

SECTION 01710

FINAL CLEANING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Cleaning for Substantial Completion review and final acceptance.

1.2 RELATED SECTIONS

- A. Additional Requirements: Cleaning for specific products or elements of Work are described in individual product Specification Sections describing that Work.

1.3 CLEANING AND DISPOSAL REQUIREMENTS

- A. Cleaning and Disposal Requirements, General: Conduct cleaning and disposal operations in compliance with all applicable codes, ordinances, and regulations, including environmental protection laws, rules, and practices.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cleaning Agents and Materials: Use only those cleaning agents and materials which will not create hazards to health or property and which will not damage surfaces.
 - 1. Use only those cleaning agents, materials and methods recommended by manufacturer of the material to be cleaned.
 - 2. Use cleaning materials only on surfaces recommended by cleaning agent manufacturer.

PART 3 - EXECUTION

3.1 SUBSTANTIAL COMPLETION REVIEW CLEANING, GENERAL

- A. Substantial Completion Review Cleaning, General: Execute a thorough cleaning prior to Substantial Completion review by the Engineer.
 - 1. Clean surrounding areas affected by construction. Clean and repair all surrounding areas and appurtenances such as curbs, gutters, swales, storm drain, platforms, equipment, vents, buses, fences, Apex boxes, light concrete pedestal, landscaping, and driveways. Repair equipment, curbs, surrounding driveways, landscaping, and site affected by the construction work by thorough brooming and washdown. Remove all oil, concrete, debris, and paint from the surfaces mentioned.

2. Remove waste and surplus materials, rubbish and temporary construction facilities, utilities and controls from site.

3.2 FINAL COMPLETION INTERIOR CLEANING

- A. Final Completion Cleaning, General: Complete final cleaning before submitting final Application for Payment.
 1. Remove asphalt, oil, grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, concrete material, and other foreign materials from all visible exterior surfaces.
 2. Remove dust from all horizontal surfaces not exposed to view, including equipment, light standards, ledges, utilities, buses, apex boxes, and plumbing fixtures on site affected by construction.
 3. Repair all disrupted or broken appurtenances that were damaged during construction to a new condition.
- B. Clean all adjacent walls, equipment, and other appurtenances mentioned in article 3.1 A 1 above affected by construction work including areas adjacent to construction and on site.
- C. Clean construction area in which phase has been completed and re-stripe before begin of next phase of work

3.3 FINAL COMPLETION SITE CLEANING

- A. Site Cleaning: Broom clean exterior paved surfaces. Rake clean other surfaces of the grounds affected by construction material.
 1. Wash down and scrub where necessary all paving soiled because of construction activities. Thoroughly remove material droppings, asphalt splatters, stains, oil, and adhered soil.
 2. Remove from the site all construction waste, unused materials, excess soil, and other debris resulting from the Work.

3.4 INSPECTION

- A. Cleaning Inspection: Prior to Final Payment or acceptance by the Engineer for partial occupancy of premises, the Contractor, and the Engineer shall jointly conduct an inspection of visible interior and exterior surfaces to verify that entire Work is acceptably clean.

END OF SECTION 01710

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Maintain at the site for OCTA Representative one record copy of:
 - 1. Approved Drawings;
 - 2. Specifications;
 - 3. Addenda;
 - 4. Change Orders and other Modifications to the Contract;
 - 5. OCTA's Field orders or written instructions;
 - 6. Reviewed Shop Drawings, Product Data and Samples;
 - 7. Field Test Records; and
 - 8. Referenced Documents.

1.2 RELATED REQUIREMENTS

- A. Section 01340: Shop Drawings, Product Data, and Samples

1.3 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in Contractor's field office apart from documents used for construction.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide locked cabinet or secure storage space for storage of samples.
- B. File documents and samples in accordance with CSI/CSC format.
- C. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by the OCTA's Representative.

1.4 MARKING DEVICES

- A. Provide red color ballpoint pen for all markings.

1.5 RECORDING

- A. Label each document "PROJECT RECORD" in neat large printed letters.
- B. Record information concurrently with construction progress.
 - 1. Do not conceal any work until required information is recorded.
- C. Drawings: Legibly mark to record actual construction:
 - 1. Horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements;
 - 2. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure;
 - 3. Field changes of dimension and detail with reference to any RFI's, when applicable (copies of applicable RFI's shall be attached to the Record Documents)
 - 4. Changes made by Field Order or by Change Order; and
 - 5. Details not on original contract drawings.
- D. Specifications and Addenda: Legibly mark each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed; and
 - 2. Changes made by Field Order or by Change Order.
- E. Shop Drawings: Maintain as record documents.
 - 1. Legibly annotate drawings to record changes made after review.
 - 2. Shop Drawings prepared on CAD:
 - a. Revise the CAD file to reflect annotations made on record copy.
 - b. Submit CAD files on CD-ROMs and submit in accordance with paragraph 1.6.

1.6 SUBMITTAL

- A. At Contract closeout, deliver Record documents to the OCTA's Representative.
- B. Accompany submittal with transmittal letter in duplicate, containing:
 - 1. Date;

2. Project title and number;
3. Contractor's name and address;
4. Title and number of each Record Document; and
5. Signature of Contractor or his authorized representative.

END OF SECTION 01720

SECTION 01732
SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes demolition of the following:
 - 1. Installation of necessary conduit to serve VSS.
- B. See Division 1 Section "Final Cleaning" for site clearing and removal of above- and below-grade improvements.
- C. See Division 16 Sections for demolishing, cutting, patching, or repairing utilities.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver to OCTA or disposed off-site as required by Authority.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 MATERIALS OWNERSHIP

- A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, demolished materials shall become Contractor's property and shall be disposed off-site legally.

1.4 SUBMITTALS

- A. Proposed Control Measures: Submit statement or drawing that indicates the measures proposed for use, proposed locations, and proposed time frame for their operation. Identify options if proposed measures are later determined to be inadequate. Include measures for the following:
 - 1. Noise control.

- B. Schedule of Selective Demolition Activities: Indicate detailed sequence of selective demolition and removal work, with starting and ending dates for each activity, interruption of utility services.
- C. Pre-demolition Photographs or Videotape: Show existing conditions of adjoining construction and site improvements that might be misconstrued as damage caused by selective demolition operations. Submit before Work begins.
- D. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

1.5 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition work similar in material and extent to that indicated for this Project.
- B. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- C. Standards: Comply with ANSI A10.6 and NFPA 241.

1.6 PROJECT CONDITIONS

- A. Owner will occupy portions of site immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations. Bus parking next to construction work will continue do not park equipment or material in bus parking stalls next to work area.
- B. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Provide access to adjacent bus parking stalls. Allow buses to pass through to bus parking areas.
 - 1. Do not close or obstruct walkways, driveways, bus stalls, or other occupied or used facilities without written permission from authorities having jurisdiction.
- C. Owner assumes no responsibility for condition of areas to be selectively demolished.
 - 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. Hazardous materials will be removed by Owner before start of the Work.
 - 2. If materials suspected of containing hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

- E. Storage or sale of removed items or materials on-site will not be permitted.
- F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations. Review OCTA Record drawings for underground utilities before begin of demolition work.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.7 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.
 - 1. If possible, retain original Installer or fabricator to patch the exposed Work listed below that is damaged during selective demolition. If it is impossible to engage original Installer or fabricator, engage another recognized experienced and specialized firm.

PART 2 - PRODUCTS

2.1 REPAIR MATERIALS

- A. Use repair materials identical to existing materials.
 - 1. If identical materials are unavailable or cannot be used for exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible.
 - 2. Use materials whose installed performance equal or surpasses that of existing materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that underground utilities have been located before begin work.
- B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

- E. Engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations, specially fences, channel retaining wall, gutters, swales, storm drain inlet, curbs and gutters and other appurtenances.

3.2 UTILITY SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction. Provide temporary services during interruptions, disruption, or breakdown to existing utilities, as acceptable to Owner and to authorities having jurisdiction.
 - 1. Provide at least 72 hours' notice to Owner if shutdown of service is required during changeover.
- C. Utility Requirements: Locate, identify, protect, relocate, disconnect, and seal or cap off indicated utilities serving areas to be selectively demolished.
 - 1. Arrange to shut off indicated utilities with utility companies.
 - 2. If utility services are required to be removed, relocated, or abandoned, provide temporary utilities before proceeding with selective demolition that bypass area of selective demolition and that maintain continuity of service to other parts of building.
 - 3. Protect concreted areas, curbs, gutters, storm drain inlet adjacent to construction work.
- D. Utility Requirements: Refer to Division 15 and 16 Sections for shutting off, disconnecting, removing, and sealing or capping utilities. Do not start selective demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from the Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
 - 2. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
 - 3. Protect existing site improvements, appurtenances, and landscaping to remain.

- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
- C. Temporary Enclosures: Provide temporary enclosures for protection of existing building and construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weather-tight enclosure for building exterior.
- D. Temporary Partitions: Erect and maintain dustproof partitions and temporary enclosures to limit dust and dirt migration and to separate areas from fumes and noise.
- E. Temporary Shoring: Provide and maintain interior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of appurtenances to remain, such as curbs & gutters, storm drain inlet, channel wall, fences, Apex boxes, and curbs to prevent unexpected or uncontrolled movement or collapse during of construction demolition.

3.4 POLLUTION CONTROLS

- A. Dust Control: Use water mist, temporary enclosures, and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations.
 - 1. Wet mop pavement to eliminate trackable dirt and wipe down other appurtenances on site affected by construction after completion of work.
- B. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas. Clean all construction debris from all driveways, curbs and gutters, storm drain inlet, adjacent bus parking areas. Clean all areas daily through which construction material was transported.
- C. Cleaning: Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

3.5 SELECTIVE DEMOLITION

- A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations.
 - 1. Neatly saw-cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction.
 - 2. Saw-cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
 - 3. Where cutting of existing materials is deemed necessary by the contractor, saw-cutting methods shall be used. Cutting torches shall not be used at any time. At concealed spaces, such as duct and pipe interiors, verify condition and contents

of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations, when approved by an OCTA and City Representative. These Facilities are Class I, Division II Facilities.

4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Existing Facilities: Comply with Facility Manager's requirements for protecting driveways, bus parking areas, building entries, and other facilities on-site during selective demolition operations.
- C. Removed and Salvaged Items to be disposed off-site by Contractor:
1. Clean salvaged items.
 2. Pack or crate items after cleaning. Identify contents of containers.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to Owner's storage area as designated by Owner. Protect items from damage during transport and storage.
- D. Removed and Reinstalled Items: Protect items during removal from damage
1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and reinstalled in their original locations after asphalt pavement has been reconstructed.
- 3.6 PATCHING AND REPAIRS
- A. General: Promptly repair damage to adjacent construction caused by selective demolition operations. Finishes and texture of all adjacent surfaces that are patched and repaired shall match existing conditions.
- B. Patching: Patching of existing finishes shall match adjacent finishes for texture and color.
- C. Repairs: Where repairs to existing surfaces are required, patch to produce surfaces suitable for new materials.
1. Completely repair existing retaining walls, curbs and gutters, storm drain inlet, Apex boxes, swales, fences, and other appurtenances on site that are damaged and are to remain with an approved patching material applied according to manufacturer's written recommendations.

- D. Finishes: Restore exposed finishes of patched areas and extend restoration into adjoining construction in a manner that eliminates evidence of patching and refinishing. Refinish to nearest joint line horizontal or vertical.
- E. Provide an even surface of uniform finish color, texture, and appearance. Remove existing pavement and other appurtenances and replace with new materials, if necessary, to achieve uniform color and appearance to the nearest joint.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials daily. Do not allow demolished materials to accumulate on-site. At the end of each workday, clean all construction areas and areas from which construction material has been transported. All OCTA property shall be kept clean and free of any debris at all times.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

END OF SECTION 01732

SECTION 01740

WARRANTIES AND BONDS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. General administrative and procedural requirements for preparation and submission of warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special Project warranties.
 - 1. Refer to the Conditions of the Contract for terms of Contractor's special warranty of workmanship and materials.
 - 2. Certifications and other commitments and agreements for continuing services to the Authority are specified elsewhere in the Contract Documents.

1.2 RELATED DOCUMENTS AND SECTIONS

- A. Section 01340 - Shop Drawings, Product Data and Samples: General administrative requirements for submittals, applicable to warranties and bonds.
- B. Section 01700 - Contract Closeout: General requirements for closeout of the Contract.
- C. Section 01730 - Operating and Maintenance Data: Operating and maintenance data binders, to include copies of warranties and bonds.
- D. Individual Product Specifications Sections (15000-17000): Special Project warranty requirements for specific products or elements of the Work; commitments and agreements for continuing services to Authority.

1.3 DEFINITIONS

- A. Warranty: Assurance to the Authority by the Contractor, installer, supplier, manufacturer or other party responsible as warrantor, for the quantity, quality, performance and other representations of a product, system service of the Work, in whole or in part, for the duration of the specified period of time.
- B. Guaranty: Assurance to the Authority by the Contractor or product manufacturer or other specified party, as guarantor, that the specified warranty will be fulfilled by the guarantor in the event of default by the warrantor.
- C. Standard Product Warranty: Preprinted, written warranty published by product manufacturer for particular products and specifically endorsed by the manufacturer to the Authority.

- D. Special Project Warranty: Written warranty required by or incorporated into Contract Documents, to extend time limits provided by standard warranty or to provide greater rights for the Authority.
- E. Correction Period: The Correction Period shall be synonymous with warranty period and guaranty period used in the Contract Specifications.

1.4 WARRANTIES AND GUARANTEES

- A. Warranties and Guarantees, General: Provide all warranties and guarantees with the City of Tustin named as beneficiary. For equipment and products, or components thereof, bearing a manufacturer's warranty or guaranty that extends for a period beyond the one-year time beyond the Contractor's warranty and guaranty, so state in the warranty or guaranty.
- B. Provisions for Special Warranties: Refer to the Conditions of the Contract for terms of the Contractor's special warranty of workmanship and materials.
- C. General Warranty and Guaranty Requirements: Warranty shall be an agreement to repair or replace, without cost and undue hardship to the Authority, Work performed under the Contract, which is found to be defective during the warranty or guaranty period (correction period).
- D. Specific Warranty and Guaranty Requirements: Specific requirements are included in product Specifications Sections of Divisions 2 through 16, including content and limitations.
- E. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties and guarantees shall not relieve Contractor of responsibility for warranty and guaranty requirements for the Work that incorporates such products, nor shall they relieve suppliers, manufacturers, and installers required to countersign special warranties with Contractor.
- F. Related Damages and Losses: When correcting warranted Work that has been found defective, remove and replace other Work that has been damaged as a result of such defect or that shall be removed and replaced to provide access for correction of warranted Work.
- G. Reinstatement of Warranty: When Work covered by a warranty has been found defective and has been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- H. Replacement Cost: Upon determination that Work covered by a warranty has been found to be defective, replace or reconstruct the Work to a condition acceptable to the Authority, complying with applicable requirements of the Contract Documents. Contractor shall be responsible for all costs for replacing or reconstructing defective Work regardless of whether the Authority has benefited from use of the Work through a portion of its anticipated useful service life.

- I. Authority's Recourse: Written warranties made to the Authority shall be in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under law, nor shall warranty periods be interpreted as limitations on time in which the Authority can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of Warranties: The Authority reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- J. Warranty as Condition of Acceptance: The Authority reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment are required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.5 PREPARATION OF WARRANTY AND BOND SUBMITTALS

- A. Number of Copies: Make all submittals of warranties, guarantees, and bonds in duplicate.
- B. Project Warranty and Guaranty Forms: Form for the Contractor's guaranty is included at the end of this section. Prepare written documents utilizing the appropriate form, ready for execution by the Contractor, or the Contractor and subcontractor, supplier or manufacturer. Submit a draft to the Engineer for approval prior to final execution.
 - 1. Refer to product Specifications Sections of Divisions 2 through 16 for specific content requirements, and particular requirements for submittal of special warranties.
 - 2. Prepare standard warranties and guarantees, excepting manufacturers' standard printed warranties and guarantees, on Contractor's, subcontractor's, material supplier's, or manufacturer's own letterhead, addressed to the Authority, as directed by the Engineer.
 - 3. Warranty and guaranty letters shall be signed by all responsible parties and by the Contractor in every case, with modifications only as approved in advance by the Engineer to suit the conditions pertaining to the warranty or guaranty.
- C. Manufacturer's Guaranty Form: Manufacturer's guaranty form may be used in lieu of special Project form included at the end of this Section. Manufacturer's guaranty form shall contain appropriate terms and identification, ready for execution by the required parties.
 - 1. If proposed terms and conditions restrict guaranty coverage or require actions by the Authority beyond those specified, submit draft of guaranty to the Engineer for review and acceptance before performance of the Work.
 - 2. In other cases, submit draft of guaranty to the Engineer for approval prior to final execution of guaranty.

- D. Signatures: Signatures shall be by person authorized to sign warranties, guarantees, and bonds on behalf of entity providing such warranty, guaranty, or bond. All signatures on warranties, guarantees, and bonds shall be original and notarized.
- E. Co-Signature: All installer's warranties and bonds shall be co-signed by Contractor. Manufacturer's guarantees will not require co-signature.

1.6 FORM OF WARRANTY AND BOND SUBMITTALS

- A. Form of Warranty and Bond Submittals: At Final completion, compile two copies of each required warranty, guaranty, and bond, properly executed by Contractor, or jointly by Contractor, subcontractor, supplier, or manufacturer. Collect and assemble all written warranties and guarantees into binders and deliver binders to the Engineer for final review and acceptance.
 - 1. Prior to submission, verify that documents are in proper form, contain all required information, and are properly signed.
 - 2. Organize warranty and guaranty documents into an orderly sequence based on the Table of Contents of the Project Manual.
 - 3. Include Table of Contents for binder, neatly typed, following order and Section numbers and titles as used in the Project Manual.
 - 4. Bind warranties, guarantees and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, with clear front and spine to receive inserts, and sized to receive 8-1/2 inch by 11-inch paper.
 - 5. Provide heavy paper dividers with celluloid or plastic covered tabs for each separate warranty. Mark tabs to identify products or installation, and Section number and title.
 - 6. Include on separate typed sheet, if information is not contained in warranty or guaranty form, a description of the product or installation, and the name, address, telephone number and responsible person for applicable installer, supplier, and manufacturer.
 - 7. Identify each binder on front and spine with typed or printed inserts with title "WARRANTIES AND BONDS", the Project title or name, and the name of the Contractor. If more than one volume of warranties, guarantees, and bonds is produced, identify volume number on binder.
 - 8. When operating and maintenance data manuals are required for warranted construction, include additional copies of each required warranty and guaranty in each required manual. Coordinate with requirements specified in Section 01730 - Operating and Maintenance Data.

1.7 TIME OF WARRANTY AND BOND SUBMITTALS

- A. Submission of Preliminary Copies: Unless otherwise specified, obtain preliminary copies of warranties, guarantees, and bonds within ten days of completion of applicable item or Work. Prepare and submit preliminary copies for review as specified herein.
- B. Submission of Final Copies: Submit fully executed copies of warranties, guarantees and bonds within ten days of date identified in Certificate of Completion but no later than three days prior to application date for Final Payment.
- C. Date of Warranties and Bonds: Unless otherwise directed or specified, commencement date of warranty, guaranty, and bond periods shall be the date established in Certificate of Completion.
 - 1. Warranties for Work accepted in advance of date stated in Certificate of Completion: When a designated system, equipment, component parts or other portion of the Work is completed and occupied or put to beneficial use by the Authority, by separate agreement with Contractor, prior to Final Completion, submit properly executed warranties to the Engineer within ten days of completion of that designated portion of the Work. List date of commencement of warranty, guaranty or bond period as date of Acceptance.
 - 2. Warranties for Work not accepted as of date of Substantial completion: Submit documents within ten days after acceptance, listing date of such acceptance as beginning of warranty, guaranty, or bond period.
- D. Duration of Warranties and Guarantees: Unless otherwise specified or prescribed by law, warranty and guaranty periods (Correction Period) for all work shall not be less than one year from the filing date of notice of completion. See product Specifications Sections in Divisions 15 through 17 of the Project Manual for specifics on extended warranty and guaranty beyond the minimum duration. Entire VSS, HVAC, and electrical distribution system shall include a 5-year parts and labor warranty. Contractor shall provide service technician on-site within 4 hours of call for service.

END OF SECTION 01740
(Sample Form Letters follow)

FOR CONTRACTOR'S / MANUFACTURER'S WARRANTY

CONTRACTOR'S / SUPPLIER'S / MANUFACTURER'S LETTERHEAD

SPECIAL LIMITED PROJECT WARRANTY FOR VSS ELECTRICAL WORK.

We, the undersigned, do hereby warrant that the portion of the Work described above which we have provided for Orange County Transportation Authority (OCTA), at the Tustin Metrolink Station located at 2975 Edinger Avenue, Tustin, CA 92780 is in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by us, together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of Five (5) years, commencing from *date identified in Certificate of Completion, unless otherwise directed* and terminating (date).

The following terms and conditions apply to this warranty (*obtain the Engineer's approval before submission*):

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by Orange County Transportation Authority, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize Orange County Transportation Authority to have said defective Work repaired or replaced to be made good, and agree to pay to Orange County Transportation Authority upon demand all moneys that Orange County Transportation Authority may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

Local Representative: For warranty maintenance, repair, or replacement service, contact:

(Name) _____

(Address) _____

(City) _____ (State) _____ (ZIP) _____

(Phone) _____ / _____

(signed)

(signed)

(Date)

(Date)

(Typed Name)

(Typed Name)

(Title)

(Title)

(Firm)

(Firm)

(Installer, applicator, manufacturer or
supplier)

State License No: _____

***** FORM LETTER *****

FOR MANUFACTURER'S GUARANTY

MANUFACTURER'S LETTERHEAD

SPECIAL LIMITED PROJECT [WARRANTY] [GUARANTY] FOR VSS DESIGN/
INSTALLATION

We, the undersigned, do hereby [warranty] [guaranty] that the portion of the Work described above which [we have provided] [was provided by *(Installer or Subcontractor's Name)*] for Orange County Transportation Authority (OCTA), at the Tustin Metrolink Station located at 2975 Edinger Avenue, Tustin, CA 92780 is in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by [us,] [*(Installer or Subcontractor's Name)*] together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of five (5) years, commencing *(date indicated in Certificate of Completion, unless otherwise directed)* and terminating *(date)*.

The following terms and conditions apply to this [warranty] [guaranty] *(obtain the Engineer's approval before submission)*:

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by Orange County Transportation Authority, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize Orange County Transportation Authority to have said defective Work repaired or replaced to be made good, and agree to pay to Orange County Transportation Authority upon demand all moneys that Orange County Transportation Authority may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

Local Representative: For warranty maintenance, repair, or replacement service, contact:

(Name) _____

(Address) _____

(City) _____ *(State)* _____ *(ZIP)* _____

(Phone) _____ / _____

(Continued on next page)

(signed)

(signed)

(Date)

(Date)

(Typed Name)

(Typed Name)

(Title)

(Title)

(Firm)

(Firm)

(Installer, applicator, manufacturer or
supplier)

(Contractor)

State License No: _____

***** FORM LETTER *****

FOR MANUFACTURER'S GUARANTY

MANUFACTURER'S LETTERHEAD

SPECIAL LIMITED PROJECT [WARRANTY] [GUARANTY] FOR MANUFACTURING AND HVAC WORK

We, the undersigned, do hereby [warranty] [guaranty] that the portion of the Work described above which [we have provided] [was provided by *(Installer or Subcontractor's Name)*] for Orange County Transportation Authority (OCTA) at the Tustin Metrolink Station located at 2975 Edinger Avenue, Tustin, CA 92780 is in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by [us,] [*(Installer or Subcontractor's Name)*] together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of five (5) years, commencing *(date indicated in Certificate of Completion, unless otherwise directed)* and terminating *(date)*.

The following terms and conditions apply to this [warranty] [guaranty] *(obtain the Engineer's approval before submission)*:

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by Orange County Transportation Authority, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize Orange County Transportation Authority to have said defective Work repaired or replaced to be made good, and agree to pay to Orange County Transportation Authority upon demand all moneys that Orange County Transportation Authority may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

Local Representative: For warranty maintenance, repair, or replacement service, contact:

(Name) _____

(Address) _____

(City) _____ (State) _____ (ZIP) _____

(Phone) _____ / _____

(Continued on next page)

(signed)

(signed)

(Date)

(Date)

(Typed Name)

(Typed Name)

(Title)

(Title)

(Firm)

(Firm)

(Installer, applicator, manufacturer or
supplier)

(Contractor)

State License No: _____

***** FORM LETTER ***

SECTION 09900
PAINTS AND COATINGS

PART 1 GENERAL

1.1 Summary

A. Section Includes

1. Surface preparation, painting, and finishing of indicated substrates
2. Accessories required for a complete installation.

B. Section Includes

1. Section 01300 - Submittals
2. Section 01400 - Quality Control

1.2 References

A. UL - Underwriters Laboratories Inc.

B. FM—FM Approvals

C. ASTM—American Society for Testing and Materials

1. ASTM B117 -- Standard Practice for Operating Salt Spray (Fog) Apparatus.
2. ASTM D523 - Standard Test Method for Specular Gloss.
3. ASTM D1640 - Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature.
4. ASTM D1653 - Standard Test Methods for Water Vapor Transmission of Organic Coating Films.
5. ASTM D2247 - Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
6. ASTM D2486 - Standard Test Methods for Scrub Resistance of Wall Paints.
7. ASTM D2794 - Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact).
8. ASTM D2805 - Standard Test Method for Hiding Power of Paints by Reflectometry.
9. ASTM D3359 - Standard Test Methods for Measuring Adhesion by Tape Test.
10. ASTM D3363 - Standard Test Method for Film Hardness by Pencil Test.

11. ASTM D4060 - Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.
12. ASTM D4214 - Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films.
13. ASTM D4287- Standard Test Method for High-Shear Viscosity Using a Cone/Plate Viscometer.
14. ASTM D4541 - Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers.
15. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
16. ASTM E1347 - Standard Test Method for Color and Color-Difference Measurement by Tristimulus (Filter) Colorimetry.

D. SSPC—Society for Protective Coatings:

1. SSPC SP1 – Solvent Cleaning.
2. SSPC SP2 – Hand Tool Cleaning.
3. SSPC SP3 – Power Tool Cleaning.
4. SSPC SP6 – Commercial Blast Cleaning.
5. SSPC SP7 – Brush-Off Blast Cleaning.
6. SSPC SP8 – Near-White Blast Cleaning.

E. MPI—Master Painters Institute

1. MPI 10 – Exterior Latex, Flat, MPI Gloss Level 1.
2. MPI 45 – Interior Alkyd Primer Sealer.

F. NACE—NACE International (formerly National Association of Corrosion Engineers)

1. NACE TM0174 – Laboratory Methods for the Evaluation of Protective Coatings and Lining Materials on Metallic Substrates in Immersion Service.

1.3 Submittals

A. Make submittals in accordance with Section 01300

- B. Product Data: Manufacturer's technical data for each paint system specified, including block fillers and primers, including label analysis and instructions for handling, storage, and application of each material proposed for use.

1. List each material and cross-reference specific coating, finish system, and application. Identify material by manufacturer's catalog number and general classification.
2. Certification by manufacturer certifying that products supplied comply with local regulations controlling use of volatile organic compounds (VOCs).
3. Indicate manufacturer's instructions for special surface preparation procedures and substrate conditions requiring special attention.

1.4 Quality Assurance

A. Comply with Section 01400

B. Regulatory Requirements

1. Comply with referenced ASTM, SSPC, MPI, and NACE standards as applicable to the coatings indicated.
2. Comply with Federal and State toxicity and air quality regulations and with Federal requirements on content of lead, mercury, and other heavy metals. Do not use solvents in paint products that contribute to air pollution.

C. Manufacturer: Company specializing in manufacturing products specified with minimum 5 years' documented experience.

D. Applicator: Company specializing in performing work having minimum 5 years' documented experience and approved by manufacturer.

E. Coordination of Work: Review related work in which primers are provided to ensure compatibility of total systems for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.

F. Material Quality: Provide manufacturer's best quality trade sale paint material of various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.

1.5 Project Conditions

A. Weather Conditions

1. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
2. Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.
3. Minimum Application Temperatures for Latex Paints: Between 50 degrees F and 90 degrees F.
4. Minimum Application Temperatures for Solvent Thinned Paints: Between 45 degrees F and 95 degrees F.
5. Minimum Application Temperatures for Varnish Finishes: Between 65 degrees F for interior or exterior, unless required otherwise by manufacturer's instructions.

6. Painting may continue during inclement weather if surfaces and areas to be painted are enclosed and heated within temperature limits specified by the manufacturer during application and drying periods.
- B. Labels: Do not paint over UL, FM, or other code required labels or equipment name, identification, performance rating, or nomenclature plates.

PART 2 Products

2.1. Materials

- A. Basis of Design and Quality: Selections in finish schedule indicate color and textures selected for aesthetics and have been approved by Engineer. It is not intended to limit or restrict products by other manufacturers but to establish the aesthetic, technical, and performance requirements to be met. Submit proposals for the use of products by other manufacturers as a substitution to Engineer, who will render final judgment regarding proposed substituted products. Any install of conduit or other VSS improvements will require paint coverage to match existing Tustin Metrolink Station conditions.
 1. Manufacturer: For convenience, the paint schedule is based on Frazee Paints, 100% acrylic paint (vinyl acrylic paints not permitted), top of commercial line or better (residential quality paints not permitted). Subject to compliance with requirements, provide products complying with requirements:
 - a. Frazee Paints
 - b. Dunn Edwards Paints (Sparta Series vinyl acrylic paint not permitted).
 - c. Pittsburgh Paints.
 - d. Sherwin-Williams Company (ProMar 200 Series only; Promar 400, 700 acrylic and Super Paint vinyl acrylic paints are not permitted).
 - e. Vista Paints.
- B. Material Compatibility: Provide block fillers, primers, finish coat materials, and related materials recommended by manufacturer and compatible with one another and the substrates indicated under conditions of service and application, as demonstrated by manufacturer based on testing and field experience.
- C. Material Quality: Provide manufacturer's best quality commercial paint materials of various coating types specified. Vinyl acrylic and residential paints are not permitted. Paint material containers not displaying manufacturer's product identification are not acceptable.
 1. Proprietary Names: The Paint Schedule is based on paint systems of a single manufacturer. Use of manufacturer's proprietary systems to designate materials and colors is not intended to imply that only products named are required to be used to the exclusion of equivalent products of specified manufacturers.
- D. Coatings: Ready mixed, except field-catalyzed coatings. Process pigments to soft paste consistency, capable of being readily and uniformly dispersed to a homogenous coating; good flow and brushing properties; capable of drying or curing free of streaks or sags.

- E. Accessory materials: Linseed oil, shellac, turpentine, paint thinners, and other materials not specifically indicated but required to achieve the finishes specified or commercial quality.
- F. Patching materials: Latex filler
- G. Fastener Head Cover Materials: Latex filler
- H. Colors: Match adjacent existing exterior and interior wall and siding paint color. Provide color selections to the Engineer from manufacturer's full range of standard colors.
 - 1. Standard Gloss Ranges: Comply with ASTM D523 and match adjacent existing wall, siding, and ceiling coverage.

PART 3 Products

3.1. Examination

- A. Verify that substrate conditions are ready to receive work as instructed by the product manufacturer.
- B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- C. Test shop applied primer for compatibility with subsequent cover materials.
- D. Measure moisture content of surfaces using an electronic moisture meter.
- E. Notify Engineer of anticipated problems using materials specified over substrates primed by others.

3.2. Preparation

- A. Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing. Following completion of painting operations in each space or area, have items reinstalled by workers skilled in the trades involved.
- B. Correct defects and clean surfaces that affect new work. Remove existing coatings exhibiting loose surface defects.
- C. Seal with shellac and seal marks which may bleed through surface finishes/
- D. Cleaning: Before applying paint or other surface treatments, clean substrates of substances impairing bond of various coatings. Remove oil and grease prior to cleaning. Schedule cleaning and painting so that dust and other contaminants from cleaning process will not fall on wet, newly painted surfaces.
- E. Impervious Surfaces: Remove mildew by scrubbing with solution of trisodium phosphate and bleach. Rinse with clean water and allow surface to dry.

F. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified. Provide barrier coats over incompatible primers and allow surfaces to dry.

1. Ferrous Metals:

- a. Ungalvanized Surfaces: Clean surfaces that have not been shop coated including field weeds, field connections, remove oil, grease, dirt, loose mill scale, and foreign substances. Use solvent or mechanical cleaning methods complying with recommendations of the SSPC.
- b. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch up patches inconspicuous. Clean surfaces with solvent. Prime base steel surfaces. Prime metal items including shop primed items.
- c. Blast steel surfaces clean as recommended by paint system manufacturer and according to requirements of SSPC-SP 10.
- d. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
- e. Touch up bare areas and shop applied prime coats that have been damaged. Wire brush, clean with solvents recommended by the paint manufacturer, and touch up with the same primer as shop coat.
- f. Manual cleaning methods: Use one or combination of methods to obtain prepared visual surface condition based upon initial surface condition.
 1. Solvent cleaning, SSPC SP-1: Use solvent detergent or cleaning solution as recommended by finish system manufacturer. Apply solvent by either hand rubbing, wiping, or scrubbing with clean cloths, and brushes. Rinse the surfaces and remove solvent residue.
 2. Hand Tool cleaning SSPC SP-2: Use hand methods such as wire brushing, chipping, sanding, scraping, and similar abrasive, and impact equipment.
 3. Power Tool cleaning SSPC SP-3: Use power operated brushes, chipping, hammers, scalers, sanders, grinders, and similar abrasive and impact equipment.
 4. Blast cleaning methods: For architecturally exposed structural steel, provide dry blast cleaning of surfaces with commercial type of nonstaining, new, unused, and clean, fine abrasive grit. Employ blast-cleaning system with suitable dust removal equipment. Obtain prepared visual surface condition based upon initial surface condition.

5. Commercial Blast Cleaning, SSPC S-6 Use dry blast cleaning as necessary to obtain thorough commercial cleaning with 2 mil (0.050 in.) anchor pattern and surface condition C or D Sa2.
- g. Galvanized Surfaces: Clean galvanized surfaces with nonpetroleum-based solvents so surface is free of oil and surface contaminants. Remove pretreatment from galvanized sheet metal fabricated from coil stock by mechanized methods.
- h. Materials Preparation: Carefully mix and prepare paint materials according to manufacturer's directions.
 1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue
 2. Stir materials before application to produce a mixture of uniform density; stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain material before using.
 3. Use only thinners approved by the paint manufacturer, within recommended limits, and complying with California VOC requirements.
 4. Tinting: Tint each undercoat a lighter shade to facilitate identification of each coat where multiple coats of the same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.3. Application

- A. Apply paint according to manufacturer's written instructions. Use applicators and techniques best suited for substrate and type of material being applied.
 1. Paint colors, surface treatments, and finishes are to match adjacent existing walls, siding, and ceiling.
 2. Provide finish coats compatible with primers used.
 3. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has dried and cured in accordance with manufacturer's instructions.
 4. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to coating.
 5. Sand between applications where sanding is required to produce smooth even surface according to manufacturer's directions.
 6. Apply additional coats if undercoats, stains, or other conditions show through final coat of paint until paint film is of uniform finish, color, and appearance. Give special attention

to ensuring that surfaces, including edges, corners, crevices, welds, and exposed fasteners; receive a dry film thickness equivalent to surfaces of flat surfaces.

7. The term "exposed surfaces" includes areas visible when permanent or built in fixtures, convector covers, covers for finned tube radiation, grilles, and similar components are in place. Extend coatings as required to maintain system integrity and provide desired protection.
 8. Paint exposed and bare surfaces and covered pipes and ducts (including color coding), hangers, exposed steel and iron work, and primed metal surfaces and mechanical and electrical equipment.
 9. Sand lightly between each succeeding enamel or varnish coat. Wipe clean of dust prior to recoating.
 10. Omit primer on metal surfaces that have been shop primed and touch up painted.
 11. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels.
 - a. Labels: Do not paint over UL, FM, or other code required labels or equipment name, identification, performance rating, or nomenclature plates.
- B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
1. The number of coats and the film thickness required are the same regardless of application method. Do not apply succeeding coats until the previous coat has cured as recommended by the manufacturer.
 2. Omit primer on metal surfaces that have been shop primed and touchup painted.
 3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
 4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, it does not deform or feel sticky under moderate thumb pressure, and application of another coat of paint does not cause the undercoat to lift or lose adhesion.
- C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer's written instructions.
1. Brushes: Use brushes best suited for the type of materials applied. Use brush of appropriate size for the surface or item being painted.
 2. Rollers: Use rollers of carpet, velvet back, or high-pile sheep's wool as recommended by the manufacturer for the material and texture required.

3. Spray equipment: Use airless spray equipment with orifice size as recommended by the manufacturer for the material and texture required.
 4. Apply each coat of paint slightly darker than preceding coat.
- D. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer's recommended spreading rate. Provide the total dry film thickness of the entire system as recommended by the manufacturer.
- E. Exposed Surfaces: Paint areas visible when permanent and built in fixtures, covers, grilles, mechanical and electrical equipment housings, ducts, and conduits, are in place within finish areas.
- F. Concealed Members: Wherever steel and other metal parts to be painted will be built into and concealed by construction, paint as specified for exposed parts so that finish painting is completed before areas are concealed.
- G. Prime Coats: Before applying finish coats, apply a prime coat of material, as recommended by the manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn through or other defects due to insufficient sealing.
- H. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.
- I. Completed work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.
- J. Touch Up for Previously Coated Surfaces:
1. Touch up marred, scraped, and blemished areas of surfaces that were factory primed or previously coated.
 2. Properly prepare and touch up scratches, abrasions, and blemishes and remove foreign matter before proceeding with succeeding coats.
 3. Feather touch up coating, overlapping minimum 2 inches into adjacent unblemished areas, producing smooth, uniform surface.
 4. As soon after erection and installation as possible, touch up fasteners, welded surfaces and surroundings, field connections, and areas on which shop coat has been abraded or damaged with specified primer before corrosion and after damage occurs from exposure.

3.4. Cleaning

- A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from the site. After completing painting, clean paint spattered surfaces. Be careful not to scratch or damage adjacent finished surfaces.

3.5. Paint Schedule

- A. Exterior Paint Systems: Verify that gloss of paint complies with gloss requirements of ASTM D523.

1. Ferrous Metal – 3 Coat System:

- a. Prime coat and touch up coat on preprimed materials, 1.5 mils DFT.
- b. Second coat, 1.4 mils DFT (Gloss)
- c. Third coat, 1.4 DFT.
- d. VOC: 417 mg/l
- e. % Solids, Volume: 47%
- f. % Solids, Weight, 64%
- g. Primer: 661 Metal Primer
- h. 1st Coat: 648 Aro-Plate Industrial Gloss
- i. 2nd Coat: 648 Aro-Plate Industrial Gloss

2. Ferrous Metal – 3 Coat System:

- j. Prime coat and touch up coat on preprimed materials, 1.5 mils DFT.
- k. Second coat, 1.4 mils DFT (Gloss)
- l. Third coat, 1.4 DFT.
- m. VOC: 417 mg/l
- n. % Solids, Volume: 47%
- o. % Solids, Weight, 64%
- p. Primer: 661 Metal Primer
- q. 1st Coat: 648 Aro-Plate Industrial Gloss
- r. 2nd Coat: 648 Aro-Plate Industrial Gloss

END OF SECTION 09900

SECTION 16000

ELECTRICAL

PART 1 GENERAL

1.1 Summary

Project includes installation and/or modification to power distribution equipment, conduit and cabling. The electrical work elements include but are not limited to the following:

1. Circuit breakers installed within the existing Metrolink Station electrical distribution system. Coordinate existing electrical system interface with the OCTA and Station personnel.
2. Rack mounted Uninterrupted Power Supplies to power the VSS network and recording equipment within the security equipment room.
3. Rack mounted multi-outlet strips to distribute UPS power to the rack mounted VSS equipment.
4. Distributed CCTV power supplies to feed cameras that are at a distance from the existing security equipment room where it is not practical due to voltage drop to feed from the security equipment room.
5. Interface with existing 208/120 volt distribution panel boards.
6. Equipment racks to house the VSS power supplies, network and video recording equipment.
7. Electrical circuit breakers and branch circuits. Coordinate conduit routing and existing panel locations with OCTA and Station personnel.
8. Contractor shall furnish all design documents, equipment, materials, labor, supervision, installation, tools, testing, demonstration, training and equipment required to design, install and startup the electrical distribution system as described in these specifications.

1.2 Submittals

- A. An electrical distribution system shall be sized and a one-line diagram developed. The one line diagram indicating panel sizes, branch circuit sizes and interfaces with existing electrical power distribution system shall be submitted with proposal.
- B. Contractor shall prepare responses to OCTA 60% and 95% design review comments.
- C. Contractor shall provide submittal of final design documents to the City of Tustin for permit review.

1.3 Quality Assurance

A. Regulatory Requirements

1. Electrical Components, Devices and Accessories: Listed and labeled under UL 467 as defined in NFPA 70, Article 100, by a testing agency acceptable to City/OCTA having jurisdiction, and marked for intended use. The contractor shall be responsible for the cost of required testing.
2. Contractor shall conform to state and local codes as well as:
 - a. NFPA 37 Installation of Stationary Facilities
 - b. NFPA 70 National Electric Code
3. Contractor shall conform with all codes noted within Part 3

PART 2 Products

The items listed below are meant to convey basic functional requirements of the system.

2.1. Power Distribution

1. The VSS power requirements and interface with existing electrical distribution system shall be coordinated with OCTA and Station personnel.
2. Use copper conductor; aluminum wire not permitted.
3. Use 80-degree rise dry-type step-down transformers where required for reduced voltage. Use of buck/boost transformers is not permitted.
4. Wiring devices shall be FED-SPEC specification grade.
5. All electrical equipment shall be suitable for the area classification of the area for which it is to be installed.

PART 3 Execution

The following issues shall be addressed by the electrical engineer of the Design install Contractor. These issues are not meant to represent the full extent of electrical involvement, but instead are meant to convey basic functional requirements of the system. The Contractor shall furnish all design documents, equipment, materials, labor, supervision, installation, tools demonstration, training and equipment required to design, install and startup the electrical distribution system as described in these specifications.

3.1. Electrical Service and Power Distribution

1. General: Work shall include but not limited to:

- a. New circuit breakers within existing power distribution panelboards.
 - b. New branch circuit conduit and conductors between the existing panelboards and new VSS loads.
 - c. Grounding and bonding
 - d. Cabling and wire management
 - e. Provide distribution to safety and adequately serve the electrical requirements to the facility, without overload or malfunction
 - f. Provide electrical equipment and materials suitable for the area classification of the area for which it is to be installed
 - g. Label wall outlets and disconnects with panel location.
2. Grounding and Bonding
- a. Comply with NFPA 70, IEEE C2 and UL 467
 - b. Testing per NFPA 70 B
 - c. Copper conductors
 - d. Exothermic-welding for all joints below grade or embedded in soil
 - e. Copper-clad ground rods
 - f. Test wells
 - g. Ground all equipment
3. Not Allowed:
- a. Aluminum bus
 - b. Aluminum Conductors

3.2. Branch Wiring

1. General: Provide branch wiring to adequately and safely serve the requirements of the facility, without overload or malfunction. Provide energy efficient branch wiring wherever possible. Branch wiring consists of the following elements:
 - a. Raceways and boxes
 - b. Conductors and cables
 - c. Wiring devices

- d. Hangers and supports
- e. Electrical identification

3.3. Raceway and Boxes

1. General: Comply with ANSI A13.1. Utilize the appropriate type of raceway and box for the application. Conceal raceway except in unfinished spaces. Provide conduit sleeves for penetrations through walls and floors. Penetrations through fire rated walls and floors shall be fire stopped to match rating of the wall and floor. Exterior below grade conduit may be directional bored or trenched. Use underground conduit installation method that will minimize disruption to existing paved areas. Any of the following conduit types may be used:
 - a. EMT
 - b. EMT Fittings: Compression type
 - c. FMC
 - d. LFMC
 - e. IMC
 - f. RGS
 - g. PVC Schedule 80 (below grade)
 - h. Surface raceways as approved

3.4. Conductors and Cables

1. Comply with NFPA 70 and NEMA WC 70 and the following:
 - a. Provide copper conductors only.
 - b. Solid conductors for No. 10 AWG and smaller, stranded for No. 8 AWG and above.
 - c. Individual neutrals for each circuit.
 - d. Provide conduit for all power conductors.

3.5. Wiring Devices

1. Provide the following:
 - a. GFCI receptacles where required by NFPA 70.
 - b. AFCI devices where required by NFPA 70.
 - c. Device mounting height and location per NECA, ADA and ADAAG.

3.6. Hangers and Supports

1. Comply with NFPA 70, NECA 1 and NECA 101. Provide material of hanger or support appropriate for the application and environment.

3.7. Electrical Identification

1. Include the following:
 - a. Identification for raceway and boxes
 - b. Underground warning tape
 - c. Warning labels and signs
 - d. Instruction signs
 - e. Equipment identification labels
2. Provide conductor and cable identification: Color-coding conductor tape and self-adhesive wraparound circuit identification legend.
3. Provide warning labels complying with NFPA70 and 26 CFR 1910.145.
4. Provide instruction signs: Engraved, laminated acrylic or melamine.
5. Provide equipment labels: Self adhesive, engraved, laminated acrylic or melamine.

3.8. Uninterruptible Power Supplies

Rack mounted uninterruptible power supplies shall be sized during design install proposal submission and size submitted with proposal. The UPS shall be connected to the power distribution system in such a manner as to promote maximum flexibility for utilizing emergency power.

1. Comply with NFPA 70 and UL.
2. UPS shall be sized to operate all VSS equipment initially installed plus an additional 100% spare capacity for future loads. UPS shall be equipped with at least 10 minutes of battery backup at UPS full load.

END OF SECTION 16000

SECTION 17000

VIDEO SURVEILLANCE SYSTEM

PART 1 GENERAL

1.1 Summary

- A. Contractor shall furnish all design documents, equipment, materials, labor, supervision, installation, tools, testing, demonstration, training, and equipment required to design, install and startup the video surveillance system as described in these specifications.
- B. Contractor shall coordinate installation work with OCTA and Tustin Metrolink Station personnel and plan work to minimize disruption to Tustin Metrolink Station operations.
- C. Utility outages must be scheduled 48 hours in advance.
- D. Temporary blocking of public areas must be scheduled 48 hours in advance.

1.2 System Description – VSS Camera Coverage

A. General

- 1. This section includes the design and installation of a closed-circuit TV camera monitoring system including fiber optic and copper networks, interface hardware, conduit, and associated software. The areas of coverage shall be consistent with the attached site plan drawings. The drawings indicate camera locations and priorities. Priority “A” cameras are considered base bid camera locations. Priority “B” cameras will be bid as alternates according to the bid instructions. Priority “C” cameras are conduit rough-in locations only provided by the parking garage contractor and are not included in this contract. The VSS will provide fixed and pan-tilt-zoom cameras throughout the Tustin Metrolink Station property to provide video coverage of the following areas:

B. Base Bid Camera Locations

- 1. Vehicle Entrances: Provide high-resolution fixed cameras with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Cameras 1.3, 1.5, 1.6, sheet T2.1)
- 2. Overall view of the stair lobbies and emergency call boxes. Provide high-resolution fixed cameras with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Cameras 1.1, 1.2, 1.4, sheet T2.1)
- 3. Overall view of the stair lobbies and emergency call boxes. Provide high-resolution fixed cameras with extended dynamic range. Route camera cabling through existing

- conduit provided by the parking garage contractor. (Cameras 2.1, 2.2, 2.3, sheet T2.2)
4. Overall view of the stair lobbies and emergency call boxes. Provide high-resolution fixed cameras with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Cameras 3.1, 3.2, 3.3, sheet T2.3)
 5. Overall view of the stair lobbies and emergency call boxes. Provide high-resolution fixed cameras with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Cameras 4.1, 4.2, 4.3, sheet T2.4)
 6. Overall view of the stair lobbies and emergency call boxes. Provide high-resolution fixed cameras with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Cameras 5.1, 5.2, 5.3, sheet T2.5)
 7. Overall views of the access pathway (abandoned wye). Provide day/night, extended dynamic range, high-resolution fixed cameras. The pathway cameras shall be mounted to existing light poles. Route camera video and power cabling through existing conduit stubbed up into the light pole bases. The existing conduit extends from the pole bases to an existing communication building (sheet E5). (Cameras XT.1, XT.2, XT.3, XT.4, XT.5, sheets 7 & 8 of 13)
 8. North train platform. Provide high resolution, day/night, fixed cameras with extended dynamic range providing overall views of the platform. The north platform cameras shall be mounted to existing light poles. Contractor shall field verify if existing pathways exist or determine another method for routing video and power cabling to the cameras. Based on as-built drawings it appears there is an existing empty communication conduit routed into each light pole. This communication conduit is routed into an existing communication building (sheet E5). (Cameras XPN-2, XPN-6, XPN-7, sheet E4)
 9. North train platform. Provide vandal resistant, high resolution, day/night, fixed cameras with extended dynamic range providing overall views of the stairs and ramp leading from the platform to the underground pedestrian tunnel connection the north and south platforms. Cameras shall be surface mounted to the concrete wall above the walkways. Contractor shall field determine and provide conduit pathways from these cameras into the existing communications building (sheet E5). (Camera XPN-4, sheet E4)
 10. Underground pedestrian tunnel. Provide vandal resistant, high resolution, day/night, fixed cameras with extended dynamic range providing overall views of the pedestrian tunnel. Cameras shall be surface mounted to the ceiling or wall of the tunnel. Contractor shall field determine and provide conduit pathways from these cameras into the existing communications building (sheet E5). (Camera XPN-5, sheet C-12)
 11. South train platform. Provide high resolution fixed cameras with extended dynamic range providing overall views of the platform. The south platform cameras shall be mounted to existing light poles. Contractor shall field verify if existing pathways exist

or determine another method for routing video and power cabling to the cameras. Based on as-built drawings it appears there is an existing empty communication conduit routed into each light pole. This communication conduit is routed into an existing communication building (sheet E5). (Cameras XPS-2, XPS-7, XPS-8, sheets E4, and E5)

12. South train platform. Provide high resolution fixed cameras with extended dynamic range providing overall views of the platform. The south platform cameras shall be mounted to the existing platform canopy. Contractor shall field determine and provide conduit pathways from these cameras into the existing communication building (sheet E5). (Cameras XPS-5, XPS-6, sheet E4)
13. South train platform ramp to pedestrian tunnel. Provide a high-resolution fixed camera with extended dynamic range providing overall views of the ramp leading to the pedestrian tunnel. The camera shall be mounted to the ceiling or wall of the pedestrian tunnel. Contractor shall field determine and provide conduit pathways from the camera into the existing communication building (sheet E5). (Camera XPS-3, sheet C-12)

C. Alternate Bid Camera Locations

14. Overall view of entry door to main telecom room. Provide high-resolution fixed camera with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Camera 1.7, sheet T2.1)
15. Elevator Cameras: Provide fixed, wide angle, vandal resistant cameras providing views of the elevator cabs. Route power and video via the elevator traveling cables. Coordinate installation with elevator provider. From the elevator equipment room route camera cabling through existing conduit provided by the parking garage contractor. (Cameras 1.8, 1.9, sheet T2.1)
16. Overall view of entry door to security equipment room. Provide high-resolution fixed camera with extended dynamic range. Route camera cabling through existing conduit provided by the parking garage contractor. (Camera 2.5, sheet T2.2)
17. Overall view of the surface parking lots, train platform, and areas surrounding the parking garage. Provide day/night, extended dynamic range, pan-tilt-zoom cameras mounted the exterior of the parking garage between levels 3 and 4. Route camera cabling through existing conduit provided by the parking garage contractor. Route camera cabling through existing conduit provided by the parking garage contractor. (Camera 3.6, 3.7, 3.8, 3.9, sheet T2.3).
18. Overall view of the access pathway (abandoned wye) bike lockers. Provide day/night, extended dynamic range, high-resolution fixed camera. Camera shall be mounted to existing light pole. Route camera video and power cabling through existing conduit stubbed up into the light pole bases. The existing conduit extends from the pole bases to an existing communication building (sheet E5). (Cameras XT.6, sheets 8 of 13)
19. North train platform. Provide high resolution, day/night, fixed cameras with extended dynamic range providing overall views of the platform. The north platform cameras

20. North train platform. Provide vandal resistant, high resolution, day/night, fixed cameras with extended dynamic range providing overall views of the stairs and ramp leading from the platform to the underground pedestrian tunnel connection the north and south platforms. Cameras shall be surface mounted to the concrete wall above the walkways. Contractor shall field determine and provide conduit pathways from these cameras into the existing communications building (sheet E5). (Camera XPN-3, sheet E4)
21. Underground pedestrian tunnel. Provide vandal resistant, high resolution, day/night, fixed cameras with extended dynamic range providing overall views of the pedestrian tunnel. Cameras shall be surface mounted to the ceiling or wall of the tunnel. Contractor shall field determine and provide conduit pathways from these cameras into the existing communications building (sheet E5). (Camera XPS-11, sheet C-12)
22. South train platform. Provide high resolution fixed cameras with extended dynamic range providing overall views of the platform. The south platform cameras shall be mounted to existing light poles. Contractor shall field verify if existing pathways exist or determine another method for routing video and power cabling to the cameras. Based on as-built drawings it appears there is an existing empty communication conduit routed into each light pole. This communication conduit is routed into an existing communication building (sheet E5). (Cameras XPS-1, XPS-9, sheets E3, and E5)
23. South train platform. Provide high resolution fixed cameras with extended dynamic range providing overall views of the platform. The south platform cameras shall be mounted to the existing platform canopy. Contractor shall field determine and provide conduit pathways from these cameras into the existing communication building (sheet E5). (Camera XPS-4, sheet E4)
24. South train platform. Provide a day/night, extended dynamic range, pan-tilt-zoom camera mounted to an existing light pole. Contractor shall field determine and provide conduit pathways from this camera into the existing communication building (sheet E5). (Camera XPS-10 sheet E4)
25. Vehicle license plates: Provide fixed cameras designed specifically for license plate reading along with license plate recognition software. Route camera cabling through existing conduit provided in Base Bid through parking lot and through the garage provided by the parking garage contractor. (Cameras PL.1 & PL.2, sheet C-5) Camera and integrated processor shall be Spike+ (model P372) integrated camera and processor. Provide all hardware interfaces and cabling as required.

D. System Recording Requirements

1. The system shall be equipped to provide continuous recording capability of all cameras and storage of video for at least one year in accordance with the California Public Utilities Commission requirements.

1.3 Submittals

- A. A VSS shall be sized and a one-line diagram developed. The one line diagram indicating cameras, network equipment, power supplies, and recording servers shall be submitted with proposal.
- B. Contractor shall make design review submittals to OCTA at 60% and 95% levels of completion. Submittals shall include all calculations used to size equipment, construction drawings, specifications and proposed equipment cut sheets.
- C. Contractor shall prepare responses to OCTA 60% and 95% design review comments.
- D. Contractor shall provide submittal of final design documents to the City of Santa Ana Planning and Building for permit review.

1.4 Operation and Maintenance Manuals

- A. Operation and maintenance manuals shall include:
 1. Manufacturer's Instruction Manuals: Submit brochures, manuals, and service sheets published by the manufacturers of the components, devices, and equipment provided. Include instructions for operating and maintaining the system and source information for spare and replacement parts.
 2. Performance, Test, and Adjustment Data: Include comprehensive documentation of all performance verification and correction procedures and measurements.
 3. Wiring one-line diagrams and floor plans.

1.5 Warranty Coverage

- A. Five-year parts and labor warranty for the entire VSS installed by this project. Contractor shall provide service technician on-site within 4 hours of call for service.
- B. Five-year preventative maintenance (PM) agreement for the VSS installed by this project.
- C. PM agreement shall include all material and labor as recommended by the equipment manufacturer to insure the warranty.
- D. PM agreement shall also include all software upgrades, operating system upgrades, bug fixes, and patches as provided or recommended by the equipment manufacturer.

1.6 Measurement and Payment

- A. Payment for the work in this section shall be included as part of the lump-sum bid amount stated in the proposal.

PART 2 MATERIALS AND TECHNICAL REQUIREMENTS

2.1 General: The items listed below are meant to convey basic functional requirements of the system.

2.2 Basic Components

- A Rack mounted CAT 6 patch panels.
- B Rack mounted fiber optic patch panels and fiber optic transceivers.
- C Cisco Power Over Ethernet LAN switches.
- D Rack mounted CCTV power supplies.
- E Outdoor rated CCTV camera power supplies.
- F Rack mounted Network Video Recorders.
- G Network Video Recorder Application Software with applicable licenses for the number of cameras being installed.
- H Rack mounted sliding Personal Computer (PC) for local viewing, control, and administration of VSS.
- I Fixed and pan-tilt-zoom cameras.

2.3 System Components

- A Cameras, mounts, Network Video Recorders (NVRs), NVR application software, Power Over Ethernet (POE) Local Area Network (LAN) switches, video encoders, camera power supplies, CAT 6 patch panels, CAT 6 cabling, CAT 6 RJ-45 jacks, CAT 6 patch cords, fiber optic patch cords, fiber optic cable, fiber optic patch cords and twisted pair cable shall be provided to monitor areas as described herein and indicated on the drawings.
- B Design of a dedicated CCTV LAN. Contractor shall obtain the services of a certified network engineer to design and specify the CCTV LAN system components to provide capacity for the number of cameras shown on the drawings and allow for 150% future growth. The dedicated CCTV LAN switches must be compatible with the existing City of Tustin LAN and the cameras, NVR and NVR application software being proposed. The dedicated CCTV LAN may be interfaced with the existing City of Tustin LAN. This interface would allow users connected to the existing City of Tustin LAN to access the CCTV Network Video Recorders.
- C CCTV cameras shall be IP based. Where IP cameras (e.g. license plate cameras) are not available, provide analog cameras and video encoders to digitize the analog signals.
- D Coordination with City of Tustin Information Technology (IT) personnel to provide CCTV network equipment (LAN switches, routers, patch panels, cabling, patch cords, etc.) that is compatible with the existing City of Tustin LAN equipment.

- E Within the NVR application software, develop a graphic facility map with camera icons at the locations of actual installed cameras. This map will allow users to quickly locate a camera of interest and by double clicking, will automatically display the video from that camera on their PC workstation.
- F Coordination with OCTA and the City of Tustin to define the working parameters of the system such as camera views, image quality, record rates, and schedules.
- G Coordination with other trades and the work sequence.
- H Cabling from cameras shall be routed to the VSS room and terminated in rack mounted patch panels.
- I CCTV cameras located more than 90 meters from the VSS room shall be connected via fiber optic cable and fiber optic transceivers.
- J CCTV cameras located within 90 meters of the VSS room shall be powered from Power Over Ethernet LAN switches.
- K CCTV cameras located more than 90 meters from the VSS room shall be fed from outdoor rated CCTV power supplies.
- L Distributed CCTV power supplies shall be fed from existing emergency power circuits provided by the garage contractor.
- M The rack mounted VSS equipment shall be fed from dedicated rack mounted UPS.

2.4 Specific System Hardware and Software Characteristics

- A. NVR Application Software. Provide with the following characteristics:
 - 1. The CCTV system shown on the drawings and specified herein is an Internet Protocol (IP) network-based video surveillance and camera management system. NVRs shall store video from IP and analog cameras onto an internal hard drive(s). The NVRs shall be capable of distributing live or recorded images across standard TCP/IP networks to existing desktop PC workstations where images can be viewed.
 - 2. Cameras shall be located as shown on the drawings. Network components shall be mounted within equipment racks as indicated on the drawings.
 - 3. NVR Application Software shall run as a Windows Service without the user interface or as a Windows Application with the user interface. Shall operate on industry standard Microsoft Windows 2000, 2000 Advanced Server, 2008 server, XP Professional, or .NET operating system with all the controls done via keyboard and mouse.
 - 4. NVR Application Software shall be based on industry standard hardware and shall not include any proprietary hardware such as video capture or frame grabber cards.
 - 5. All System configurations, changes, setups, and operation shall be a password protected and available to the System Administrator for access and use.

6. Shall support API for integration with 3rd party software. System shall support the input and management of alarms from 3rd party security systems.
7. Shall be able to define "Generic ASCII Generated Events" by exact match or by match within a string of pre-defined ASCII characters and symbols received on TCP-IP or UDP port of the NVR server.
8. Shall communicate and receive video image streams from IP addressable Cameras using IP protocol.
9. Shall support traditional analog cameras via video server adapters using IP protocol.
10. Shall control PTZ cameras using IP protocol.
11. Shall support IP cameras and encoders using MJPEG, MPEG4 and H263 compression simultaneously.
12. Shall have the ability to view, record, playback and archive video from cameras located at remote locations over the IP network. (Multi-location recordings).
13. Shall provide the capability to record audio with a camera, when the camera has audio feature supported by the software.
14. Shall simultaneously record, playback and display live video and audio (Triplex).
15. Shall allow time synchronized multiple cameras view/playback with motion detection information.
16. Shall allow the viewing/playback of multiple cameras from PC workstations on the network.
17. Shall have the ability to record and store images at rates between 1 frame per hour to 30 frames per second on a per camera basis.
18. Shall have the ability to store the recorded images on the System's local hard drive, or on a Storage Area Network (SAN), or on a Network Attached Storage (NAS), or on attached storage (USB, Firewire, and SCSI). System shall support RAID-5 hard drive recording configuration.
19. Shall support the recording of at least 64 cameras per server at 4CIF resolution at 30 frames per second.
20. Shall be scalable to support at least: 5900 cameras, 1900 users, and 80 concurrent viewing workstations.
21. Shall have automatic (maintenance free) daily archiving capabilities of recorded video with automatic archive recycling.
22. Shall have video search capabilities to find video images by Time, Date, and Activity/Alarm.

23. Shall provide 24 hours scheduler to activate and deactivate the following features on a per camera basis:
 - a. Bring cameras on/off line
 - b. Sound audible alarm on motion detection in camera's field of view
 - c. Send e-mail/text pager/SMS notification on motion detection events with/without video image attachment.
 - d. Start/stop and change patrolling sequence for PTZ cameras.
24. Shall have an advanced motion detection capabilities with ALL the functions as described bellow. The operator shall have the ability to use one, several or any non-conflicting combinations of the following functions, on a per camera basis:
 - a. Automatically freeze the live video of a camera with no motion in its field of view.
 - b. Stop recording camera images with no motion in it field of view.
 - c. Start recording images up to 600 seconds before a motion is detected in the cameras field of view and continue recording for up to 600 seconds after the motion stopped in the cameras field of view.
 - d. Adjustments of motion level sensitivity.
 - e. Adjustments of low light noise levels to avoid false motion detection.
 - f. Inclusion / exclusion motion detection zones per camera.
 - g. Change recorded frame rate when motion is detected.
25. Shall be able to start recording on request or an event setup by the operator/administrator.
26. Shall be able to speedup the recording FPS on motion detection or on event detected.
27. Shall be able to adjust image resolution to CIF 320x240, VGA (4CIF) 640x480 and up to 2,048 x 1,536 lines
28. Shall be able to adjust the compression level of the video image data size, to save on storage size, when needed.
29. Shall be able to provide the operator with up to 25 presets position per PTZ camera and the ability to quickly cause the camera to move to a preset location upon operator demand.
30. Shall be able to move a PTZ camera to any of the preset positions upon detecting motion at another camera.

31. Shall be able to move a PTZ camera to any of the preset positions upon detecting software command from 3rd party security software.
32. Shall be able to cause the PTZ camera to go to any of the preset positions on input contact closure/open (such as door sensor, alarm panel input etc.).
33. Shall be able to provide PTZ camera patrolling feature between preset positions.
34. Shall be able to program at least 4900 patrolling sequences, and 3000 presets.
35. Shall be able to control the patrolling sequences using a 24/7 scheduler.
36. Shall be able to control PTZ movement speed during patrolling for selected supported PTZ cameras.
37. Shall be able to resume patrolling after an operator manual PTZ control session times out.
38. Shall be able to close and open remote relay outputs at the IP cameras and /or video encoders.
39. Shall be able to detect close/open relay input from the camera's location and trigger alarm/event on the System.
40. Shall have the ability to detect door contacts or PIR motion detector input and cause a PTZ camera to move and zoom into the door and record the activity, to increase protection of sensitive areas.
41. Shall be able to perform "go to preset" on event even during patrolling sequence.
42. Shall provide tamper-proof log file on users' activity in the system using encryption and integrity check.
43. Shall provide web server service to allow authorized users to view live video, playback of recorded video and search the archive to view video using their Internet Explorer web browser from any PC on the Intranet or Internet, if authorized. Web browser functionality shall include:
 - a. Provide username and password for access control into the System.
 - b. Define remote user profile and user rights in relation to viewing certain cameras and the use of PTZ and Output relays.
 - c. Navigate to cameras and rooms using and integrated premises map.
 - d. View any MJPEG camera on the System, with live video.
 - e. Control all 25 PTZ Presets per camera for fast and accurate remote positioning control.

- f. Access any recorded video of the current day and the archive for past days, search by time/date or activity/alarm and playback the video as a stream, frame by frame, or jump to motion detected sequences.
 - g. Provide thumbnail images for each new event for easy search.
 - h. Create an AVI file video and audio clips of desire sequences with time stamp for local storage and the ability to e-mail it.
 - i. Allow printout of still image with operator comments and timestamp.
 - j. Provide a view of live video from 4 cameras, simultaneously.
 - k. Activate remote system relay outputs to control external systems as light, sounds, and wipers.
44. Shall include unlimited PDA Client licenses with the ability to:
- a. Monitor and control live fixed and PTZ cameras.
 - b. Full PTZ control includes sending the camera to any of the 25 presets.
 - c. Select camera, time and date for video playback.
 - d. Control playback mode, frame by frame, direction, and speed.
 - e. View live and playback cameras at full screen mode.
45. Shall provide Image server service to allow authorized users to view live video, playback of recorded video and search the archive to view video using installed client software based on .net technology. The client shall be downloaded from the recording server and shall include an unlimited number of viewer/playback clients to have the ability to:
- a. Provide username and password for access control into the System.
 - b. Define remote user profile and user rights in relation to viewing certain cameras and the use of any function within the client.
 - c. Define user profile and views as an individual user or as shared features between multiple users.
 - d. Monitor up to 64 live cameras on the same screen or on multiple screens.
 - e. Each camera window can be defined as a live/playback camera, map, fixed image, hotspot, and incoming video alarm window.
 - f. Select cameras using "drag and drop" from the camera list.
 - g. Select cameras using icon on an integrated facility map.
 - h. Each camera will go to full screen by double click on the image.

- i. Cameras recorded on multiple recorders throughout the network can be viewed on the same screen.
 - j. Create unlimited number of views and screen grids, arranged into groups.
 - k. Flip between Views using Keyboard or mouse.
 - l. Use clickable maps to call different camera views.
 - m. Full PTZ control includes sending the camera to any of the 25 presets.
 - n. Control PTZ camera with Point and Click.
 - o. Control selected supported PTZ camera with USB Joystick.
 - p. Control PTZ camera setting with buttons on the USB joystick. Controlled functions includes manual focus, iris control and gain control.
 - q. Control PTZ camera using Keyboard functions including pan, tilt, and zoom.
 - r. Synchronized playback of cameras with forward and backward commands, fast forward, fast backward, forward playback, reverse playback, playback speed control and frame-by-frame commands.
 - s. Control playback by keyboard inc. frame by frame, next or previous sequence.
 - t. Digital PTZ on live and recorded image.
 - u. Find recording using Go-To time and date.
 - v. Find recording using Alarm / Event list.
 - w. Find recording using "Smart Search". Automatic archive search for activity in a designated area of the image.
 - x. Preview clip of any alarm/event sequence of a pop up window.
 - y. Export an AVI file to the client desktop.
 - z. Print still picture from any camera with operator comments.
 - aa. Change screen grid and cameras locations selected from pull down menu on the fly.
 - bb. Able to import alarm list for specific camera and view alarm preview clip.
- B. Exterior Mount Fixed IP Camera
- 1. Provide an integrated package that includes vandal resistant, day/night IP camera, heater, dome drive, clear lower dome, matching mounting brackets as required for the installation with the following characteristics:

- a. Pick-up element: 1/3" CCD.
- b. Horizontal Resolution: 540 horizontal lines, minimum.
- c. Effective Pixel: 768x492.
- d. White Balance Mode: Automatic Sensing.
- e. Housing: Vandal resistant, IP66 rating, clear acrylic lower dome.
- f. Lens: 2.7 – 13.5 mm vari-focal, auto iris.
- g. Compression: MPEG-4.
- h. Frame rate: 30fps.
- i. Protocols: TCP/IP, UDP, HTTP, FTP, SMTP, DHCP, DNS, NTP, SNMP, RTP.
- j. Interface: Ethernet, 100BasTX/ 10Base-T (RJ-45).
- k. Signal-to-Noise Ratio: 50 dB minimum.
- l. Sensitivity: .29 lux at 30 IRE (color), .12 lux at 30 IRE (B-W).
- m. Environmental: -40 to 122 degrees Fahrenheit.
- n. Synchronization: Line-Lock with phase adjustment to allow synchronization of all cameras independent of phase of power line.
- o. Power: 24VAC.

C. Exterior PTZ Camera

1. Provide an integrated package that includes day/night IP camera, heater, dome drive, clear lower dome, matching mounting bracket as required for the installation with the following characteristics:
 - a. Pick-up element: 1/4" CCD.
 - b. Horizontal Resolution: > 540 TV lines.
 - c. Effective Pixel: 768x494.
 - d. Exposure Control: Automatic, Back-Light-Compensation.
 - e. White Balance Mode: Automatic Sensing.
 - f. Housing: Meets IP67 and NEMA 4X, clear polycarbonate resin dome.
 - g. Lens: 35X zoom (optical), 12X zoom (digital), 3.4 – 122.4mm, auto iris.

- h. Panning Range: 360 degrees endless.
 - i. Compression: MPEG-4.
 - j. Frame rate: 30fps.
 - k. Protocols: TCP/IP, UDP, HTTP, FTP, SMTP, DHCP, DNS, NTP, SNMP, RTP.
 - l. Wide Dynamic Range: 128X.
 - m. Interface: Ethernet, 100BasTX/ 10Base-T (RJ-45).
 - n. Sensitivity: .66 lx at 30 IRE (color), .166 lx at 30 IRE (black and white) minimum scene illumination.
 - o. Environmental: -40 to 140 degrees Fahrenheit.
 - p. Other Functions: Motion Detection, Day/Night, auto image stabilizer, zone masking.
 - q. Synchronization: Line-Lock with phase adjustment to allow synchronization of all cameras independent of phase of power line.
 - r. Power: 73VA, 24VAC.
- D. License Plate Recognition Camera
- 1. Provide integrated unit specifically designed for license plate capture to match existing City of Tustin equipment. Provide Spike+ integrated camera and processor as manufactured by PIPS Technology.
- E. Miscellaneous Network Equipment: Provide the following equipment to the City of Tustin. The City will be responsible for the installation of this equipment.
- 1. CISCO 2921/K9 router.
 - 2. CISCO SM-ES3G-16-P EtherSwitch module (Alternate WS-C3560E-24PDS Catalyst 3560-E switch).
 - 3. CISCO VWIC2-2MFT-T1 module (Alternate HWIC-4T1/E1 module).
 - 4. CISCO 3945E/K9 router.
 - 5. CISCO HWIC-4T1/E1 interface modules.
- F. LAN Switch
- 1. Provide Power Over Ethernet (POE) LAN switches which have sufficient capacity to accommodate the LAN traffic from the number of cameras shown on the drawings. The dedicated CCTV LAN switches must be Cisco equipment and must be compatible with the existing City of Tustin LAN switches and the cameras, NVR and NVR application software being proposed.

PART 3 Execution

3.1 General

1. The following issues shall be addressed by the VSS design engineer of the Design install Contractor. These issues are not meant to represent the full extent of VSS designer involvement, but instead are meant to convey basic functional requirements of the system. The Contractor shall furnish all design documents, equipment, materials, labor, supervision, installation, tools demonstration, training and equipment required to design, install and startup the video surveillance system as described in these specifications.

3.2 Cameras

1. Coordinate camera installation with City. Develop and submit mounting details for review and comment for every camera type and unique mounting. Manufacturer's standard details will not be acceptable. Details must include routing of conduit and cabling to the camera, camera mounting brackets, attachment and anchoring of camera, mounting height of camera.

3.3 Conduit

1. Coordinate underground conduit routing with City. Develop and submit details for review and comment for every unique subsurface installation. Details must include size of conduit, depth of conduit, removal of existing surface, backfill and repair of existing surface.
2. Coordinate surface mounted conduit routing and attachment with City. Develop and submit details for review and comment for every unique surface installation. Details must include size of conduit, attachment and anchoring of conduit, mounting height, painting of conduit to match adjacent surfaces.

3.4 Network and Recording Equipment

1. Develop for review and comment video recording calculations indicated the network video servers required to provide one year of recording.
2. Develop and submit for review and comment rack elevation details. Details must include sizes of equipment.
3. Develop for review and comment enlarged floor plans of the VSS room showing layout of equipment racks and wall mounted equipment. Include electrical distribution equipment located within the room.
4. Develop for review and comment network equipment power requirements. Coordinate requirements with electrical distribution system designer.

3.5 Conductors and Cables

6. Install CCTV system wiring in raceway unless otherwise noted. Install exposed conduits parallel and perpendicular to surfaces or exposed structural members, and

follow surface contours.

7. All CCTV system wiring shall be plenum rated when not installed in conduit.
8. Cabling installed outdoors or below grade shall be outdoor rated flooded cable with polyethylene outer jacket and pair insulation for all exposed outdoor and underground cable installations. Cable shall have an operation temperature range of -40 to 70 degrees Celsius. Cable shall meet the requirements of NEMA WC 63/66, ANSI/ICEA S-90-661.

3.6 Testing, Documentation and Training

1. Submit testing procedures for review and approval. Testing shall demonstrate the conformance of the system to the requirements of the drawings and specifications.
2. Upon completing installation of the system, align, adjust, and balance the system and perform complete pretesting. Determine, through pretesting, the conformance of the system to the requirements of the drawings and specifications. Correct deficiencies observed in pretesting. Replace or repair malfunctioning or damaged items, and retest until satisfactory performance and conditions are achieved.
3. Upon completion of pretesting, conduct acceptance testing in presence of Owner's Representative.
4. Contractor shall provide VSS training to City.
5. Contractor shall provide as-built documentation of the system.

END OF SECTION 17000

LEVEL 3 SAFETY SPECIFICATIONS

PART I – GENERAL

1.0 GENERAL HEALTH, SAFETY & ENVIRONMENTAL REQUIREMENTS

- A. The Contractor, its sub-tier contractors, suppliers, and employees have the obligation to comply with all Authority health, safety and environmental compliance department (HSEC) requirements, as well as all federal, state, and local regulations pertaining to scope of work, contracts or agreements with the Authority including California Department of Transportation safety requirements and special provisions. Additionally, manufacturer requirements are considered incorporated by reference as applicable to this scope of work.
- B. Observance of repeated unsafe acts or conditions, serious violation of health and safety standards, non-conformance of Authority health, safety and environmental compliance department (HSEC) requirements, or disregard for the intent of these safety specifications to protect people and property, by Contractor may be reason for termination for cause, of agreements with the Authority, at the sole discretion of the Authority.
- C. The Authority HSEC requirements, and references contained within this scope of work shall not be considered all-inclusive as to the hazards that might be encountered. Safe work practices shall be pre-planned and performed, and safe conditions shall be maintained during the course of this work scope.
- D. The Contractor shall specifically acknowledge that it has primary responsibility to prevent and correct all health, safety and environmental hazards for which it and its employees, or its sub-tier contractors (and their employees) are responsible. The Contractor shall further acknowledge their expertise in recognition and prevention of hazards in the operations for which they are responsible, that the Authority may not have such expertise, and is relying upon the Contractor for such expertise. The Authority retains the right to notify the Contractor of potential hazards and request the Contractor to evaluate and, as necessary, to eliminate those hazards.
- E. The Contractor shall provide all necessary tools, equipment, and related safety protective devices to execute the scope of work in compliance with the Authority's HSEC requirements, California Code of Regulations (CCR) Title 8 Standards, and recognized safe work practices.
- F. The Contractor shall instruct all its employees, and all associated sub-contractors under contract with the Contractor who work on Authority projects in the following; recognition, identification, and avoidance of unsafe acts and/or conditions applicable to its work.

PART II – SPECIFIC REQUIREMENTS

- 2.0 While these safety specifications are intended to promote safe work practices, Contractors are reminded of their obligation to comply with all federal (CFR 1926 & 1910 Standards), state (CCR Title 8 Standards), Local and municipal safety

regulations, and Authority health, safety and environmental requirements applicable to their project scope. Failure to comply with these standards may be cause for termination of scope, contracts, or agreements with the Authority, at the sole discretion of the Authority.

2.1 REQUIRED DOCUMENTATION / REPORTING REQUIREMENTS

The Contractor at a minimum shall provide the following documents to the Authority's Project Manager. Items A through E below shall be submitted and accepted by the Authority's Project Manager prior to Contractor mobilization. Item F upon each occurrence, and items G through K, contractor shall verify the following documentation is in place, prior to and during contract scope, and make available to the Authority upon request within 72 hours.

- A. Comprehensive Project Specific Safety Work Plan.
- B. Company Safety Manual.
- C. Certification of Compliance of Company's Injury Illness Prevention Program in accordance with California Code of Regulations (CCR) Title 8, Section 3203.
- D. Policy or Certification of Compliance Company's Substance Abuse Prevention Policy.
- E. The qualifications/certifications of assigned project competent person, and designated safety representative.
- F. Accident/Incident investigation report within 24 hours of event (immediate verbal notification to Authority Project Manager, followed by Written Report).

The required documentation shall be provided to the Authority's Project Manager upon request within 72 hours.

- G. A copy of Contractor weekly site safety inspection report with status of corrections.
- H. Contractors and sub-tier Contractors competent person list (submit to Authority Project Manager monthly).
- I. Contractors and sub-tier contractors qualified equipment operators list (submit to Project Manager monthly).
- J. A monthly report that includes number of workers on project, a list of sub-tier contractors, work hours (month, year to date, & project cumulative) of each contractor, labor designation, OSHA Recordable injuries and illnesses segregated by medical treatment cases, restricted workday cases, number of restricted days, lost workday cases, and number of lost work days, and Recordable incident rate.

K. TRAINING DOCUMENTATION

To ensure that each employee is qualified to perform their assigned work, when applicable to scope work, contractor shall verify training documentation is in place, prior to and during contract scope, and make available to the Authority upon request within 72 hours. Training may be required by the Authority or CCR Title 8 (Cal/OSHA), and required for activity on Authority's property and/or Authority controlled projects.

2.2 HAZARD COMMUNICATION (§5194)

- A. Contractor shall comply with CCR Title 8, Section 5194, Hazard Communication Standard. Prior to use on Authority property and/or project work areas Contractor shall provide the Authority Project Manager copies of MSDS for all applicable products.
- B. All chemicals including paint, solvents, detergents and similar substances shall comply with South Coast Air Quality Management District (SCAQMD) rules 103, 1113, and 1171.

2.3 DESIGNATED SAFETY REPRESENTATIVE

- A. Before beginning on-site activities, the Contractor shall designate an on-site Safety Representative. This person shall be a competent or qualified individual as defined by the Occupational, Safety, and Health Administration (OSHA), familiar with applicable CCR Title 8 Standards, and has the authority to affect changes in work procedures that may include schedule and budget impacts.
- B. The Contractor's safety representative for Authority projects are subject to Acceptance by the Authority Project Manager. All contact information of the safety representative (name, phone, fax and pager/cell phone number) shall be provided to the Authority Project Manager.
- C. QUALIFICATIONS – Safety Representative shall possess knowledge equal to CIH, CSP, CHST, OSHA 10 hour training, or similar professional standing. Rare circumstances may require an exception for these minimum qualification requirements, and shall be at the discretion of the Authority Project Manager and the Authority HSEC Department.
 - 1. Competent Person, means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
 - 2. Qualified Person, means one who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.
- D. Authority's Project Manager reserves the right to require the Contractor to provide one full-time qualified person as a safety representative whenever the

Contractor and its sub-tier contractors, suppliers, and vendors meets or exceeds 10 workers, or warranted by scope of work.

2.4 SITE SAFETY ORIENTATION

The Contractor shall conduct and document a project site safety orientation for all Contractor personnel, sub-tier contractors, suppliers, vendors, and new employees assigned to the project prior to performing any work on Authority projects. The safety orientation at a minimum shall include, as applicable, Personal Protection Equipment (PPE) requirements, eye protection, ANSI class 2 reflective vests, designated smoking, eating, and parking areas, traffic speed limit and routing, cell phone policy, and barricade requirements. When required by scope, additional orientation shall include fall protection, energy isolation/lock-out/tag-out (LOTO), confined space, hot work permit, security requirements, and similar project safety requirements.

2.5 INCIDENT NOTIFICATION AND INVESTIGATION

A. The Authority shall be promptly notified of any of the following types of incidents:

1. Damage to Authority property (or incidents involving third party property damage);
2. Reportable and/or Recordable injuries (as defined by the U. S. Occupational Safety and Health Administration);
3. Incidents impacting the environment, i.e. spills or releases on Authority property.

Notifications shall be made to Authority representatives, employees and/or agents. This includes incidents occurring to contractors, vendors, visitors, or members of the general public that arise from the performance of Authority contract work. A comprehensive investigation and written report shall be submitted to Authority's Project Manager within 24 hours of the incident.

G. A serious injury or incident may require a formal incident review at the discretion of the Authority's Project Manager. The incident review shall be conducted within 7 calendar days of the incident. The serious incident presentation shall include action taken for the welfare of the injured, a status report of the injured, causation factors leading to the incident, a root cause analysis, and a detailed recovery plan that identifies corrective actions to prevent a similar incident, and actions to enhance safety awareness.

H. A serious incident includes; An injury or illness to one or more employees, occurring in a place of employment or in connection with any employment, which requires inpatient hospitalization for a period in excess of twenty-four hours for other than medical observation, or in which an employee suffers the loss of any member of the body, or suffers any serious degree of physical disfigurement. In addition, property damage that causes disruption of

operations, delay of work schedule, causes a serious injury, causes third party or other property damage, or requires emergency services.

2.6 REGULAR INSPECTIONS & THIRD PARTY INSPECTIONS

- A. Frequent and regular inspections of the project jobsite shall be made by contractor safety representative, or another competent person designated by the Contractor. Unsafe acts and/or conditions noted during inspections shall be corrected immediately.
- B. The Contractor is advised that representatives of regulatory agencies (i.e., CAL-OSHA, EPA, SCAQMD, etc.), upon proper identification are entitled to access onto Authority property and projects. The Authority Project Manager shall be notified of their arrival as soon as possible when applicable for Contractor scope.

2.7 VEHICLE AND ROADWAY SAFETY REQUIREMENTS

- A. The Contractor shall ensure that all Contractor vehicles, including those of its sub-tier contractors, suppliers, vendors and employees are parked in designated parking areas, are identified by company name and/or logo, and comply with traffic routes, and posted traffic signs in areas other than the employee parking lots.
- B. Personal vehicles of the Contractor employees shall not be parked on the traveled way or shoulders including any section closed to public traffic, or areas of the community that may cause interference or complaints
- C. The Contractor shall comply with California Department of Transportation safety requirements and special provisions when working on highway projects.
- D. The Contractor shall conform to American Traffic Safety Services Association (Quality Standard for Work Zone Control Devices 1992).

2.8 LANGUAGE REQUIREMENTS

The Contractor for safety reasons shall ensure employees that do not read, or understand English, shall be within visual and hearing range of a bilingual supervisor or responsible designee at all times when on the Authority property or projects.

2.9 PERSONAL PROTECTIVE EQUIPMENT

Contractors, and all associated sub-tier contractors, vendors and suppliers are required to provide their own personal protective equipment (PPE), including eye, head, foot, and hand protection, respirators, reflective safety vests, and all other PPE required to perform their work safely on Authority projects.

- A. RESPIRATORS (§5144) - The required documentation for training and respirator use shall be provided to the Authority's Project Manager upon

request within 72 hours. All compliance documentation as required by CCR Title 8 Standard, Section 5144, Respiratory Protective Equipment.

- B. EYE PROTECTION – The Authority requires eye protection on construction projects and work areas that meet ANSI Z-87.1 Standards.

2.10 AERIAL DEVICES (§3648)

Aerial devices are defined in CCR Title 8 as any vehicle-mounted or self-propelled device, telescoping extensible or articulating, or both, which is primarily designed to position personnel. If aerial devices are to be used, the required documentation in CCR Title 8 Standard, Section 3648 shall be provided to the Authority's Project Manager upon request within 72 hours.

2.11 CONFINED SPACE ENTRY (§5157)

Before any employee will be allowed to enter a confined space, the required documentation as required by CCR Title 8 Standard, Section 5157 shall be provided to the Authority's Project Manager upon request within 72 hours.

- A. RECOMMENDED, a copy of the most recent calibration record for each air monitoring unit, 3-gas monitor or "sniffer" to be used by the Entry Supervisor prior to entering permit-required confined spaces.

2.12 CRANES

A. MOBILE CRANES (§5006)

Prior to using mobile cranes the Contractor shall provide items 1, 2 & 3 of the following documentation a minimum of seven (7) days prior to activity, and item 4 each day of activity.

1. Cranes require a submittal of the annual certification, and copy of the cranes most recent quarterly inspection
2. A copy of each crane operator's qualification (NCCCO, or equivalent) of company-authorized crane operators that have been properly trained in the equipment's use and limitations. Operator certification as required by CCR Title 8 Standard, Section 5006.1.
3. A rigging plan is required for all lifts. Critical lifts require an engineered plan designed by a registered professional engineer licensed in California. Critical lifts include lifts equal or over 10 tons, lift and transit of load, 85% or greater of rated capacity, multiple cranes for one lift, lifts over buildings, equipment or structures.
4. Documented daily crane inspection report.

B. OVERHEAD CRANES

Before using the Authority overhead cranes, each Contractor shall designate a limited number of employees to attend a training session on the use and limitations of overhead cranes with designated Authority personnel.

2.13 DEMOLITION OPERATIONS (§1734)

Before starting demolition activities the required documentation shall be provided to the Authority's Project Manager upon request within 72 hours. All compliance documentation as required by CCR Title 8 Standard, Article 31.

2.14 EXCAVATION OPERATIONS (§1541)

Before starting excavation activities more than 5 feet deep into which people shall enter, The required documentation shall be provided to the Authority's Project Manager upon request within 72 hours. All compliance documentation as required by CCR Title 8 Standard, Section 1541.

A. A copy of the Contractor's Excavation Permit.

2.15 FALL PROTECTION (§1669-1671)

The following standards are required when performing work on Authority property. The required documentation shall be provided to the Authority's Project Manager upon request within 72 hours.

A. Fall protection is required for workers exposed to falls in excess of six (6) feet.

B. When conventional fall protections methods are impractical or create a greater hazard, a written plan in conformance with CCR Title 8, Article 24, shall be submitted to the Authority a minimum of seven (7) days in advance of the scheduled activity.

2.16 FORKLIFTS, BACKHOES AND OTHER INDUSTRIAL TRACTORS (§3664)

CCR Title 8 defines backhoes as "industrial tractors", the required documentation shall be provided to the Authority's Project Manager upon request within 72 hours. All compliance documentation as required by CCR Title, Section 3664, Operating Rules.

A. A copy of each operator's certificate or a list, of company-authorized industrial tractor operators that have been properly trained in the equipment's use and limitations. Please state which equipment, and model each operator has been authorized to operate (i.e. forklifts, backhoe, bulldozer, front-end loader, etc.).

2.17 HIGH VOLTAGE ELECTRICAL OPERATIONS (§2700-2974)

Any work on electrical equipment defined by OSHA as high-voltage, at or above 600 volts requires specialized training certifications and personal protective equipment. Before any high-voltage work commences, the Authority Project

Manger must be notified and provide approval. The required documentation shall be provided to the Authority's Project Manager upon request within 72 hours.

- A. A list of the name of the company-designated high voltage Qualified Electrical Worker(s).

2.18 POWDER-ACTUATED TOOLS (§1685)

Before using tools such as "Hilti guns" or other powder-actuated tools the required documentation shall be provided to the Authority's Project Manager upon request within 72 hours.

- A. A copy of each qualified person's valid operator card.

2.19 SCAFFOLDS (§1635.1-1677)

Scaffold Erection shall be in compliance with CCR Title 8. The required documentation shall be provided to the Authority's Project Manager upon request within 72 hours. All compliance documentation as required by CCR Title 8, Sections 1635.1-1677.

- A. All scaffolds on Authority project shall be inspected by a competent person qualified for scaffolds in accordance with CCR Title 8 Standards.
- B. Contractor shall arrange for a third party inspection at least quarterly by a credentialed professional (insurance carrier, scaffold manufacturer representative, or similar) in addition to the contractors daily self inspections.
- C. A proper scaffold inspection and tagging system shall be maintained identifying compliance status (Example: Green/safe, Yellow/modified-fall protection required, Red/unsafe-do not use).
- D. Contractor shall have a fall protection plan that meets CCR Title 8 compliance for scaffold erectors, an erection/dismantling plan shall be submitted to Authority Project Manager for review prior to start of activity.
- E. Scaffold erection/dismantling shall install handrails beginning on the first level above ground erected, and erectors shall plan erection and dismantling in a manner to maximize handrail protection and minimize employees at unprotected areas.

2.20 WARNING SIGNS AND DEVICES

Signs, signals, and/or barricades shall be visible at all times when and where a hazard exists. Overhead tasks, roofing tasks, excavations, roadwork activity, demolition work, and other recognized hazards shall have guardrail protection, warning barricades, or similar protective measures acceptable to the Authority's Project Manager. Signs, signals, and/or barricades shall be removed when the hazard no longer exists.

END OF DOCUMENT

**SOUTHERN CALIFORNIA
REGIONAL RAIL
AUTHORITY**



**General Safety Regulations for Third Party
Construction
and Maintenance
Activity on SCRRA Member Agency Property**

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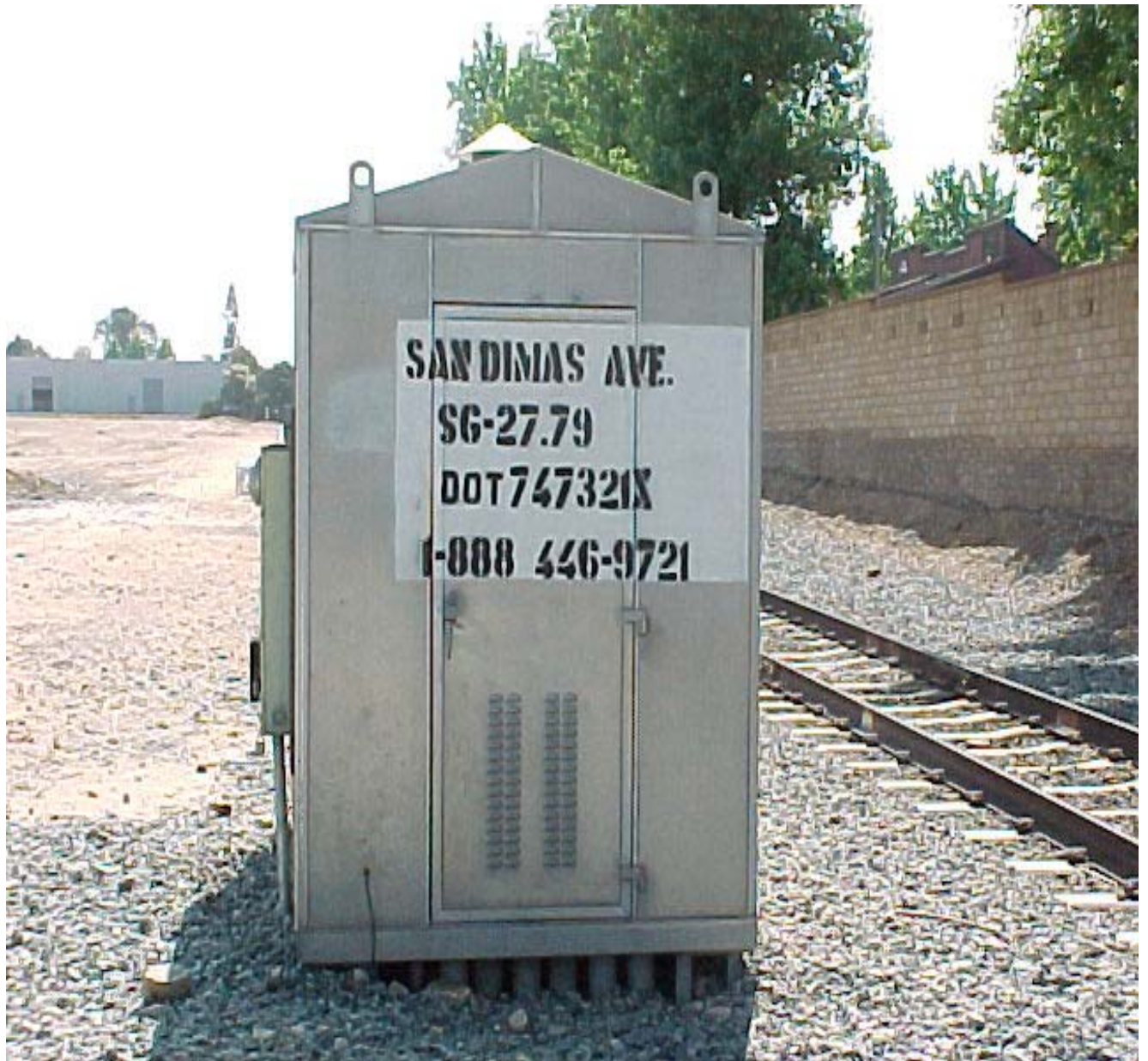


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All Contractors' employee(s), regardless of gender, whose duties are affected by them, must comply with these rules. They supersede all previous General Safety Regulations for Third Party Construction and Maintenance Activity on SCRRA Member Agency Property.

Acknowledgement of the receipt of GENERAL SAFETY REGULATIONS FOR THIRD PARTY CONSTRUCTION AND MAINTENANCE ACTIVITY ON SCRRA MEMBER AGENCY PROPERTY

Southern California Regional Rail Authority (SCRRA) is a joint powers authority of five county transportation authorities, organized under the provisions of the Joint Powers Act, Section 6500 et seq. of the California Government Code and Section 130255 of the California Public Utilities Code, that builds, maintains, and operates Metrolink commuter railway system within Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties.

The rules published herein are for the benefit of the third party contractor personnel and others who are involved in construction, maintenance or other activities while on SCRRA member agency property.

Employees must be knowledgeable of and obey these rules and instructions at all times. If in doubt as to the meaning, they must ask their supervisor for an explanation. **Violation of any of these safety rules subjects the Contractor to work stoppage until compliance is reached.** These rules coincide with the General Code of Operating Rules for Maintenance of Way Employees.

These rules and instructions supersede any previous safety rules and regulations governing third party contractors working on SCRRA member agency property. In addition, affected employees must observe the applicable portions of all other rules with any other applicable or subsequent instruction.

The intention of these safety rules is to advise third party contractor personnel working on SCRRA member agency property that **Safety is of the utmost importance.** For this reason, employees to whom these rules and regulations apply shall:

- Be furnished a copy of the “General Safety Regulations for Third Party Construction and Maintenance Activity on SCRRA Member Agency Property”.
- Be required to read and study these rules and regulations as furnished.
- Know and understand their application.
- Have a copy of these rules and regulations in their possession while on duty or on SCRRA member agency property.
- Immediately call to the attention of a supervisor and the SCRRA EIC any action not in compliance with these rules and regulations.
- Hold daily safety meetings and/or job briefings prior to beginning work; change in work and/or fouling the track.

All Third Party Contractor personnel working on or about SCRRA property shall attend a Safety class given by SCRRA prior to beginning work.

SCRRA management will regularly make observations and checks and advise the Training Manager or Supervisor to take the necessary action(s) to ensure compliance with the Safety Rules and Regulations.

Director of Engineering and Construction

This is to certify that I have been issued a copy of the “**General Safety Regulations for Third Party Construction and Maintenance Activity on SCRRA Member Agency Property**”.

Print Employee Name

Signature

Company

Date

GENERAL SAFETY REGULATIONS FOR THIRD PARTY CONSTRUCTION AND MAINTENANCE ACTIVITY ON SCRRRA MEMBER AGENCY PROPERTY

I. Overview

Southern California Regional Rail Authority (SCRRRA) is a joint powers authority of five county transportation authorities, organized under the provisions of the Joint Powers Act, Section 6500 et seq. of the California Government Code and Section 130255 of the California Public Utilities Code, that builds, maintains, and operates Metrolink commuter railway system within Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties.

The rules published herein are for the benefit of the third party contractor personnel and others who are involved in construction, maintenance or other activities while on SCRRRA member agency property.

Employees must be knowledgeable of and obey these rules and instructions at all times. If in doubt as to the meaning, they must ask their supervisor for an explanation. **Violation of any of these safety rules subjects the Contractor to work stoppage until compliance is reached.** These rules coincide with the General Code of Operating Rules for Maintenance of Way Employees.

These rules and instructions supersede any previous safety rules and regulations governing third party contractors working on SCRRRA member agency property. In addition, affected employees must observe the applicable portions of all other rules with any other applicable or subsequent instruction.

The intention of these safety rules is to advise third party contractor personnel working on SCRRRA member agency property that **Safety is of the utmost importance**. For this reason, employees to whom these rules and regulations apply shall:

- Be furnished a copy of the “General Safety Regulations for Third Party Construction and Maintenance Activity on SCRRRA Member Agency Property”.
- Be required to read and study these rules and regulations as furnished.
- Know and understand their application.
- Have a copy of these rules and regulations in their possession while on duty or on SCRRRA member agency property.
- Immediately call to the attention of a supervisor and the SCRRRA EIC any action not in compliance with these rules and regulations.
- Hold daily safety meetings and/or job briefings prior to beginning work; change in work and/or fouling the track.

All Third Party Contractor personnel working on or about SCRRRA property shall attend a Safety class given by SCRRRA prior to beginning work.

SCRRRA management will regularly make observations and checks and advise the Training Manager or Supervisor to take the necessary action(s) to ensure compliance with the Safety Rules and Regulations.

Director of Engineering and Construction

GENERAL SAFETY REGULATIONS FOR THIRD PARTY CONSTRUCTION AND MAINTENANCE ACTIVITY ON SCRRRA MEMBER AGENCY PROPERTY

II. RIGHT-OF-WAY ENCROACHMENT APPROVAL PROCEDURES.

Contact must be made by the Third Party Contractor with the appropriate SCRRRA representative who will cooperatively work with the Contractor to ensure that all appropriate documents, plans and agreements have been submitted, reviewed, approved and executed. These procedures can also be found by visiting the Metrolink website at www.metrolinktrains.com under Public Projects/Engineering.

A. REVIEW PROCESS

1. SCRRRA reviews engineering plans for compliance to technical and safety regulations, which include but are not limited to:
 - Location of work,
 - Horizontal and vertical clearances to tracks,
 - Shoring, jacking and false work,
 - Any issue determined to impact safety or railroad operations,
 - Maintainability,
 - Drainage impacts,
 - Access to member agency property,
 - Compatibility with future plans for rail improvements or use of rail roadway,
 - Existing underground railroad utilities (signal & communications lines).
2. Member Agency (MTA, OCTA, etc) Real Estate Department will review applications for use of the right-of way. Right of entry cannot be granted until both SCRRRA and member agency real estate approvals are complete.

B. APPROVAL PROCESS

1. The Contractor shall submit a right-of-way encroachment application with three (3) copies of applicable design or construction drawings. (Half size prints of 24"x36" drawings are generally acceptable.)
2. SCRRRA will provide written comments on all submittals.
3. If there are no comments requiring corrections, SCRRRA will advise the applicant in writing and will then advise the Contractor of the requirements to obtain the Right-of -Entry from SCRRRA.
4. Real Estate Agreement (Lease, License or Easement) from SCRRRA member agency.
5. The approved SCRRRA Right-of-Entry document consists of:
 - Right-of-Entry Agreement (Form 6) or,
 - Indemnification and Assumption of Liability (Form 5) or,
 - Agreement for House Moving (Form 4).

These form demonstrate approval by SCRRRA of the technical aspects of the work and the insurance and indemnification certifications.

In addition to the above form(s) the complete Right-of-Entry package will include reference to the approved drawings and to any unique instructions, specifications, MOU or other requirements of the SCRRA.

6. When all required agreements have been executed, (including Right-of-Entry) the Contractor must contact SCRRA Right-of-Way Engineer, or designee, to obtain a SCRRA EIC for the work to be done.

C. DOCUMENTATION AND IDENTIFICATION

All Third Party Contractors working on SCRRA property must have a Right of Entry or other approved document(s) with them at all times when on property. In addition, all individuals working or otherwise entering SCRRA member agency property must have:

- Approved picture identification
- Picture ID can be: current valid driver license, employer issued identification, etc.
- Must be SCRRA safety trained annually.
- Must display current safety trained sticker on their hard hat.

Please note that failure to have approved Right-of-Entry document, picture identification and SCRRA safety trained sticker, is grounds for removal from property.

III. GENERAL RESPONSIBILITIES AND SAFETY

A. Overview

These safety regulations govern your activities while on SCRRA member agency property regardless if on or off duty. Any work performed without obtaining proper authorization or compliance with these rules will permanently jeopardize your ability to be allowed on railroad right-of-way. These rules cover unique requirements and general workplace safety.

B. Employee In Charge

1. Duties and Responsibilities: On-Track Safety.

Work performed by any contractor is regulated by Title 49 Part 214 of the Code of Federal Regulations, as specified in SCRRA's General Code of Operating Rules (GCOR) and as administered by a SCRRA EIC. A SCRRA EIC is referred to as providing "Flag" protection against trains. SCRRA EICs have been trained and qualified in GCOR and the characteristics of the SCRRA territory. They will provide selected training, job briefings, and flag protection to assure both the contractor's safe work environment and the safe passage of trains. The SCRRA EIC has the authority to temporarily or permanently halt work and to remove contractor's employee(s) from the right-of-way in order to assure safe work. In all cases the contractor's employees must comply immediately with the instructions of the EIC.

2. Appeals: Right To Challenge

Contractor employees may, during the job briefing process, request clarification of the protection against trains being provided by the EIC. If the Contractor employee does not believe that the protection against trains is sufficient, the employee may, in good faith, challenge the EIC's form of protection and must remain clear of all tracks until the challenge is resolved. The EIC, Contractor Supervisor and the SCRRA Supervisor will resolve the challenge before work can begin.

3. Appeals: EIC Decisions

If the Contractor has concerns about instructions of the EIC, the Contractor and Contractor's employees are to immediately comply with the EIC's instructions. After employees are clear of tracks, Contractor may contact EIC's Supervisor to resolve concerns. In other words, "comply, then complain."

C. Job Briefings

1. Job briefings, as given by the EIC, are meetings of all who are or will be involved in a particular task or job at the same work site and are required prior to beginning work each day.
2. All information related to On-Track-Safety must be given in the job briefing to any worker who will enter railroad property. In addition to other safety issues, the minimum On-Track Safety information must include:
 - Designation of the Employee In Charge (EIC),
 - Type of track protection,
 - Time limits of the protection,
 - Track(s) that may be fouled,
 - Status of other track(s) at worksite,
 - A designated place of safety where workers clear for trains,
 - A designated assembly place in case of an emergency,
 - Designated work zones,
 - Specific job(s) to be done or equipment moves(s) to be made,
 - Responsibilities of each worker,
 - Method of notification (e.g. air horn) of approach of trains.Additional instructions may include an unusual or a specific reminder due to a hazardous condition or unusual practice.
3. Additional job briefings will be given when:
 - Working conditions or procedures change,
 - Workers arrive late or new workers enter working limits,
 - When the main track protection or time allowed to foul the track changes,
 - When visitor(s) enter the work site.

D. General Safety

1. **SAFETY IS PARAMOUNT AND ALWAYS TOP PRIORITY.** Safety takes precedence over deadlines, production schedules, and all other considerations. When uncertainty arises, take the safe course. **Remember accidents are a result of carelessness, unsafe practices, lack of attention or complacency. Any accident can be avoided.**
2. Using, possessing, or working under the influence of alcohol and /or drugs is not permitted while working anywhere on railroad property. This includes prescription drugs that cause drowsiness or otherwise impair one's ability to perform their assigned task.
3. The use or possession of unauthorized radio equipment is forbidden. Use of personal radios, portable tape cassette players or portable disc or record players while working is prohibited.
4. Horseplay, physical altercations, running or jumping are forbidden.
5. Firearms or other deadly weapons, including knives with a blade in excess of three (3) inches are prohibited on SCRRA member agency property.
6. Work on public streets, roadway crossings, and highway bridges should be performed with due regard for the convenience and safety of the public.
7. All employees must look in both directions before crossing any track or roadway.
8. Only authorized employees are allowed on engines, cars, cabooses, track cars or other railroad equipment.
9. When using cellular phones you must remain at least 25-feet from the nearest running rail

E. RIGHT-OF-WAY SAFETY

When on or near the tracks, the following precautions must be taken:

1. Keep clear of all tracks unless an SCRRA EIC protects them.
2. Before crossing tracks look both ways.
3. Expect movement of locomotives, railroad cars or on-track equipment in either direction at any time. (Remember: there could be an uncontrolled movement.)
4. Always step over the rails when crossing the tracks. Never walk, stand, or sit on the rails. The rail surface can be extremely slippery.

5. Stay away from track switches. The switch points can move unexpectedly and with enough force to crush ballast rock! Stand 150 feet from track switches when trains are approaching, make sure that you face approaching trains at all times. Stay away from any other railroad device you are not sure of.
6. When crossing the tracks in a group, walk single file.
7. Never stand between adjacent tracks in multiple track territory when a train is passing.
8. When crossing tracks occupied by standing engines, railroad cars, or on-track equipment workers must provide at least 20 feet clearance from the end of any piece of equipment.
9. Do not cross track(s) if there is less than 50 feet between trains, cars, or equipment.
10. Employees must not cross tracks by going underneath, over or through cars, engines or on-track equipment.
11. Work is not allowed within 50 feet of the track centerline while trains are passing the work site. Always stand as far back as possible to prevent injury from flying debris or loose rigging. Face the direction from which the trains or on-track equipment is approaching
12. Visually inspect all passing trains. If you detect a dangerous condition, inform your EIC immediately. The EIC will warn the train crew to stop their train. If the train does not stop immediately, the EIC will notify the train dispatcher.
13. Never remain in a vehicle that is within 20 feet of the nearest running rail of a passing train. Stop your vehicle on the approach of a moving train. Move vehicles away from the track at least 20 feet or park the vehicles away from the tracks and, if safety permits, get out of your vehicle and walk to a safe location away from the tracks.
14. Equipment must be stopped while train is passing through your working limits. No movement will be allowed toward an approaching train that would cause the engineer to believe the track was going to be fouled.
15. Trains are traveling faster than they appear and are relatively quiet. Moving trains are to be expected on any track at anytime from either direction. Engines can push or pull a train. Employees should not rely on past experiences to determine train schedule. Train's schedules are unpredictable and trains are subject to schedule changes or delays.

F. PERSONAL PROTECTIVE EQUIPMENT

All employees working on SCRRRA member agency property will be required to wear the following protective equipment (except in offices and motor vehicles):

1. Hard hats that meet the requirements of ANSI Z89.1 or ANSI Z89.2, as specified by CAL/OSHA and /or Fed/OSHA must be worn. Metallic hard hats shall not be worn on any SCRRRA project
2. Eye protection that meets the requirements of ANSI Z87.1 is required on SCRRRA property. Eye protection with side shields which meets the requirements of ANSI Z89.1 is required for those employees or contractors falling under 49CFR 214.
3. Orange vest with reflective tape for night work must be worn. An orange T-shirt, sweatshirt, jacket may be worn during the day.
4. Footwear that provides ankle support has soles thick enough to give good traction and to withstand punctures from sharp objects and is a lace type boots at least 8" high with a defined heel. Steel toe boots are required for those employees who fall under 49 CFR 214 and are recommended for all.
5. Proper attire when working on SCRRRA member agency's right-of-way includes:
 - Waist length shirts, with sleeves and ankle-length pants.
 - Clothing must not interfere with vision or hearing, and must allow free use of hands and feet.
 - Loose or ragged clothing must not be worn at anytime.
 - Neckties, or loose jewelry must not be worn while operating or working on machinery.
 - Shoes constructed without a defined heel, open toed, lounging or jogging-type shoes, unlaced shoes or unbuckled overshoes, badly worn with loose sole shoes must not be worn on SCRRRA property.

G. HOUSE KEEPING

1. CPUC General Order 260 and 118 require that lateral and vertical clearance around a railroad track and a safe walkway parallel to both sides of the track be maintained. The EIC will observe construction and material storage activities and may direct contractor's employee(s) to correct conditions not in compliance with the CPUC General Orders.
2. Keeping premises, tools and equipment in a clean and orderly condition is essential to safety and is the responsibility of the contract's employee(s).
3. Material must not be stored closer than 20 feet of the closest rail.

4. Contractor's employee(s) must be aware of areas with spilled oil or grease and apply sand or an equivalent (approved) material to minimize slipping hazards.
5. Contractor must remove all unused materials and debris created by the construction project.
6. Clear site immediately of all tripping hazards such as wire, loose material, etc.
7. Flammable materials, petroleum products, paints, caustics, acids and solvents must be stored in designated areas and in containers which are provided for them.
8. Contractor is responsible for restoring the property to its previous condition or a condition of betterment, making repairs to drainage facilities, fences, gates, or buildings damaged or removed by the Contractor or its forces.

H. ELECTRICAL

1. Electric wires must be considered live at all times. Employees shall not depend on the insulation of wires for their safety. Employees must keep away from all overhead and underground wires they may come in contact with.
2. When using power cords, they must be placed 2-inches below base of rail.
3. Employees must not place any metal objects across rails.
4. Signal cables/conduits may be encountered or damaged while undergoing excavations along the right-of-way. Call the signal desk prior to excavations to have cable and conduits located. (888.446.9720)
5. Excavation is not permitted until:
 - Dig Alert (USA) – identification is complete,
 - SCRRRA Signals Department has identified signal conduits.

I. HAND TOOLS

1. Employees must inspect tools, machinery and equipment for defects before using.
2. Employees must use all tools and appliances in the manner intended and for the purpose designed and only those employees qualified and authorized to operate equipment and machinery can do so in the performance of duty.
3. Tools and appliances must not be altered from their intended use.

J. EMERGENCY SITUATIONS

1. When persons are injured, everything possible must be done for their care.
2. If equipment was involved in the accident it must be examined to make sure the equipment was in proper working order. Any defective tools, machinery and equipment is prohibited from use.
3. Report to the EIC by the first available means of communication any accidents, personal injuries, defects in tracks, bridges, signals utilities or communication facilities or any unusual condition that may affect the safe operation of the Railroad.
4. Employees must exercise care to prevent injury to themselves or others. They must be alert and attentive at all times when performing their work and plan their work to avoid injury.
5. In case of personal injury, loss of life, or damage to property, the Foreman (Supervisor or others in charge) must immediately secure the names, addresses and occupation of all persons involved, including all persons at the scene regardless of whether these persons admit knowing anything about the accident. This information should be included in reports covering each occurrence.
6. If an accident causes personal injury or death, all tools, machinery and other equipment involved, including premises where such accident occurred must be promptly inspected by the Foreman or by other competent inspectors. Tools, equipment and machinery must be secured until Foreman, Safety Officer, or other competent inspector has completed inspection. A report of such inspection, stating the conditions found and names of persons making the inspection, must be promptly forwarded to SCRRA and the supervising officer of person making the inspection.
7. Information concerning accidents or personal injuries occurring to persons who are not employees, must not be given to anyone except authorized representatives of the SCRRA or an officer of the law.
8. Prior to starting work the EIC will have available on site, a list of these emergency phone numbers:
 - Ambulance,
 - Police,
 - SCRRA's and/or its operating contractors representative,
 - Metrolink Operation Center (MOC),
 - Signals emergency number.

K. RAILROAD FLAGGING/PROTECTION

The Contractor's Foremen working on or about the tracks are responsible for the safety of their crews and must guard their crews against impending danger or injury. They shall bear in mind that **Safety is the first and most important consideration**. Contractor's Foreman must be advised of train, engine and on-track equipment movements and that protection has been furnished as required by On-Track Safety rules.

The contractor must request and arrange for flagging services from SCRRA's authorized representatives five (5) working days before the work begins for the following conditions:

1. A railroad flagger is required for your protection any time you are on SCRRA member agency property. On-track protection will be provided by a flagger when the following work is being performed, but not limited to:
 - When any part of equipment is standing or being operated within 20 feet of the nearest track or has the potential to foul the track,
 - When any erection or construction activities are in progress within such limits, regardless of elevation above or below track,
 - For any excavation in or around the tracks that, in the opinion of SCRRA or its member agency representative, may subject the tracks or other property to settlement or movement,
 - For any clearing, grubbing, or demolition in proximity to the property which, in the opinion of SCRRA, may endanger the property or operation,
 - For any street construction and maintenance activities requiring temporary work area traffic control. All activities that change the flow of traffic across a railroad crossing, e.g., traffic cones, etc., must be protected. SCRRA must approve traffic control plans before work can begin.
2. A job briefing must be conducted prior to beginning any work and/or anyone fouling the track. A new job briefing will be conducted each time conditions of the protection change and/or new personnel arrive. Everyone must have a working knowledge of:
 - The limits and time of the protection,
 - Location of where everyone is to clear for all trains or on-track equipment.
3. Good communication between the contractor and the EIC is imperative! The EIC is responsible for clearing all workers and/or equipment near or on the main track.

L. WORK EQUIPMENT

1. Equipment operators must be properly trained and qualified before operating equipment on railroad right-of-way, and must operate equipment in a safe, skillful and reliable manner.
2. Operators are responsible for knowing that their machines are in safe, operating condition before starting and must assure themselves that proper protection is being afforded their operations. Operators must make a running brake test before actual operations of work equipment when operating on the main track. The appropriate equipment must be used and operated for each task as per the manufacturer's instructions.
3. Do not engage in reckless operations of vehicles while on the railroad's right-of-way. The speed limit on the right-of-way is not more than 15mph and may be lowered if conditions warrant. Offenders may be asked to leave the railroad's right-of-way by any railroad employee or representative observing unsafe behavior.
4. Audible backup warning devices are required on all heavy equipment.
5. Operator must make sure that the equipment manual is on their machine.
6. While trains, engines or on-track equipment are passing:
 - Machines must be stopped,
 - Vehicles must be stopped,
 - Brakes must be set,
 - Buckets and shovels or clams must be lowered to rest,
 - Machines without buckets must have their load line tightened to prevent movement.
7. Operators are responsible for seeing that unauthorized persons are not carried on equipment and must know that persons qualified to be on equipment are properly positioned before movement is made. Do not transport passengers in truck beds or on heavy equipment.
8. Use of equipment such as loaders and backhoes to raise or lower people is strictly forbidden.
9. Operators of equipment must know the locations of overhead and underground utilities. Operator must have a clear understanding of how to protect utility lines before operating machinery.
10. NEVER move equipment across the tracks except at established road crossings. Tracked or rubber tire equipment will require the supervision of a SCRRA EIC any time railroad tracks are crossed.
11. NEVER move tracked or rubber tire equipment across railroad bridges or through tunnels.

12. When equipment is left unattended:

- Motor must be stopped and ignition must be locked,
- Parking or hand brake must be securely set,
- Keys must be in possession of operator or authorized employee,
- Wheels must be securely blocked on grades,
- Equipment secured in a highly visible area.

IV. DEFINITIONS

Ballast – The rock that supports the track and ties. This rock is groomed to keep the track in place, drain water away from the track, and to distribute the weight of trains to surrounding soil. DO NOT DISTURB OR PLACE SOIL, SAND, OR DEBRIS ON IT.

California Public Utilities Commission (CPUC) - The State Agency that administers certain rule regulations of the railroad industry.

Center Line of Track – An imaginary line, that runs down the center of the two rails of a track.

Confined Space – A space that is large enough and so configured that an individual can enter and perform assigned work. The space has limited or restricted means for entry or exit and is not designed for continuous individual occupancy. This would include but not limited to tanks, vessels, silos, storage bins, hoppers, vaults and pits.

Contractor – Any Third Party Contractor's authorized worker, other than a railroad employee, who is working on railroad property.

Derailment - A potentially dangerous condition, whereby rail cars or engines leave the tracks.

Directional Bore – A method that controls the direction of boring and eliminates the need for multiple conventional bore pits allowing for a longer bore length than conventional methods. Directional bores utilizes pressurized bentonite to auger and slurry to backfill the bore. Excess bentonite must be contained.

Employee-In-Charge (EIC or SCRRRA EIC) – A roadway worker designated to provide On-Track-Protection for one or more work groups.

Engine – A unit propelled by any form of energy or more than one of these units operated from a single control typically referred to as a locomotive.

Excavation – Any removal of earth. Any excavation and/or shoring, no matter how large or small requires prior approval from SCRRRA Engineer.

Fall Protection – A requirement of the FRA and SCRRRA, that ensures training and protection for work performed on any bridge structure that is at a height of 10 feet or more above water or ground and/or while working at a height of 10 feet or more.

Fill – A section of earth built up to support the railroad's track structure.

Foul the ballast – Anything that contaminates the ballast section of the roadbed and inhibits the ballast from supporting the track, draining water, or suppressing weed growth. In most cases ballast is fouled by excavated material being placed on the ballast.

Foul the track – Placement of an individual or a piece of equipment in such a proximity to a track that the individual or equipment could be struck by a moving train or track equipment. SCRRA fouling distance is defined as within 20 feet from the nearest running rail.

General Code of Operating Rules (GCOR) – The rules that govern the use of railroad tracks by trains, maintenance employees, contractors and others.

Hy-rail Vehicle - This vehicle is considered on-track equipment. It is typically driven on highways, but has specially manufactured attachments that allow the vehicle to travel on railroad tracks. They are viewed as trains and only authorized railroad personnel may operate them.

Industry Track – A secondary track designated to allow access to industries along the main track.

Job Site – Any area where work is performed, where materials and equipment are stored, or which employees access during the project.

Mainline (main track) – The primary track used by trains. Some of the routes have more than one track.

Member Agency- is that specific county transportation Member Agency(s), whose Property is directly affected by the Contractor's actions. The five county transportation Member Agencies are the Los Angeles County Metropolitan Transportation Authority, the Orange County Transportation Authority, the Riverside County Transportation Commission, the San Bernardino Associated Governments, and the Ventura County Transportation Commission.

Mileposts – Field indicators of approximate distance from a specific point the Railroad system used for approximate locations of Railroad facilities. They are not to be used for field surveys.

MOU- is a memorandum of understanding.

On-Track Equipment - Maintenance of Way machines such as track cars, Hy-rail vehicles, tampers, ballast regulators, etc. which may be operated on the track.

On-Track Safety - A set of safety rules, developed and promulgated by the FRA, that must be complied with to work on or near railroad property. Specific training and obedience to these rules is a requirement of the FRA and is managed by SCRRA for its' member agencies. The GCOR embodies the FRA On-Track Safety Rules. When SCRRA rules are more stringent those rules shall apply. Loss of your privilege to work on SCRRA member agency right-of-way can result from the violation of these rules.

Roadbed - A graded area beneath and on either side of the track structure that provides support and drainage of the track.

Roadway Worker – Any employee of the railroad or any contractor on a railroad right-of-way, whose duties include inspection, construction, maintenance or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities or roadway machinery on or near track, or with the potential of fouling a track.

Safety Training - A session conducted by a qualified SCRRRA representative at which On-Track Safety and Railroad Rules and Regulations are discussed.

Safety Sticker - An emblem that indicates completion of Railroad Training. The non transferable “Safety Trained” emblem is to be placed on each individual’s hard hat so it is visible when working on the Railroad’s Right-of Way.

Shoring – Methods and materials used to prevent the collapse of the earthen walls of excavations. Shoring in close proximity to the tracks requires design pursuant to Cooper E-80 loading. In all cases, shoring drawings require approval prior to construction.

Siding – A secondary track used for the passing of trains on single-track routes.

Signal - Railroad facility used to inform Railroad personnel of track conditions.

Spur Track – A secondary track designated to allow access to industries along the main track.

Tracks – The rails, ties, and ballast that composes the traveling surface by trains.

Track Structure – The rails, ties ballast, and roadbed that compose the traveling surface used by trains.

Trains – One or more engines coupled together, with or without cars, which use the Railroad track.

Train Movement – Any motion of engines and/or cars over the railroad tracks.

Yard- A collection of secondary tracks used to store equipment (cars, engines, maintenance machines, etc.), for assembling or disassembling trains, and/or conducting other railroad operations.

Suggested for your use.

RAILROAD EMERGENCY RESPONSE FORM

Location (Subdivision & Milepost)_____

Closest City and Directions from it to the job site or nearest crossing if job site is inaccessible from roadway. _____

Location of the closest hospital and directions from job site. Or nearest crossing if job site is inaccessible from roadway_____

Nearest emergency Services:

Ambulance: _____

Fire _____

Police _____

Railroad Contacts:

Name _____

Nextel _____

Emergency Numbers

Grade Crossing Hot Line 888.446.9721

Manager, Maintenance-of-Way (Cell phone) 213.792.7904

Public Projects Right-of-Way Engineer 213.452.0256

Cell phone 213.305.8508

Southern California Regional Rail Authority

Third Party Contractor

Zero Tolerance Safety Rules

- All third party contractors must have a Right-of-Entry or approved document to work on SCRRA right-of-way.
- Drinking alcoholic beverages, being under the influence of any drug or medication or having them in your possession at any time on SCRRA property will not be tolerated.
- All third party contractor personnel must have been SCRRA Roadway Worker Safety trained and have a valid SCRRA safety sticker on their hard hat or they will not be allowed on SCRRA property.
- All third party contractor personnel must wear a hard hat, safety glasses, orange vest with reflectorized tape long pants, and lace type boot not less than 8" high.
- **WORKING ON OR AROUND TRACKS:**
 1. All work within 20 feet of the nearest running rail must be coordinated with the Right-of-Way Engineer so that positive protection can be provided for personnel.
 2. Do not foul the track with any piece of equipment without a flagger and positive protection.
- Do not stand on the track or within 10 feet of the centerline of the track. The track is not an observation platform.
- Do not leave open holes or trenches unattended.
- Do not disturb or foul the ballast at any time.

VIOLATION OF ANY OF THESE RULES WILL RESULT IN REMOVAL FROM THE PROPERTY AND MAY CAUSE THE JOB TO BE SHUT DOWN.

TEMPORARY RIGHT-OF-ENTRY AGREEMENT

SCRRA FORM NO. 6

SCRRA File No.	
SCRRA Project/Task No.	
Subdivision	
Mile Post	
Thomas Guide Location	

This Temporary Right-of-Entry Agreement ("Agreement") is between the Southern California Regional Rail Authority (hereinafter referred to as "SCRRA") and _____ (hereinafter referred to as "Contractor"). This Agreement is for entry upon, over and under SCRRA and Member Agency right of way ("Right of Way") at or near _____ in the City of _____ or in the Unincorporated County of _____ (as such location is more specifically identified above) for the purpose of _____ (as shown on attached drawings).

1. Definitions

- A. Contractor is an individual, firm, partnership or corporation or combination thereof, private, municipal or public, including joint ventures, which are referred to throughout this document by singular number and masculine gender. For purposes of this agreement, Contractor also includes any subcontractor, supplier, agent or other individual entering the Right of Way during performance of work.
- B. Indemnitees are SCRRA, Member Agencies and Operating Railroad and their respective officers, commissioners, employees, agents, successors and assigns.
- C. Operating Railroad is/are that specific passenger or freight-related railroad company(s) validly operating on SCRRA and Member Agency track(s). Operating Railroads are any combination(s) of the SCRRA (METROLINK), the National Railroad Passenger Corporation (AMTRAK), the Union Pacific Railroad Company (UPRR) and the BNSF Railway Company.
- D. Property and Right of Way is defined herein to mean the real and/or personal property of SCRRA and/or Member Agencies.
- E. SCRRA is a five-county joint powers authority, created pursuant to State of California Public Utilities Code Section 130255 and California Government Code Section 6500 et seq., to build and operate the "Metrolink" commuter train system in the five-county area on rail rights-of-ways owned by the Member Agencies. The five-county Member Agencies are comprised of the following: Los Angeles County Metropolitan Transportation Authority (MTA), Ventura County Transportation Commission (VCTC), Orange County Transportation Authority (OCTA), San Bernardino Associated Governments (SANBAG), and Riverside County Transportation Commission (RCTC).
- F. SCRRA Railroad Employee (SRE) is a Southern California Regional Rail Authority employee or

contractor (SCRRA General Code of Operating Rules and Territory Qualified) providing warning to Public Agency or Contractor personnel of approaching trains or on track equipment and who has the authority to halt work and to remove personnel from the Right of Way to assure safe work.

- G. SCRRA Safety Training Officer is a Southern California Regional Rail Authority employee (SCRRA General Code of Operating Rules qualified) authorized by the SCRRA Director of Engineering and Construction to provide Contractor training.

2. **References**

When working on the Right of Way, the Contractor must comply with the rules and regulations contained in the current editions of the following documents which are "references" incorporated in this document as if they were set out in full in this paragraph. The Contractor, by its signature on this Agreement, acknowledges receipt of these documents and agrees to abide by said rules and regulations at all times when on the Right of Way.

- A. Rules and Requirements for Construction on Railway Property, SCRRA Form No. 37.
- B. General Safety Regulations for Third Party Construction and Maintenance Activity on SCRRA Member Agency Right of Way.

3. **Entry Onto Right of Way**

No verbal approvals will be granted. The Contractor shall not enter onto the Right of Way unless Contractor has arranged for SCRRA safety training as well as protective services (SCRRA Railroad Employee (SRE) and/or other protective services to be determined by SCRRA) and has paid all charges and fees. A fully executed copy this Form 6 must be in the possession of the contractor at the job site and must be produced by Contractor upon request by SCRRA, a law enforcement officer or Member Agency's representative. If said Agreement is not produced, SCRRA has the right to suspend work in the Right of Way until Contractor demonstrates possession of Agreement at the job site.

4. **Termination of Agreement**

SCRRA or Member Agency reserves the right to terminate or revoke this temporary Agreement at any time upon two hours notice; however, in the event of an unsafe condition on the Right of Way, SCRRA shall have the right to terminate this Agreement immediately, without any advanced notice. Unless subsequently modified, extended, terminated or revoked by SCRRA, this temporary Agreement shall extend until the work authorized hereunder is completed or accepted by SCRRA. In any event, however, the Agreement shall be automatically terminated if or when the insurance that the Contractor is required to maintain hereunder lapses or expires. The Contractor agrees to return the Property to a condition substantially the same as before construction, including replacement, repair, or reinstallation of railroad signs and property. Railroad signs include but are not limited to "No Trespassing", "Speed Limit", "Milepost", "Whistle", "Station Stop" and "Fiber Optics". The Contractor agrees to notify SCRRA, in writing and orally, when use of the Right of Way or work is completed (see Section 18 of this Agreement for SCRRA contact). Under no circumstances shall the temporary right of entry provided for under this Agreement be construed as granting to the Contractor or its Subcontractors and agents any right, title or interest of any kind or character in, on or about any Property.

At the request of SCRRA or Member Agency, Contractor shall remove from the Right of Way any employee or other individual who has not completed safety training or otherwise fails to conform to the instructions of SCRRA's or Member Agency's representative in connection with work on the Right of Way. Any right of Contractor to enter upon the Right of Way shall be suspended until such request of SCRRA or Member Agency is met. Contractors shall defend, indemnify and hold harmless SCRRA and Member Agency against any claim arising from the removal of any such employee or other individual

from the Right of Way.

5. **Indemnification**

Contractor, on behalf of itself and its employees, subcontractors, agents, successors and assigns, agrees to indemnify, defend, by counsel satisfactory to SCRRA and Member Agency, and hold harmless "Indemnitees", and each of them to the maximum extent allowed by law, from and against all loss, liability, claims, demands, suits, liens, claims of lien, damages (including incidental consequential damages), costs and expenses (including, without limitation, any fines, penalties, judgments, actual litigation expenses and experts' and actual attorneys' fees), that are incurred by or asserted against Indemnitees arising out of or connected in any manner with (i) the acts or omissions of the Contractor or its officers, directors, affiliates, subcontractors or agents or anyone directly or indirectly employed by them or for whose acts the foregoing persons are liable (collectively, "Personnel") in connection with or arising from the presence upon or performance of activities by the Contractor or its Personnel with respect to the Right of Way, (ii) bodily and/or personal injury or death of any person (including without limitation employees of Indemnitees) or damage to or loss of use of Property resulting from such acts or omissions of the Contractor or its Personnel or (iii) non-performance or breach by Contractor or its Personnel of any term or condition of this Agreement, in each case whether occurring during the term of this Agreement or thereafter.

The foregoing indemnity shall be effective regardless of any negligence (whether active, passive, derivative, joint, concurring or comparative) on the part of Indemnitees, unless caused by the sole negligence or willful misconduct of Indemnitees, and is in addition to any other rights or remedies, which Indemnitees may have under the law or under this Agreement.

Claims against the Indemnitees by the Contractor or its Personnel shall not limit the Contractor's indemnification obligations hereunder in any way, whether or not such claims against Indemnitees may result in any limitation of the amount or type of damages, compensation or benefits payable by or for the Contractor or its Personnel under workers' compensation acts, disability benefit acts or other employee benefit acts or insurance.

The provisions of this section shall survive the termination or expiration of this Agreement.

6. **Assumption of Liability**

To the maximum extent allowed by law, the Contractor releases Indemnitees from and assumes any and all risk of loss, damage or injury of any kind to any person or property, including without limitation, the Property and/or Right of Way and any other property of or under the control or custody of, the Contractor or its personnel in connection with any acts undertaken under or in connection with this Agreement. The Contractor's assumption of risk shall include, without limitation, loss or damage caused by defects in any structure or improvements (including easement, lease or license agreements for other existing improvements and utilities) on the Right of Way, accident or fire or other casualty on the Right of Way or electrical discharge, noise or vibration resulting from SCRRA, Member Agency and Operating Railroad transit operations on or near the Right of Way and any other persons or companies employed, retained or engaged by SCRRA or Member Agency. The Contractor, on behalf of itself and its Personnel (as defined in Section 5, "Indemnification") as a material part of the consideration for this Agreement, hereby waives all claims and demands against the Indemnitees for any such loss, damage or injury of the Contractor and/or its Personnel. The Contractor waives the benefit of California Civil Code Section 1542, which provides as follows: "A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

The provisions of this Section shall survive the termination or expiration of this Agreement.

7. **Insurance**

The Contractor, at its sole cost and expense, shall obtain and maintain in full force and effect during the term of this Agreement insurance as required by SCRRA or Member Agency in the amounts, coverage, and terms and conditions specified, and issued by insurance companies as described on Exhibit "A". SCRRA or Member Agency reserve the right, throughout the term of this Agreement, to review and change the amount and type of insurance coverage it requires in connection with this Agreement. Prior to entering the Right of Way or performing any work or maintenance on the Right of Way, the Contractor shall furnish SCRRA with insurance endorsements or certificates in the form of Exhibit "B", evidencing the existence, amounts and coverage of the insurance and signed by a person authorized by the insurer to bind coverage on its behalf. In most instances, SCRRA and Member Agency do not allow self-insurance; however, if the Contractor can demonstrate assets and retention funds meeting SCRRA and Member Agency self-insurance requirements, SCRRA and Member Agency may in SCRRA's sole and absolute discretion permit the Contractor to self-insure. The right to self-insure with respect to any coverage required hereunder may be granted or revoked at the sole and absolute discretion of SCRRA or any Member Agency. SCRRA or Member Agency shall not be liable for the payment of any premiums or assessments for insurance required to be maintained by the Contractor under this Agreement. Contractor affirms that all subcontractors covered by this Agreement are insured to the same limits required of the Contractor or included in Contractor's policy.

Prior to the expiration of any policy, the Contractor shall furnish SCRRA with certificates of renewal or "binders" thereof. Each certificate shall expressly state that such policies shall not be cancelable or otherwise subject to modification except after thirty (30) days prior written notice to SCRRA and Member Agency.

8. **No Assignment**

The Contractor shall not assign this Agreement or any right hereunder without SCRRA's and Member Agency's prior written consent.

9. **Compliance by Contractor**

The Contractor shall take all steps necessary to assure that its subcontractors comply with the terms and conditions of this Agreement and applicable laws and regulations. The Contractor shall assure that no lien is placed against the Right of Way arising from performance of work hereunder by Contractor or any subcontractor, and in the event of such a lien, Contractor shall immediately remove or cause to be removed such lien.

10. **Safety Orientation Class**

The Contractor and his subcontractors shall be required to attend a SCRRA Safety Orientation Class prior to receiving permission to enter the Right of Way.

11. **SCRRA Safety and Protective Services**

The Contractor must request and arrange for on track safety protection satisfactory to SCRRA in the following circumstances:

- A. When Contractor's personnel or equipment encroach onto the Right of Way unless specifically exempted by SCRRA due to physical separation between tracks and Contractor's operation;
- B. When any part of any equipment is standing or being operated within or adjacent to the Right of Way or when any erection or construction activities are in progress within such limits;

- C. For any excavation within the railroad Right of Way;
- D. For any clearing, grubbing, grading or blasting in proximity to the Right of Way which, in the opinion of SCRRA or Member Agency's representative, may endanger the Right of Way or operations;
- E. For any street construction and maintenance activities, located within the Right of Way or in the vicinity of an at-grade crossing, requiring temporary work area traffic control;
- F. For any work activity on or adjacent to the Right of Way as required by the Maintenance of Way (MOW) office.

The Contractor shall notify the SCRRA Training Officer (909-859-4113) to schedule mandatory safety training. Upon completion of safety training, the Contractor shall notify the SCRRA Maintenance of Way office (909-392-4506) a minimum of five (5) working days prior to beginning work on the Right of Way and secure any protection SCRRA deems necessary. This prior notification does not guarantee the availability of on track safety protection for the proposed date of construction. To the full extent of Paragraph 5 above (Indemnification), Contractor agrees to indemnify SCRRA against any and all claims resulting from sickness or any other absence.

12. **Reimbursement of Costs and Expenditures**

The Contractor agrees to reimburse SCRRA or Member Agency for all cost and expense incurred by SCRRA or Member Agency in connection with said work, including without limitation the expense of engineering plan review, staff costs to process approvals and agreements, safety training, furnishing an SCRRA Railroad Employee and protective services as SCRRA deems necessary. Contractor agrees to reimburse SCRRA for all construction related services including but not limited to installation and removal of falsework beneath tracks, restoration of railroad roadbed and tracks, installation of appropriate protective devices, temporary and permanent repairs of signal or communication equipment, restoration of the Right of Way to a condition satisfactory to SCRRA's and Member Agency's representative.

The Contractor agrees to reimburse SCRRA or Member Agency actual cost and expense reasonably incurred for all services and work performed in connection with said work, including SCRRA's allocated overhead and fringe benefits. SCRRA will charge the Contractor four hours minimum for the mandatory safety training class and for other services four hours or less in duration. SCRRA will charge the Contractor for eight hours minimum if the Contractor cancels SCRRA services after SCRRA Railroad Employee or SCRRA Safety Training Officer is on site on the day of the appointment.

The Contractor also agrees to reimburse SCRRA, Member Agency and/or Operating Railroad for any and all cost and expense incurred as a result of Contractor's work which may result in (i) unscheduled delay to the trains or interference in any manner with the operation of trains, (ii) unscheduled disruption to normal train operation, (iii) unreasonable inconvenience to the public or private user of the system, (iv) loss of revenue and (v) alternative method of transportation for passengers. SCRRA will submit final bills to the Contractor for cost incurred.

Prior to commencement of work, the Contractor shall deposit with SCRRA the sum of _____ dollars (\$) _____ representing the estimated expense to be incurred by SCRRA and Member Agency in connection with said work. As the work progresses, SCRRA may require additional progress payments as the scope of work changes or becomes clearer. SCRRA may discontinue services to Contractor pending receipt of progress payments. The deposit and progress payments shall be applied to SCRRA's and Member Agency's actual costs and expenditures. The Contractor shall be responsible to pay any amount exceeding the above payments upon receipt of notice or invoice by SCRRA. SCRRA shall exercise its best efforts to provide final invoicing to Contractor within 90 days following completion of the work; however, Contractor acknowledges that it shall be responsible for payment of all expenses

incurred by SCRRA and Member Agency in connection with the work even if the final invoicing is provided to Contractor thereafter. Upon satisfactory completion of all work, any payments in excess of SCRRA's and Member Agency's costs and expenditures shall be returned to the Contractor within reasonable time.

If there is no amount indicated in the blank space provided above for the deposit to be made by the Contractor, and if prior SCRRA written approval is obtained, in lieu of such deposit, Contractor shall cause surety bond to be executed by a reliable surety acceptable to SCRRA and Member Agency, conditioned upon the faithful performance of the provisions of this Agreement.

13. **Temporary Traffic Control**

Temporary traffic control shall be used when a maintenance or construction activity is located on the Right of Way or when the activity is located in the vicinity of a highway-rail grade crossing, which could result in queuing of vehicles across the railroad tracks. Refer to SCRRA's "Temporary Traffic Control Guidelines" for further information on definitions, referenced standards, traffic control plans, submittals, traffic control elements and responsibility/authority for temporary traffic control at highway-rail grade crossings. The guidelines provide acceptable alternatives and procedures, which prescribe appropriate temporary traffic control measures at highway-rail grade crossings and are available on the SCRRA website. ([http://www.metrolinktrains.com/Public Projects Site/PDF Files/Temporary Traffic Control Guidelines.pdf](http://www.metrolinktrains.com/Public%20Projects%20Site/PDF%20Files/Temporary%20Traffic%20Control%20Guidelines.pdf))

14. **Environmental Health and Safety Plan**

Contractor shall immediately notify SCRRA and the appropriate regulatory agency (ies) of any spill, release, discharge or discovery of any hazardous material or contaminants in, on or under the Property. After providing such notice to SCRRA and the appropriate regulatory agency (ies), any contaminated soils or hazardous materials which are spilled, released, discharged or discovered by the Contractor, shall be promptly removed and disposed of by Contractor in accordance with all the applicable laws at Contractor's sole cost and expense. To the extent preexisting contamination or hazardous material, which was not caused or contributed to by Contractor, is discovered or unearthed by Contractor, Contractor shall only be obligated by this provision to removing and disposing of that portion of the contaminated soils or hazardous materials that are unearthed or otherwise disturbed during Contractor's operations. Prior to entry onto the Property, Contractor (s) performing trenching, excavations or soil borings may be required by SCRRA to submit a "Hazardous Materials Work Plan." If required, said plan shall include Contractor's site-specific health and safety plan and any other information that SCRRA may require. Contractor shall ensure that all documentation for transportation or disposal of contaminated soils or hazardous materials is prepared in the Contractor's name only and that neither SCRRA nor Member Agency shall have any responsibility or liability therefor. Contractor shall defend and indemnify SCRRA for any spill, release or discharge of contaminants or hazardous materials by Contractor in connection with activities hereunder in accordance with Section 5 Indemnification (Page 2 of 12)

15. **Warranty for Plan Review**

Review and or approval of the plans and calculations by SCRRA shall not relieve the Contractor of responsibility for full compliance with contract requirements, correctness of design drawings and details, proper fabrication and construction techniques and coordination with other government and private permitting agencies, nor shall such review or approval by SCRRA in any way relieve Contractor from, or otherwise modify, Contractors' indemnity obligations (Section 5) or assumption of liability obligations (Section 6). Execution of this right of entry does not imply design warranty or responsible charge on the part of SCRRA engineering employees. The parties expressly agree that SCRRA makes no warranty of any kind and assumes no responsibility therefore.

16. **Miscellaneous**

Wherever the context of this document so requires, words used in the masculine gender shall include the feminine and neuter genders; words used in the neuter gender shall include the masculine and feminine genders; words in the singular shall include the plural; and words in the plural shall include the singular.

17. **Emergency Telephone Numbers**

The Contractor must immediately contact SCRRA in case of accidents, personal injury, defect in track, bridge or signals or any unusual condition that may affect the safe operation of the railroads. The following are SCRRA's emergency numbers:

Signal emergencies and grade crossing problems	(888) 446-9721
Metrolink Chief Dispatcher	(909) 593-0661 or (888) 446-9715
Metrolink Sheriff's Dispatcher	(323) 563-5280
Signal and Communications Cable Location	(909) 392-8476

18. **Notices**

Except as otherwise provided in this agreement, all notices, statements, demands, approvals or other communications to be given under or pursuant to this agreement will be in writing, addressed to the parties at their respective addresses as provided below and will be delivered in person or by certified or registered mail, postage paid or by telegraph or cable, charges pre-paid.

SCRRA: Manager Public Projects
Southern California Regional Rail Authority (SCRRA)
700 South Flower Street, Suite 2600
Los Angeles, CA 90017-4101
Attn: Right of Way Engineer
213/452-0353

Contractor: Contractor's address is shown below.

19. **California Law**

This agreement shall be construed and interpreted in accordance with and governed by the laws of the State of California.

The Contractor hereby agrees to the terms as set forth in this Agreement and hereby acknowledges receipt of this Agreement and of the insurance certificate forms (Exhibits A & B) herein provided.

(Name of Contractor)

(Signature)

(Address)

(Print Name)

(Title)

(Telephone)

(Contractor's State License No.)

(Fax)

Receipt of the foregoing agreement and certificated of insurance furnished by the Contractor are hereby acknowledged on this _____ day of _____ 20 _____.

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY

By: _____
Right of Way Engineer

By: _____
Manager Public Projects

[Approved As To Form By Legal Counsel]

EXHIBIT "A"
INSURANCE REQUIREMENTS FOR RIGHT OF ENTRY AGREEMENTS

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 by the Contractor, his agents, representatives, employees or subcontractors.

1. **Minimum Scope of Insurance**

Coverage shall be at least as broad as:

- ☒ Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).
- ☒ Insurance Services Office form No. CA 0001 (Ed. 1/87) covering Auto. Liability, code 1(any auto).
- ☒ Worker's Compensation insurance as required by the State of CA. & Employer's Liability Insurance.
- ☐ Course of Construction insurance form providing coverage for "all risks" of loss.
- ☐ Property insurance against all risks of loss to any tenant improvements or betterment.
- ☐ Contractor's Pollution Liability

2. **Minimum Limits of Insurance**

Contractor shall maintain limits no less than:

- ☒ General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and Property damage.
- ☒ If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- ☒ Automobile Liability: \$1,000,000 per accident for bodily injury and Property damage.
- ☒ Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
- ☐ Course of Construction: Completed value of the project.
- ☐ Property Insurance: Full replacement cost with no coinsurance penalty provision.
- ☐ Contractor's Pollution Liability: \$1,000,000 per occurrence/\$2,000,000 annual aggregate

3. **Certificate Holder/Additional Insured**

Certificate holder and/or insured will be the following:

Southern California Regional Rail Authority (SCRRA)

Additionally Insured will be the following:

Los Angeles County Metropolitan Trans. Auth. (MTA)
Orange County Transportation Authority (OCTA)
Riverside County Transportation Commission (RCTC)
San Bernardino Associated Government (SANBAG)
Ventura County Transportation Commission (VCTC)

Burlington Northern Santa Fe Corp. (BNSF)
Union Pacific Railroad Company (UPRR)
National Railroad Passenger Corporation (Amtrak)

4. **Railroad Protective Liability Insurance**

- ☒ Railroad Protective Liability Insurance

The Contractor shall provide, with respect to the operations they or any of their subcontractors perform on the Property, Railroad Protective Liability Insurance, AAR-AASHTO (ISO/RIMA) in the name of the railroads and Member Agencies shown in Section 3 above.

The policy shall have limits of liability of not less than **\$2 million per occurrence**, combined single limit, for coverage and for losses arising out of injury to or death of all persons and for physical loss or damage to or destruction of Property, including the loss of use thereof. A **\$6 million annual aggregate** shall apply.

If coverage is provided on the London claims-made form, the following provisions shall apply:

- A. The limits of liability shall be not less than \$3 million per occurrence, combined single limit. A \$9 million aggregate may apply.
- B. Declarations item 6, extended claims made date, shall allow an extended claims made period no shorter than the length of the original policy period plus one year.
- C. If equivalent or better, wording is not contained in the policy form, the following endorsement must be included:

It is agreed that "physical damage to Property" means direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment, railroad tracks, roadbed, catenaries, signals, bridges or buildings.

For certain low-hazard activity, Contractor may request that the SCRRA and Member Agency waive the requirement to provide the Railroad Protective Liability Insurance. If the exposure to the track is physically separated by a building, floor or a continuous fence (no thoroughfares) and the employees of the Contractor are explicitly notified that they are not permitted to have any contact with the track, the Railroad Protective Liability Insurance requirement may be waived by SCRRA's Manager Public Projects or his/her designated representative.

5. **Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by SCRRA and Member Agency. At the option of SCRRA, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects SCRRA and Member Agency, its officials and employees or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

6. **Other Insurance Provisions**

The General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions:

- A. SCRRA and Member Agency, its subsidiaries, officials and employees are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; 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 SCRRA and Member Agency, its subsidiaries, officials and employees.
- B. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects SCRRA and Member Agency, its subsidiaries, officials and employees. Any insurance or self-insurance maintained by SCRRA and Member Agency, its subsidiaries, officials and employees shall be excess of the Contractor's insurance and shall not contribute with it.
- C. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to SCRRA and Member Agency, its subsidiaries, officials and employees.
- D. The Contractor 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.

- E. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to SCRRA and/or Member Agency.

Course of Construction policies shall contain the following provisions:

- A. SCRRA and Member Agency shall be named as loss payee.
- B. The insurer shall waive all rights subrogation against SCRRA and Member Agency.

7. **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise approved by SCRRA and Member Agency.

8. **Verification of Coverage**

Contractor shall furnish SCRRA with original endorsements effecting coverage required by this clause. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by SCRRA. All endorsements are to be received and approved by SCRRA before work commences. As an alternative to SCRRA's forms, the Contractor's insurer may provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications.

9. **Subcontractors**

Contractor shall include all subcontractors as insured under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated herein.

10. **Train Services**

Approximate daily train traffic is _____ passenger trains and _____ freight trains.

11. **Submittal**

The original insurance policy (s) shall be submitted to:

Manager Public Projects
Southern California Regional Rail Authority (SCRRA)
700 South Flower Street, Suite 2600
Los Angeles, CA 90017-4101
Attn: Right of Way Engineer
213/452-0353

EXHIBIT "B"
RAILROAD PROTECTIVE LIABILITY POLICY
DECLARATION

POLICY

Insurance Company: _____

Policy Number: _____

Policy Period: _____

From: _____

To: _____

12:01am Standard time at location

CERTIFICATE HOLDER AND ADDITIONALLY INSURED

Certificate Holder/Insured:

Southern California Regional Rail Authority (SCRRA)

700 South Flower Street, Suite 2600, Los Angeles, CA 90017-4101

Additionally Insured:

Los Angeles County Metropolitan Transportation Authority (MTA)

Orange County Transportation Authority (OCTA)

Riverside County Transportation Commission (RCTC)

San Bernardino Associated Governments (SANBAG)

Ventura County Transportation Commission (VCTC)

Burlington Northern Santa Fe Corporation (BNSF)

Union Pacific Railroad Company (UPRR)

National Railroad Passenger Corporation (Amtrak)

LIMITS OF INSURANCE

Aggregate Limit \$6,000,000

Each Occurrence Limit

\$2,000,000

DESCRIPTION OF WORK AND JOB LOCATION(S)

NAME AND ADDRESS OF DESIGNATED CONTRACTOR

NAME AND ADDRESS OF INVOLVED GOVERNMENT AUTHORITY OR OTHER CONTRACTING PARTY

PREMIUM

Contract Cost _____

Premium Base _____

Rate per 1,000 of _____

Advance Premium _____

FORM OF ENDORSEMENT

Title

Number

COUNTERSIGNATURE

Countersigned by _____
(Authorized Representative)

Date _____

EXHIBIT "B"

CERTIFICATE OF INSURANCE Southern California Regional Rail Authority (SCRRA)				ISSUE DATE (MM/DD/YY)	
PRODUCER		THIS CERTIFICATE OF INSURANCE IS NOT AN INSURANCE POLICY AND DOES NOT AMEND, EXTEND OR ALTER THIS COVERAGE AFFORDED BY THE POLICY BELOW.			
INSURED		COMPANIES AFFORDING COVERAGE COMPANY A LETTER COMPANY B LETTER COMPANY C LETTER COMPANY D LETTER COMPANY E LETTER			
COVERAGES THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENTS, 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.					
CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	GENERAL LIABILITY ☐ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS MADE ☐ OCCUR. ☐ OWNER'S & CONTRACTOR'S PROT. ☐ OTHER _____				GENERAL AGGREGATE PRODUCTS-COMP/OP AGG. \$ PERSONAL & ADV. INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE (Any one fire) \$ MED. EXPENSE \$ (Any one person)
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ ALL OWNED AUTO ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ☐ NON-OWNED AUTOS ☐ GARAGE LIABILITY				COMBINED SINGLE LIMIT \$ BODILY INJURY \$ (Per person) BODILY INJURY \$ (Per accident) PROPERTY DAMAGE \$
	EXCESS LIABILITY ☐ UMBRELLA FORM ☐ OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$
	PROPERTY INSURANCE ☐ COURSE OF CONSTRU CTION				AMOUNT OF INSURANCE \$
	WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY				STATUARY LIMITS EACH ACCIDENT \$ DISEASE -POLICY LIMIT \$ DISEASE -EACH EMPLOYEE \$
DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS					
THE FOLLOWING PROVISIONS APPLY: 1. None of the above-described policies will be canceled, limited in scope of coverage or nonrenewed until after 30 days' written notice has been given to SCRRA at the address indicated below. 2. As respects operations of the named insured performed on behalf of SCRRA, the following are added as additional insured on all liability insurance policies listed above: SCRRA, its Member Agencies, Operating Railroads, its subsidiaries, officials and employees. 3. It is agreed that any insurance of selfinsurance maintained by SCRRA will apply in excess of and not contribute with, the insurance described above. 4. SCRRA is named a loss payee on the property insurance policies described above, if any. 5. All rights of subrogation under the property insurance policy listed above have been waived against SCRRA. 6. Any failure by the insured to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to SCRRA, its Member Agencies, its subsidiaries, officials and employees. 7. The worker's compensation insurer named above, if any, agrees to waive all rights of subrogation against SCRRA for injuries to employees of the insured resulting from work for SCRRA or use of Member Agencies premises or facilities.					
CERTIFICATE HOLDER Southern California Regional Rail Authority (SCRRA) 700 South Flower St., Suite 2600, Los Angeles, CA 90017-4101 ADDITIONAL INSURED MTA, OCTA, RCTC, SANBAG, VCTC BNSF, UPRR, AMTRAK				AUTHORIZED REPRESENTATIVE SIGNATURE _____ TITLE _____ PHONE NO. _____	

**RULES AND REQUIREMENTS FOR
CONSTRUCTION ON RAILWAY PROPERTY****SCRRA FORM NO. 37****1.0 GENERAL****1.1 Purpose**

The rules and requirements were adopted to protect the Southern California Regional Rail Authority's (SCRRA) operations, including the proper manner of protecting the tracks, signals, fiber optic cables, pipe lines, other Property, and tenants or licensees upon, adjacent to, across (under, and/or over), and along SCRRA and Member Agency Property during the construction and/or maintenance activities on or adjacent to Railway Property.

1.2 Definitions

- 1.2.1 **SCRRA**, is a five-county joint powers authority, created pursuant to State of California Public Utilities Code Section 130255 and California Government Code Section 6500 et seq., to build, maintain and operate the "Metrolink" commuter train system. The five-county member agencies are comprised of the following: Los Angeles County Metropolitan Transportation Authority (MTA), Ventura County Transportation Commission (VCTC), Orange County Transportation Authority (OCTA), San Bernardino Associated Governments (SANBAG), and Riverside County Transportation Commission (RCTC). SCRRA builds, operates and maintains commuter rail system in the five-county area on rail rights-of-ways owned by the member agencies.
- 1.2.2 **MEMBER AGENCY**, is that specific county transportation entity, whose Property is directly affected by the Contractor's actions herein. The five county transportation Member Agencies are the Los Angeles County Metropolitan Transportation Authority, the Orange County Transportation Authority, the Riverside County Transportation Commission, the San Bernardino Associated Governments, and the Ventura County Transportation Commission.
- 1.2.3 **PROPERTY**, is defined herein to mean the real and/or personal Property of SCRRA or Member Agency(s).
- 1.2.4 **CONTRACTOR**, is an individual, firm, third party, partnership or corporation, or combination thereof, private, municipal or public, including joint ventures, retained by SCRRA or another public entity to provide construction or maintenance services which may impact SCRRA Property and who is referred to throughout this document by singular number and masculine gender.
- 1.2.5 **PUBLIC AGENCY**, is defined to mean (i) the federal government and any agencies, departments or subdivisions thereof, and (ii) the State of California or any other state, and any county, city, city and county, district, public authority, public agency, joint powers, municipal corporation, or any other political subdivision or public corporation therein.

1.3 Submittal

- 1.3.1 Prior to authorization to begin, any work which may infringe on SCRRA or Member Agency Property, the Contractor shall furnish SCRRA with three sets of, working drawings showing details of construction affecting the tracks and Property, specifications, falsework plans, falsework removal plans, sheeting and shoring plans, cribbing plans not included in the contract, shop drawings, traffic control plans, and other incidents not detailed in plans. The Contractor shall also furnish three sets of calculations of any falsework, sheeting and shoring, or cribbing which are to be located over, under or adjacent to tracks. Construction details affecting the tracks and the Property, and not included in the contract plans shall be submitted to SCRRA for review and approval. Plans, installation procedures and calculations shall be signed and stamped by a registered Professional Engineer licensed to practice in the State of California.
- 1.3.2 The Contractor shall not begin any work until notified by SCRRA that such plans have been approved. Approval of the plans and calculations by SCRRA shall not relieve the Contractor of responsibility for full compliance with contract requirements, for correctness of dimensions, clearances and material quantities, for proper design of details, for proper fabrication and construction techniques, for proper coordination with other trades, and for providing all devices required for safe and satisfactory construction and operation.

1.4 References

- 1.4.1 When working on the Property, the Contractor must comply with the rules and regulations contained in the current editions of the following documents which are "references" incorporated in this document as if they were set in full in this paragraph. The Contractor agrees to abide by said rules and regulations at all times when on the Property.
- A. Right-of-Entry agreement, SCRRA Form No. 6. The Right-of-Entry agreement is an agreement between SCRRA and the Contractor that permits the Contractor, under certain agreed upon conditions, to encroach upon, adjacent to, across (under and/or over), and along SCRRA or Member Agency Property.
 - B. General Safety Regulations for Construction/Maintenance Activity on Railway Property. The Regulations are for the benefit of employees of the Contractors and others who are involved in construction, maintenance or other activities on the right-of-way. The Regulations were developed in the interest of safety and protection of trains, passengers or personnel of SCRRA, Member Agency, Operating Railroad(s), and the employees of the Contractor.
 - C. California Public Utilities Commission (CPUC) General Orders.
 - D. American Railway Engineering and Maintenance-of-Way Association (AREMA), Manual for Railway Engineering.
 - E. SCRRA Engineering Standards.

2.0 PROTECTION OF SCRRA OPERATIONS

2.1 Coordination

- 2.1.1 The Contractor shall cooperate with SCRRA where work is over or under the tracks, or

within the limits of the Property, so as to expedite the work and to avoid interference with the operation of railway equipment.

- 2.1.2 The Contractor's ability to enter the Property is subject to the absolute right of SCRRA or Member Agency to cause the Contractor's work on the Property to cease if, in the opinion of SCRRA or Member Agency, Contractor's activities create hazard to the Property, employees, and/or operations.
- 2.1.3 It is expected that SCRRA and Member Agency will cooperate to the extent possible with the Contractor such that the work may be handled and performed in an efficient manner, but the Contractor shall have no claim whatsoever for any type of damages or for extra or additional compensation in the event its work is delayed.
- 2.1.4 The Contractor shall take protective measures as are necessary to keep the Property, including track ballast, free of sand, debris, and other foreign objects and materials resulting from its operations. Any damage to the Property resulting from Contractor's operations will be repaired or replaced by SCRRA or Member Agency at their option and the cost of such repairs or replacement shall be recovered from the Contractor.
- 2.1.5 The Contractor will perform the construction or maintenance work in such a manner and at such times as shall not endanger or interfere with SCRRA or Member Agency's operations, including relation to the proper manner of protecting the tracks, signals, fiber optic cables, pipe lines, other Property, and tenants or licensees at or in the vicinity of the work during the period of construction.
- 2.1.6 All forecasts of train traffic and schedules are approximate. The train schedule shall be used for planning purposes only and shall not be used for scheduling actual work around the railroad tracks. SCRRA reserves the right to run as many trains as practical on any track at any time. The operation of the trains will be at sole discretion of SCRRA or Member Agency. The Contractor's work may be halted or delayed whenever necessary to accommodate train service.

2.2 Safety and Protective Services

- 2.2.1 The Contractor must request and arrange for a flag person, inspector and/or other protective services from SCRRA authorized representative for the following conditions:
 - A. When Contractor's personnel and equipment(s) are within twenty (20) feet of the nearest rail.
 - B. When any part of any equipment is standing or being operated within or adjacent to the Property, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.
 - C. For any excavation below the elevation of track sub-grade if, in the opinion of SCRRA or Member Agency's representative, track or other Property may be subject to settlement or movement.
 - D. For any clearing, grubbing, grading, or blasting in proximity to the Property which, in the opinion of SCRRA or Member Agency's representative, may endanger the Property or operations.
 - E. For any street construction and maintenance activities, located within the right-of-

way or in the vicinity of the highway-rail grade crossing, requiring temporary work area traffic control, which may affect or create unsafe conditions for employees, public, trains and vehicles.

- 2.2.2 SCRRA will furnish such personnel or other protective services when, in the opinion of SCRRA's representative, the Property, including, but not limited to, tracks, buildings, signals, wire lines or pipelines, may be endangered. The Contractor agrees to reimburse SCRRA or Member Agencies for all cost and expense incurred by SCRRA or Member Agency in connection with the safety and protective services.

2.3 Time of Work

The Contractor will work daylight hours only and no more than five (5) weekdays (not on Saturday, Sunday or legal holidays) per week. Variations from this schedule must have approval of SCRRA's authorized representative.

3.0 DESIGN

3.1 Clearances

- 3.1.1 The Contractor shall also abide by the following minimum clearances during the course of construction:

15'-0" Horizontally from centerline of track (including temporary falsework)

22'-6" Vertically above top of rail

21'-6" Vertically above top of rail (Temporary Falsework Clearance - requires prior CPUC approval by resolution or decision and SCRRA approval)

27'-0" Vertically above top of rail for electric wires carrying less than 750 volts

28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts

30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts

34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts

- 3.1.2 Any infringement on the above clearances or walkways due to the Contractor's operations shall be submitted to SCRRA and to the Public Agency and shall not be undertaken until approved in writing by SCRRA, and until the Public Agency has obtained any necessary authorization from CPUC for the infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending SCRRA approval, and/or CPUC authorization.

- 3.1.3 In the case of impaired vertical clearance above top of rail, SCRRA shall have the option of installing tell-tales or other protective devices SCRRA deems necessary (at Contractor's cost) for protection of SCRRA or Member Agency trainmen or rail traffic.

3.2 Support and Shoring Systems

- 3.2.1 SCRRA permission is required for installation of support and shoring systems on the right-of-way.

- 3.2.2 The support and shoring systems shall be in accordance with the American Association of State Highway and Transportation Officials (AASHTO), AREMA and Caltrans requirements. The support and shoring system shall be designed to support all lateral forces caused by the earth, railroad and other surcharge loads. The railroad loading to be applied is a Cooper's E-80 loading.
- 3.2.3 When excavation is within the sheet piling zone [the area between the vertical line offset 8'-6" from the nearest track centerline and a one part horizontal to one part vertical (1:1) projection, beginning at a point located 8'-6" from the nearest track centerline and 18 inches below the bottom of the rail of the nearest track and sloping down and away from the nearest track], interlocking steel sheet piling driven prior to excavation, must be used to protect track stability. Steel sheet piling shall be abandoned in place, except for the top three (3) feet, which shall be removed, backfilled.
- 3.2.4 When excavation is within the shoring zone [the area between a one part horizontal to one part vertical (1:1) projection, beginning at a point located 8'-6" from the nearest track centerline and 18 inches below the bottom of the rail of the nearest track and sloping down and away from the nearest track and a one and half part horizontal to one part vertical (1.5:1) projection, beginning at a point located 11'-0" from the nearest track centerline and 18 inches below the bottom of the rail of the nearest track and sloping down and away from the nearest track], soldier pile system with lagging elements which are placed as excavation proceeds can be used.
- 3.2.5 When excavation is within the excavation zone [the area that is located beyond a one and half part horizontal to one part vertical (1.5:1) projection, beginning at a point located 11'-0" from the nearest track centerline and 18 inches below the bottom of the rail of the nearest track and sloping down and away from the nearest track], shoring is not required and sloping system is allowed.
- 3.2.6 Tiebacks or any other excavation support mechanisms that are installed under the track structure shall be at least four (4) feet clear below top of the rail.
- 3.2.7 Support and shoring system drawings shall include plan view indicating the extent of all proposed shoring relative to the nearest track centerline; cross-sections of all proposed shoring cut perpendicular to the track and indicating track location with equal horizontal and vertical scale; details of all structural members, connections and embedment depths and impacted facilities including construction access locations, ditches mitigated measures. Vertical dimensions shall be relative to the top of rail and horizontal dimensions shall be relative to the nearest track centerline.
- 3.2.8 Prior to commencing the excavation of a trench five (5) feet in depth or greater and into which a person will be required to descend, the Contractor shall first obtain a permit to do so from the Division of Industrial Safety. Any excavation adjacent to track shall be covered and ramped and provided with standard handrails. Handrails shall be in accordance with the State of California Occupational Safety and Health Standards (CAL/OSHA) and CPUC General Order No. 26-D.
- 3.2.9 The face of all jacking and receiving pits shall be located a minimum of 25 feet from the center line of the nearest track, measured at right angle to the track, unless otherwise approved by SCRRA. The use of trench boxes may be permitted for jacking and receiving pits, however, trench boxes are not acceptable within the sheet piling zone.

- 3.2.10 Footing for all piers, columns, walls, or other facilities shall be located and designed so that any temporary support and shoring system for support of adjacent track or tracks during construction shall not be closer than ten (10) feet from the centerline of the nearest track.

4.0 CONSTRUCTION

4.1 Excavation and Backfill

- 4.1.1 The Contractor shall compact all backfill to 90 percent of maximum standard density as determined by AASHTO T-99 or ASTM D-698. Where it becomes necessary to excavate beyond the normal lines of excavation to remove boulders or other interfering objects, the voids remaining after such materials are removed shall be back-filled with suitable material approved by SCRRA. The material obtained from the project excavation may be suitable for use as fill or backfill at the discretion of SCRRA. Any excess material must be disposed of by hauling off-site. The excess material must not be piled-up or scattered on the right-of-way.
- 4.1.2 The Contractor shall perform excavation and grading so that the finished surfaces are in uniform planes with no abrupt breaks in surface and having positive drainage on the right-of-way away from the track structure.

4.2 Utilities

- 4.2.1 The Contractor is responsible for the location and protection of any and all surface, sub-surface, and overhead utilities and structures. Approval of the project and the Right-of-Entry agreement by SCRRA and/or Member Agency does not constitute a representation as to the accuracy or completeness of location or the existence or non-existence of any utilities or structures within the limits of this project. The Contractor shall notify the appropriate regional notification center [Underground Service Alert (DIGALERT) at (800)-227-2600], railway companies, and utility companies prior to performing any excavation close to any underground pipeline, conduit, duct, wire, or other structure. SCRRA is not a member of DIGALERT, it is, therefore, necessary to call SCRRA signal department at (909) 392-8476 to mark signal and communication cables and conduits. In case of signal emergencies or grade crossing problems, the Contractor shall call SCRRA's 24-hour signal emergency number (888) 446-9721.
- 4.2.2 There are oil, gas, and fiber optic lines running along most of the right-of-ways. Damage to any of the lines will create dangerous and hazardous situations.

4.3 Hazardous and Toxic Materials

- 4.3.1 The Contractor shall operate and maintain the Property in compliance with all, and shall not cause or permit the Property to be in violation of any federal, state or local environmental, health and/or safety-related laws, regulations, standards, decisions of the courts, permits or permit conditions, currently existing or as amended or adopted in the future which are or become applicable to the Contractor or SCRRA or Member Agency Property. Except for hazardous materials expressly approved by SCRRA and Member Agency in writing, the Contractor shall not cause or permit, or allow the Contractor personnel to cause or permit, or any hazardous materials to be brought upon, stored, used, generated, treated or disposed of on or about the Property. Any hazardous

materials on the site shall be stored, used, generated and disposed of in accordance with all applicable environmental laws.

- 4.3.2 In addition, in the event of any release on or contamination of the Property, the Contractor, at its sole expense, shall promptly notify SCRRA of any spill, release, or discharge of any hazardous material and take all actions necessary to clean up the affected Property (including SCRRA or Member Agency Property and all affected adjacent Property -whether or not owned by SCRRA or Member Agency) and to return the affected Property to the condition existing prior to such release or contamination, to the satisfaction of SCRRA and Member Agency and any governmental authorities having jurisdiction thereover.
- 4.3.3 Prior to commencing any hazardous materials work (testing for or removal of hazardous materials), the Contractor shall obtain the prior written approval of SCRRA of the proposed work plan, which plan shall include site-specific health and safety plan for such hazardous materials work, and any parties, other than employees, who will be entering upon the Property or performing work. The Contractor shall not perform any hazardous materials work on the Property which is not set forth in the approved hazardous materials work plan and shall not make any changes to the approved plan without prior written consent, which consent may be withheld in SCRRA's sole and absolute discretion.
- 4.3.4 The Contractor shall furnish copies of: (i) all results (including all technical data and laboratory reports) of any sampling and analytical tests performed in the course of the hazardous materials work; (ii) all evaluations, technical data and analyses, reports (draft and final), and recommendations relating to environmental conditions in, on, or under the Property; and (iii) all plans, permits, registrations, approvals, orders, notices (including notices of violation and notices to comply), inquiries, directives, guidelines, standards, reports (routine and non-routine), and other correspondence submitted to, or received from, any federal, state, or local governmental authority regarding the hazardous materials work.
- 4.3.5 The Contractor shall ensure that all documentation for transportation or disposal of hazardous materials from the Property shall be prepared and executed in Contractor's name only and SCRRA or Member Agency shall not have any responsibility or liability therefore. Prior to transportation or disposal of any wastes or hazardous materials from the Property, the Contractor shall provide SCRRA with copies of all draft transportation and disposal documentation required for the transportation and disposal of such waste or hazardous materials, and immediately subsequent to the transportation or disposal of any wastes or hazardous materials from the Property, provide SCRRA with copies of all final and complete transportation and disposal documentation required for the transportation and disposal of such waste or hazardous materials. (Such transportation and disposal documentation shall include, but not be limited to any and all hazardous waste manifests).
- 4.3.6 To the extent permitted by law and unless the Contractor has obtained the prior written consent of SCRRA (which SCRRA may withhold in its sole and absolute discretion), the Contractor hereby covenants and agrees to: (i) keep all information concerning or arising from the hazardous materials work confidential; and (ii) refrain from disclosing such information to third parties, except as may be required by order of a governmental agency having jurisdiction over the hazardous materials work, and shall use its best efforts to ensure that, to the extent permitted by law, Contractor's parties also comply with these covenants. In the event that the Contractor believes that it, or any of

Contractor's parties, are legally compelled to disclose any of the information concerning or arising from the hazardous materials work to any person or entity other than SCRRA, including a governmental agency or other third party not authorized to receive such information, Contractor shall immediately notify SCRRA, prior to such disclosure, so that SCRRA may seek a protective order or other appropriate remedy before timely release of such information. If such protective order or other remedy is not obtained or a waiver is granted, Contractor shall reveal only that portion of the information which it is legally required to disclose and will exercise all reasonable efforts to obtain assurance that the information so revealed will be treated as confidential. If such information is to be provided by any of Contractor's parties, Contractor shall use its best efforts to ensure that such parties act in the same manner.

- 4.3.7 The Contractor shall cooperate with SCRRA in any tests or inspections deemed necessary by SCRRA or Member Agency. The Contractor shall pay or reimburse SCRRA or Member Agency, as appropriate, for all reasonable costs and expenses incurred due to the tests, inspections or any necessary corrective work and inspections thereafter.

4.4 Temporary Construction Crossings

The Contractor shall not move its equipment or materials across the tracks. No vehicular crossing over SCRRA and/or Member Agency tracks shall be installed or used by contractor without prior written permission of SCRRA and/or Member Agency. Proper grade crossing surfaces and warning devices, signage and all other devices required by SCRRA must be provided at the Contractor's sole cost.

4.5 Temporary Traffic Control

- 4.5.1 Temporary traffic control shall be used when a maintenance or construction activity is located on the railroad right-of-way or when the activity is located in the vicinity of Highway-Rail Grade Crossing, which could result in queuing of vehicles across the railroad tracks.
- 4.5.2 Refer to SCRRA's "Temporary Traffic Control Guidelines for Highway-Rail Grade Crossings" for further information on definitions, referenced standards, traffic control plans, submittals, traffic control elements and responsibility/authority for the temporary traffic control at Highway-Rail Grade Crossing. The guidelines provide acceptable alternatives and procedures to prescribe the appropriate temporary traffic control measures at highway-rail grade crossings. The guidelines are available on SCRRA's website at www.metrolinktrains.com (About Metrolink, "Public Projects" and "Guidelines").

4.6 Explosives

The Contractor shall not use or store explosives on the Property without prior written approval from SCRRA's Director of Engineering and Construction.

4.7 Restoration of Property

- 4.7.1 Upon completion of its work, the Contractor and its subcontractors shall, at the option of SCRRA and Member Agency (a) leave the Property in a condition satisfactory to SCRRA and Member Agency, (b) restore the Property to its original condition (this may include, without limitation, the restoration of any fences ditches, signs or roads removed

or damaged by the Contractor or its subcontractors) and (c) remove all of the Contractor's and its subcontractors' tools, equipment and materials from the Property promptly upon completion of work.

- 4.7.2 Upon receipt of the Contractor's written assertion that the work has been completed, the work will be inspected by SCRRA for acceptance. All work shall be guaranteed by the Contractor against defective workmanship and material furnished by the Contractor for a period of one (1) year from the date the work was accepted by SCRRA.

EXHIBIT C
PROPOSED AGREEMENT

B. AUTHORITY's failure to insist in any one or more instances upon CONSULTANT's performance of any terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of AUTHORITY's right to such performance or to future performance of such terms or conditions and CONSULTANT's obligation in respect thereto shall continue in full force and effect. Changes to any portion of this Agreement shall not be binding upon AUTHORITY except when specifically confirmed in writing by an authorized representative of AUTHORITY by way of a written amendment to this Agreement and issued in accordance with the provisions of this Agreement.

ARTICLE 2. AUTHORITY DESIGNEE

The Chief Executive Officer of AUTHORITY, or designee, shall have the authority to act for and exercise any of the rights of AUTHORITY as set forth in this Agreement.

ARTICLE 3. SCOPE OF WORK

A. CONSULTANT shall perform the work necessary to complete in a manner satisfactory to AUTHORITY the services set forth in Exhibit A, entitled "Scope of Work," attached to and, by this reference, incorporated in and made a part of this Agreement. All services shall be provided at the times and places designated by AUTHORITY.

B. CONSULTANT shall provide the personnel listed below to perform the above-specified services, which persons are hereby designated as key personnel under this Agreement.

Names

Functions

C. No person named in paragraph B of this Article, or his/her successor approved by AUTHORITY, shall be removed or replaced by CONSULTANT, nor shall his/her agreed-upon function or level of commitment hereunder be changed, without the prior written consent of AUTHORITY. Should the services of any key person become no longer available to CONSULTANT, the resume and

qualifications of the proposed replacement shall be submitted to AUTHORITY for approval as soon as possible, but in no event later than seven (7) calendar days prior to the departure of the incumbent key person, unless CONSULTANT is not provided with such notice by the departing employee. AUTHORITY shall respond to CONSULTANT within seven (7) calendar days following receipt of these qualifications concerning acceptance of the candidate for replacement.

ARTICLE 4. TERM OF AGREEMENT

This Agreement shall commence upon the effective date of this Agreement, and shall continue in full force and effect through (9 months from Notice to Proceed), unless earlier terminated or extended as provided in this Agreement.

ARTICLE 5. PAYMENT

A. For CONSULTANT's full and complete performance of its obligations under this Agreement, and subject to the maximum cumulative payment obligation provisions set forth in Article 7, AUTHORITY shall pay CONSULTANT on a firm fixed price basis in accordance with the following provisions.

B. The following schedule shall establish the firm fixed payment to CONSULTANT by AUTHORITY for each work task set forth in the Scope of Work. The schedule shall not include any CONSULTANT expenses not approved by AUTHORITY including but not limited to reimbursement for local meals.

<u>Task</u>	<u>Description</u>	<u>Firm Fixed Price</u>
1	Design	.00
2	Equipment	.00
3	Installation	.00
4	Warranty (5 Years)	<u>.00</u>
TOTAL FIRM FIXED PRICE PAYMENT		<u>.00</u>

C. CONSULTANT shall invoice AUTHORITY on a monthly basis for payments corresponding to the work actually completed by CONSULTANT. Percentage of work completed shall be documented

1 in a monthly progress report prepared by CONSULTANT, which shall accompany each invoice
2 submitted by CONSULTANT. CONSULTANT shall also furnish such other information as may be
3 requested by AUTHORITY to substantiate the validity of an invoice. At its sole discretion, AUTHORITY
4 may decline to make full payment for any task listed in paragraph B of this Article until such time as
5 CONSULTANT has documented to AUTHORITY's satisfaction, that CONSULTANT has fully
6 completed all work required under the task. AUTHORITY's payment in full for any task completed shall
7 not constitute AUTHORITY's final acceptance of CONSULTANT's work under such task; final
8 acceptance shall occur only when AUTHORITY's release of the retention described in paragraph D.

9 D. As partial security against CONSULTANT's failure to satisfactorily fulfill all of its obligations
10 under this Agreement, AUTHORITY shall retain ten percent (10%) of the amount of each invoice
11 submitted for payment by CONSULTANT. All retained funds shall be released by AUTHORITY and
12 shall be paid to CONSULTANT within sixty (60) days of payment of final invoice, unless AUTHORITY
13 elects to audit CONSULTANT's records in accordance with Article 17 of this Agreement. If
14 AUTHORITY elects to audit, retained funds shall be paid to CONSULTANT within thirty (30) calendar
15 days of completion of such audit in an amount reflecting any adjustment required by such audit.
16 CONSULTANT agrees to release subcontractor retention within thirty (30) calendar days after the
17 subconsultants work is satisfactory completed. These prompt payment provisions are required to be
18 incorporated in all subcontract agreements issued by CONSULTANT.

19 E. Invoices shall be submitted by CONSULTANT on a monthly basis and shall be submitted in
20 duplicate to AUTHORITY's Accounts Payable office. Each invoice shall be accompanied by the
21 monthly progress report specified in paragraph C of this Article. AUTHORITY shall remit payment
22 within thirty (30) calendar days of the receipt and approval of each invoice. Each invoice shall include
23 the following information:

- 24 1. Agreement No. C-0-1769;
- 25 2. Specify the task number for which payment is being requested;
- 26 3. The time period covered by the invoice;

1 4. Total monthly invoice (including project-to-date cumulative invoice amount) and
2 retention;

3 5. Monthly Progress Report;

4 6. Certification signed by the CONSULTANT or his/her designated alternate that a)
5 The invoice is a true, complete and correct statement of reimbursable costs and progress; b) The
6 backup information included with the invoice is true, complete and correct in all material respects; c) All
7 payments due and owing to subcontractors and suppliers have been made; d) Timely payments will be
8 made to subcontractors and suppliers from the proceeds of the payments covered by the certification
9 and; e) The invoice does not include any amount which CONSULTANT intends to withhold or retain
10 from a subcontractor or supplier unless so identified on the invoice.

11 7. Any other information as agreed or requested by AUTHORITY to substantiate the
12 validity of an invoice.

13 **ARTICLE 6. PROMPT PAYMENT CLAUSE**

14 A. CONSULTANT agrees to pay each subcontractor for the satisfactory work preformed under
15 this Agreement, no later than ten (10) calendar days from the receipt of each payment CONSULTANT
16 receives from AUTHORITY. CONSULTANT agrees further to return retainage payments to each
17 subcontractor within thirty (30) calendar days after the subcontractor's work is satisfactorily completed.
18 AUTHORITY reserves the right to request the appropriate documentation from CONSULTANT showing
19 payment has been made to the subcontractors. Any delay or postponement of payment from the above
20 referenced time frames may occur only for good cause following written approval by AUTHORITY.

21 B. Failure to comply with this provision or delay in payment without prior written approval from
22 AUTHORITY will constitute noncompliance, which may result in appropriate administrative sanctions,
23 including, but not limited to a penalty of two percent (2%) of the invoice amount due per month for every
24 month that payment is not made.

25 C. These prompt payment provisions must be incorporated in all subcontract agreements
26 issued by CONSULTANT under this Agreement.

ARTICLE 7. MAXIMUM OBLIGATION

Notwithstanding any provisions of this Agreement to the contrary, AUTHORITY and CONSULTANT mutually agree that AUTHORITY's maximum cumulative payment obligation (including obligation for CONSULTANT's profit) shall be _____Dollars (\$.00) which shall include all amounts payable to CONSULTANT for its subcontracts, leases, materials and costs arising from, or due to termination of, this Agreement.

ARTICLE 8. NOTICES

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid and addressed as follows:

To CONSULTANT:

To AUTHORITY:

Orange County Transportation Authority

550 South Main Street

P.O. Box 14184

Orange, CA 92863-1584

ATTENTION:

ATTENTION: John Mathis, Senior Contracts

Administrator

Ph: 714.560.5478 Fax 714.560.5792

Email: jmathis@octa.net

ARTICLE 9. INDEPENDENT CONTRACTOR

CONSULTANT's relationship to AUTHORITY in the performance of this Agreement is that of an independent contractor. CONSULTANT's personnel performing services under this Agreement shall at all times be under CONSULTANT's exclusive direction and control and shall be employees of CONSULTANT and not employees of AUTHORITY. CONSULTANT shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all

1 reports and obligations respecting them, such as social security, income tax withholding, unemployment
2 compensation, workers' compensation and similar matters.

3 **ARTICLE 10. INSURANCE**

4 A. CONSULTANT shall procure and maintain insurance coverage during the entire term of this
5 Agreement. Coverage shall be full coverage and not subject to self-insurance provisions.
6 CONSULTANT shall provide the following insurance coverage:

7 1. Commercial General Liability, to include Products/Completed Operations,
8 Independent Contractors', Contractual Liability, and Personal Injury, and Property Damage with a
9 minimum limit of \$1,000,000.00 per occurrence and \$2,000,000.00 general aggregate.

10 2. Automobile Liability to include owned, hired and non-owned autos with a combined
11 single limit of \$1,000,000.00 each accident;

12 3. Workers' Compensation with limits as required by the State of California including a
13 waiver of subrogation in favor of AUTHORITY, its officers, directors, employees and agents;

14 4. Employers' Liability with minimum limits of \$1,000,000.00; and

15 5. Professional Liability with minimum limits of \$1,000,000.00 per claim.

16 B. Proof of such coverage, in the form of an insurance company issued policy endorsement
17 and a broker-issued insurance certificate, must be received by AUTHORITY prior to commencement of
18 any work. Proof of insurance coverage must be received by AUTHORITY within ten (10) calendar days
19 from the effective date of this Agreement with the AUTHORITY, its officers, directors, employees and
20 agents designated as additional insured on the general and automobile liability. Such insurance shall
21 be primary and non-contributive to any insurance or self-insurance maintained by AUTHORITY.
22 Furthermore, AUTHORITY reserves the right to request certified copies of all related insurance policies.

23 C. CONSULTANT shall include on the face of the Certificate of Insurance the Agreement
24 Number C-0-1769; and, the Contract Administrator's Name, John Mathis, Senior Contracts
25 Administrator.

26 /

D. CONSULTANT shall also include in each subcontract the stipulation that subcontractors shall maintain insurance coverage in the amounts required from CONSULTANT as provided in this Agreement.

ARTICLE 11. ORDER OF PRECEDENCE

Conflicting provisions hereof, if any, shall prevail in the following descending order of precedence: (1) the provisions of this Agreement, including all exhibits; (2) the provisions of RFP , (3) CONSULTANT's proposal dated_____ ; and (4) all other documents, if any, cited herein or incorporated by reference.

ARTICLE 12. CHANGES

By written notice or order, AUTHORITY may, from time to time, order work suspension and/or make changes in the general scope of this Agreement, including, but not limited to, the services furnished to AUTHORITY by CONSULTANT as described in the Scope of Work. If any such work suspension or change causes an increase or decrease in the price of this Agreement or in the time required for its performance, CONSULTANT shall promptly notify AUTHORITY thereof and assert its claim for adjustment within ten (10) calendar days after the change or work suspension is ordered, and an equitable adjustment shall be negotiated. However, nothing in this clause shall excuse CONSULTANT from proceeding immediately with the agreement as changed.

ARTICLE 13. DISPUTES

A. Except as otherwise provided in this Agreement, any dispute concerning a question of fact arising under this Agreement which is not disposed of by supplemental agreement shall be decided by AUTHORITY's Director, Contracts Administration and Materials Management (CAMM), who shall reduce the decision to writing and mail or otherwise furnish a copy thereof to CONSULTANT. The decision of the Director, CAMM, shall be final and conclusive.

B. The provisions of this Article shall not be pleaded in any suit involving a question of fact arising under this Agreement as limiting judicial review of any such decision to cases where fraud by such official or his representative or board is alleged, provided, however, that any such decision shall

1 be final and conclusive unless the same is fraudulent or capricious or arbitrary or so grossly erroneous
2 as necessarily to imply bad faith or is not supported by substantial evidence. In connection with any
3 appeal proceeding under this Article, CONSULTANT shall be afforded an opportunity to be heard and
4 to offer evidence in support of its appeal.

5 C. Pending final decision of a dispute hereunder, CONSULTANT shall proceed diligently with
6 the performance of this Agreement and in accordance with the decision of AUTHORITY's Director,
7 CAMM. This Disputes clause does not preclude consideration of questions of law in connection with
8 decisions provided for above. Nothing in this Agreement, however, shall be construed as making final
9 the decision of any AUTHORITY official or representative on a question of law, which questions shall be
10 settled in accordance with the laws of the state of California.

11 **ARTICLE 14. TERMINATION**

12 A. AUTHORITY may terminate this Agreement for its convenience at any time, in whole or
13 part, by giving CONSULTANT written notice thereof. Upon termination, AUTHORITY shall pay
14 CONSULTANT its allowable costs incurred to date of that portion terminated. Said termination shall be
15 construed in accordance with the provisions of CFR Title 48, Chapter 1, Part 49, of the Federal
16 Acquisition Regulation (FAR) and specific subparts and other provisions thereof applicable to
17 termination for convenience. If AUTHORITY sees fit to terminate this Agreement for convenience, said
18 notice shall be given to CONSULTANT in accordance with the provisions of the FAR referenced above
19 and Article 8, herein. Upon receipt of said notification, CONSULTANT agrees to comply with all
20 applicable provisions of the FAR pertaining to termination for convenience.

21 B. AUTHORITY may terminate this Agreement for CONSULTANT's default if a federal or state
22 proceeding for the relief of debtors is undertaken by or against CONSULTANT, or if CONSULTANT
23 makes an assignment for the benefit of creditors, or for cause if CONSULTANT fails to perform in
24 accordance with the scope of work or breaches any term(s) or violates any provision(s) of this
25 Agreement and does not cure such breach or violation within ten (10) calendar days after written notice
26 thereof by AUTHORITY. CONSULTANT shall be liable for any and all reasonable costs incurred by

AUTHORITY as a result of such default or breach including, but not limited to, reprourement costs of the same or similar services defaulted by CONSULTANT under this Agreement. Such termination shall comply with CFR Title 48, Chapter 1, Part 49, of the FAR.

ARTICLE 15. INDEMNIFICATION

CONSULTANT shall indemnify, defend and hold harmless AUTHORITY, its officers, directors, employees and agents from and against any and all claims (including attorneys' fees and reasonable expenses for litigation or settlement) for any loss or damages, bodily injuries, including death, damage to or loss of use of property caused by the negligent acts, omissions or willful misconduct by CONSULTANT, its officers, directors, employees, agents, subcontractors or suppliers in connection with or arising out of the performance of this Agreement.

ARTICLE 16. ASSIGNMENTS AND SUBCONTRACTS

A. Neither this Agreement nor any interest herein nor claim hereunder may be assigned by CONSULTANT either voluntarily or by operation of law, nor may all or any part of this Agreement be subcontracted by CONSULTANT, without the prior written consent of AUTHORITY. Consent by AUTHORITY shall not be deemed to relieve CONSULTANT of its obligations to comply fully with all terms and conditions of this Agreement.

B. AUTHORITY hereby consents to CONSULTANT's subcontracting portions of the Scope of Work to the parties identified below for the functions described in CONSULTANT's proposal. CONSULTANT shall include in the subcontract agreement the stipulation that CONSULTANT, not AUTHORITY, is solely responsible for payment to the subcontractor for the amounts owing and that the subcontractor shall have no claim, and shall take no action, against AUTHORITY, its officers, directors, employees or sureties for nonpayment by CONSULTANT.

Subcontractor Name/Addresses

Subcontractor Amounts

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	.00
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ARTICLE 17. ACCESS TO RECORDS AND REPORTS

CONSULTANT shall provide AUTHORITY, the U.S. Department of Transportation (DOT), the Comptroller General of the United States, or other agents of AUTHORITY, such access to CONSULTANT's accounting books, records, payroll documents and facilities of the CONSULTANT which are directly pertinent to this Agreement for the purposes of examining, auditing and inspecting all accounting books, records, work data, documents and activities related hereto. CONSULTANT shall maintain such books, records, data and documents in accordance with generally accepted accounting principles and shall clearly identify and make such items readily accessible to such parties during CONSULTANT's performance hereunder and for a period of four (4) years from the date of final payment by AUTHORITY. AUTHORITY's right to audit books and records directly related to this Agreement shall also extend to all first-tier subcontractors identified in Article 16 of this Agreement. CONSULTANT shall permit any of the foregoing parties to reproduce documents by any means whatsoever or to copy excerpts and transcriptions as reasonably necessary.

ARTICLE 18. CONFLICT OF INTEREST

CONSULTANT agrees to avoid organizational conflicts of interest. An organizational conflict of interest means that due to other activities, relationships or contracts, the CONSULTANT is unable, or potentially unable to render impartial assistance or advice to the Authority; CONSULTANT's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or the CONSULTANT has an unfair competitive advantage. CONSULTANT is obligated to fully disclose to the AUTHORITY in writing Conflict of Interest issues as soon as they are known to the CONSULTANT. CONSULTANT is obligated to fully disclose to the AUTHORITY in writing Conflict of Interest issues as soon as they are known to the CONSULTANT. All disclosures must be submitted in writing to AUTHORITY pursuant to the Notice provision herein. This disclosure requirement is for the entire term of this Agreement.

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ARTICLE 19. CODE OF CONDUCT

CONSULTANT agrees to comply with the AUTHORITY's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. CONSULTANT agrees to include these requirements in all of its subcontracts.

ARTICLE 20. FEDERAL, STATE AND LOCAL LAWS

CONSULTANT warrants that in the performance of this Agreement, it shall comply with all applicable federal, state and local laws, statutes and ordinances and all lawful orders, rules and regulations promulgated thereunder.

ARTICLE 21. EQUAL EMPLOYMENT OPPORTUNITY

In connection with its performance under this Agreement, CONSULTANT shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin. CONSULTANT shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, sex, age or national origin. Such actions shall include, but not be limited to, the following: 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.

ARTICLE 22. CIVIL RIGHTS ASSURANCE

During the performance of this Agreement, CONSULTANT, for itself, its assignees and successors in interest agree as follows:

A. Compliance with Regulations: CONSULTANT shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Agreement.

B. Nondiscrimination: CONSULTANT, with regard to the work performed by it during the Agreement, shall not discriminate on the grounds of race, color, or national origin in the selection and

1 retention of subcontractors, including procurements of materials and leases of equipment. The
2 CONSULTANT shall not participate either directly or indirectly in the discrimination prohibited by
3 Section 21.5 of the Regulations, including employment practices when the Agreement covers a
4 program set forth in Appendix B of the Regulations.

5 C. Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all
6 solicitations either by competitive bidding or negotiation made by the CONSULTANT for work to be
7 performed under a subcontract, including procurements of materials or leases of equipment, each
8 potential subcontractor or supplier shall be notified by the CONSULTANT of the CONSULTANT's
9 obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of
10 race, color, or national origin.

11 D. Information and Reports: CONSULTANT shall provide all information and reports required
12 by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records,
13 accounts, other sources of information, and its facilities as may be determined by the AUTHORITY to
14 be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any
15 information required of a CONSULTANT is in the exclusive possession of another who fails or refuses
16 to furnish this information the CONSULTANT shall so certify to the AUTHORITY as appropriate, and
17 shall set forth what efforts it has made to obtain the information.

18 E. Sanctions for Noncompliance: In the event of the CONSULTANT's noncompliance with
19 nondiscrimination provisions of this Agreement, the AUTHORITY shall impose Agreement sanctions as
20 it may determine to be appropriate, including, but not limited to:

21 1. Withholding of payments to the CONSULTANT under the Agreement until the
22 CONSULTANT complies; and/or

23 2. Cancellation, termination, or suspension of the Agreement, in whole or in part.

24 F. Title VI of the Civil Rights Act: In determining the types of property or services to acquire, no
25 person in the United States shall, on the grounds of race, color, or national origin, be excluded from
26 participation in, be denied the benefits of, or otherwise be subjected to discrimination under any

1 program or activity receiving Federal financial assistance in violation of Title VI of the Civil Rights Act of
 2 1964, as amended, 42 U.S.C. Sections 2000d *et seq.* and DOT regulations, "Nondiscrimination in
 3 Federally Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil
 4 Rights Act of 1964," 49 CFR Part 21. In addition, FTA Circular 4702.1, "Title VI and Title VI-Dependent
 5 Guidelines for FTA Recipients," 05-13-07, provides FTA guidance and instructions for implementing
 6 DOT's Title VI regulations.

7 G. The Americans with Disabilities Act of 1990, as amended (ADA), 42 U.S.C. Sections 12101
 8 *et seq.*, prohibits discrimination against qualified individuals with disabilities in all programs, activities,
 9 and services of public entities, as well as imposes specific requirements on public and private providers
 10 of transportation.

11 H. Incorporation of Provisions: CONSULTANT shall include the provisions of paragraphs (A)
 12 through (H) in every subcontract, including procurements of materials and leases of equipment, unless
 13 exempt by the Regulations, or directives issued pursuant thereto. The CONSULTANT shall take such
 14 action with respect to any subcontract or procurement as the AUTHORITY may direct as a means of
 15 enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event
 16 a CONSULTANT becomes involved in, or is threatened with, litigation with a subcontractor or supplier
 17 as a result of such direction, the CONSULTANT may request the AUTHORITY to enter into such
 18 litigation to protect the interests of the AUTHORITY, and, in addition, the CONSULTANT may request
 19 the United States to enter into such litigation to protect the interests of the United States.

20 **ARTICLE 23. DISADVANTAGED BUSINESS ENTERPRISES**

21 Race-Neutral DBE Participation

22 **[INTERNAL NOTE: USE THE FOLLOWING LANGUAGE IF CONSULTANT HAS PROPOSED TO
 23 UTILIZE DBES IN THE PERFORMANCE OF THE CONTRACT.]**

24 At the time of contract execution, the CONSULTANT committed to utilize
 25 DBE(s) in the performance of this DOT-assisted contract, and further agrees to
 26 ensure that DBE subcontractors listed on the **"DBE Race-Neutral
 Participation Listing" (Exhibit D-2)** perform work and/or supply materials in
 accordance with original commitments, unless otherwise directed and/or
 approved by the Authority prior to the CONSULTANT effectuating any changes
 to its race-neutral DBE participation commitment(s) (*Refer to Subsection H:
 "Performance of DBE Subcontractors"*).

[INTERNAL NOTE: USE THE FOLLOWING LANGUAGE IF CONSULTANT HAS NOT PROPOSED TO UTILIZE DBES IN THE PERFORMANCE OF THE CONTRACT.]

At the time of contract execution, the CONSULTANT did not commit to utilize DBE(s) in the performance of this DOT-assisted contract. However, in the event DBE(s) are utilized in the performance of this contract, the CONSULTANT shall comply with reporting requirements delineated under *Section E: "Race-Neutral DBE Submission and Ongoing Reporting Requirements (Post-Award)"*.

A. In accordance with federal financial assistance agreements with the U.S. Department of Transportation (U.S. DOT), the Orange County Transportation Authority (AUTHORITY) has adopted a Disadvantaged Business Enterprise (DBE) Policy and Program, in conformance with Title 49 CFR Part 26, "Participation by Disadvantaged Business Enterprises in Department of Transportation Programs". The project is subject to these stipulated regulations. In order to ensure that the Authority achieves its overall DBE Program goals and objectives, the Authority encourages the participation of DBEs as defined in 49 CFR 26 in the performance of contracts financed in whole or in part with U.S. DOT funds. Pursuant to the intent of these Regulations, it is also the policy of the Authority to:

1. Fulfill the spirit and intent of the Federal DBE Program regulations published under U.S. DOT Title 49 CFR, Part 26, by ensuring that DBEs have equitable access to participate in all of Authority's DOT-assisted contracting opportunities.

2. Ensure that DBEs can fairly compete for and perform on all DOT-assisted contracts and subcontracts.

3. Ensure non-discrimination in the award and administration of AUTHORITY's DOT-assisted contracts.

4. Create a level playing field on which DBEs can compete fairly for DOT-assisted contracts.

5. Ensure that only firms that fully meet 49 CFR, Part 26 eligibility standards are permitted to participate as DBEs.

6. Help remove barriers to the participation of DBEs in DOT-assisted contracts.

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7. Assist in the development of firms that can compete successfully in the marketplace outside the DBE Program.

B. CONSULTANT shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of subcontracts. Any terms used in this section that are defined in 49 CFR Part 26, or elsewhere in the Regulations, shall have the meaning set forth in the Regulations. In the event of any conflicts or inconsistencies between the Regulations and the Authority's DBE Program with respect to DOT-assisted contracts, the Regulations shall prevail.

C. AUTHORITY's New Race-Neutral DBE Policy Implementation Directives: Pursuant to recently released Race-Neutral DBE policy directives issued by the U.S. DOT in response to the Ninth Circuit U.S. Court of Appeals decision in *Western States Paving Co. v. Washington State Department of Transportation*, the Authority has implemented a wholly Race-Neutral DBE Program. A Race-Neutral DBE Program is one that, while benefiting DBEs, is not solely focused on DBE firms. Therefore, under a Race-Neutral DBE Program, AUTHORITY does not establish numeric race-conscious DBE participation goals on its DOT-assisted contracts. CONSULTANT shall not be required to achieve a specific level of DBE participation as a condition of contract compliance in the performance of this DOT-assisted contract. However, CONSULTANT shall adhere to race-neutral DBE participation commitment(s) made at the time of contract award.

D. Definitions: The following definitions apply to the terms as used in these provisions:

1. "Disadvantaged Business Enterprise (DBE)" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individuals or, in the case of any publicly-owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

2. "Small Business Concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto, except that a small

1 business concern shall not include any concern or group of concerns controlled by the same socially
2 and economically disadvantaged individual or individuals which has annual average gross receipts in
3 excess of \$19.57 million over the previous three fiscal years.

4 3. "Socially and Economically Disadvantaged Individuals" means those individuals who are
5 citizens of the United States (or lawfully admitted permanent residents) and who are Black Americans,
6 Hispanic Americans, Native Americans, Asian-Pacific Americans, or Asian-Indian Americans, women
7 and any other minorities or individuals found to be disadvantaged by the Small Business Administration
8 pursuant to Section 8(a) of the Small Business Act, or by the Authority pursuant to 49 CFR part 26.65.
9 Members of the following groups are presumed to be socially and economically disadvantaged:

10 a. "Black Americans," which includes persons having origins in any of the Black racial
11 groups of Africa;

12 b. "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban,
13 Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;

14 c. "Native Americans," which includes persons who are American Indians, Eskimos,
15 Aleuts, or Native Hawaiians;

16 d. "Asian-Pacific Americans," which includes persons whose origins are from Japan,
17 China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust
18 Territories of the Pacific, and the Northern Marianas;

19 e. "Asian-Indian Americans," which includes persons whose origins are from India,
20 Pakistan, and Bangladesh; and

21 f. Women, regardless of ethnicity or race.

22 4. "Owned and Controlled" means a business: (a) which is at least 51 percent owned by
23 one or more "Socially and Economically Disadvantaged Individuals" or, in the case of a publicly-owned
24 business, at least 51 percent of the stock of which is owned by one or more "Socially and Economically
25 Disadvantaged Individuals"; and (b) whose management and daily business operations are controlled
26 by one or more such individuals.

1 5. "Manufacturer" means a firm that operates or maintains a factory or establishment that
2 produces on the premises the materials or supplies obtained by the CONSULTANT.

3 6. "Regular Dealer" means a firm that owns, operates or maintains a store, warehouse, or
4 other establishment in which the materials or supplies required for the performance of the contract are
5 bought, kept in stock, and regularly sold to the public in the usual course of business. The firm must
6 engage in, as its principal business, and in its own name, the purchase and sale of the product in
7 question. A regular dealer in such bulk items as steel, cement, gravel, stone and petroleum products
8 need not keep such products in stock if it owns or operates distribution equipment.

9 7. "Other Socially and Economically Disadvantaged Individuals" means those individuals
10 who are citizens of the United States (or lawfully admitted permanent residents) and who, on a case-by-
11 case basis, are determined by Small Business Administration or AUTHORITY to meet the social and
12 economic disadvantage criteria described below.

13 a. Social Disadvantage: The individual's social disadvantage must stem from his/her
14 color, national origin, gender, physical handicap, long-term residence in an environment isolated from
15 the mainstream of American society, or other similar cause beyond the individual's control.

16 i. The individual must demonstrate that he/she has personally suffered social
17 disadvantage.

18 ii. The individual's social disadvantage must be rooted in treatment, which he/she
19 has experienced in American society, not in other countries.

20 iii The individual's social disadvantage must be chronic, longstanding and
21 substantial, not fleeting or insignificant.

22 iv. The individual's social disadvantage must have negatively affected his/her
23 entry into and/or advancement in the business world.

24 v. A determination of social disadvantage must be made before proceeding to
25 make a determination of economic disadvantage.

26 b. Economic Disadvantage

i. The individual's ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities, as compared to others in the same line of business and competitive market area that are not socially disadvantaged.

ii. The following criteria will be considered when determining the degree of diminished credit and capital opportunities of a person claiming social and economic disadvantage:

With respect to the individual:

- availability of financing
- bonding capability
- availability of outside equity capital
- available markets

With respect to the individual and the business concern:

- personal and business assets
- personal and business net worth
- personal and business income and profits

E. Race-Neutral DBE Submission and Ongoing Reporting Requirements (Post-Award)

CONSULTANT shall complete and submit the following DBE exhibits (forms) at the times specified:

"Monthly Race-Neutral DBE Subcontractors Paid Report Summary and Payment Verification" (Form 103) (Exhibit [INTERNAL NOTE: INSERT FORM NUMBER]). If CONSULTANT is a DBE firm and/or

has proposed to utilize DBE firms, CONSULTANT will be required to complete and submit a Form 103 to AUTHORITY by the 10th of each month until completion of the contract to facilitate reporting of race-neutral DBE participation, following the first month of contract activity. CONSULTANT shall report the total dollar value paid to DBEs for the applicable reporting period. CONSULTANT shall also report the DBE's scope of work and the total subcontract value of commitment for each DBE reported. CONSULTANT is advised not to report the participation of DBEs toward CONSULTANT's race-neutral DBE attainment until the amount being counted has been paid to the DBE. Upon completion of the contract, CONSULTANT will be required to prepare and submit to the Authority a

1 “Race-Neutral DBE Subcontractors Paid Report Summary and Payment Verification” (Form 103)
 2 (Exhibit [INTERNAL NOTE: INSERT FORM NUMBER]) clearly marked “Final” to facilitate reporting
 3 and capturing actual DBE race-neutral attainments. CONSULTANT shall complete and submit a
 4 Final Form 103 whether or not DBEs were utilized in the performance of the contract.

5 F. DBE Eligibility and Commercially Useful Function Standards : A DBE must be a small
 6 business concern as defined pursuant to Section 3 of the U.S. Small Business Act and relevant
 7 regulations promulgated pursuant thereto. A DBE may participate as a prime contractor, subcontractor,
 8 joint venture partner with a prime or subcontractor, vendor of material or supplies, or as a trucking
 9 company. A DBE joint venture partner must be responsible for specific contract items of work, or clearly
 10 defined portions thereof. Responsibility means actually performing, managing and supervising the work
 11 with its own forces. The DBE joint venture partner must share in the capital contribution, control,
 12 management, risks and profits of the joint venture commensurate with its ownership interest. A DBE
 13 must perform a commercially useful function in accordance with 49 CFR 26.55 (i.e., must be
 14 responsible for the execution of a distinct element of the work and must carry out its responsibility by
 15 actually performing, managing and supervising the work). A DBE should perform at least thirty percent
 16 (30%) of the total cost of its contract with its own workforce to presume it is performing a commercially
 17 useful function. DBEs must be certified by the California Unified Certification Program (CUCP). Listings
 18 of DBEs certified by the CUCP are available from the following sources: The CUCP web site, which can
 19 be accessed at <http://www.californiaucp.com>; or the Caltrans “Civil Rights” web site at
 20 <http://www.dot.ca.gov/hq/bep>. The CUCP DBE Directory, which may be obtained from the Department
 21 of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive,
 22 Sacramento, California 95815; Telephone: (916) 445-3520.

23 G. DBE Crediting Provisions : When a DBE is proposed to participate in the contract, either
 24 as a prime CONSULTANT or Subcontractor, only the value of the work proposed to be performed by
 25 the DBE with its own forces may be counted towards race-neutral DBE participation. If CONSULTANT
 26 is a DBE joint venture participant, only the DBE proportionate interest in the joint venture shall be

1 counted. If a DBE intends to subcontract part of the work of its subcontract to a lower tier
2 Subcontractor, the value of the subcontracted work may be counted toward race-neutral DBE
3 participation only if the DBE Subcontractor is a certified DBE and actually performs the work with their
4 own forces. Services subcontracted to a non-DBE firm may not be credited toward the prime
5 Contractor's race-neutral DBE attainment. CONSULTANT is to calculate and credit participation by
6 eligible DBE vendors of equipment, materials, and suppliers toward race-neutral DBE attainment, as
7 follows: Sixty percent (60%) of expenditure(s) for equipment, materials and supplies required under the
8 Contract, obtained from a regular dealer; or One hundred percent (100%) of expenditure(s) for
9 equipment, materials and supplies required under the Contract, obtained from a DBE manufacturer.
10 The following types of fees or commissions paid to DBE Subcontractors, Brokers, and Packagers may
11 be credited toward the prime CONSULTANT's race-neutral DBE attainment, provided that the fee or
12 commission is reasonable, and not excessive, as compared with fees or commissions customarily
13 allowed for similar work, including: Fees and commissions charged for providing bona fide professional
14 or technical services, or procurement of essential personnel, facilities, equipment, materials, or supplies
15 required in the performance of the Contract; Fees charged for delivery of material and supplies
16 (excluding the cost of materials or supplies themselves) when the licensed hauler, trucker, or delivery
17 service is not also the manufacturer of, or a regular dealer in, the material and supplies; Fees and
18 commissions charged for providing any insurance specifically required in the performance of the
19 Contract. CONSULTANT may count the participation of DBE trucking companies toward race-neutral
20 DBE attainment, as follows: The DBE must be responsible for the management and supervision of the
21 entire trucking operation for which it is responsible on a particular contract. The DBE must itself own
22 and operate at least one fully licensed, insured, and operational truck used on the Contract. The DBE
23 receives credit for the total value of the transportation services it provides on the contract using trucks it
24 owns, insures, and operates using drivers it employs. The DBE may lease trucks from another DBE
25 firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another
26 DBE receives credit for the total value of the transportation services the lessee DBE provides on the

1 contract. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE
 2 who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a
 3 result of the lease arrangement. The DBE does not receive credit for the total value of the
 4 transportation services provided by the lessee, since these services are not provided by a DBE. For
 5 purposes of this paragraph, a lease must indicate that the DBE has exclusive use of and control over
 6 the truck. This does not preclude the leased truck from working for others during the term of the lease
 7 with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased
 8 truck. Leased trucks must display the name and identification number of the DBE. If CONSULTANT
 9 listed a non-certified DBE 1st tier subcontractor to perform work on this contract, and the non-certified
 10 DBE subcontractor subcontracts a part of its work or purchases materials and/or supplies from a lower
 11 tier DBE certified Subcontractor or Vendor, the value of work performed by the lower tier DBE firm's
 12 own forces can be counted toward race-neutral DBE participation on the contract.

13 H. Performance of DBE Subcontractors: DBE subcontractors listed by CONSULTANT in its
 14 "DBE Race-Neutral Participation Listing" (Exhibit D-2) submitted at the time of proposal submittal shall
 15 perform the work and supply the materials for which they are listed, unless the CONSULTANT has
 16 received prior written authorization from the Authority to perform the work with other forces or to obtain
 17 the materials from other sources. CONSULTANT shall provide written notification to the AUTHORITY in
 18 a timely manner of any changes to its anticipated DBE participation. This notice should be provided
 19 prior to the commencement of that portion of the work.

20 I. Additional DBE Subcontractors: In the event CONSULTANT identifies additional DBE
 21 subcontractors or suppliers not previously identified by CONSULTANT for race-neutral DBE
 22 participation under the contract, CONSULTANT shall notify the Authority by submitting Exhibit
 23 [INSERT FORM REF. NO.]: "Request for Additional DBE Firm" to enable CONSULTANT to capture
 24 all race-neutral DBE participation. CONSULTANT shall also submit, for each DBE identified after
 25 contract execution, a written confirmation from the DBE acknowledging that it is participating in the

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1 contract for a specified value, including the corresponding scope of work (a subcontract agreement
2 can serve in lieu of the written confirmation).

3 J. DBE Certification Status: If a listed DBE subcontractor is decertified during the life of
4 the project, the decertified subcontractor shall notify CONSULTANT in writing with the date of
5 decertification. If a non-DBE subcontractor becomes a certified DBE during the life of the project,
6 the DBE subcontractor shall notify CONSULTANT in writing with the date of certification.
7 CONSULTANT shall furnish the written documentation to AUTHORITY in a timely manner.

8 K. CONSULTANT's Assurance Clause Regarding Non-Discrimination: In compliance
9 with State and Federal anti-discrimination laws, CONSULTANT shall affirm that they will not exclude
10 or discriminate on the basis of race, color, national origin, or sex in consideration of contract award
11 opportunities. Further, CONSULTANT shall affirm that they will consider, and utilize subcontractors
12 and vendors, in a manner consistent with non-discrimination objectives.

13 **ARTICLE 24. PROHIBITED INTERESTS**

14 A. CONSULTANT covenants that, for the term of this Agreement, no director, member, officer
15 or employee of AUTHORITY during his/her tenure in office or for one (1) year thereafter, shall have any
16 interest, direct or indirect, in this Agreement or the proceeds thereof.

17 B. No member of or delegate to, the Congress of the United States shall have any interest,
18 direct or indirect, in this Agreement or to the benefits thereof.

19 **ARTICLE 25. OWNERSHIP OF REPORTS AND DOCUMENTS**

20 A. The originals of all letters, documents, reports and other products and data produced under
21 this Agreement shall be delivered to, and become the property of AUTHORITY. Copies may be made
22 for CONSULTANT's records but shall not be furnished to others without written authorization from
23 AUTHORITY. Such deliverables shall be deemed works made for hire and all rights in copyright therein
24 shall be retained by AUTHORITY.

25 B. All ideas, memoranda, specifications, plans, manufacturing, procedures, drawings,
26 descriptions, and all other written information submitted to CONSULTANT in connection with the

performance of this Agreement shall not, without prior written approval of AUTHORITY, be used for any purposes other than the performance under this Agreement, nor be disclosed to an entity not connected with the performance of the project. CONSULTANT shall comply with AUTHORITY's policies regarding such material. Nothing furnished to CONSULTANT, which is otherwise known to CONSULTANT or is or becomes generally known to the related industry shall be deemed confidential. CONSULTANT shall not use AUTHORITY's name, photographs of the project, or any other publicity pertaining to the project in any professional publication, magazine, trade paper, newspaper, seminar or other medium without the express written consent of AUTHORITY.

C. No copies, sketches, computer graphics or graphs, including graphic artwork, are to be released by CONSULTANT to any other person or agency except after prior written approval by AUTHORITY, except as necessary for the performance of services under this Agreement. All press releases, including graphic display information to be published in newspapers, magazines, etc., are to be handled only by AUTHORITY unless otherwise agreed to by CONSULTANT and AUTHORITY.

ARTICLE 26. PATENT AND COPYRIGHT INFRINGEMENT

A. In lieu of any other warranty by AUTHORITY or CONSULTANT against patent or copyright infringement, statutory or otherwise, it is agreed that CONSULTANT shall defend at its expense any claim or suit against AUTHORITY on account of any allegation that any item furnished under this Agreement or the normal use or sale thereof arising out of the performance of this Agreement, infringes upon any presently existing U. S. letters patent or copyright and CONSULTANT shall pay all costs and damages finally awarded in any such suit or claim, provided that CONSULTANT is promptly notified in writing of the suit or claim and given authority, information and assistance at CONSULTANT's expense for the defense of same. However, CONSULTANT will not indemnify AUTHORITY if the suit or claim results from: (1) AUTHORITY's alteration of a deliverable, such that said deliverable in its altered form infringes upon any presently existing U.S. letters patent or copyright; or (2) the use of a deliverable in combination with other material not provided by CONSULTANT when such use in combination infringes upon an existing U.S. letters patent or copyright.

B. CONSULTANT shall have sole control of the defense of any such claim or suit and all negotiations for settlement thereof. CONSULTANT shall not be obligated to indemnify AUTHORITY under any settlement made without CONSULTANT's consent or in the event AUTHORITY fails to cooperate fully in the defense of any suit or claim, provided, however, that said defense shall be at CONSULTANT's expense. If the use or sale of said item is enjoined as a result of such suit or claim, CONSULTANT, at no expense to AUTHORITY, shall obtain for AUTHORITY the right to use and sell said item, or shall substitute an equivalent item acceptable to AUTHORITY and extend this patent and copyright indemnity thereto.

ARTICLE 27. FINISHED AND PRELIMINARY DATA

A. All of CONSULTANT's finished technical data, including but not limited to illustrations, photographs, tapes, software, software design documents, including without limitation source code, binary code, all media, technical documentation and user documentation, photoprints and other graphic information required to be furnished under this Agreement, shall be AUTHORITY's property upon payment and shall be furnished with unlimited rights and, as such, shall be free from proprietary restriction except as elsewhere authorized in this Agreement. CONSULTANT further agrees that it shall have no interest or claim to such finished, AUTHORITY-owned, technical data; furthermore, said data is subject to the provisions of the Freedom of Information Act, 5 USC 552.

B. It is expressly understood that any title to preliminary technical data is not passed to AUTHORITY but is retained by CONSULTANT. Preliminary data includes roughs, visualizations, software design documents, layouts and comprehensives prepared by CONSULTANT solely for the purpose of demonstrating an idea or message for AUTHORITY's acceptance before approval is given for preparation of finished artwork. Preliminary data title and right thereto shall be made available to AUTHORITY if CONSULTANT causes AUTHORITY to exercise Article 12, and a price shall be negotiated for all preliminary data.

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ARTICLE 28. FORCE MAJEURE

Either party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by an unforeseeable cause beyond its control, including but not limited to: any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; or a material act or omission by the other party; when satisfactory evidence of such cause is presented to the other party; and provided further that such nonperformance is unforeseeable, beyond the control and is not due to the fault or negligence of the party not performing.

ARTICLE 29. PRIVACY ACT

CONSULTANT shall comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. §552a. Among other things, CONSULTANT agrees to obtain the express consent of the Federal Government before the CONSULTANT or its employees operate a system of records on behalf of the Federal Government. CONSULTANT understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying Agreement.

ARTICLE 30. INCORPORATION OF FTA TERMS

All contractual provisions required by Department of Transportation (DOT), whether or not expressly set forth in this document, as set forth in Federal Transit Administration (FTA) Circular 4220.1F, as amended, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. CONSULTANT shall not perform any act, fail to perform any act, or refuse to comply with any requests, which would cause AUTHORITY to be in violation of the FTA terms and conditions.

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ARTICLE 31. FEDERAL CHANGES

CONSULTANT shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the agreement between the AUTHORITY and FTA , as they may be amended or promulgated from time to time during this Agreement. CONSULTANT's failure to comply shall constitute a material breach of contract.

ARTICLE 32. NO FEDERAL GOVERNMENT OBLIGATION TO THIRD PARTIES

AUTHORITY and CONSULTANT acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying Agreement, absent the express written consent by the Federal Government, the Federal Government is not a party to this Agreement and shall not be subject to any obligations or liabilities to the AUTHORITY, CONSULTANT, or any other party (whether or not a party to this Agreement) pertaining to any matter resulting from the underlying Agreement. CONSULTANT agrees to include these requirements in all of its subcontracts.

ARTICLE 33. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS AND RELATED ACTS

A. CONSULTANT acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. §§3801 et seq. and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this project. Accordingly, by signing this Agreement, CONSULTANT certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying Agreement of the FTA assisted project for which this Agreement's work is being performed. CONSULTANT also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose penalties of the Program Fraud Civil Remedies Act of 1986 on the CONSULTANT to the extent the Federal Government deems appropriate.

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B. CONSULTANT also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under an agreement connected with a project that is financed in whole or part with Federal assistance awarded by FTA under the authority of 49 U.S.C. §5307 et seq., the Government reserves the right to impose the penalties of 18 U.S.C. §1001 and 49 U.S.C. §5307(n) (1) et seq. on the CONSULTANT, to the extent the Federal Government deems appropriate. CONSULTANT agrees to include this requirement in all of its subcontracts.

ARTICLE 34. RECYCLED PRODUCTS

CONSULTANT shall comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in subpart B of 40 CFR Part 247. CONSULTANT agrees to include this requirement in all of its subcontracts.

ARTICLE 35. ENERGY CONSERVATION REQUIREMENTS

CONSULTANT shall comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy Conservation Act.

ARTICLE 36. CLEAN AIR

CONSULTANT shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. CONSULTANT shall report each violation to AUTHORITY, who will in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office. CONSULTANT agrees to include this requirement in all of its subcontracts.

ARTICLE 37. CLEAN WATER REQUIREMENTS

CONSULTANT shall comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. CONSULTANT shall

report each violation to AUTHORITY and understands and agrees that the AUTHORITY who will in turn, report each violation as required to assure notification to FTA and appropriate EPA Regional Office. CONSULTANT agrees to include this requirement in all of its subcontracts.

ARTICLE 38. FLY AMERICA REQUIREMENT

CONSULTANT agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for the U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. CONSULTANT shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. CONSULTANT agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

ARTICLE 39. BUY AMERICA REQUIREMENTS

CONSULTANT agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7, and include final assembly in the United States, for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, microcomputer equipment, software and small purchases (currently less than \$100,000) made with capital, operating or planning funds. Separate requirements for rolling stock are set out at 5323(j)(2)© and 49 CFR 661.11. Rolling stock not subject to a general waiver must be manufactured in the United States and have a 60 percent domestic content.

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ARTICLE 40. SEISMIC SAFETY REQUIREMENTS

CONSULTANT agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. CONSULTANT also agrees to ensure that all work performed under this contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

ARTICLE 41. SEISMIC PROTEST PROCEDURES

The Authority has on file a set of written protest procedures applicable to the solicitation of this agreement that may be obtained by contacting the Contract Administrator responsible for this procurement. Any protests filed by an Offeror in connection with this agreement must be submitted in accordance with the Authority's written procedures.

ARTICLE 42. LOBBYING

CONSULTANT and sub-consultants who apply for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying". Each tier certifies to be above that it will not or has not used Federal appropriated funds to pay any person or organization 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 obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contracts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

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ARTICLE 43. DEBARMENT AND SUSPENSION

Unless otherwise permitted by law, any person or firm that is debarred, suspended, or voluntarily excluded, as defined in the Federal Highway Administration (FHWA) Circular 2015.1, may not take part in any federally funded transaction, either as a participant or a principal, during the period of debarment, suspension, or voluntary exclusion. Accordingly, the Authority, may not enter into any transaction with such debarred, suspended, or voluntarily excluded persons or firms during such period.

A certification process has been established by 49 CFR Part 29, as a means to ensure that debarred suspended or voluntarily excluded persons or firms do not participate in Federally assisted projects. The inability to provide the required certification will not necessarily result in denial of participation in a covered transaction. A person or firm that is unable to provide a positive certification as required by this solicitation must submit a complete explanation attached to the certification. FHWA will consider the certification and any accompanying explanation in determining whether to provide assistance for the project. Failure to furnish a certification or an explanation may disqualify that person or firm from participating in the project.

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This Agreement shall be made effective upon execution by both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement No. C-0-1769 to be executed on the date first above written.

CONSULTANT

ORANGE COUNTY TRANSPORTATION AUTHORITY

By _____

By _____

Will Kempton
Chief Executive Officer

APPROVED AS TO FORM:

By _____

Kennard R. Smart, Jr.
General Counsel

APPROVED:

By _____

Jim Beil, P.E.
Executive Director, Capital Programs

Date _____

EXHIBIT D

FORMS

PARTY DISCLOSURE FORM**Information Sheet****ORANGE COUNTY TRANSPORTATION AUTHORITY
AND AFFILIATED AGENCIES**

The attached Party Disclosure Form must be completed by applicants for, or persons who are the subject of, any proceeding involving a license, permit, or other entitlement for use pending before the Board of Directors of the Orange County Transportation Authority or any of its affiliated agencies. (Please see next page for definitions of these terms.)

IMPORTANT NOTICE

Basic Provisions of Government Code Section 84308

- A. If you are an applicant for, or the subject of, any proceeding involving a license, permit, or other entitlement for use, you are prohibited from making a campaign contribution of more than \$250 to any board member or his or her alternate. This prohibition begins on the date your application is filed or the proceeding is otherwise initiated, and the prohibition ends three months after a final decision is rendered by the Board of Directors. In addition, no board member or alternate may solicit or accept a campaign contribution of more than \$250 from you during this period.
- B. These prohibitions also apply to your agents, and, if you are a closely held corporation, to your majority shareholder as well. These prohibitions also apply to your subcontractor(s), joint venturer(s), and partner(s) in this proceeding. Also included are parent companies and subsidiary companies directed and controlled by you, and political action committees directed and controlled by you.
- C. You must file the attached disclosure form and disclose whether you or your agent(s) have in the aggregate contributed more than \$250 to any board member or his or her alternate during the 12-month period preceding the filing of the application or the initiation of the proceeding.
- D. If you or your agent have in the aggregate contributed more than \$250 to any individual board member or his/or her alternate during the 12 months preceding the decision on the application or proceeding, that board member or alternate must disqualify himself or herself from the decision. However, disqualification is not required if the board member or alternate returns the campaign contribution within 30 days from the time the director knows, or should have known, about both the contribution and the fact that you are a party in the proceeding. The Party Disclosure Form should be completed and filed with your proposal, or with the first written document you file or submit after the proceeding commences.

1. A proceeding involving "a license, permit, or other entitlement for use" includes all business, professional, trade and land use licenses and permits, and all other entitlements for use, including all entitlements for land use, all contracts (other than competitively bid, labor or personal employment contracts), and all franchises.
2. Your "agent" is someone who represents you in connection with a proceeding involving a license, permit or other entitlement for use. If an individual acting as an agent is also acting in his or her capacity as an employee or member of a law, architectural, engineering, consulting firm, or similar business entity, both the business entity and the individual are "agents."
3. To determine whether a campaign contribution of more than \$250 has been made by you, campaign contributions made by you within the preceding 12 months must be aggregated with those made by your agent within the preceding 12 months or the period of the agency, whichever is shorter. Contributions made by your majority shareholder (if a closely held corporation), your subcontractor(s), your joint venturer(s), and your partner(s) in this proceeding must also be included as part of the aggregation. Campaign contributions made to different directors or their alternates are not aggregated.
4. A list of the members and alternates of the Board of Directors is attached.

This notice summarizes the major requirements of Government Code Section 84308 of the Political Reform Act and 2 Cal. Adm. Code Sections 18438-18438.8.

ORANGE COUNTY TRANSPORTATION AUTHORITY
AND ITS AFFILIATED AGENCIES

To be completed only if campaign contributions have been made in the preceding 12 months.

Prime Firm's Name: _____

Party's Name: _____

Party's Address: _____
Street

City

State Zip Phone

Application or Proceeding
Title and Number: _____

Board Member(s) or Alternate(s) to whom you and/or your agent made campaign contributions and dates of contribution(s) in the preceding 12 months:

Name of Member: _____
Name of Contributor (if other than Party): _____
Date(s): _____
Amount(s): _____

Name of Member: _____
Name of Contributor (if other than Party): _____
Date(s): _____
Amount(s): _____

Name of Member: _____
Name of Contributor (if other than Party): _____
Date(s): _____
Amount(s): _____

Date: _____
Signature of Party and/or Agent

**ORANGE COUNTY TRANSPORTATION AUTHORITY
AND AFFILIATED AGENCIES**

Board of Directors

Jerry Amante, Chairman

Patricia Bates, Vice Chairman

Art Brown, Director

Peter Buffa, Director

Bill Campbell, Director

Carolyn V. Cavecche, Director

William J. Dalton, Director

Richard Dixon, Director

Paul G. Glaab, Director

Don Hansen, Director

Allan Mansoor, Director

John Moorlach, Director

Shawn Nelson, Director

Janet Nguyen, Director

Curt Pringle, Director

Miguel Pulido, Director

Gregory T. Winterbottom, Director

PARTICIPANT DISCLOSURE FORM

Information Sheet

**ORANGE COUNTY TRANSPORTATION AUTHORITY
AND AFFILIATED AGENCIES**

The attached Participant Disclosure Form must be completed by participants in a proceeding involving a license, permit, or other entitlement for use. (Please see next page for definitions of these terms.)

IMPORTANT NOTICE

Basic Provisions of Government Code Section 84308

- A. If you are a participant in a proceeding involving a license, permit, or other entitlement for use, you are prohibited from making a campaign contribution of more than \$250 to any board member or his or her alternate. This prohibition begins on the date you begin to actively support or oppose an application for license, permit, or other entitlement for use pending before the Orange County Transportation Authority or any of its affiliated agencies, and continues until three months after a final decision is rendered on the application or proceeding by the Board of Directors.

No board member or alternate may solicit or accept a campaign contribution of more than \$250 from you and/or your agency during this period if the board member or alternate knows or has reason to know that you are a participant.

- B. The attached disclosure form must be filed if you or your agent has contributed more than \$250 to any board member or alternate for the Orange County Transportation Authority or any of its affiliated agencies during the 12-month period preceding the beginning of your active support or opposition. (The disclosure form will assist the board members in complying with the law.)
- C. If you or your agent have made a contribution of more than \$250 to any board member or alternate during the 12 months preceding the decision in the proceeding, that board member or alternate must disqualify himself or herself from the decision. However, disqualification is not required if the member or alternate returns the campaign contribution within 30 days from the time the director knows, or should have known, about both the contribution and the fact that you are a participant in the proceeding.

The Participant Disclosure Form should be completed and filed with the proposal submitted by a party, or should be completed and filed the first time that you lobby in person, testify in person before, or otherwise directly act to influence the vote of the board members of the Orange County Transportation Authority or any of its affiliated agencies.

1. An individual or entity is a "participant" in a proceeding involving an application for a license, permit or other entitlement for use if:
 - a. The individual or entity is not an actual party to the proceeding, but does have a significant financial interest in the Orange County Transportation Authority's or one of its affiliated agencies' decision in the proceeding.

AND

- b. The individual or entity, directly or through an agent, does any of the following:
 - (1) Communicates directly, either in person or in writing, with a board member or alternate of the Orange County Transportation Authority or any of its affiliated agencies for the purpose of influencing the member's vote on the proposal;
 - (2) Communicates with an employee of the Orange County Transportation Authority or any of its affiliated agencies for the purpose of influencing a member's vote on the proposal; or
 - (3) Testifies or makes an oral statement before the Board of Directors of the Orange County Transportation Authority or any of its affiliated agencies.
2. A proceeding involving "a license, permit, or other entitlement for use" includes all business, professional, trade and land use licenses and permits, and all other entitlements for use, including all entitlements for land use; all contracts (other than competitively bid, labor, or personal employment contracts) and all franchises.
3. Your "agent" is someone who represents you in connection with a proceeding involving a license, permit, or other entitlement for use. If an agent acting as an employee or member of a law, architectural, engineering, or consulting firm, or a similar business entity or corporation, both the business entity or corporation and the individual are agents.

4. To determine whether a campaign contribution of more than \$250 has been made by a participant or his or her agent, contributions made by the participant within the preceding 12 months shall be aggregated with those made by the agent within the preceding 12 months or the period of the agency, whichever is shorter. Campaign contributions made to different members or alternates are not aggregated.
5. A list of the members and alternates of the Board of Directors is attached.

This notice summarizes the major requirements of Government Code Section 84308 and 2 Cal. Adm. Code Sections 18438-18438.8.

ORANGE COUNTY TRANSPORTATION AUTHORITY
AND ITS AFFILIATED AGENCIES

To be completed only if campaign contributions have been made in the preceding 12 months.

Prime's Firm Name: _____

Party's Name: _____

Party's Address: _____
 Street

 City

 State Zip Phone

Application or Proceeding
 Title and Number: _____

Board Member(s) or Alternate(s) to whom you and/or your agent made campaign contributions and dates of contribution(s) in the preceding 12 months:

Name of Member: _____
 Name of Contributor (if other than Party): _____
 Date(s): _____
 Amount(s): _____

Name of Member: _____
 Name of Contributor (if other than Party): _____
 Date(s): _____
 Amount(s): _____

Name of Member: _____
 Name of Contributor (if other than Party): _____
 Date(s): _____
 Amount(s): _____

Date: _____

 Signature of Party and/or Agent

**ORANGE COUNTY TRANSPORTATION AUTHORITY
AND AFFILIATED AGENCIES**

Board of Directors

Jerry Amante, Chairman

Patricia Bates, Vice Chairman

Art Brown, Director

Peter Buffa, Director

Bill Campbell, Director

Carolyn V. Cavecche, Director

William J. Dalton, Director

Richard Dixon, Director

Paul G. Glaab, Director

Don Hansen, Director

Allan Mansoor, Director

John Moorlach, Director

Shawn Nelson, Director

Janet Nguyen, Director

Curt Pringle, Director

Miguel Pulido, Director

Gregory T. Winterbottom, Director

Status of Past and Present Contracts Form

On the form provided below, Offeror shall list the status of past and present contracts where the firm has either provided services as a prime contractor or a subcontractor during the past five (5) years in which the contract has ended or will end in a termination, settlement or in legal action. A separate form must be completed for each contract. Offeror shall provide an accurate contact name and telephone number for each contract and indicate the term of the contract and the original contract value.

If the contract was terminated, list the reason for termination. Offeror must also identify and state the status of any litigation, claims or settlement agreements related to any of the identified contracts. Each form must be signed by an officer of the Offeror confirming that the information provided is true and accurate.

Project city/agency/other:	
Contact name:	Phone:
Project award date:	Original Contract Value:
Term of Contract:	
1) Status of contract:	
2) Identify claims/litigation or settlements associated with the contract:	

By signing this Form entitled "Status of Past and Present Contracts," I am affirming that all of the information provided is true and accurate.

Name _____
 Title _____

_____ Date

EXHIBIT D-1

LIST OF SUBCONTRACTORS

List only the subcontractors, which will perform, work or labor or render services to the bidder in excess of one-half of one percent of the proposer's total amount. Do not list alternative subcontractors for the same work. (Use additional sheets if necessary.)

Name Under Which Subcontractor is Licensed	City & State	Specific Description of Work to be Rendered	Dollar Amount
			\$
			\$
			\$
			\$
			\$
			\$
\$			

Bidders Name _____

**PROPOSER'S CERTIFICATION REGARDING
INELIGIBLE FOREIGN CONTRACTORS AND SUBCONTRACTORS**

_____, (Company name) hereby certifies that it is not an ineligible foreign contractor and that it does not intend to utilize on this project any ineligible foreign subcontractors as defined in paragraph I, "Bidder's Certification of Compliance" - Ineligible Foreign Contractors and Subcontractors of Section II "INSTRUCTIONS TO BIDDING FORMS" of this IFB.

Signature: _____

Name: _____

Title: _____

Date: _____

**CERTIFICATION OF PRIMARY PARTICIPANT
REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS**

The _____
Firm name/principal

certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
2. Have not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local), with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this bid had one or more public transactions (federal, state or local) terminated for cause or default.

If unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.

THE PRIMARY PARTICIPANT _____
Firm name/principal

CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

Signature and Title of Authorized Official

CERTIFICATION OF LOWER-TIER PARTICIPANTS
REGARDING
DEBARMENT, SUSPENSION, AND OTHER INELIGIBILITY AND VOLUNTARY
EXCLUSION

The _____
Firm name/principal

certifies, by submission of this bid, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

If unable to certify to any of the statements in this certification, such participant shall attach an explanation to this proposal.

The _____
Firm name/principal

CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.

Signature and Title of Authorized Official

BIDDER'S CERTIFICATE OF NONCOMPLIANCE
REGARDING
"BUY AMERICA" REQUIREMENTS (SECTION 165(A))
FOR
STEEL, IRON, OR MANUFACTURED PRODUCTS

In order to demonstrate compliance with the Buy America Requirements (see Book 1, Section II, of this IFB for further explanation), Bidder shall complete only one of the two statements below:

The _____ Firm name/principal hereby certifies that it will comply with the requirements of Section 165(a) of the Surface Transportation Assistance Act of 1982 and the applicable regulations in 49 CFR Part 661. _____ Signature _____ Title _____ Date
--

Or:

The _____ Firm name/principal hereby certifies that it cannot comply with the requirements of Section 165(a) of the Surface Transportation Assistance Act of 1982 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 and Regulations in 49 CFR Part 661.7. _____ Signature _____ Title _____ Date

CERTIFICATION
LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN
FEDERAL TRANSACTIONS

E. DEFINITIONS

1. Authority, as used in this clause, means the Orange County Transportation Authority, acting on behalf of the Orange County Transit District.
2. Covered Federal action, as used in this clause, means any of the following Federal actions:
3. The awarding of any Federal contract.
4. The making of any Federal grant.
5. The making of any Federal loan.
6. The entering into of any cooperative agreement.
7. The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
8. Indian tribe and tribal organization, as used in this clause, have the meaning provided in Section 4 of the Indian self-determination and Education Assistance Act (25 U.S.C. 4508) and include Alaskan Natives.
9. Influencing or attempting to influence, as used in this clause, means making, with the intent to influence, any communication to or appearance before 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 any covered Federal action.
10. Local government, as used in this clause, means a unit of government in a State and, if chartered, established, or other were recognized by a State for the performance of a governmental duty, including a local public AUTHORITY, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.
11. Officer or employee of an agency, as used in this clause, includes the following individuals who are employed by an agency:
 - a. **An individual who is appointed to a position in the Government under title 5, United States code, including a position under a temporary appointment.**
 - a. A member of the uniformed services, as defined in the

subsection 101(3), Title 37, United States Code.

- b. A special Government employee, as defined in Section 202, Title 18, United States Code.
 - c. An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, Appendix 2.
- 12. Person, as used in this clause, means an individual, corporation, company, association, AUTHORITY, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization or any other Indian organization with respect to expenditures specifically permitted by other Federal law.
 - 13. Reasonable compensation, as used in this clause, means with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.
 - 14. Reasonable payment, as used in this clause means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.
 - 15. Recipient, as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.
 - 16. Regularly employed, as used in this clause, means, with respect to an officer or employee of a person requesting or receiving by such person for at least 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within one year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.
 - 17. State, as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and a multi-State regional or interstate entity having governmental duties and powers.

F. PROHIBITIONS

1. Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan or cooperative agreement from using appropriated funds to pay 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 any of the following covered Federal actions: 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; or, the modification of any Federal contract, grant, loan, or cooperative agreement.
2. The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) 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 a Federal contract, grant, loan or cooperative agreement.
3. The prohibitions of the Act do not apply under the following conditions:
 - b. Agency and legislative liaison by own employees.
 1. The prohibition on the use of appropriated funds, in subparagraph B.1. of this clause, does not apply in the case of payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.
 2. For purposes of paragraph B.3.a.(1) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.
 3. The following agency and legislative liaison activities are permitted any time where they are not related to a specific solicitation for any covered Federal action:
 4. Discussing with an agency (including individual demonstrations) the qualities and characteristics of the person's products or services, conditions or terms of sale, and service capabilities.
 5. Technical discussions and other activities regarding the application of adaptation of the person's products or services for an agency's use.
 6. The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal

action:

7. Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;
8. Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and,
9. Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Public Law 95-507, and subsequent amendments.
10. Only those services expressly authorized by paragraph B.3.a.(1) of this clause are permitted under this clause.
11. Professional and technical services
12. The prohibition on the use of appropriated funds, in subparagraph B.1. of this clause, does not apply in the case of:
13. A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as condition for receiving that Federal action.
14. Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission or negotiation of any bid, proposal, or application or that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.
15. For purposes of paragraph B.3.a.(1) of this clause, professional and technical services shall be limited to advise and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal is allowable. Similarly, technical advice provided by an

engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission, or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission, or negotiation of a covered Federal action.

16. Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.
17. Only those services expressly authorized by paragraph B.3.a.(1) and (2) of this clause are permitted under this clause.
18. The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

c. Disclosure

1. The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form OMB standard form LLL, Disclosure of Lobbying Activities, (Attachment to the bid package) if such person has made or had agreed to made any payment using non appropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph B.1. of this clause, if paid for with appropriated funds.
2. The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph II.A. of

this clause. An event that materially affects the accuracy of the information reported includes:

3. A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
4. A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or
5. A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.
6. The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.
7. All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the District at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

d. Agreement

The Contractor agrees not to make any payment prohibited by this clause.

e. Penalties

1. Any person who makes an expenditure prohibited under paragraph a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph d) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.
2. Contractors may relay without liability on the representation made by their subcontractors in the certification and disclosure forms.

f. Cost Allowability:

Nothing in this clause is to be interpreted to make allowable or reasonable any costs, which will otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provisions.

EXHIBIT F

CERTIFICATION OF
RESTRICTIONS ON LOBBYING

I, _____, hereby certify on behalf (name of offeror) of
_____ that:
(Firm name)

1. No Federal appropriated funds have been paid, by or on behalf of the undersigned, 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, the undersigned shall complete and submit the attached Standard Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in all subcontracts, and that all subcontractors 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 civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed this _____ day of _____, 200__

By _____
(Signature of authorized official)

(Title of authorized official)

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See attached disclosure form.)

1. Type of Federal Action: ☐ a. contract ☐ b. grant ☐ c. cooperative agreement ☐ d. loan ☐ e. loan guarantee ☐ f. loan insurance	2. Status of Federal Action: ☐ a. bid/offer application ☐ b. initial award ☐ c. post-award	3. Report Type: ☐ a. initial filing ☐ b. material changes For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: ☐ Prime ☐ Subawardee Tier _____, if known: Congressional District, if known: _____		5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime: Congressional District, if known: _____
6. Federal Department/Agency:	7. Federal Program Name/Description: CFDA number, if applicable: _____	
8. Federal Action Number, if known:	9. Award Amount, if known: \$ _____	
10. a. Name and Address of Lobbying Entity (if individual, last name, first name, MI)		b. Individuals Performing Services (including address if different from No 10a) (last name, first name, MI):
(attach Continuation Sheet(s) SF - LLL - A if necessary)		
11. Amount of Payment (check all that apply): \$ _____ ☐ actual ☐ planned	13. Type of Payment (check all that apply): ☐ a. retainer ☐ b. one-time fee ☐ c. commission ☐ d. contingent fee ☐ e. deferred ☐ f. other specify: _____	
12. Forum of Payment (check all that apply): ☐ a. cash ☐ b. in-kind; specify nature: _____ value: _____		
14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s) or Member(s) contracted for Payment indicated in Item, 11: (attach Continuation Sheet(s) SF-LLL-A if necessary)		
15. Continuation Sheet(s) SF-LLL-A attached: ☐ Yes ☐ No		
16. Information requested through this form is authorized by Code 31 U.S.C. Section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000.00 and not more than \$100,000.00 for each such failure.		Signature: _____ Print name: _____ Title: _____ Telephone No: _____ Date: _____
Federal Use Only		Authorized for Local Reproduction Standard Form - LLL

EXHIBIT G**INSTRUCTIONS FOR COMPLETION OF SF-LLL DISCLOSURE OF LOBBYING ACTIVITIES**

This DISCLOSURE FORMS SHALL BE COMPLETED BY the reporting entity, whether Subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity 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 a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be a prime or subawardee recipient. Identify the tier of the subawardee e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee" then enter the full name, address city, state, and zip code of the prime Federal recipient. Include Congressional District.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency, name if known. For example, Department of Transportation, United State Coast Guard.
7. Enter the Federal program name for description of the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g. Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state, and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a.). Enter Last Name, First Name, and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box (es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box (es). Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.
15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Office of Management and Budget Paperwork Reduction Project (0348-0446), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES CONTINUATION SHEET

Reporting Entity: _____

Page _____

of _____

LIST OF DBE SUBCONTRACTORS (Exhibit D-2)

List all Disadvantaged Business Enterprise (**DBE**) subcontractors/suppliers that will participate in this Contract. For purposes of crediting DBE participation toward meeting the established contract-specific goal of 0 %, all certified DBE subcontractors should be listed irrespective of bid value or tier. (Use additional sheets if necessary).

Name Under Which Subcontractor is Licensed & DBE Certified	City & State	Item # & Specific Description of Work to be Rendered¹	Certifying Agency² and Exp. Date	Type*	Dollar Amount³
					\$
					\$
					\$
					\$
					\$

A. TOTAL DBE PARTICIPATION (IN CONFORMANCE WITH CREDITING PROVISIONS – i.e. 60% rule, broker fees & commissions, etc.):	\$
B. TOTAL BID AMOUNT:	\$
C. BIDDER'S DBE GOAL COMMITMENT (A÷B):	%

*Type:	
1. Subcontractor	3. Trucker
2. Vendor/Supplier	4. Broker

¹ If 100% of item is not to be performed or furnished by DBE, describe exact portion of item to be performed or furnished by DBE.

² DBE Subcontractors must be certified at time of bid submission. Refer to Section IV: Disadvantaged Business Enterprises Program, specifically, DBE Certification for a list of recognized certifying agencies.

³ Refer to Section IV Disadvantaged Business Enterprises Program, specifically, "Bidders' Obligation" to properly credit DBE participation.

EXHIBIT H-2
Local Agency Proposer DBE Information (Consultant Contracts)
SUCCESSFUL PROPOSER ONLY

NOTE: PLEASE REFER TO INSTRUCTIONS ON THE REVERSE SIDE OF THIS FORM

AGENCY: _____ LOCATION: _____

PROJECT DESCRIPTION: _____

TOTAL CONTRACT AMOUNT: \$ _____

PROPOSAL DATE: _____

PROPOSER'S NAME: _____

CONTRACT ITEM NO.	DESCRIPTION OR SERVICES TO BE SUBCONTRACTED	DBE Cert. No. AND EXPIRATION DATE	NAME OF DBEs (Must be certified on the date bids are opened - include DBE address and phone number)	PERCENTAGE OF DBE

For Local Agency to Complete:

Local Agency Contract Number: _____

Federal Aid Project Number: _____

Federal Share: _____

Contract Award Date: _____

Local Agency certifies that the DBE certification(s) has been verified and all information is complete and accurate.

Print Name _____ Signature _____ Date _____

Local Agency Representative

Area Code) Telephone Number: _____

Total Claimed
Participation

\$ _____

% _____

Signature of Proposer

Date _____ (Area Code) Tel. No. _____

For Caltrans Review:

Print Name _____ Signature _____ Date _____
 Caltrans District Local Assistance Engineer

Local Agency Bidder - DBE Commitment (Rev 3/09)

Distribution: (1) Copy – Fax or scan a copy to the Caltrans District Local Assistance Engineer (DLAE) within 15 days of contract execution. Failure to send a copy to the DLAE within 15 days of contract execution may result in de-obligation of funds for this project. (2) Original – Local agency files

**INSTRUCTIONS - LOCAL AGENCY PROPOSER DBE INFORMATION
(CONSULTANT CONTRACTS) (Revised 03/09)**

SUCCESSFUL PROPOSER:

The form requires specific information regarding the consultant contract: Agency, Location, Project Description, Federal Aid Project Number (assigned by Caltrans-Local Assistance), Proposal Date, and Successful Proposer's Name.

The form has a column for the Description or Services to be Subcontracted by DBEs. The DBE should provide a certification number to the prime consultant. The form has a column for the Names of DBE certified consultants to perform the work (must be certified on the date the proposal is received and include DBE address and phone number). Enter DBE prime consultant's and subconsultants' certification numbers. The prime consultant shall indicate all work to be performed by DBEs including, if the prime consultant is a DBE, work performed by its own forces.

Enter the Total Claimed DBE Participation percentage of items of work in the total DBE Dollar Amount column. (If 100% of item is not to be performed by the DBE, describe the exact portion of time to be performed by the DBE.) See Notice to Proposers/Bidders Disadvantaged Business Enterprise Information to determine how to count the participation of DBE firms.

Exhibit H-2 must be signed and dated by the successful proposer at contract execution. Also list a phone number in the space provided and print the name of the person to contact.

For the successful proposer, local agencies should complete the Contract Award Date and Federal Share fields and verify that all information is complete and accurate before signing and sending a copy of the form to the District Local Assistance Engineer within 15 days of contract execution. Failure to submit a completed and accurate form within the 15-day time period may result in the de-obligation of funds on this project.

District DBE Coordinator should verify that all information is complete and accurate. Once the information has been verified, the **District Local Assistance Engineer** signs and dates the form.

BIDDERS LIST**[EXHIBIT H-3]****Bidder:** _____ **IFB No.:** _____

The Department of Transportation requires the AUTHORITY to develop and maintain a "Bidders List". The list must include all firms that proposed on prime contracts or subcontracts for DOT-assisted projects, including **both DBEs and non-DBEs**. The Bidders List is intended to be a count of all firms that are participating, or attempting to participate, on DOT-assisted contracts whether the firm was successful or unsuccessful in their attempts to obtain contracts. This information is also required from the proposed Bidder. Bidders are encouraged to submit this information at the time of bid submission. However, if not elected to so at the time of bid submission, bidders must submit such information at the request of the Authority within the prescribed timeline set forth in the solicitation. The AUTHORITY will use this information to develop and maintain the Bidders List to assist in the AUTHORITY'S Overall Annual DBE goal-setting process.

Prime Bidder's Information	
Prime Bidder's Name:	Phone: ()
Address:	Fax: ()
Number of years in business:	Type of work/services/materials provided:
Contact Person:	Title:
Is the firm currently certified as a DBE under 49 CFR Part 26? ☐ Yes ☐ No	Check the box below for your firm's annual gross receipts last year.
	☐ Less than \$1 million
	☐ Less than \$5 million
	☐ Less than \$10 million
	☐ Less than \$15 million
	☐ More than \$15 million

List Bidder's Information for each subcontractor that proposed on DOT-assisted projects, including both DBEs and non-DBEs, whether successful or unsuccessful in their attempts to obtain contracts.	
Name of Subcontractor's Firm:	Phone: ()
Address:	Fax: ()
Number of years in business:	Type of work/services/materials provided:
Contact Person:	
Is the firm currently certified as a DBE under 49 CFR Part 26? ☐ Yes ☐ No	Check the box below for the firm's annual gross receipts last year.
	☐ Less than \$1 million
	☐ Less than \$5 million
	☐ Less than \$10 million
	☐ Less than \$15 million

		☐ More than \$15 million
List Bidder's Information for each subcontractor that proposed on DOT-assisted projects, including both DBEs and non-DBEs, whether successful or unsuccessful in their attempts to obtain contracts.		
Name of Subcontractor's Firm:	Phone: ()	
Address:	Fax: ()	
	Type of work/services/materials provided:	
Number of years in business:		
Contact Person:		
Is the firm currently certified as a DBE under 49 CFR Part 26? ☐ Yes ☐ No		Check the box below for the firm's annual gross receipts last year.
		☐ Less than \$1 million
		☐ Less than \$5 million
		☐ Less than \$10 million
		☐ Less than \$15 million
		☐ More than \$15 million

List Bidder's Information for each subcontractor that proposed on DOT-assisted projects, including both DBEs and non-DBEs, whether successful or unsuccessful in their attempts to obtain contracts.		
Name of Subcontractor's Firm:	Phone: ()	
Address:	Fax: ()	
	Type of work/services/materials provided:	
Number of years in business:		
Contact Person:		
Is the firm currently certified as a DBE under 49 CFR Part 26? ☐ Yes ☐ No		Check the box below for the firm's annual gross receipts last year.
		☐ Less than \$1 million
		☐ Less than \$5 million
		☐ Less than \$10 million
		☐ Less than \$15 million
		☐ More than \$15 million

If necessary, this form can be duplicated to list all subcontractors that proposed on DOT-assisted projects, including both DBEs and non-DBEs, whether successful or unsuccessful in their attempts to obtain contracts.