

**COUNTY OF EL DORADO
DEPARTMENT OF GENERAL SERVICES**



BID DOCUMENTS FOR

**PLACERVILLE AIRPORT
PLACERVILLE, CALIFORNIA**

**RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23**

AIP 3-06-0188-11

BID #GS-08-1019

**BIDS DUE: THURSDAY, JUNE 5, 2008
NO LATER THAN 2:00 P.M.**

**AT: EL DORADO COUNTY
OFFICE OF PROCUREMENT & CONTRACTS
330 FAIR LANE
PLACERVILLE, CA 95667**

APPROVED:

**Rusty Dupray, Chairman
Board of Supervisors**

**Richard W. Shepard, P.E.
Director of Transportation**

**EL DORADO COUNTY
GENERAL SERVICES DEPARTMENT
PLACERVILLE AIRPORT – PLACERVILLE, CALIFORNIA**

**RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
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ORGANIZATION OF SPECIFICATIONS

These specifications include the required F.A.A. Standards and the required County of El Dorado Standards. As a result there may be some duplication or conflict between certain sections. In case of conflict between the F.A.A. and the County specifications, the more restrictive specifications shall govern.

The General and Technical Provisions of this specification are based on the Federal Aviation Administration AC 150/5370-10C, "Standards for Specifying Construction of Airports." This standard specification has been modified to contain only sections applicable to this Project and to include requirements only related to the Project site.

The proposal form is included on the yellow sheets of these specifications.

**COUNTY OF EL DORADO, CALIFORNIA
DEPARTMENT OF TRANSPORTATION**

**NOTICE TO BIDDERS
BID #GS-08-1019**

NOTICE IS HEREBY GIVEN by the County of El Dorado, State of California, that sealed bids for work in accordance with the Project Plans (Plans) and Contract Documents designated:

**PLACERVILLE AIRPORT, PLACERVILLE, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23
AIP NO. 3-06-0188-11**

will be received by the County of El Dorado, Office of Procurement and Contracts located at 330 Fair Lane, Placerville, CA 95667, or by mailing to 330 Fair Lane, until **Thursday, June 5, 2008 at 2:00 p.m.**, at which time bids will be publicly opened and read by the El Dorado County Office of Procurement and Contracts.

No Bid may be withdrawn after the time established for receiving bids or before the award and execution of the Contract, unless the award is delayed for a period exceeding sixty (60) calendar days. The contract award will be made within sixty (60) calendar days after the date set for the opening of the bids and bids shall remain binding for this sixty-day period. Bids shall be executed in accordance with the instructions given and on the forms provided in the bound Contract Documents furnished by the El Dorado County, Department of Transportation. The proposal shall not be detached from the Contract Documents. All bids must be clearly marked on the envelope:

"PROPOSAL FOR PLACERVILLE AIRPORT, PLACERVILLE, CALIFORNIA, RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II), REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23, AIP NO. 3-06-0188-11, BID #GS-08-1019, TO BE OPENED AT 2:00 P.M. ON THURSDAY, JUNE 5, 2008."

LOCATION/DESCRIPTION OF THE WORK: The project is located in El Dorado County, at 3501 Airport Road, Placerville, California.

The Work to be done consists of, but is not limited to:

- A. Replace Medium Intensity Runway Lights on Runway 5-23 (Phase 2), Replace VASI with New 2-box PAPI on Runway 23, and Furnish New Regulator and Electrical Vault Modifications.
- B. Bids are required for the entire Work described herein.
- C. The contract time shall be forty (40) working days after the commencement date set forth in the Notice to Proceed.
- D. For bonding purposes the anticipated project cost is \$220,000.
- E. A pre-bid meeting will be held by the El Dorado County Department of Transportation on Tuesday, May 27, 2008, at 10:00 a.m. at the Placerville Airport, Airport Manager's Office, Placerville, California.

IN CASE OF CONFLICT BETWEEN F.A.A. AND COUNTY SPECIFICATIONS, THE MORE RESTRICTIVE SPECIFICATION SHALL GOVERN.

OBTAINING OR INSPECTING CONTRACT DOCUMENTS: The Contract Documents and Plans may be examined at the El Dorado County Department of Transportation or may be purchased in person or by mail from the Department of Transportation, 2850 Fairlane Court, Placerville, California 95667, Telephone (530) 621-5900. The purchase price of each set of Contract Documents and half-size Plans is THIRTY FIVE dollars (\$35.00) for each set and is non-refundable. To receive Contract Documents and half-size Plans by mail, send request and payment prior to shipping and include an additional TEN dollars (\$10.00), for a total of FORTY FIVE dollars (\$45.00), to include shipping and handling. A full set or partial set of full-size plans and/or cross sections is available at Brownie's Blueprint, 1322 V Street, Sacramento, California 95818, Telephone (916) 443-1322. The Contractor shall be responsible for payment of the cost of these full-size drawings.

CONTRACTOR'S LICENSE CLASSIFICATION: Bidders shall be properly licensed to perform the Work pursuant to the State Contractor's License Act (Business and Professions Code section 7000 et seq.) and shall possess a **CLASS A** or

C10 LICENSE or equivalent combination required by the categories and type of Work included in the Contract Documents and Plans.

Pursuant to California Public Contract Code section 20103.5 for contracts involving Federal funds, bids submitted shall not be invalidated by the failure of the Bidder to be licensed in accordance with the laws of this state so long as at the time the Contract is awarded, the successful Bidder is properly licensed in accordance therein. Failure of the successful Bidder to obtain proper and adequate licensing for an award of the Contract shall constitute a failure to execute the Contract, and forfeiture as provided under that section.

REQUIRED LISTING OF PROPOSED SUBCONTRACTORS: Each proposal shall have listed therein the name, address and percentage of work of each subcontractor to whom the Bidder proposes to subcontract portions of the Work in an amount in excess of ½ of one percent of his total Bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100, through 4113 inclusive of the Public Contract Code. The Bidder's attention is invited to other provisions of said Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION: In order to meet F.A.A. requirements, the Agency encourages the participation of Disadvantaged Business Enterprises (DBEs), as defined in 49 CFR 26 in the performance of contracts financed in whole or in part with Federal Funds. The Contractor shall not discriminate on the basis of race, national origin, or sex in the award and performance of subcontracts.

Bidders are advised that, as required by federal law, the Agency and F.A.A. have established a DBE goal. This Agency federal-aid contract is considered to be part of the DBE goal. The Agency is required to report to F.A.A. on DBE participation for all Federal-aid contracts each year. To provide assistance in meeting the goal, the Agency may include a DBE Availability Advisory in this contract. Bidders need not achieve the percentage stated in any DBE Availability Advisory as a condition of award.

All DBE forms attached to this document shall be filled out by the Contractor per these specifications.

The race neutral DBE availability advisory for this project is three percent (3%) of the total bid amount. Based on the Ninth Circuit Court Decision in the Western States Paving Company v. Washington State Department of Transportation, the Department of Transportation of the County of El Dorado, Placerville Airport has determined that it is appropriate to use a race/gender-neutral DBE goal. The County encourages all Contractors to take active race/gender-neutral steps to include DBEs in this and other airport contracts. Race/gender-neutral steps include the following: unbundling large contracts; identifying portions of work for subcontracting; provision of assistance in bonding and financing; technical assistance; etc. This contract can be awarded without the lowest responsive bidder meeting the goal or demonstrating good faith efforts to meet the goal.

WAGE RATE REQUIREMENTS:

- A) In accordance with the provisions of California Labor Code sections 1770, et seq., including but not limited to 1773, 1773.1, 1773.2, 1773.6 and 1773.7, and 1720, the general prevailing rate of wages in the County in which the Work is to be done has been determined by the Director of the California Department of Industrial Relations. These wage rates appear in the California Department of Transportation publication entitled General Prevailing Wage Rates. Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, PO Box 603, San Francisco CA 94101, Phone (415) 787-2794. Future effective wage rates which have been predetermined and are on file with the Department of Industrial Relations are referenced but not printed in said publication.
- B) Copies of the general prevailing rate of wages in the County in which the Work is to be done are also on file at the Department of Transportation principal office, and shall be made available upon request, and in the case of projects involving federal funds, federal wage requirements have been included in the Contract Documents.
- C) Federal prevailing wage rules and regulations are fully set forth in the Contract specifications. Where federal and state prevailing wage requirements apply, compliance with both is required so that the higher wage rate shall apply. (i.e. state prevailing wage rates shall apply when the State wage rate is higher than the federal wage rate.)

LABOR CODE PROVISIONS: All Contractors and subcontractors are subject to the provisions of sections 1810 through 1814 of the California Labor Code which provide for the maximum hours a worker is to be employed and the amount and rate of overtime compensation.

NONDISCRIMINATION: During the performance of this Contract, the Department of Transportation notifies the bidders that it will affirmatively insure that no otherwise qualified person will be excluded from participation or employment, denied program benefits, or be subjected to discrimination based on race, color, ancestry, national origin, sex, age, handicap, physical disability (including HIV and AIDS), medical condition (cancer) religion, familial status or religious preference under any contract activity funded by these federal funds, as required by Title VI of the Civil Rights Act of 1964, Department of Justice regulations under 28 CFR Subpart 42, as amended, and the Age Discrimination Act of 1975 and title V, Section 504 of the Rehabilitation Act of 1973 (29 USC Section 974), and the Fair Employment and Housing Act and all implementing regulations. The successful Bidder and all of its subcontractors are hereby notified that it/they will be required to comply with these provisions and the applicable regulations promulgated thereunder.

EQUAL EMPLOYMENT OPPORTUNITY: The EEO requirements, labor provisions and wage rates are included in the specifications and bid documents and are available for inspection at the El Dorado County Department of Transportation, located at 2850 Fairlane Court, Placerville, California 95667.

COMPLIANCE WITH FEDERAL AND STATE LAWS: The successful Bidder and all of its subcontractors are hereby notified that it/they will be required to comply with all State and Federal requirements described in the bid documents including but not by way of limitation labor standards, non-discrimination and Equal Employment Opportunity regulations, the Americans with Disabilities Act, Title V, Section 504 of the Rehabilitation Act of 1973, Drug Free Workplace, Title VI of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

FEDERAL REQUIREMENTS: Each bidder must complete, sign and furnish, with his/her bid, the "Bidder's Statement on Previous Contracts Subject to EEO Clause" and a "Certification of Nonsegregated Facilities," the pertinent race-neutral Disadvantaged Business Enterprise bid forms to facilitate Bidder's reporting of Disadvantaged Business Enterprise participation, as applicable, as contained in the Bid Proposal.

A contractor having 50 or more employees and his/her subcontractors having 50 or more employees and who may be awarded a contract of \$50,000 or more will be required to maintain an affirmative action program, the standards for which are contained in the specifications.

To be eligible for award, each bidder must comply with the affirmative action requirements that are contained in the specifications.

BID EXAMINATION AND PREPARATION: The Bidder shall carefully examine the Contract Documents, including the Plans and Specifications and satisfy the Bidder as to their sufficiency, and shall not at any time after submission of the Bid, dispute or complain of such Plans or Specifications nor assert that there is any misunderstanding in regard to the location, extent or nature or amount of work to be performed in accordance thereto. Should a Bidder find discrepancies or omissions in the Plans and Specifications or have questions regarding the materials contained therein, the Bidder shall contact the Design Engineer, Reinard W. Brandley, (916) 652-4725.

The Bid shall have all items and filled in and the signatures of all persons signing the Bid shall be in long-hand. Mistakes must be corrected and the correction inserted and initialed in ink by the person signing the Bid. A bid which makes exceptions, changes or reservations to the Plans and Specifications shall be deemed to be non-responsive and shall not be considered. A bid that fails to conform to the conditions of the Notice to Bidders shall be deemed to be non-responsive and shall not be considered.

BID SECURITY: A bid security shall be provided with each Bid. Bid security shall be in an amount of not less than ten percent of the total amount of the Bid and shall be cash, a certified check or cashier's check drawn to the order of the County of El Dorado or a Bidder's Bond executed by a surety satisfactory to the County of El Dorado in the form provided in the Proposal section of these Contract Documents. The Bidder to whom award is made shall provide Certificates of Insurance as required in Article 8 of the El Dorado County Standard Specifications, and shall complete and submit the Performance Bond and Payment Bond forms contained in the Contract Documents.

AWARD OF CONTRACT: Bids will be considered for award by the Board of Supervisors. The County of El Dorado reserves the right after opening bids to reject any or all bids, to waive any informality (non-responsiveness) in a bid, or to make award to the lowest responsive, responsible Bidder and reject all other bids, as it may best serve the interest of the County.

As a condition of award, the successful Bidder will be required to submit bonds and evidence of insurance, as well as certifications required by the grant and set forth in the Contract Documents, within ten (10) calendar days of award of bid, not including Sundays and legal holidays, and prior to execution of the Agreement by the County. Failure to meet this requirement shall constitute abandonment of the Bid by the Bidder and forfeiture of the Bid Bond. Award will then be considered to the next lowest responsible Bidder.

RETAINAGE FROM PAYMENTS: The Contractor may elect to receive 100 percent of payments due under the Contract from time to time, without retention of any portion of the payment by the County, by depositing securities of equivalent value with the County in accordance with the provisions of Section 22300 of the Public Contract Code. Securities eligible for deposit hereunder shall be limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

PROJECT ADMINISTRATION: All communications relative to the Contract Documents and Plans shall be directed to the County of El Dorado, Department of Transportation, Attn: David Nicolls, Airport Operations Supervisor, 3501 Airport Road, Placerville, California 95667, (530) 622-0459, by mail at 360 Fair Lane, Placerville, California 95667; with copies to Richard Shepard, Director of Transportation, 2850 Fairlane Court, Placerville, California 95667, (530) 621-5981. No oral responses to any questions concerning the content of the Plans and Contract Documents will be given. Responses, if any, will be in the form of written addenda to the Contract Documents and Plans.

BY ORDER OF the Director of the Department of Transportation, County of El Dorado, State of California. Executed on _____, 2008 at Placerville, California.

By _____
Richard W. Shepard, P.E., Director
County of El Dorado
Department of Transportation

(NOTICE: Bidder's failure to fully complete and execute the questions and statements required by these Contract Documents, and/or as required by applicable law and regulations may prohibit award of the subject contract to the Bidder. El Dorado County may make a determination based upon Bidder's responses to the questions and statements required by these Contract Documents that may prohibit the award of the Contract to Bidder.)

INSTRUCTIONS TO BIDDERS

1. SCOPE OF PROJECT

The work to be done under this contract consists of furnishing all materials, plant and equipment, and performing all necessary labor in accordance with the prepared plans, specifications, and special provisions as directed by the County or its authorized representative, as follows:

- Replace Medium Intensity Runway Lights (MIRL) on Runway 5-23, Phase 2
- Replace VASI with new 2-Box PAPI on Runway 23.
- Furnish New Regulator, Electrical Vault Modifications
- Perform all work and furnish all materials incidental to the above and in accordance with the prepared plans, specifications and special provisions and/or as directed by El Dorado County or its authorized representative.

2. LOCAL CONDITIONS

Bidders are notified that they must carefully examine the Plans and Specifications, annexed forms of Proposal, General Conditions, and Contract and thoroughly familiarize themselves with all State, Federal and other laws pertaining to this improvement. They must also examine and judge for themselves as to the location and character of the proposed work, the amounts and quality of the materials to be required, the work to be done, the probable soil classification, and other features to be encountered. No allowance will be made to any bidder because of lack of such examination or knowledge. Bidders will be permitted to make such tests and examinations as they deem necessary to determine the character of the material which will be encountered in excavation. Such tests and examinations shall not interfere with airport operations and shall have prior approval of the County.

If any bidder is in doubt as to the true meaning of any part of the drawings, specifications, or other Contract Documents, or finds discrepancies in, or omissions from, the drawings or specifications, he/she may submit to the Project Administrator a written request for a clarification or correction thereof not later than five (5) days before the date bids will be opened. The person submitting the request will be responsible for its prompt delivery. Any clarification or correction will be made by written addendum, which shall be mailed or delivered to each person receiving a set of such documents. The County will not be responsible for any other explanation or interpretation of the Contract Documents.

3. EXISTING FACILITIES

The Contractor's attention is directed to the fact that the existing airport facilities must be kept in operation with an absolute minimum of interference in order that no delays or hazards affect the using of this airport facility. The Contractor shall be required to plan and coordinate his work with the Engineer in such a manner as to ensure safety and a minimum of hindrance to the public

using the facilities. All construction and access to the construction must be confined to the limits designated by the Engineer.

4. ESTIMATE OF QUANTITIES

The estimate of quantities of work to be done under the specifications is approximate and is given only as a basis of calculation upon which the award of the contract will be made. The Contractor will be paid for the actual work done including materials and equipment actually installed at the contract unit price. The County reserves the right to increase or decrease the amount of any class of work or material deemed necessary without restrictions. Bidders must submit balanced bids in order that they may not be affected adversely by an increase or decrease of quantities.

5. BIDDER'S QUALIFICATIONS

It is required that a Contractor hold a valid contractor's license of a class corresponding for the work to be done in accordance with the State Contractor's License Law requirements under the provisions of Chapter 791, Statutes of California, 1929, as amended. Class of Contractor's License required for this work is "A" or "C10".

6. SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of the contract or contracts or any portion thereof, or of his/her right, title, or interest therein, without written consent of the County. In case such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with his/her own organization not less than 30 percent of the total contract cost, except that any items designated by the Contractor and approved by the County as "specialty items" may be performed by subcontract and the cost of any such specialty items so performed by subcontract may be deducted from the total cost before computing the amount of work to be performed by the Contractor with his/her own organization. No subcontracts or transfer of contract shall release the Contractor of his/her liability under contracts and bonds.

7. FORM OF PROPOSAL

All proposals must be submitted on the forms furnished herewith and bound herein, and in addition to the necessary unit price items to make a complete bid, all blanks giving general information must be filled in and the bid signed by the Contractor or his/her duly authorized agent.

The proposals may be rejected if they show any alteration of forms, additions not called for, conditional or alternative bids, incomplete bids, erasures or irregularities of any kind.

8. BASIS OF AWARD

The County reserves the right to reject any or all bids, to waive irregularities not affecting substantial rights, and to delay the award pending approval of the Federal Aviation Administration.

In case of conflict in the proposal between unit price bid and the extended total, the unit price bid shall govern.

The basis of the award is subject to all conditions as contained in these specifications. The award of the contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed. It is understood and agreed that all equipment and material items shall be in stockpile under immediate control of the Contractor prior to the time they will be needed to complete the work at the Airport.

The contract award will be made within sixty (60) calendar days after the date set for the opening of the bids, and bids shall remain binding for this sixty-day period. The Contractor shall commence work within five (5) calendar days after the date set by El Dorado County in the written Notice to Proceed to the Contractor.

LOCAL AGENCY BIDDER - DBE INFORMATION form will be included in the contract documents to be executed by the successful bidder. The purpose of the form is to collect data required under 49 CFR 26. Even if no DBE participation will be reported, the successful bidder must execute and return the form.

The successful bidder's "LOCAL AGENCY BIDDER - DBE INFORMATION" form should include the names, addresses and phone numbers of DBE firms that will participate, with a complete description of work or supplies to be provided by each, and the dollar value of each DBE transaction. When 100 percent of a contract item of work is not to be performed or furnished by a DBE information, a description of the exact portion of that work to be performed or furnished by that DBE should be included in the DBE information, including the planned location of that work. A successful bidder certified as a DBE should describe the work it has committed to performing with its own forces as well as any other work that it has committed to be performed by DBE subcontractors, suppliers and trucking companies.

The successful bidder is encouraged to provide written confirmation from each DBE that the DBE is participating in the contract. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract. IF a DBE is participating as a joint venture partner, the successful bidder is encouraged to submit a copy of the joint venture agreement.

The "LOCAL AGENCY'S BIDDER - DBE INFORMATION" form should be completed and returned to the Agency by the successful bidder with the executed contract and contract bonds.

9. CONTRACT BONDS

Upon receipt of written notice of award of the contract and not more than ten (10) calendar days thereafter, not including Sundays and legal holidays, the Contractor shall furnish a Performance Bond and a Payment Bond as set forth in Article 8.2, "Bonds," of the El Dorado County Specifications, with power of attorney issued by a surety licensed to do business in the State of California. The form of the bonds shall be acceptable to the County.

10. WORKER'S COMPENSATION INSURANCE

The Contractor shall provide worker's compensation insurance, as required under the laws of the State of California, protecting the employees on the work, and shall pay all premiums due thereunder. Contractor shall provide Workers' Compensation Certificate as included in Article 13 of the Contract.

11. PUBLIC LIABILITY INSURANCE

See Article 8, Item 8.1, of the El Dorado County Specifications for insurance requirements.

12. CONTRACT TIME

The Contractor shall begin work within five (5) calendar days after the date set in the written Notice to Proceed by the County and shall diligently prosecute same to completion for all of the proposed construction.

The Contract time for the completion of the total project shall be forty (40) working days beginning on date of written Notice to Proceed.

13. LIQUIDATED DAMAGES

If the Contractor refuses or fails to complete the work within the time specified, including authorized extensions, there shall be deducted from monies due the Contractor, not as a penalty, but as liquidated damages the sum of Five Hundred Dollars (\$500.00) for each calendar day subsequent to the time specified and the time the work is actually completed and accepted. Delays caused by adverse weather conditions or conditions for which the County is clearly responsible will be added to the contract time.

14. SHOP AND MANUFACTURER'S DRAWINGS

The successful bidder shall submit to the Engineer eight (8) copies of the name of manufacturers, catalog numbers, and shop drawings of each item of equipment he/she proposes to furnish and install under this contract. These submittals shall be made to the Engineer within five (5) days after award of the contract.

15. FEDERAL REQUIREMENTS

The work done under this contract is being financed in part by a grant from the U.S. Government under the Airport Improvement Program. The following Federal Requirements must be adhered to by the Contractor:

- a. This contract is under and subject to Executive Order 11246, as amended, of September 24, 1965, the Federal Labor provisions and the Equal Employment Opportunity (EEO) provisions as contained in the contract, specifications, and bid documents.

- b. Each bidder must complete, sign and furnish with his/her bid the "Bidder's Statement on Previous Contracts Subject to EEO Clause," a "Certification of Nonsegregated Facilities," the "Race-Neutral Disadvantaged Business Enterprise Utilization" form and the "Letter of Intent," as included in the Bid Proposal.
- c. Required Notice for All Contracts:
 - (1) The bidder must supply all the information required by the proposal forms and specifications.
 - (2) The appropriate sponsor, in accordance with Title VI of the Civil Rights Act of 1964, hereby notifies all bidders that they (bidders) must affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for award.
- d. Required Notices for Contracts Over \$10,000. The regulations and orders of the Secretary of Labor, Office of Federal Contract Compliance Programs (OFCCP) require that the sponsor and/or his/her contractor(s) include in Invitation for Bids (IFB) or negotiations for contracts over \$10,000 the following notices:
 - (1) Each bidder will be required to comply with the affirmative action plan for equal employment opportunity prescribed by the OFCCP, United States Department of Labor, Regulations of the Secretary of Labor (41 CFR 60), or by other designated trades used in the performance of the contract and other nonfederally involved contracts in the area geographically defined in the plan.
 - (2) The proposed contract is under and subject to Executive Order 11246, as amended, of September 24, 1965, and to the EEO clause; and
 - (3) The successful bidder will be required to submit a Certification of Non-Segregated Facilities prior to award of the contract, and to notify prospective subcontractors of the requirement for such a certification where the subcontract exceeds \$10,000. Samples of the certification and the notice to subcontractors appear in the specifications.
 - (4) A bidder must indicate whether he/she has previously had a contract subject to the EEO clause, whether he/she has filed all report forms required in such contract, and if not, a compliance report (Standard Form SF 100) must be submitted prior to award of the contract.
 - (5) EEO and labor provisions, when applicable, are included in the bidding documents of specifications and are available for inspection at the El Dorado County Department of Transportation, Placerville, California.

- (6) Contractors and subcontractors may satisfy requirements of the EEO contract clause by stating in all solicitations or advertisements for employees that:

"All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin."

or by using a single advertisement in which appears in clearly distinguished type, the phrase:

"an equal opportunity employer".

- e. Required Notice for Contracts with 50 or More Employees and a Contract of \$50,000 or More. In the Invitation for Bids relating to contracts of \$50,000 or more, the sponsor shall give notice that a contractor having 50 or more employees and who may be awarded a subcontract of \$50,000 or more will, within 120 days from contract commencement, be required to develop a written Affirmative Action Compliance Program for each of its establishments (state and local governments are exempt). Invitation for Bids shall also include the following:

- (1) Prior to award of this contract, the contractor must file a Compliance Report (SF 100) if the contractor has not submitted a complete and accurate Compliance Report within 12 months preceding the date of award.
- (2) State and local governments are exempt from the requirements of filing an annual Compliance Report (SF 100).
- (3) The contractor shall require the subcontractor on any first tier subcontract to file a SF 100 prior to award of the subcontract if the above conditions apply. A SF 100 will be furnished upon request. The SF 100 is normally furnished contractors annually, based on a mailing list currently maintained by the Joint Reporting Committee. In the event a contractor has not received the form, he/she may obtain it by writing to the following address:

Joint Reporting Committee
1800 G Street, N.W.
Washington, D.C. 20506

- f. Required Notice for Contracts in Excess of \$100,000. Advertisements for bids must include:

The requirement for a bid guarantee from each bidder equivalent to 10 percent of the bid price. The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his/her bid, execute such contractual documents as may be required within the time specified.

16. U.S. DEPARTMENT OF LABOR POSTERS

U.S. Department of Labor Posters, Form SOL-155 (10-54), together with the applicable minimum wage rates, as determined by the Secretary of Labor for this project, shall be posted in a prominent place at the site of the work. The name of the FAA District Airport Engineer whom workers may contact in the event they have reason for complaint shall be placed in the box in the middle of the poster. Copies of this poster can be obtained from local Labor Department offices.

17. PAYMENTS

The Contractor shall, before application for first progress payment, submit to the County a schedule of values of the various parts of the work aggregating the total sum of the contract made out in such form as the County and the Contractor may agree upon and supported by evidence as to its correctness, such as quotes from subcontractors' or Contractor's estimating work sheets. This schedule, when approved by the County, shall be used as the basis for making progress payments unless it is found to be in error. In applying for payments, the Contractor shall submit a statement based on this schedule. Payment will be made only for material and work actually incorporated in the work. A suggested form for this progress payment follows:

MONTHLY STATEMENT FORM

NAME OF JOB _____

CONTRACTOR _____

Statement as of _____

Item No.	Description*	Unit	Unit Price	Bid Quantity	Bid Amount	Quantity Complete	Amount Due	Percent Complete
TOTAL CONTRACT PRICE					\$		\$	
Change Order No. _____								
REVISED CONTRACT PRICE							\$	
Total earned to date							\$	
Less 10% Retention								
Total amount due							\$	
Less previous payments								
AMOUNT DUE THIS PAYMENT							\$	

Submitted by: _____

Approved by: _____

*List contract items which comprise the total of the bid as shown in the proposal.

18. WITHHOLDING

The County shall withhold from each payment due the Contractor ten percent (10%) of the amount claimed. This 10% of the payment shall be withheld until final acceptance of the total project is given by the County, by the Engineer, and by the FAA. After final acceptance of the project is given and the Contractor has submitted acceptable release of all liens and furnished the Engineer acceptable red-lined drawings showing the "as-built" condition of the completed project, then the County shall release for payment the 10% retention. County will make such final payment of retention within thirty-five (35) days of recordation of a Notice of Completion of the project and submittal of release of liens and red-lined as-built drawings.

19. DEFINITIONS

Whenever in the specifications or on the drawings the word directed, required, permitted, designated, ordered, or words of like import are used, it shall be understood that the direction, requirement, permission, designation or order of El Dorado County is intended; and, similarly, the words approved, satisfactory, suitable, acceptable, or words of like import, shall mean approved by the representative of El Dorado County authorized to express such approval.

20. LEGAL REQUIREMENTS

The Bidder's special attention is directed to the requirements set forth in Attachment E, Standard Federal Contract Clauses and Requirements for Construction Contracts, to the Contract.

21. TAXES

Bidders shall have included in their bids any and all Federal, State and local taxes of whatever nature in connection with material to be furnished to the County. Absolutely no extras shall be allowed for such by the County.

22. CONTRACT DOCUMENTS

The form of agreement which the successful bidder, as Contractor, will be required to execute and the form of bonds which he/she will be required to furnish are included in the Contract Documents and should be carefully examined by each bidder. The contract and bonds will be executed in three (3) original counterparts. The complete contract consists of the Contract Documents as defined in the contract, and are intended to cooperate and be complementary so that any work called for in one and not mentioned in the other, or vice versa, is to be executed the same as if mentioned in all said documents. The intention of the documents is to include all labor, materials, equipment, transportation and services necessary for the proper execution of the work.

23. DECLARATION FOR FINAL PAYMENT

After the completion of the work of this contract, the Contractor shall file with the County his/her declaration under penalty of perjury stating that all workers and persons employed, all firms supplying the materials and all subcontractors upon the project, have been paid in full and that there are no bills outstanding against the project for either labor or materials except certain items, if any, to be set forth in detail in the declaration. The filing of such declaration by the Contractor and the submittals referred to in Section 90-09 of the General Provisions shall be a condition precedent to Contractor's receipt of the final payment on this contract.

24. ADMONITION

All bidders hereby are advised that El Dorado County has adopted General Provisions for this work which differ substantially from the general provisions provided for private projects or projects undertaken by other governmental agencies. Contractors are admonished to carefully read the

General Provisions, as well as the special conditions and technical provisions, and are advised that the General Provisions shall be enforced strictly.

**** END OF SECTION ****

(Because some colored inks will not reproduce in copy machines, please use black ink to complete this proposal.)

(DO NOT DETACH)

PROPOSAL

**TO THE DEPARTMENT OF TRANSPORTATION,
COUNTY OF EL DORADO,
STATE OF CALIFORNIA**

for the construction of

**PLACERVILLE AIRPORT, PLACERVILLE, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23
AIP NO. 3-06-0188-11
BID #GS-08-1019**

NAME OF BIDDER _____

BUSINESS P.O. BOX _____

CITY, STATE, ZIP _____

BUSINESS STREET ADDRESS

(Please include even if P.O. Box used)

CITY, STATE, ZIP _____

TELEPHONE NO: AREA CODE (____) _____

FAX NO: AREA CODE (____) _____

The Work for which this Proposal is submitted is for the construction in accordance with these Contract Documents (including the payment of not less than the State general prevailing wage rates or Federal minimum wage rates set forth herein), the Project Plans described below, including any addenda thereto, the Contract annexed hereto, and also in accordance with the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and in accordance with the General Prevailing Wage rates. The Project Plans and Contract Documents for the work to be done are entitled: **PLACERVILLE AIRPORT, PLACERVILLE, CALIFORNIA, RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II), REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23, AIP NO. 3-06-0188-11, BID #GS-08-1019.**

Bids are to be submitted for the entire Work. The amount of the Bid for comparison purposes will be the total of all the items in the base bid.

The Bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided

for this purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In case of discrepancy between the item price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount of the entry in the item total column, then the amount set forth in the total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc., from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the Department's Final Estimate of cost.

If this Proposal is accepted and the undersigned Bidder shall fail to enter into the Contract and furnish the two bonds in the sums required by the State Contract Act, with surety satisfaction to the County of El Dorado within 10 days, not including Sundays and legal holidays, after the Bidder has received notice from the County of El Dorado that the Contract has been awarded, the County of El Dorado may, at its option, determine that the Bidder has abandoned the Contract, and thereupon this Proposal and the acceptance thereof shall be null and void and the forfeiture of such security accompanying this Proposal shall operate and the same shall be the property of the County of El Dorado.

The undersigned, as Bidder, declares under penalty of perjury under the laws of the State of California that the only persons or parties interested in this Proposal, as principals, are those named herein; that this Proposal is made without collusion with any other person, firm, or corporation; that the Bidder has carefully examined the location of the proposed work, the annexed proposed form of Contract, and the Project Plans therein referred to; and the Bidder proposes, and agrees if this Proposal is accepted, that the Bidder will contract with the County of El Dorado, in the form of the copy of the Contract annexed hereto, to provide all necessary machinery, tools, apparatus, and other means of construction, and to do all the work and furnish all the materials specified in the Contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that the Bidder will take in full payment therefore the following item prices, to wit:

PROPOSAL PAY ITEMS BID PRICE SCHEDULE
PLACERVILLE AIRPORT, PLACERVILLE, CALIFORNIA - BID #GS-08-1019
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23
AIP NO. 3-06-0188-11

Item No.	Item Description	Unit of Measure	Approximate Quantity	Unit Price (In Figures)	Amount (In Figures)
1	SWPPP Submitted by California Registered Civil Engineer (P-148)	L.S.	L.S.	LUMP SUM	\$
2	Marking and Lighting of Closed Airport Facilities (P-149)	L.S.	L.S.	LUMP SUM	\$
3	Mobilization (P-150)	L.S.	L.S.	LUMP SUM	\$
4	Airfield Cable, L824, 1/C, No. 8, Type C, 5 KV, Furnish and Install in Duct or Conduit (L-108)	Ln. Ft.	8,000.0	\$	\$
5	Furnish and Install 10 kW, 6.6 amp. Regulator, Complete in Place (L-109)	Each	1.0	\$	\$
6	Vault Labor and Equipment (L-109)	L.S.	L.S.	LUMP SUM	\$
7	Underground Electrical Duct, Type II, 1-way, 2-inch (L-110)	Ln. Ft.	6,400.0	\$	\$
8	Underground Electrical Duct, Type I, 2-way, 4-inch (L-110)	Ln. Ft.	10.0	\$	\$
9	Underground Electrical Duct, Type I, 1-way, 3-inch (L-110)	Ln. Ft.	320.0	\$	\$
10	Directional Bored Duct, 1-way, 3-inch (L-110)	Ln. Ft.	225.0	\$	\$
11	Furnish and Install L-867 Size E Pull Box, Complete in Place (L-115)	Each	11.0	\$	\$
12	Remove Existing Stake-Mounted Runway Lights (L-125)	L.S.	L.S.	LUMP SUM	\$
13	New Medium Intensity Runway Edge Lights, Base Mounted, Complete in Place (L-125)	Each	26.0	\$	\$
14	Furnish and Install 100-watt Transformers for Existing Airfield Guidance Signs (L-125)	Each	6.0	\$	\$
15	Furnish and Install New 2-box Precision Approach Path Indicator (PAPI), Complete in Place (L-125)	L.S.	L.S.	LUMP SUM	\$
	Total Base Bid				\$

BASE BID (Words):

MAJOR EQUIPMENT ITEMS: The Bidder shall list in the space provided hereinbelow one named manufacturer for each type of major equipment listed in the Specifications. Any requests for substitutions for materials and equipment, including specifically those listed as major equipment, may only be made after the award. Failure to list a manufacturer for any type of equipment shall constitute submission of a non-responsive bid.

The Bidder hereby represents that Bidder will utilize the following manufacturer for each of the items of major equipment described below, and will not substitute a different manufacturer without the prior written approval of the County of El Dorado:

Specification Section

Equipment

Manufacturer

None

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

BIDDER'S STATEMENT ON PREVIOUS CONTRACTS SUBJECT TO EEO CLAUSE

The Bidder _____,

proposed subcontractor _____,

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

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

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

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

CERTIFICATION OF NONSEGREGATED FACILITIES

The federally-assisted construction contractor certifies that Contractor does not maintain or provide for his/her employees any segregated facilities at any of his/her establishments and that he/she does not permit his/her employees to perform their services at any location, under Contractor control, where segregated facilities are maintained. The federally-assisted construction contractor certifies that he/she will not maintain or provide, for his/her employees, segregated facilities at any of his/her establishments and that he/she will not permit his/her employees to perform their services at any location under his/her control where segregated facilities are maintained. The federally-assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or any other reason.

The federally-assisted construction contractor agrees that (except where he/she has obtained identical certifications from proposed subcontractors for specific time periods) he/she will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he/she will retain such certifications in his/her files.

Certification - The information above is true and complete to the best of my
knowledge and belief.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

PERSONS INTERESTED IN THIS PROPOSAL

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

(IMPORTANT NOTICE: If Bidder or other interested person is a corporation, state the legal name of the corporation and also the names of its president, secretary, treasurer, and manager; if a co-partnership, state true name of the firm and also the names of all individual co-partners composing the firm; if a sole proprietorship, state the first and last names in full.)

BIDDER'S LICENSE

The undersigned Bidder is licensed in the State of California in accordance with the Contractor's License Law, Business and Professional Code:

License Number _____

Classification(s) _____

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury under the laws of the State of California, the following questionnaire:

Has the Bidder, any officer of the Bidder, or any employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes: _____

No: _____

If the answer is yes, explain the circumstances in the following space:

PUBLIC CONTRACT CODE SECTION 10232 STATEMENT

In accordance with Public Contract Code Section 10232, the Bidder hereby states under penalty of perjury under the laws of the State of California, that no more than one final unappealable finding of contempt of court by a Federal Court has been issued against the Bidder within the immediate preceding two year period because of the Bidder's failure to comply with an order of a Federal Court which orders the Bidder to comply with an order of the National Labor Relations Board

NOTE: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

NONCOLLUSION AFFIDAVIT

(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

In accordance with Title 23 United States Code, Section 112, and Public Contract Code Section 7106, the Bidder declares that the Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the Bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the Contract or anyone interested in the proposed Contract; that all statements contained in the bid are true; and, further, that the Bidder has not, directly or indirectly, submitted his bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

NOTE:

The above Noncollusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Noncollusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

CERTIFICATION FOR FEDERAL AID CONTRACTS

The undersigned certifies, by signing and submitting this bid or proposal, to the best of his knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of 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 Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

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

The undersigned also agrees by submitting his bid or proposal that he shall require that the language of this certification be included in all lower tier subcontracts, which all such subrecipients shall certify and disclose accordingly.

COMPLETE THE FEDERAL FORM **SF-LLL** ONLY IF YOU PAID FUNDS, OTHER THAN FEDERAL FUNDS, FOR LOBBYING ANY FEDERAL OFFICER OR EMPLOYEE. SEE THE PRECEDING CERTIFICATION FOR FEDERAL AID CONTRACT. THIS FORM CAN BE OBTAINED FROM THE COUNTY.

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form 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. 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 followup 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 subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st 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, if known.
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 States Coast Guard.
7. Enter the Federal program name or description for 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 registrant under the Lobbying Disclosure Act of 1995 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. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 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 this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352

Approved by OMB

0348-0046

(See reverse for public burden disclosure.)

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance	2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award	3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: Congressional District, if known: ^{4c}	5. If Reporting Entity in No. 4 is a 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 Registrant <i>(if individual, last name, first name, MI):</i>	b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i>	
11. Information requested through this form is authorized by title 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 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 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
Federal Use Only:		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

**TITLE 24, CODE OF FEDERAL REGULATIONS, PART 24 DEBARMENT AND
SUSPENSION CERTIFICATION**

The Bidder, under penalty of perjury under the laws of the State of California, certifies that, except as noted below, he or any person associated therewith in the capacity of owner, partner, director, officer, manager:

is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;

has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;

does not have a proposed debarment pending; and

has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space:

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applied, initiating agency, and dates of action.

NOTES: Providing false information may result in criminal prosecution or administrative sanctions.

The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In accordance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the Bidder hereby declares under penalty of perjury under the laws of the State of California that the Bidder has _____, has not _____ been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "Bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

NOTE: The Bidder must place a check mark after "has" or "has not" in one of the blank spaces provided.
The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement.
Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

**TRADE RESTRICTION CLAUSE - 49 CFR PART 30
(VERSION 1, 1/5/90)**

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- (a) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- (b) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- (c) has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct, through the Sponsor, cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely upon the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct, through the Sponsor, cancellation of the contract or subcontract for default at no cost to the Government.

Trade Restriction Clause (Continued)

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

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

NOTES: Providing false information may result in criminal prosecution or administrative sanctions.

The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

BUY AMERICAN CERTIFICATE (JAN 1991)

By submitting a bid/proposal under this solicitation, except for those items listed by the offeror below or on a separate and clearly identified attachment to this bid/proposal, the offeror certifies that steel and each manufactured product, is produced in the United States (as defined in "Buy American - Steel and Manufactured Products for Construction Contracts" of Attachment in to the Contract included in these specifications) and that components of unknown origin are considered to have been produced or manufactured outside the United States.

Offerors may obtain from El Dorado County Department of Transportation lists of articles, materials, and supplies excepted from this provision.

PRODUCT

COUNTRY OF ORIGIN

NOTES: Providing false information may result in criminal prosecution or administrative sanctions.

The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

**RACE-NEUTRAL
DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION**

The bidder is committed to _____ percent* (___%) race neutral DBE utilization on this project based on its proposed DBE subcontractors/vendors for participation under this contract.

Contractor _____

State Registration No. _____

By _____ (Signature) _____ (Title)

Address _____

Phone No. _____ Zip Code _____

*Contractor shall insert percentage to which he/she is committing.

LETTER OF INTENT

Name of Bidder's Firm: _____

Bidder's Address: _____

City: _____ State _____ Zip _____

Name of DBE Firm: _____

Address: _____

City: _____ State _____ Zip _____

Telephone: _____ Area Code _____

State DBE Certification Number*: _____

Description of work to be performed or supplies to be provided by DBE firm:

Bidder intends to utilize the above-named DBE firm for the work described above. The estimated amount of work is valued at \$_____.

Bidder shall identify all DBE firms being claimed for credit, regardless of tier.

If the above-named bidder is not determined to be the successful bidder, the Letter of Intent shall be null and void.

(Copy this page for each DBE subcontractor.)

*DBE prime contractors shall enter their DBE certification number. DBE prime contractors shall indicate all work to be performed by DBEs, including work performed by its own forces.

BIDDER INFORMATION SHEET

Bidder must check one of the following classifications which fits its type of business organization and furnish all information required under that classification.

Please typewrite or print your answers.
Attach a copy of license(s) upon which you intend to rely.

Bidder's State Contractor's License, Classification(s) and Number(s):

BIDDER IS A CORPORATION

The full name of the corporation as it appears on the State Contractor's License is:

Corporation is incorporated in the State of:

BIDDER IS AN INDIVIDUAL

Bidder's name as it appears on State Contractor's License is:

BIDDER IS A PARTNERSHIP

Bidder's firm name, individual or partnership, as it appears on State Contractor's License is:

The full names of all partners as they appear on State Contractor's License are:

County in which any Certificate of Doing Business Under Fictitious Name is filed - (if none, so state):

Accompanying this proposal is _____
(NOTICE: INSERT THE WORDS "CASH(\$___)," "CASHIER'S CHECK," "CERTIFIED CHECK," OR "BIDDERS BOND," AS THE CASE MAY BE)

in amount equal to at least ten percent of the total of the Bid.

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

IMPORTANT NOTICE: If the Bidder or other interested person is a corporation, state legal name of corporation and place of incorporation, also names of the president, secretary, treasurer, and executive officer thereof; if a partnership, state name of partnership, also names of all individual partners; if Bidder or other interested person is an individual, state first and last names in full.

Licensed in accordance with an act providing for the registration of Contractors,

License No. _____ Classification(s) _____

(A Copy of the afore-referenced license must be supplied at Notice of Award.)

ADDENDA:

This Proposal is submitted with respect to the changes to the Contract included in addenda number/s

(Fill in addenda numbers if addenda have been received and insert, in this proposal, any Engineer's Estimate sheets that were received as part of the addenda)

CERTIFICATION OF BIDDER FOR PROPOSAL:

By my signature on this Proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232, and 10285.1 are true and correct and that I have complied with the requirements of EEO Reference 28 CFR Part 42. By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Bidder's Statement on Previous Contracts Subject to EEO Clause; Certification of Nonsegregated Facilities; Trade Restriction Clause – 49 CFR Part 30; Buy American Certificate, Race-Neutral Disadvantaged Business Enterprise Utilization; Letter of Intent; DBE Program Bidders List Information; Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; Disclosure of Lobbying Activities pursuant to 31 U.S.C. 1352; and the Title 24, Code of Federal Regulations, Part 24 Debarment and Suspension Certification are true and correct.

The person or persons executing this Proposal on behalf of a corporation or a member of a partnership, shall be prepared to demonstrate by resolution, article, or otherwise, that such person is or that such persons are appropriately authorized to act in these regards for such corporation or partnership. Such authority shall be demonstrated to the satisfaction of the County of El Dorado.

If the signature is by an agent other than an officer of a corporation or a member of a partnership, a power of attorney authorizing said act by the agent on behalf of his principal shall be submitted with the bid forms, otherwise the Bid may be disregarded as irregular and unauthorized.

The Bidder's execution on the signature portion of this Proposal shall constitute an endorsement and execution of those affidavits, declarations and certifications which are part of this Proposal.

Executed this _____ day of _____, 2008 at _____, California.

SIGN HERE _____



by _____
Name and Title of Bidder

Name of Firm

END OF PROPOSAL

COUNTY OF EL DORADO BIDDER'S BOND

We, _____ as Principal, and _____ as Surety, are bound unto THE COUNTY OF EL DORADO as Owner (Obligee), in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitting a bid to the Obligee, for Placerville Airport, Placerville, California, **RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II), REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23, AIP NO. 3-06-0188-11, BID #GS-08-1019**, for which bids are to be opened at the Office of Procurement and Contracts, 330 Fair Lane, Placerville, California, at 2:00 p.m. on Thursday, June 5, 2008.

NOW THEREFORE, if Principal is awarded the Contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials, as required by law, then this obligation shall be null and void; otherwise it shall remain in full force.

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

Dated: _____

Principal

Surety

By: _____

Attorney-in-Fact

ADDRESS OF SURETY FOR SERVICE OF NOTICE:

NOTE: Signature of those executing for the Surety shall be properly acknowledged and accompanied by a Certificate of Acknowledgement.

SAMPLE ONLY
CONTRACT # _____

This Contract is made and entered into by and between the County of El Dorado, hereinafter referred to as "Owner", "County" or "Grantee", and _____, a California Corporation, duly qualified to conduct business in the State of California, whose principal place of business is _____, hereinafter referred to as "Contractor".

Article 1: The Work. The Work is generally described as Placerville Airport, Placerville, California, RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II), REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23, AIP NO. 3-06-0188-11. The Contractor shall complete the Work as specified in the Contract Documents.

Article 2: Contract Documents. The complete contract between the parties hereto shall consist of the following documents herein referred to as the "Contract Documents":

- Notice to Bidders
- Instructions to Bidders
- Completed Bid Proposal (Pages 1 through 24)
- Bidder's Bond
- This Contract including Attachment "A", Contractor's Proposal, Attachment "B," Contractor's/Subcontractor's Certification Concerning State Labor Standards and Prevailing Wages; Attachment "C," Drug-Free Workplace Certification; Attachment "D," Equal Employment Opportunity Policy Statement; Attachment "E," Harassment or Discrimination in Employment; and Attachment "F," Standard Federal Contract Clauses and Requirements for Construction Contracts
- Withholding Exemption Certificate 590
- Request for Taxpayer ID Number and Certification Form W-9
- Certificate of Insurance
- Performance Bond
- Payment Bond
- Guarantee
- Local Agency Bidder – DBE Information
- El Dorado County Specifications
- Disadvantaged Business Enterprise (DBE)
- F.A.A. General Provisions
- Special Conditions
- Contract Drawings and Plans
- Technical Provisions
- Duly issued addenda
- Duly issued interpretations
- Supplemental Drawings issued
- Shop Drawings and Manufacturers' Instructions approved
- Approved Field Orders, Change Directives, and Change Orders

All of the above named Contract Documents are intended to cooperate and be complementary, and Work required by one and not by others shall be performed as if required by all. In the event of a conflict between the Plans and Specifications, the Plans shall generally prevail; provided, however, any such conflict shall be immediately brought to the notice of the Owner for interpretation and confirmation.

Article 3: Covenants. For and in consideration of the covenants, promises, and agreements as set forth herein, the Contractor promises and agrees with the Owner to do all the Work and to furnish at Contractor's own cost and expense all labor, material and equipment, necessary to complete in a good, workmanlike and substantial manner, in strict accordance with the Contract Documents, the entire Work for the project as indicated in the Bid Documents, and Contract Documents titled: Placerville Airport, Placerville, California, RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II), REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23, AIP NO. 3-06-0188-11, and to further perform all obligations, covenants and conditions of the Contract as set forth in the Contract Documents.

Article 4: Compensation: Owner promises and agrees to pay to the Contractor for satisfactory performance under the Contract Documents of construction of the Work, and completion of all obligations, covenants and conditions described in the Contract Documents, the sum of _____ Dollars (\$ _____), subject to additions and deductions as provided in the Contract Documents.

This contract is a unit price contract and payment will be made at unit prices bid for the actual quantities furnished and installed. A copy of the Contractor's Proposal setting forth the unit prices to be paid is attached as Attachment A and shall be considered a part of this contract.

Article 5: Federal Compliance for Grant Funds: The Contractor acknowledges that the Contract is funded through Federal and/or State grant funds and that the Contractor shall perform, and any contract between the Contractor and any subcontractor shall require performance, as follows:

1. To perform the Work in accordance with Federal, State and local housing and building codes as are applicable, including but not by way of limitation, environmental, building, planning, zoning, health and safety, relocation, labor, fair employment and housing, and historic preservation.
2. To comply with all State and Federal requirements described in Attachments B, C, D, E and F of this Contract which pertain to, among other things, Drug-Free Workplace Certification, labor standards, DBE requirements, Equal Employment Opportunity, and Buy American.
3. Maintain the Worker's Compensation Insurance as set forth in the Specifications herein.
4. Maintain unemployment insurance, disability insurance and liability insurance in an amount set forth in the Specifications herein.

5. Retain all books, records, accounts, documentation, and all other materials relevant to the Contract for a period of three (3) years from date of termination of the Contract, or three (3) years from the conclusion or resolution of any and all audits or litigation relevant to the Contract and any amendments, whichever is later.
6. Permit the State, Federal government, the Bureau of State Audits, the Department of Criminal Justice Planning and/or their representatives, upon reasonable notice, unrestricted access to any or all books, records, accounts, documentation, and all other materials relevant to the Contract for the purpose of monitoring, auditing, or otherwise examining said materials.

Article 6: Equal Opportunity Compliance: Contractor agrees as follows:

1. The Civil Rights and Age Discrimination Acts Assurances:
During the performance of this Contract, the Contractor assures that no otherwise qualified person shall be excluded from participation or employment, denied program benefits, or be subjected to discrimination based on race, color, national origin, sex, age, or handicap, under any program or activity funded by this Contract, as required by Title VI of the Civil Rights Act of 1964 and the Age Discrimination Act of 1975, and all implementing regulations.
2. State Nondiscrimination Clause:
 - A) During the performance of this Contract, Contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Contractors and subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Contractors and subcontractors shall comply with the provisions of the Fair Employment and Housing Act, (FCHA) and its implementing regulations, California Administration Code, Title 2, Division 4, and Government Code 11135-11139.5 and the applicable regulations promulgated thereunder (California Code of Regulations, Title 22, Sections 98000-98413 et seq. and Title VI of the Civil Rights Act of 1964). These applicable regulations are incorporated into this Contract by reference and made a part hereof as if set forth in full. Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
 - B) The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform Work under the Contract.
 - C) The Contractor shall comply with Title V, Section 504 of the Rehabilitation Act of 1973 (29 USC, Section 947) California Government Code Section 4450, and California Administrative Code, Title 2, Division 4, Chapter 2, Subchapter 9, 7293.9, which prohibits exclusion, denial of benefits, or discrimination based solely

on the basis of disabilities, and provides that employers shall notice reasonable accommodations to the physically handicapped.

3. Equal Opportunity Clause. During the performance of this Contract, the Contractor agrees to comply with Executive Order 11246 that:
- A) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action 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. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
 - B) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
 - C) The Contractor shall send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - D) The Contractor shall comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor, and with the implementing regulations of Title VI of the Civil Rights Act of 1964 of the Department of Justice.
 - E) The Contractor shall furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency, the Attorney General, and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
 - F) In the event of the Contractor's noncompliance with the discrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order

11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulations, or orders of the Secretary of Labor, or as otherwise provided by law.

- G) The Contractor shall include the portion of the sentence immediately preceding paragraph (A) and the provisions of paragraphs (A) through (G) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 504 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Article 7: Drug-Free Workplace Certification

The Contractor shall comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.) and shall provide a drug-free workplace by taking the following actions and shall require all sub-contractors to take the following actions:

- a. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.
- b. Establish a Drug-Free Awareness Program to inform employees about all of the following:
- 1) the dangers of drug abuse in the workplace;
 - 2) the person's or organization's policy of maintaining a drug-free workplace;
 - 3) any available counseling, rehabilitation and employee assistance programs; and,
 - 4) penalties that may be imposed upon employees for drug abuse violations.
- c. Provide that every employee who performs work under this Contract:
- 1) will receive a copy of the Contractor's drug-free policy statement, and
 - 2) will agree to abide by the terms of the Contractor's statement as a condition of employment of this Contract.

Failure to comply with these requirements may result in suspension of payments under this Contract or termination of the Contract or both.

Article 8: ADA Compliance: Contractor shall comply with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C. 12101 et seq) as well as all applicable regulations and guidelines issued pursuant thereto.

Article 9: Commencement and Completion: The commencement date of the Contract for determination of the time for completion shall be set forth in the Notice to Proceed issued by the Owner. The Contractor shall complete all work required by the Contract within forty (40) working days after said commencement date, as adjusted and provided for in the Contract Documents.

Article 10: Liquidated Damages: The Work to be performed under the Contract shall commence on the date specified in the Notice to Proceed by the County, and the Work shall be fully completed within the time specified in Notice. The Owner and Contractor realize that time is of the essence for completion, and the County will suffer financial loss if the Work is not completed in the time specified. In the event that the Contractor does not complete all Work required by the Contract within the time specified in Article 8, liquidated damages shall be imposed upon the Contractor. After considering such a breach and all aspects of the Work including, but not limited to, the type of installation, the current and future uses of facilities and premises, the disarrangement of the premises and facilities thereof during the Work, and the additional cost and difficulty of using the disarranged facilities during the Work, the parties agree that a reasonable daily damage for such a breach, will be \$500 per calendar-day, and the payment of the same, is payment of liquidated damages and not a penalty. It is understood that this Contract for liquidated damages is entered into because the amount is manifestly reasonable under the circumstances existing at the time of this Contract, and it would be extremely difficult or impossible to determine with any degree of accuracy the actual damages in case of any such breach. In case of such breach, it is agreed that the Owner may deduct the amount thereof from any money due or to become due said Contractor under this Contract.

Article 11. Conflict of Interest of Members, Officers, or Employees of Contractors, Members of Local Governing Body, or other Public Officials: No member, officer, or employee of the County, or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercise any functions or responsibilities with respect to the program during his/her tenure or for one year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for grant activities to be performed in connection with the program assisted under this Contract. The Grantee and Contractor shall incorporate, or cause to be incorporated, in all such contracts or subcontracts a provision prohibiting such interest pursuant to the purposes of this section.

Article 12. Guarantee: Contractor shall repair or replace any or all work provided hereunder which is defective due to faulty materials, poor workmanship, or defective equipment at no expense to the County, ordinary wear or tear and unusual abuse or neglect excepted, during the term of the Contract and for a period of one year from the date of the Notice of Completion of the Work.

Contractor shall be required to repair or replace any and all adjacent facilities or areas which have been damaged or displaced due to Contractor Work performed under this Contract at no expense to the County during the term of this Contract and for a period of one year from the date of the Notice of Completion of the Work.

The parties agree that this guarantee and the rights and obligations accruing therefrom shall be in addition and not by way of limitation in any manner whatsoever to the rights, obligations, warranties or remedies otherwise provided for by law.

In the event of Contractor's failure to comply with the above mentioned conditions within ten (10) days after being notified in writing by the County, Contractor hereby authorizes County to proceed to have said defects repaired and made good at Contractor's expense, and Contractor will honor and pay all costs and charges therefore upon written demand.

The Contractor shall provide a security to guarantee the performance of the Work to the County and shall maintain the security for one (1) year.

Article 13: State Labor Standards and Prevailing Wage Certification: All contractors and subcontracts shall give certification to the County within 10 days after the execution of any contract or subcontract (see Attachment B , marked "Contractor's/Subcontractor's Certification Concerning State Labor Standards and Prevailing Wages"), incorporated herein and made by reference a part hereof. Copies of the general prevailing rate of wages in the County in which the Work is to be done are on file at the Department of Transportation principal office, and shall be made available upon request, and in the case of projects involving federal funds, federal wage requirements have been included in the Contract Documents.

Article 14: Workers' Compensation Certification. By my signature hereunder, as Contractor, I certify that I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the Work of this Contract.

CERTIFICATE OF KNOWLEDGE - LABOR CODE SECTION 3700

I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for the worker's compensation or self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of Work of this Contract.

Signed: _____ Dated: _____

Article 15: Indemnity. To the fullest extent allowed by law, the Contractor shall defend, indemnify, and hold the County, the United States Government, and the State of California harmless against and from any and all claims, suits, losses, damages and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of or are connected with the Work, Contractor's services, operations, or performance of the Work, the Contractor, subcontractor(s) and employee(s) of any of these, except for the sole, or active negligence of the County, its officers and employees, or as expressly proscribed by statute. This duty of Contractor to indemnify and save County harmless includes the duties to defend set forth in California Civil Code Section 2778.

Article 16: Insurance: Contractor shall provide proof of policy(ies) of insurance satisfactory to the County of El Dorado Risk Manager and documentation evidencing that Contractor maintains insurance that meets all the requirements set forth in Article 8 of the El Dorado County Specifications.

Article 17: Cancellation of Agreement: The Owner reserves the right to terminate this Contract at any time for any reason by serving written notice to the Contractor as set forth in Article 10 of the El Dorado County Specifications.

Article 18: Administrator: The County Officer or employee with responsibility for administering this agreement is Richard W. Shepard, P.E., Director, Department of Transportation, or successor.

Article 19: Authorized Signatures: The parties to this agreement warrant and represent that the undersigned individuals executing this agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties the obligations set forth herein.

COUNTY OF EL DORADO

Dated: _____

**Rusty Dupray, Chairman
Board of Supervisors**

**ATTEST:
Cindy Keck, Clerk
of the Board of Supervisors**

By: _____
Deputy Clerk

Date: _____

CONTRACTOR

Dated: _____

By _____
**Name
Title**

Dated: _____

Corporate Secretary (if incorporated)

ADDRESS OF SURETY FOR SERVICE OF NOTICE

PROPOSAL PAY ITEMS BID PRICE SCHEDULE
PLACERVILLE AIRPORT, PLACERVILLE, CALIFORNIA - BID #GS-08-1019
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI - RUNWAY 23
AIP NO. 3-06-0188-11

Item No.	Item Description	Unit of Measure	Approximate Quantity	Unit Price (In Figures)	Amount (In Figures)
1	SWPPP Submitted by California Registered Civil Engineer (P-148)	L.S.	L.S.	LUMP SUM	\$
2	Marking and Lighting of Closed Airport Facilities (P-149)	L.S.	L.S.	LUMP SUM	\$
3	Mobilization (P-150)	L.S.	L.S.	LUMP SUM	\$
4	Airfield Cable, L824, 1/C, No. 8, Type C, 5 KV, Furnish and Install in Duct or Conduit (L-108)	Ln. Ft.	8,000.0	\$	\$
5	Furnish and Install 10 kW, 6.6 amp. Regulator, Complete in Place (L-109)	Each	1.0	\$	\$
6	Vault Labor and Equipment (L-109)	L.S.	L.S.	LUMP SUM	\$
7	Underground Electrical Duct, Type II, 1-way, 2-inch (L-110)	Ln. Ft.	6,400.0	\$	\$
8	Underground Electrical Duct, Type I, 2-way, 4-inch (L-110)	Ln. Ft.	10.0	\$	\$
9	Underground Electrical Duct, Type I, 1-way, 3-inch (L-110)	Ln. Ft.	320.0	\$	\$
10	Directional Bored Duct, 1-way, 3-inch (L-110)	Ln. Ft.	225.0	\$	\$
11	Furnish and Install L-867 Size E Pull Box, Complete in Place (L-115)	Each	11.0	\$	\$
12	Remove Existing Stake-Mounted Runway Lights (L-125)	L.S.	L.S.	LUMP SUM	\$
13	New Medium Intensity Runway Edge Lights, Base Mounted, Complete in Place (L-125)	Each	26.0	\$	\$
14	Furnish and Install 100-watt Transformers for Existing Airfield Guidance Signs (L-125)	Each	6.0	\$	\$
15	Furnish and Install New 2-box Precision Approach Path Indicator (PAPI), Complete in Place (L-125)	L.S.	L.S.	LUMP SUM	\$
	Total Base Bid				\$

BASE BID (Words):

ATTACHMENT B
CONTRACT # _____

CONTRACTOR'S/SUBCONTRACTOR'S CERTIFICATION
CONCERNING STATE LABOR STANDARDS AND PREVAILING WAGES

All Contractors and subcontractors shall give the following certification to the Owner and forward this certification to the Owner within 10 days after the execution of any Contract or subcontract.

- A. "I am aware of the provisions of Section 1720 et seq. of the California Labor Code which requires that the State prevailing wage rate shall be paid to employees where this rate exceeds the Federal wage rate."

- B. "I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the Work of this Contract."

- C. "It is further agreed that, except as may be provided in Section 1815 of the California Labor Code, the maximum hours a worker is to be employed is limited to eight hours a day and 40 hours a week and the subcontractor shall forfeit, as a penalty, \$25 for each worker employed in the execution of the subcontract for each calendar day during which a worker is required or permitted to labor more than eight hours in any calendar day or more than 40 hours in any calendar week."

(Contractor/Subcontractor)

By: _____
(Signature)

(Typed Name and Title)

Date: _____

DRUG-FREE WORKPLACE CERTIFICATION

STD. 21 (REV. 12-93)

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized legally to bind the contractor or grant recipient to the certification described below. I am fully aware that this certification, executed on the date below, is made under penalty of perjury under the laws of the State of California.

CONTRACTOR/BIDDER FIRM NAME	FEDERAL ID NUMBER
BY (Authorized/Signature)	DATE EXECUTED
PRINTED NAME AND TITLE OF PERSON SIGNING	TELEPHONE NUMBER (Include Area Code)
TITLE	
CONTRACTOR/BIDDER FIRM'S MAILING ADDRESS	

The contractor or grant recipient named above hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The above named contractor or grant recipient will:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
 - (a) The dangers of drug abuse in the workplace,
 - (b) The person's or organization's policy of maintaining a drug-free workplace,
 - (c) Any available counseling, rehabilitation and employee assistance programs, and
 - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract or grant:
 - (a) Will receive a copy of the company's drug-free policy statement, and
 - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or grant.
4. At the election of the contractor or grantee, from and after the "Date Executed" and until _____
(date)
(NOT TO EXCEED 36 MONTHS), the state will regard this certificate as valid for all contracts or grants entered into between the contractor or grantee and this state agency without requiring the contractor or grantee to provide a new and individual certificate for each contract or grant. If the contractor or grantee elects to fill in the blank date, then the terms and conditions of this certificate shall have the same force meaning, effect and enforceability as if a certificate were separately, specifically, and individually provided for each contract or grant between the contractor or grantee and this state agency.

() Large () Small () Government Agency () Non-Profit Organization

() OSMB-Certified* -- Certification No.: _____

() Disabled Veteran - DVBE -- Certification No.: _____

*NOTE: Bidders desiring to claim this preference must submit a copy of their OSMB Small Business Certification approval letter with their proposal.

**SAMPLE
XYZ ORGANIZATION
EQUAL EMPLOYMENT OPPORTUNITY
POLICY STATEMENT**

XYZ Organization is an equal opportunity employer and is committed to an active Equal Employment Opportunity Program (EEOP). It is the stated policy of XYZ Organization that all employees and applicants shall receive equal consideration and treatment in employment without regard to race, color, religion, ancestry, national origin, age (over 40), sex, marital status, medical condition (cancer related), or physical handicap (includes all other medical conditions).

This organization will also conform to the Americans with Disabilities Act of 1990 (ADA), 42 USC, Sections 12101 et. seq., and U.S. Department of Justice implementing regulations, 28 CFR, Part 35.

All recruitment, hiring, placements, transfers, and promotions will be on the basis of individual skills, knowledge and abilities, and the feasibility of any necessary job accommodation, regardless of the above identified bases. All other personnel actions such as compensation, benefits, layoffs, terminations, training, etc., are also administered without discrimination. Equal employment opportunity (EEO) will be promoted through a continual and progressive EEOP.

The objective of an EEOP is to ensure nondiscrimination in employment and, wherever possible, to actively recruit and include for consideration for employment minorities, women and the physically handicapped.

Jane Doe has been designated EEO Coordinator. Inquiries concerning the application of Federal and State laws and regulations should be referred to her/him. The coordinator is responsible for administering program progress and initiating corrective action when appropriate. All personnel actions are monitored and analyzed to ensure the adherence of this policy. Regular annual reports are submitted to the Agency Director for review and evaluation of progress.

To achieve the goals of our EEOP, it is necessary that each member of this organization understand the importance of the program and his/her individual responsibility to contribute toward its maximum fulfillment.

SIGNATURE	TITLE (Agency Head)	DATE
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SIGNATURE	TITLE (EEO/AA Officer)	DATE
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Government Code Section 12940 and Title 2 California Code of Regulations Section 7287 Requires All Employers to Post This Document.
State of California. Department of Fair Employment and Housing.

HARASSMENT OR DISCRIMINATION IN EMPLOYMENT

Because of

- Sex • Sexual Orientation • Race • Color • Religious Creed • Marital Status
- Denial of Family and Medical Care Leave • National Origin (Including Language Limitations)
 - Ancestry • Medical Condition (Cancer/Genetic Characteristics)
- Age (40 and above) • Disability (Mental and Physical) Including HIV and AIDS
 - Denial of Pregnancy Disability Leave or Reasonable Accommodation



IS PROHIBITED BY LAW

The California Fair Employment and Housing Act

(Part 2.8 (commencing with Section 12900) of Div. 3 of Title 2 of the Government Code) and the Regulations of the Fair Employment and Housing Commission (Cal. Code of Regs., Title 2, Division 4, Section 7285.0 through Section 8504)

- prohibit harassment of employees, applicants and independent contractors and requires employers to take all reasonable steps to prevent harassment. The prohibition against sex harassment includes a prohibition against sexual harassment, gender harassment, and harassment based on pregnancy, childbirth, or related medical conditions.
- prohibit employers from limiting or prohibiting the use of language in any workplace unless justified by business necessity and the employer has notified employees of the language restriction and consequences for violation.
- require that all employers provide information to each of their employees on the nature, illegality and legal remedies which apply to sexual harassment. Employers may either develop their own publication, which must meet standards as set forth in California Government Code Section 12950, or use a brochure which may be obtained from the Department of Fair Employment and Housing.
- require employers to reasonably accommodate disabled employees or job applicants in order to enable them to perform the essential functions of a job. Employers must engage in a timely, good faith interactive process in determining effective reasonable accommodations.
- permit job applicants and employees to file complaints with the Department of Fair Employment and Housing (DFEH) against an employer, employment agency, or labor union which fails to grant equal employment as required by law.
- prohibit discrimination against any job applicant or employee in hiring, promotions, assignments or discharge. On-the-job segregation also is prohibited.
- require employers, employment agencies, and unions to preserve applications, personnel and employment referral records for a minimum of two years.
- require employers to provide leaves of up to four months to employees disabled because of pregnancy, maternity, or childbirth.
- require an employer to provide reasonable accommodations requested by an employee, with the advice of her health care provider, related to her pregnancy, childbirth or related medical conditions.
- require employers of 50 or more persons to allow eligible employees to take up to 12 weeks leave in a 12-month period for the birth of a child, the placement of a child for adoption or foster care, for an employee's own serious health condition, or to care for a parent, spouse or child with a serious health condition. (Employers are required to post a notice informing employees of their family and medical leave rights.)
- require employment agencies to serve all applicants equally; to refuse discriminatory job orders; to refrain from prohibited pre-hiring inquiries or help-wanted advertising.
- require unions not to discriminate in member admissions or dispatching to jobs.
- forbid any person to interfere with efforts to comply with the act. Permits employers to file complaints against workers who refuse to cooperate with the provisions of the law. Authorizes the DFEH to work affirmatively with cooperating employers to review hiring and recruiting practices in order to expand equal opportunity.

THE LAW PROVIDES FOR ADMINISTRATIVE FINES AND FOR REMEDIES FOR INDIVIDUALS, WHICH MAY INCLUDE:
hiring, back pay, promotion, reinstatement, cease-and-desist order, expert witness fees, reasonable attorney's fees
and costs, punitive damages, and damages for emotional distress.

JOB APPLICANTS AND EMPLOYEES: If you believe you have experienced discrimination, you may file a DFEH complaint.

INDEPENDENT CONTRACTORS: If you believe you have been harassed, you may file a DFEH complaint.

Complaints must be filed within one year from the last act of discrimination/harassment.

For information contact the Department of Fair Employment and Housing:

Toll Free 1-800-884-1684

SACRAMENTO, CA Area/OUT OF STATE (916) 227-0551

TTY Number 1-800-700-2320 Website: www.dfeh.ca.gov

This notice must be conspicuously posted in hiring offices, on employee bulletin boards, in employment agency waiting rooms, union halls, etc. This publication can be made available in Braille, large print, computer disk or tape cassette. For a copy, contact 1-800-884-1684. For Sacramento, CA Area/Out-of-State calls contact (916) 227-0551. (Rev. 11/02)

The Fair Employment and Housing Act Specifics:

- Prohibits discrimination in all aspects of employment including hiring, termination and terms and conditions
- Prohibits harassment of employees or applicants and requires employers to take all reasonable steps to prevent harassment from occurring.
- Requires that all employers provide information to each of their employees describing the forms of sexual harassment, its illegality, the internal and external complaint processes and legal remedies.
- Requires employers to reasonably accommodate employees or job applicants with disabilities in order to enable them to perform the essential functions of the job.
- Requires employers to provide leaves of up to four months to employees disabled because of pregnancy or childbirth.
- Requires an employer to provide reasonable accommodations requested by an employee, with the advice of her health care provider, related to her pregnancy, childbirth, or related medical conditions.
- Requires employers of 50 or more persons to allow eligible employees to take up to 12 weeks leave in a 12-month period for the birth of a child, the placement of a child for adoption or foster care, for an employee's own serious health condition, or to care for a parent, spouse, or child with a serious health condition. (Employers are required to post a notice informing employees of their family and medical leave rights.)
- Requires employment agencies to serve all applicants equally; to refuse discriminatory orders; to refrain from prohibited pre-employment inquiries or advertising.
- Prohibits discrimination by unions in membership or employment referrals.
- Prohibits retaliation against any person who has filed a complaint with the Department, participated in a Department investigation or opposed any activity prohibited by the Act.

The law provides for a variety of remedies, which may include:

- Hiring
- Back Pay
- Promotion
- Reinstatement
- Cease and Desist Orders
- Damages for Emotional Distress
- Reasonable Attorneys Fees and Costs
- Expert Witness Fees
- Administrative Fines and Court Ordered Punitive Damages

Persons who believe they have experienced employment discrimination may file a DFEH complaint. Complaints must be filed within one year from the date of the alleged discrimination.

Persons wishing to file a lawsuit directly in court must obtain a "right-to-sue" from DFEH. For information on this process, call the toll-free number listed below.

Within California

1-800-884-1684

1-800-700-2320 TTY

Outside California:

(916) 227-0551

**STANDARD FEDERAL CONTRACT CLAUSES AND
REQUIREMENTS FOR CONSTRUCTION CONTRACTS**

**CIVIL RIGHTS ACT OF 1964, TITLE VI - 49 CFR PART 21
CONTRACTUAL REQUIREMENTS
(VERSION 1, 1/5/90)**

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

1. **Compliance with Regulations.** The Contractor 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 contract.

2. **Nondiscrimination.** The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. **Solicitations for Subcontractors, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

4. **Information and Reports.** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance.** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

- a. Withholding of payments to the Contractor under the contract until the Contractor complies, and/or
- b. Cancellation, termination, or suspension of the contract, in whole or in part.

(6) **Incorporation of Provisions.** The Contractor shall include the provisions of paragraphs (1) through (5) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520
GENERAL CIVIL RIGHTS PROVISIONS
(VERSION 2, 4/23/90)**

The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods:

- (1) The period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits, or
- (2) The period during which the airport sponsor or any transferee retains ownership or possession of the property.

In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract.

**INSPECTION OF RECORDS - 49 CFR PART 18
(VERSION 1, 1/5/90)**

The Contractor shall maintain an acceptable cost accounting system. The Sponsor, the FAA, and the Comptroller General of the United States shall have access to any books, documents, papers, and records of the Contractor which are directly pertinent to the specific contract for the purposes of making an audit, examination, excerpts, and transcriptions. The Contractor shall maintain all

required records for three years after the Sponsor makes final payment and all other pending matters are closed.

**RIGHTS TO INVENTIONS - 49 CFR PART 18
(VERSION 1, 1/5/90)**

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed. Information regarding these rights is available from the FAA and the Sponsor.

**BREACH OF CONTRACT TERMS
SANCTIONS - 49 CFR PART 18
(VERSION 1, 1/5/90)**

Any violation or breach of the terms of this contract on the part of the contractor or subcontractor may result in the suspension or termination of this contract or such other action which may be necessary to enforce the rights of the parties of this agreement.

ENERGY CONSERVATION REQUIREMENTS – 49 CFR PART 18.36

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163)

**DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM –
REQUIRED CONTRACT CLAUSES
IN ACCORDANCE WITH 49 CFR PART 26 (1-8-99)**

Policy - It is the policy of the Department of Transportation (DOT) that Disadvantaged Business Enterprises (DBE's) as defined in 49 CFR Part 26 shall have an equitable opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the Department of General Services of the County of El Dorado has adopted this policy; therefore the DBE requirements of 49 CFR Part 26 apply to this agreement.

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

Satisfactory Performance and Release of Retainage – The prime Contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 10 days from the receipt of each payment the prime Contractor receives from the Owner. The prime

Contractor agrees further to release retainage payments to each subcontractor within 30 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors.

**AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 515
VETERANS PREFERENCE
(VERSION 1, 1/5/90)**

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to veterans of the Vietnam era and disabled veterans. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

**TERMINATION OF CONTRACT - 49 CFR PART 18
(VERSION 1, 1/5/90)**

1. The County may, by written notice, terminate this contract in whole or in part at any time, either for the County's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the County.

2. If the termination is for the convenience of the County, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

3. If the termination is due to failure to fulfill the contractor's obligations, the County may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the County for any additional cost occasioned to the County thereby.

4. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the County. In such event, adjustment in the contract price shall be made as provided in paragraph (2) of this clause.

5. The rights and remedies of the County provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

**CLEAN AIR AND WATER POLLUTION CONTROL REQUIREMENTS
(VERSION 2, 4/23/90)**

Contractors and subcontractors agree:

1. That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities.

2. To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued thereunder.

3. That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. To include or cause to be included in any contract or subcontract which exceeds \$100,000 the aforementioned criteria and requirements.

**DAVIS BACON REQUIREMENTS - 29 CFR PART 5
(VERSION 2, 4/23/90)**

1. Minimum Wages.

a. All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)] the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to laborers or mechanics, subject to the provisions of paragraph (1) d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

The wage determination (including any additional classification and wage rates conformed under (1) b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all

times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

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

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

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

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

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1) b. 2. or 3. of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

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

3. **Payrolls and Basic Records.**

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

apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

b. (1) The Contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to Reinard W. Brandley, Consulting Airport Engineer, for availability to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (3)a. above. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

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

(a) That the payroll for the payroll period contains the information required to be maintained under paragraph (3)a. above and that such information is correct and complete;

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

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

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

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

c. The contractor or subcontractor shall make the records required under (3)a. of this section available for inspection, copying or transcription by authorized representatives of the Sponsor, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. **Apprentices and Trainees**

a. Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

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

5. **Compliance With Copeland Act Requirements.** The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. **Subcontracts.** The Contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR Part 5.5 (a) (1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. **Contract Termination: Debarment.** A breach of the contract clauses in paragraphs (1) through (10) of this section and paragraphs (1) through (5) of the next section below may be grounds for termination of the contract, and for the debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

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

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

10. **Certification of Eligibility.**

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

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

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

**CONTRACT WORKHOURS AND SAFETY STANDARDS
ACT REQUIREMENTS - 29 CFR PART 5
(VERSION 1, 1/5/90)**

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

2. **Violation; Liability for Unpaid Wages; Liquidated Damages.** In the event of any violation of the clause set forth in paragraph (1) above, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) above in the sum of \$10 for each calendar day on which such individual was required or permitted to work in

excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) above.

3. **Withholding for Unpaid Wages and Liquidated Damages.** The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) above.

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

5. **Working Conditions.** No contractor or subcontractor may require any laborer or mechanic employed in the performance of any contract to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous to his health or safety as determined under construction safety and health standards (29 CFR Part 1926) issued by the Department of Labor.

EQUAL EMPLOYMENT OPPORTUNITY - 41 CFR PART 60-1.4(b)
(VERSION 1, 1/5/90)

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action 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. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

3. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the Contractor's noncompliance with the non-discrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

7. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

NOTICES TO BE POSTED PER PARAGRAPHS

(1) AND (3) OF THE EEO CLAUSE – 41 CFR PART 60-1.4(b) (VERSION 1, 1/5/90)

Equal Employment Opportunity is the Law – Discrimination is Prohibited by the Civil Rights Act of 1964 and by Executive Order No. 11246 Title VII of the Civil Rights Act of 1964 – Administered by:

The Equal Employment Opportunity Commission

Prohibits discrimination because of Race, Color, Religion, Sex, or National Origin by Employers with 25 or more employees, by Labor Organizations with a hiring hall of 25 or more members, by

Employment Agencies, and by Joint Labor-Management Committees for Apprenticeship or Training.

Any person who believes he or she has been discriminated against should contact:

The Office of Federal Contract Compliance Programs
 U.S. Department of Labor
 Washington, D.C. 20210

**NOTICE FOR SOLICITATIONS FOR BIDS
 (BID NOTICE) - 41 CFR PART 60-4.2
 (VERSION 1, 1/5/90)**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Area Covered	Timetable	Goals (Percent) for Minority Participation For Each Trade	Goals (Percent) for Female Participation for Each Trade
State: California El Dorado County	Until Further Notice	17.5 to 20.0	6.9

These goals are applicable to all the contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole

purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director, OFCCP, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is Placerville, El Dorado County, California.

**NOTICE TO PROSPECTIVE FEDERALLY ASSISTED
CONSTRUCTION CONTRACTORS - 41 CFR 60-1.8
(VERSION 1, 1/5/90)**

(3) A Certification of Nonsegregated Facilities shall be submitted prior to the award of a federally-assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

(4) Contractors receiving federally-assisted construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS
FOR CERTIFICATION OF NONSEGREGATED FACILITIES**

(1) A Certification of Nonsegregated Facilities shall be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

(2) Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

CERTIFICATION TO BE SUBMITTED BY FEDERALLY ASSISTED CONSTRUCTION CONTRACTORS AND THEIR SUBCONTRACTORS (APPLICABLE TO FEDERALLY ASSISTED CONSTRUCTION CONTRACTS AND RELATED SUBCONTRACTS EXCEEDING \$10,000 WHICH ARE NOT EXEMPT FROM THE EQUAL OPPORTUNITY CLAUSE)

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION
CONTRACT SPECIFICATIONS (41 CFR 60-4.3)
(VERSION 2, 4/23/90)**

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer Identification Number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
 - d. "Minority" includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and

timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs C (7) a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization, and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under (7)b. above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions, including specific review of these items with on-site supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a contractor's work force.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated, except that separate or single-user toilets and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor' EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations [(7) a through p]. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar groups of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under (7) a through p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to

comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's non-compliance.

9. A single goal for minorities including women has been established. The Contractor, however, is required to provide equal employment opportunity to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under-utilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph (7) of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977, and the Community Development Block Grant Program).

**BUY AMERICAN – STEEL AND MANUFACTURED PRODUCTS
FOR CONSTRUCTION CONTRACTS
(JAN. 1991)**

1. The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:
 - a. Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs (2)(a) or (b) shall be treated as domestic.
 - b. Components. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.
 - c. Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

2. The successful bidder will be required to assure that only domestic steel and manufactured products will be used by the Contractor, subcontractors, materialmen, and suppliers in the performance of this contract, except those-
 - a. that the U.S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality;
 - b. that the U.S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or
 - c. that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

**** END OF SECTION ****

Withholding Exemption Certificate

(This form can only be used to certify exemption from nonresident withholding under California R&TC Section 18662. This form cannot be used for exemption from wage withholding.)

File this form with your withholding agent.
(Please type or print)

Withholding agent's name

Vendor/Payee's name

Vendor/Payee's Social security number
 SOS no. California corp. no. FEIN

Note:
Failure to furnish your identification number will make this certificate void.

Vendor/Payee's address (number and street)

APT no. Private Mailbox no. Vendor/Payee's daytime telephone no.
()

City

State

ZIP Code

I certify that for the reasons checked below, the entity or individual named on this form is exempt from the California income tax withholding requirement on payment(s) made to the entity or individual. Read the following carefully and check the box that applies to the vendor/payee:

Individuals — Certification of Residency:

I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly inform the withholding agent. See instructions for Form 590, General Information D, for the definition of a resident.

Corporations:

The above-named corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State to do business in California. The corporation will withhold on payments of California source income to nonresidents when required. If this corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California, I will promptly inform the withholding agent. See instructions for Form 590, General Information E, for the definition of permanent place of business.

Partnerships:

The above-named partnership has a permanent place of business in California at the address shown above or is registered with the California Secretary of State, and is subject to the laws of California. The partnership will file a California tax return and will withhold on foreign and domestic nonresident partners when required. If the partnership ceases to do any of the above, I will promptly inform the withholding agent. **Note:** For withholding purposes, a Limited Liability Partnership is treated like any other partnership.

Limited Liability Companies (LLC):

The above-named LLC has a permanent place of business in California at the address shown above or is registered with the California Secretary of State, and is subject to the laws of California. The LLC will file a California tax return and will withhold on foreign and domestic nonresident members when required. If the LLC ceases to do any of the above, I will promptly inform the withholding agent.

Tax-Exempt Entities:

The above-named entity is exempt from tax under California or federal law. The tax-exempt entity will withhold on payments of California source income to nonresidents when required. If this entity ceases to be exempt from tax, I will promptly inform the withholding agent.

Insurance Companies, IRAs, or Qualified Pension/Profit Sharing Plans:

The above-named entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

California Irrevocable Trusts:

At least one trustee of the above-named irrevocable trust is a California resident. The trust will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required. If the trustee becomes a nonresident at any time, I will promptly inform the withholding agent.

Estates — Certification of Residency of Deceased Person:

I am the executor of the above-named person's estate. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return and will withhold on foreign and domestic nonresident beneficiaries when required.

CERTIFICATE: Please complete and sign below.

Under penalties of perjury, I hereby certify that the information provided herein is, to the best of my knowledge, true and correct. If conditions change, I will promptly inform the withholding agent.

Vendor/Payee's name and title (type or print) _____

Vendor/Payee's signature ► _____ Date _____

Instructions for Form 590

Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

General Information

A Purpose

Use Form 590 to certify an exemption from nonresident withholding. Complete and present Form 590 to the withholding agent. The withholding agent will then be relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless told by the Franchise Tax Board (FTB) that the form should not be relied upon.

Important – This form cannot be used for exemption from wage withholding. Any questions regarding wage withholding should be directed to the California Employment Development Department.

Do not use Form 590 if you are a seller of California real estate. Sellers of California real estate should use Form 593-C, Real Estate Withholding Certificate.

B Law

R&TC Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of this state.

Withholding is required on:

- Payments to nonresidents for services rendered in California;
- Distributions of California source income made to domestic nonresident partners and members and allocations of California source income made to foreign partners and members;
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business;
- Payments to nonresidents for royalties for the right to use natural resources located in California;
- Distributions of California source income to nonresident beneficiaries from an estate or trust; and
- Prizes and winnings received by nonresidents for contests in California.

For more information on withholding and waiver requests, get FTB Pub. 1017, Nonresident Withholding Partnership Guidelines, and FTB Pub. 1023, Nonresident Withholding Independent Contractor, Rent and Royalty Guidelines. To get a withholding publication see General Information G.

C Who can Execute this Form

Form 590 can be executed by the entities listed on this form.

Note: In a situation where payment is being made for the services of a performing entity, this form can only be completed by the performing entity or the performing entity's partnership or corporation. It **cannot** be completed by the performing entity's agent or other third party.

Note: The grantor of a revocable/grantor trust shall be treated as the vendor/payee for withholding purposes. Therefore, if the vendor/payee is a revocable/grantor trust and one or

more of the grantors is a nonresident, withholding is required. If all of the grantors of a revocable/grantor trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled "Individuals — Certification of Residency."

D Who is a Resident

A California resident is any individual who is in California for other than a temporary or transitory purpose or any individual domiciled in California who is absent for a temporary or transitory purpose.

An individual domiciled in California who is absent from California for an uninterrupted period of at least 546 consecutive days under an employment-related contract is considered outside California for other than a temporary or transitory purpose.

Note: Return visits to California that do not total more than 45 days during any taxable year covered by the employment contract are considered temporary.

This provision does not apply if an individual has income from stocks, bonds, notes, or other intangible personal property in excess of \$200,000 in any taxable year in which the employment-related contract is in effect.

A spouse who is absent from California for an uninterrupted period of at least 546 days to accompany a spouse who is under an employment-related contract is considered outside of California for other than a temporary or transitory purpose.

Generally, an individual who comes to California for a purpose which will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident. For assistance in determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status, or call the Franchise Tax Board at (800) 852-5711 or (916) 845-6500 (not toll-free).

E What is a Permanent Place of Business

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the California Secretary of State. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

F Withholding Agent

Keep Form 590 for your records. Do not send this form to the FTB unless it has been specifically requested.

Note: If the withholding agent has received Form 594, Notice to Withhold Tax at Source, only the performing entity can complete and sign Form 590 as the vendor/payee. If the performing entity completes and signs Form 590 indicating no withholding requirement, you must send a copy of Form 590 with Form 594 to the FTB.

For more information, contact the Nonresident Withholding Section. See General Information G. The vendor/payee must notify the withholding agent if:

- The individual vendor/payee becomes a nonresident;
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California;
- The partnership ceases to have a permanent place of business in California;
- The LLC ceases to have a permanent place of business in California; or
- The tax-exempt entity loses its tax-exempt status.

The withholding agent must then withhold. Remit the withholding using Form 592-A, Nonresident Withholding Remittance Statement, and complete Form 592, Nonresident Withholding Annual Return, and Form 592-B, Nonresident Withholding Tax Statement. Get Instructions for Forms 592, 592-A, and 592-B for due dates and other withholding information.

G Where to get Publications, Forms, and Additional Information

You can download, view, and print FTB Publications 1017, 1023, 1024, and nonresident withholding forms, as well as other California tax forms and publications not related to nonresident withholding from our Website at: www.ftb.ca.gov

You can also have nonresident withholding forms faxed to you by calling (800) 998-3676. To have publications or forms mailed to you or to get additional nonresident withholding information, please contact the Withholding Services and Compliance Section.

WITHHOLDING SERVICES AND
COMPLIANCE SECTION
FRANCHISE TAX BOARD
PO BOX 651
SACRAMENTO CA 95812-0651

Telephone: (888) 792-4900
(916) 845-4900 (not toll-free)
FAX: (916) 845-9512 (24 hours a day,
7 days a week)

Assistance for persons with disabilities:

We comply with the Americans with Disabilities Act. Persons with hearing or speech impairments please call TTY/TDD (800) 822-6268.

Asistencia bilingüe en español

Para obtener servicios en español y asistencia para completar su declaración de impuestos/formularios, llame al número de teléfono (anotado arriba) que le corresponde.

Request for Taxpayer Identification Number and Certification

**Give form to the
 requester. Do not
 send to the IRS.**

Print or type See Specific Instructions on page 2.	Name	
	Business name, if different from above	
	Check appropriate box: <input type="checkbox"/> Individual/ Sole proprietor <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Other ▶	
	<input type="checkbox"/> Exempt from backup withholding	
	Address (number, street, and apt. or suite no.)	
City, state, and ZIP code		
Requester's name and address (optional)		
List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. For individuals, this is your social security number (SSN). **However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3.** For other entities, it is your employer identification number (EIN). If you do not have a number, see **How to get a TIN** on page 3.

Social security number
+

or

Employer identification number
+

Note: If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), **and**
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, **and**
3. I am a U.S. person (including a U.S. resident alien).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)

Sign Here	Signature of U.S. person ▶	Date ▶
------------------	----------------------------	--------

Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee.

Note: If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Foreign person. If you are a foreign person, use the appropriate Form W-8 (see **Pub. 515**, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien.

Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the recipient has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a **nonresident alien or a foreign entity** not subject to backup withholding, give the requester the appropriate completed Form W-8.

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 30% of such payments (29% after December 31, 2003; 28% after December 31, 2005). This is called "backup withholding." Payments that may be subject to backup withholding include interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will **not** be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester, or
2. You do not certify your TIN when required (see the Part II instructions on page 4 for details), or
3. The IRS tells the requester that you furnished an incorrect TIN, or
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See the instructions below and the separate **Instructions for the Requester of Form W-9**.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of Federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Name

If you are an individual, you must generally enter the name shown on your social security card. However, if you have changed your last name, for instance, due to marriage without informing the Social Security Administration of the name change, enter your first name, the last name shown on your social security card, and your new last name.

If the account is in joint names, list first, and then circle, the name of the person or entity whose number you entered in Part I of the form.

Sole proprietor. Enter your **individual** name as shown on your social security card on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name" line.

Limited liability company (LLC). If you are a single-member LLC (including a foreign LLC with a domestic owner) that is disregarded as an entity separate from its owner under Treasury regulations section 301.7701-3, **enter the owner's name on the "Name" line.** Enter the LLC's name on the "Business name" line.

Other entities. Enter your business name as shown on required Federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name" line.

Note: *You are requested to check the appropriate box for your status (individual/sole proprietor, corporation, etc.).*

Exempt From Backup Withholding

If you are exempt, enter your name as described above and check the appropriate box for your status, then check the "Exempt from backup withholding" box in the line following the business name, sign and date the form.

Generally, individuals (including sole proprietors) are not exempt from backup withholding. Corporations are exempt from backup withholding for certain payments, such as interest and dividends.

Note: *If you are exempt from backup withholding, you should still complete this form to avoid possible erroneous backup withholding.*

Exempt payees. Backup withholding is **not required** on any payments made to the following payees:

1. An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2);
2. The United States or any of its agencies or instrumentalities;
3. A state, the District of Columbia, a possession of the United States, or any of their political subdivisions or instrumentalities;
4. A foreign government or any of its political subdivisions, agencies, or instrumentalities; or
5. An international organization or any of its agencies or instrumentalities.

Other payees that **may be exempt** from backup withholding include:

6. A corporation;
7. A foreign central bank of issue;
8. A dealer in securities or commodities required to register in the United States, the District of Columbia, or a possession of the United States;

- 9. A futures commission merchant registered with the Commodity Futures Trading Commission;
- 10. A real estate investment trust;
- 11. An entity registered at all times during the tax year under the Investment Company Act of 1940;
- 12. A common trust fund operated by a bank under section 584(a);
- 13. A financial institution;
- 14. A middleman known in the investment community as a nominee or custodian; or
- 15. A trust exempt from tax under section 664 or described in section 4947.

The chart below shows types of payments that may be exempt from backup withholding. The chart applies to the exempt recipients listed above, **1** through **15**.

If the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt recipients except for 9
Broker transactions	Exempt recipients 1 through 13 . Also, a person registered under the Investment Advisers Act of 1940 who regularly acts as a broker
Barter exchange transactions and patronage dividends	Exempt recipients 1 through 5
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt recipients 1 through 7 ²

¹ See **Form 1099-MISC**, Miscellaneous Income, and its instructions.
² However, the following payments made to a corporation (including gross proceeds paid to an attorney under section 6045(f), even if the attorney is a corporation) and reportable on Form 1099-MISC are **not exempt** from backup withholding: medical and health care payments, attorneys' fees; and payments for services paid by a Federal executive agency.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a **resident alien** and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see **How to get a TIN** below.

If you are a **sole proprietor** and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-owner **LLC** that is disregarded as an entity separate from its owner (see **Limited liability company (LLC)** on page 2), enter your SSN (or EIN, if you have one). If the LLC is a corporation, partnership, etc., enter the entity's EIN.

Note: See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get **Form SS-5**, Application for a Social Security Card, from your local Social Security Administration office or get this form on-line at www.ssa.gov/online/ss5.html. You may also get this form by calling 1-800-772-1213. Use **Form W-7**, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or **Form SS-4**, Application for Employer Identification Number, to apply for an EIN. You can get Forms W-7 and SS-4 from the IRS by calling 1-800-TAX-FORM (1-800-829-3676) or from the IRS Web Site at www.irs.gov.

If you are asked to complete Form W-9 but do not have a TIN, write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Writing "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded domestic entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 3, and 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). Exempt recipients, see **Exempt from backup withholding** on page 2.

Signature requirements. Complete the certification as indicated in 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA or Archer MSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
5. Sole proprietorship or single-owner LLC	The owner ³
For this type of account:	Give name and EIN of:
6. Sole proprietorship or single-owner LLC	The owner ³
7. A valid trust, estate, or pension trust	Legal entity ⁴
8. Corporate or LLC electing corporate status on Form 8832	The corporation
9. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
10. Partnership or multi-member LLC	The partnership
11. A broker or registered nominee	The broker or nominee
12. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ **You must show your individual name**, but you may also enter your business or "DBA" name. You may use either your SSN or EIN (if you have one).

⁴ List first and circle the name of the legal trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.)

Note: *If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.*

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons who must file information returns with the IRS to report interest, dividends, and certain other income paid to you, mortgage interest you paid, the acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA or Archer MSA. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. The IRS may also provide this information to the Department of Justice for civil and criminal litigation, and to cities, states, and the District of Columbia to carry out their tax laws. We may also disclose this information to other countries under a tax treaty, or to Federal and state agencies to enforce Federal nontax criminal laws and to combat terrorism.

You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 30% of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to a payer. Certain penalties may also apply.



CERTIFICATE OF INSURANCE FORM FOR CONTRACTOR'S ARCHITECTS' AND/OR ENGINEER'S

CERTIFICATE ISSUER (1) PHONE ()	DATE EXECUTED: THIS CERTIFICATE DOES NOT AMEND, EXTEND, OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. COMPANIES AFFORDING COVERAGE (3)		
INSURED (2) (14) PHONE ()	COMPANY A LETTER COMPANY B LETTER	COMPANY RATING COMPANY RATING	
PROJECT DESCRIPTION (4) PROJECT TITLE: PROJECT NUMBER: LOCATION: CAMPUS:	COMPANY C LETTER COMPANY D LETTER COMPANY E LETTER	COMPANY RATING COMPANY RATING COMPANY RATING	

THIS IS TO CERTIFY that the above insured has been issued policy(ies) for the limits of coverage specified with the company(ies) indicated, and that, with the exception of Automobile Liability, Worker's Compensation and Professional Liability Insurance, the insured's policy(ies) name THE BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA as an additional insured, including waiver of subrogation.

CL	Type of Insurance Coverage	Policy Number	Policy Effective Date	Policy Expiration Date	Limits of Liability (in Thousands)
	GENERAL LIABILITY (5) <input type="checkbox"/> Commercial General Liability <input type="checkbox"/> Occurrence <input type="checkbox"/> Claims Made <input type="checkbox"/> Owner's & Contractor' Protective <input type="checkbox"/> General Aggregate * <input type="checkbox"/> Per Project <input type="checkbox"/> Per Location				GENERAL AGGREGATE \$ PRODUCTS-COMP/OPS AGGREGATE \$ PERSONAL & ADVERTISING INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE (ANY ONE FIRE) \$ MEDICAL EXPENSE (ANY ONE PERSON) \$ DEDUCIBLE \$
	ARCHITECT'S AND/OR ENGINEER'S PROFESSIONAL LIABILITY (6) <input type="checkbox"/> Claims Made <input type="checkbox"/> Project				GENERAL AGGREGATE \$ EACH CLAIM \$ DEDUCTIBLE \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> Any Auto <input type="checkbox"/> All Owned Autos <input type="checkbox"/> Scheduled Autos <input type="checkbox"/> Hired Autos <input type="checkbox"/> Non-Owned Autos <input type="checkbox"/> Garage Liability				COMBINED SINGLE LIMIT \$ BODILY INJURY (PER PERSON) \$ BODILY INJURY (PER ACCIDENT) \$ PROPERTY DAMAGE \$ DEDUCTIBLE \$
	EXCESS LIABILITY <input type="checkbox"/> Umbrella Form <input type="checkbox"/> Other Than Umbrella Form				EACH OCCURRENCE \$ AGGREGATE \$
	<input type="checkbox"/> WORKER'S COMPENSATION				-----STATUTORY-----
	<input type="checkbox"/> EMPLOYER'S LIABILITY				(EACH ACCIDENT) \$ (DISEASE-POLICY LIMIT) \$ (DISEASE-EACH OCCURRENCE) \$
	OTHER (8) <input type="checkbox"/> Installation Floater (9) <input type="checkbox"/> Builder's Risk (10) <input type="checkbox"/>				\$ \$ \$

* The General Aggregate limit, under Limits of Insurance, applies separately to each of your projects away from premises owned by or rented to you.

ISSUED TO: THE BOARD OF REGENTS UNIVERSITY OF NEBRASKA (11)	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED OR TERMINATED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL GIVE THIRTY (30) DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, IN ADVANCE OF THE EFFECTIVE DATE OF SUCH CANCELLATION OR TERMINATION. (12)
	AUTHORIZED SIGNATURE, TITLE, TYPED NAME AND SSN (13)

Reference: Certificate of Insurance Preparation Instructions

COUNTY OF EL DORADO PERFORMANCE BOND

BOND NO. _____

KNOW ALL MEN BY THESE PRESENTS, that _____

_____ of _____

hereinafter called the CONTRACTOR (Principal), and _____, a corporation duly organized and existing under and by virtue of the laws of the State of California, hereinafter called the SURETY, and authorized to transact business within the State of California, as SURETY, are held and firmly bound unto the County of El Dorado as OWNER (Obligee), in the sum of: _____ DOLLARS (\$_____), lawful money of the United States of America, for the payment of which, well and truly be made to the OWNER, the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract hereto attached, with the OWNER, dated _____, 20 ____, for Placerville Airport, Placerville, California, Runway 5-23 Lighting Rehabilitation (Phase II), Replacement of VASI with New 2-Box PAPI Runway 23, AIP No. 3-06-0188-11.

NOW THEREFORE, if the CONTRACTOR shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreement of said Contract during the original term of said Contract and any extensions thereof that may be granted by the Owner, with or without notice to the Surety, and during the life of any guaranty required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may thereafter be made, then this obligation shall be void, otherwise the same shall remain in full force and virtue for one (1) year after filing of the Notice of Completion.

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

No right or action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of Owner.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument this _____ day of _____, 20 __, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By _____ (Seal)

ATTEST

SURETY

By _____ (Seal)

ATTEST

APPROVED AS TO FORM: _____, 20__
_____, Owner

ADDRESS OF SURETY FOR SERVICE OF NOTICE:

COUNTY OF EL DORADO PAYMENT BOND

BOND NO. _____

KNOW ALL MEN BY THESE PRESENTS, that _____

_____ herein after called the CONTRACTOR (Principal), and _____, a corporation duly organized and existing under and by virtue of the laws of the State of _____, hereinafter called the SURETY, and authorized to transact business within the State of California, as SURETY, are held and firmly bound unto the County of El Dorado (Obligee), in the sum of: _____ DOLLARS (\$ _____), lawful money of the United States of America, for the payment of which, well and truly be made to the OWNER, the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present as follows:

THE CONDITION OF THE ABOVE OBLIGED IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract here to attached, with the OWNER, dated _____, 20____, for Placerville Airport, Placerville, California, Runway 5-23 Lighting Rehabilitation (Phase II), Replacement of VASI with New 2-Box PAPI Runway 23, AIP No. 3-06-0188-11.

That if said Contractor, his or its heir, executors, administrators, successors or assigns, or subcontractors, shall fail to pay any of the persons names in Civil Code Section 3181, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Contractor and his subcontractors pursuant to Section 18806 of the Revenue and Taxation Code, with respect to such work and labor that the Surety or Sureties will pay for the same, in an amount not exceeding the sum specified in the bond.

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

NOW THEREFORE, if the CONTRACTOR shall promptly make payment to all persons who supply labor and materials in the prosecution of the work provided for in said Contract, and any and all duly authorized modifications of said Contract that may hereinafter be made, without notice

to the Surety, then this obligation shall be void; otherwise the same shall remain in full force and virtue.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument this _____ day of _____, 20 __, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By _____ (Seal)

ATTEST

SURETY

By _____ (Seal)

ATTEST

APPROVED AS TO FORM: _____, 20__

_____, OWNER

ADDRESS OF SURETY FOR SERVICE OF NOTICE:

CONTRACTOR'S GUARANTEE

**PLACERVILLE AIRPORT
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA**

**RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23**

AIP NO. 3-06-0188-11

DEPARTMENT OF TRANSPORTATION (DOT)

As Contractor for the above referenced project, we hereby agree to repair or replace any or all work provided hereunder which is defective due to faulty materials, poor workmanship, or defective equipment at no expense to the County of El Dorado, ordinary wear and tear and unusual abuse or neglect excepted, during the term of the contract and for a period of one year from the date of Notice of Completion of the work.

We further agree to repair or replace any and all adjacent areas which have been damaged or displaced due to our work performed under this contract at no expense to the County of El Dorado during the term of this contract and for a period of one year from the date of Notice of Completion of the work.

We agree that this guarantee and the rights and obligations accruing therefrom shall be in addition and not by way of limitation in any manner whatsoever to the rights, obligations, warranties or remedies otherwise provided for by law.

In the event of our failure to comply with the above mentioned conditions with (ten) 10 days after being notified in writing by the County of El Dorado, we hereby authorize the County of El Dorado to proceed to have said defects repaired and made good at our expense and we will honor and pay all costs and charges therefore upon written demand.

EXECUTED on this _____ day of _____, 20__.

CONTRACTOR

By _____

Title _____

By _____

Title _____

LOCAL AGENCY BIDDER - DBE - INFORMATION

This information shall be submitted with the executed contract and contract bonds.

CO.-RTE.-K.P.: _____
CONTRACT NO.: _____
BID AMOUNT: \$ _____
BID OPENING DATE: _____
BIDDER'S NAME: _____
DBE GOAL FROM CONTRACT: _____
DBE PRIME CONTRACTOR CERTIFICATION ¹: _____

CONTRACT ITEM NO.	ITEM OF WORK AND DESCRIPTION OR SERVICES TO BE SUBCONTRACTED OR MATERIALS TO BE PROVIDED ²	DBE CERT. NO.	NAME OF DBEs (Must be certified on the date bids are opened - include DBE address and phone number)	DOLLAR AMOUNT DBE ³
<p>IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Copies of the DBE quotes are required. Names of the First Tier DBE Subcontractors and their respective item(s) of work listed above shall be consistent with the names and items of work in the "List of Subcontractors" submitted with your bid pursuant to the Subcontractors Listing Law and the Special Provisions.</p> <p>1. DBE prime contractors shall enter their DBE certification number. DBE prime contractors shall indicate all work to be performed by DBEs including work performed by its own forces.</p> <p>2. 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.</p> <p>3. See Section "Disadvantaged Business Enterprises," of the Special Provisions to determine the credit allowed for DBE firms.</p>			Total Claimed Participation	\$ _____ _____ %
			_____ Signature of Bidder	
_____ Person to Contact (Please Type or Print)				

CT Bidder - DBE Information (Rev06-29-00)

**DIVISION I
EL DORADO COUNTY SPECIFICATIONS
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**PLACERVILLE AIRPORT
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23
AIP NO. 3-06-0188-11**

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**DIVISION I
EL DORADO COUNTY SPECIFICATIONS**

**PLACERVILLE AIRPORT
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23
AIP NO. 3-06-0188-11**

**Article 1
GENERAL**

1.1 BASIC DEFINITIONS

1.1.1 Owner: The County of El Dorado is the Owner and is identified as the Owner or County in the Contract and these General Provisions. The term Owner, and pronouns in place of the same shall mean the County of El Dorado acting by and through its duly authorized representative.

1.1.2 Owner's Representative: The Director of Transportation, or designated representative.

1.1.3 Engineer: Project Manager, or such other designated representative of the Owner. The Engineer has such duties and authority as may be set forth in the Specifications.

1.1.4 Contractor: The person or entity identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number. The term Contractor refers to the Contractor or the Contractor's authorized representative.

1.1.5 Inspector: The individual designated by the Owner as the Inspector as set forth in Paragraph 2.1.2.

1.1.6 Subcontractor: Those Contractors, of whatever tier, furnishing labor or material, or both, for the Work under the Contract with the Contractor.

1.1.7 Substantial Completion: The stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

1.1.8 Final Payment: The Final Payment shall be the last Progress Payment made to Contractor and shall not be considered to be the payment of any or all of the 10 percent retention.

1.1.9 Field Order: A written order of the Owner's Representative directing the Contractor to conduct minor changes in work involving neither extra cost nor extra time and being consistent with the scope and functioning of the project.

1.1.10 Construction Change Directive: A written order and signed by the Owner directing a change in the Work and stating a proposed basis for adjustment, if any, of Contract Time or Sum. The Owner may by Change Directive, without invalidating the Contract and without Contractor's agreement, order changes in the Work. This procedure will be used in the absence of agreement between Owner and Contractor.

1.1.11 Change Order: A Change Directive and signed by the Owner and Contractor stating their agreement upon all of the following: 1) a change in the Work, 2) the amount of the adjustment in the Contract Price, if any, and 3) the extent of the adjustment in the Contract Time, if any.

1.1.12 Contract Documents: The Contract Documents shall include all the documents described in Article 2 of the Contract, including Field Orders, Change Directives, and Change Orders.

1.1.13 Work: The construction and services required by the Contract Documents, including all labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations.

1.1.14 Project: The total construction of the Work performed under the Contract Documents.

1.1.15 Plans: The graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

1.1.16 Specifications: Those portions of the Contract Documents referred to as Specification, and Technical Specifications.

1.1.17 Technical Specifications: That portion of the Contract Documents consisting of the technical written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.

1.1.18 Claim: A demand or assertion by the Contractor seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract. Claims must be made by written notice and shall include a demand for the Owner's decision. The responsibility to substantiate claims and to resolve the claims of subcontractors of whatever tier shall rest with the Contractor.

1.1.19 Work Not Included: Except for such auxiliary work as shown or specified, or is necessary as part of the construction, the following is NOT included in this contract: Any work shown but marked "Not in Contract" (NIC) or otherwise designated to be done under another Contract or by Owner.

1.1.20 Furnish (material): To supply and deliver to the project ready for installation and in operating condition.

1.1.21 Install (services or labor): To place in final position, complete, anchored, connected, and in operable condition with respect to required codes and/or governing agency requirements.

1.1.22 Provide: To furnish and install complete. When “Furnish”, “Install”, or “Provide” is stated, “Provide” is implied.

1.1.23 Construct: To “Furnish” materials to “Install” in final position, complete, anchored and connected with respect to required codes, requirements, specifications and details.

1.2 CONTRACT DOCUMENTS

1.2.1 One Document: The Contract Documents are one document and any work shown or mentioned and obligations, reporting, promises or conditions shall be performed or furnished. The Contractor admits and agrees that the Specifications exhibit the intent and purpose of the Owner in regard to the Work, and that they are not complete in every detail and are to be considered as showing the purpose and intent only; and he further agrees to furnish all labor or material for any detail that is necessary to carry out the intent and purpose of the Specifications without extra charge.

1.2.2 Misuse of Words or Punctuation: The misplacement, addition, or omission of any word, letter, or punctuation mark will not in any way change the intent or meaning of the Specifications. Any part of the Work, or any article pertaining thereto which is not specifically set forth in these Specifications, but which is necessary for the proper completion of the Work, is to be supplied and set in place at the Contractor's expense, the same as if it had been mentioned in these Specifications. The Contractor shall furnish all things necessary to make a good and workmanlike job in accordance with the intent and purpose of the Specifications.

1.3 ASSIGNMENT OF CONTRACT

1.3.1 Mutual Consent: Neither party to the Contract shall assign the Contract without the written consent of the other party, nor shall the Contractor assign any moneys due or to become due to him hereunder without the written consent of the Owner.

1.3.2 Assignment Under Anti-Trust Claims: In accordance with Section 4552 of the California Government Code, and Section 7103.5 of the Public Contract Code, Contractor and subcontractors shall conform to the following requirements:

1. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractors offers and agrees to assign to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C Section 15) or under the Cartwright Act, [Chapter 2 (commencing

with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the Owner tenders Final Payment to the Contractor, without further acknowledgment by the parties.

2. In submitting a bid to Owner the bidder offers and agrees that if bid is accepted, it will assign to Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the [Clayton Act (15 U.S.C Section 15) or under the Cartwright Act, Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, services, or materials by the bidder for sale to the Owner pursuant to the bid. Such assignment shall be made and become effective at the time the Owner tenders Final Payment to the bidder.

1.4 WAIVER OF "COMMON PRACTICE"

1.4.1 The Contractor shall waive "common practice" and "common usage" as construction criteria wherever the Contract Documents details, plans, specifications, governing codes, or ordinances require greater quantity or better quality than common practice or common usage would require.

1.5 EXCESSIVE COSTS

1.5.1 Failure to Comply with Contract: If Contractor fails to comply with any Contract requirements, including any required coordination with other contractors, and that failure results in additional costs to Owner, then Contractor shall be liable for such additional costs.

1.5.2 Construction Methods: If Contractor's construction methods and techniques result in additional costs to Owner, after notice, such Contractor shall be responsible for cost attributable to his methods and techniques.

Article 2

OWNER

2.1 OWNER'S REPRESENTATIVE

2.1.1 Owner Representative: The Owner will be represented by the Owner's Representative who shall oversee the performance of the Contract on behalf of the Owner.

2.1.2 Owner May Appoint Inspector: Owner shall be entitled to appoint an agent as Inspector who shall see that the performance of the Work is in strict accordance with the Contract Specifications on behalf of the Owner.

2.1.3 Communication: In order that the Owner may act upon expert advice and upon good procedure, all communications from the Contractor will be through said Owner's Representative or Inspector, as the Owner may direct, and all communications and instructions from the Owner to the Contractor will be so routed. The Owner reserves the right to alter this procedure without the consent of the Contractor. All communications not in compliance herewith, shall be considered non-binding on the Owner.

2.2 RIGHTS OF OWNER

2.2.1 Right to Clean Up: Subject to the strict prohibition against maintaining a nuisance, if a dispute arises between the Contractor and Subcontractors as to the responsibility under their respective Contracts for maintaining the premises and surrounding area free from waste materials and rubbish the Owner may, but need not, clean up and allocate the cost among those responsible as the Inspector determines to be just.

2.2.2 Right to Accept Imperfect Work: If any part or portion of the Work completed under this Contract is defective and not in accordance with the Plans or Specifications, and if the imperfection is judged by Owner to be not of sufficient magnitude or importance so as to make the Work unacceptable, then Owner shall have the right and authority to retain such Work but will make such deductions in Contract Price as may be equitable and reasonable. However, Owner does not by this section, waive any other rights provided for herein.

2.2.3 Right to do Adjacent Work: The Owner reserves the right to perform construction or operations on the site of the Work. In doing this Owner may use its own forces or award separate contracts in connection with other construction or operations on the site but not covered by the Contract Documents.

2.2.4 Right to Finish Contractor's Work: If the Contractor defaults or neglects to carry out all or any part of the Work in accordance with the Contract Documents, the Owner has the right, exercisable solely at Owner's discretion, to commence and continue completion of the Work with diligence and promptness.

2.2.5 Right of Partial Use of Project: The Owner may occupy or use any completed or partially completed portion of the Work at any stage, upon agreement of Owner and Contractor.

1. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents.
2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld.
3. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.
4. Unless otherwise agreed upon in writing, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of work not complying with the requirements of the Contract Documents.
5. No claim for acceleration, delay, or hindrance, may be made by Contractor on his own behalf or that of any of his subcontractors, for any delays, accelerations, or hindrances that may arise out of Owner's partial occupancy of the Project.

2.2.6 Right to Audit: The Contractor shall maintain and make available to Owner, FAA, the Comptroller General, and the State Auditor all books, papers, job cost records, detailed cost estimates, claims, and accounts, including payment, property, payroll, personnel, subcontractors, and financial records related to or which arise out of the Work or under terms of the Contract. The form of record keeping shall be subject to approval by the Owner. These books, papers, records, claims, and accounts shall be made available for examination during normal business hours by Owner and Owner's representative and shall be retained at Contractor's principal place of business in California, for audit during normal business hours at such place of business for 4 years after recording of the notice of completion of the project. Contractor shall provide an office to enable Owner and Owner's representative to conduct such audit.

2.3 RESPONSIBILITIES OF OWNER

2.3.1 Removal, Relocation, or Protection of Underground Infrastructure: If the Contractor while performing the contract discovers utility facilities not identified by the Owner in the contract plans or specifications, Contractor shall immediately notify the Owner in writing. Owner shall have the sole discretion to perform the repairs or relocation work itself, or to permit the Contractor to do such repairs or relocation work at a reasonable price. In the event that the Owner authorizes the Contractor to perform the work, the parties shall proceed with a written Change Order as set forth in Article 5 herein. Compensation to the Contractor for said costs shall be in accordance with Section 4215 of the Government Code.

Nothing herein shall be construed to require the Owner to locate the presence of any existing services not expressly included in Government Code Section 4215, nor to limit the Owner's rights or remedies set forth therein.

In accordance with the provisions of Section 4215 of the California Government Code, Contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by the failure of the Owner or owner of the utility to provide for the removal or relocation of such utility facilities.

Article 3

CONTRACTOR'S RESPONSIBILITIES

3.1 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS

3.1.1 Reporting Errors in Contract Documents: The Contractor shall carefully study and compare the Contract Documents with each other and shall at once report to the Inspector errors, inconsistencies, or omissions discovered. If the Contractor performs any construction activity knowing it involves a recognized error, inconsistency, or omission in the Contract Documents without such notice to the Owner, the Contractor shall assume responsibility for such performance and shall bear all costs for correction.

3.1.2 Reporting Errors in Field Conditions: The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies, or omissions discovered shall be reported to the Owner at once.

3.1.3 No Implied Warranty: No warranty is to be implied nor shall any warranty arise by operation of law, or by interpretation of this Contract, that the Plans and Specifications are adequate and sufficient to construct the Project.

3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

3.2.1 Supervision of Work: The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters.

3.2.2 Acts of Employees and Agents: The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, subcontractors and their agents and employees, and other persons performing portions of the Work under a contract with the Contractor.

3.2.3 Acts Do Not Waive Contractor's Obligation: The Contractor shall not be relieved of obligations to perform the Work in strict accordance with the Contract Documents either by activities or duties of the Owner's Representative or the Inspector in the administration of the Contract, or by tests, inspections, or approvals required or performed by persons other than the Contractor.

3.3 PROSECUTION OF WORK

3.3.1 Time of the Essence: It is expressly understood and agreed that the time of beginning, rate of progress, and time of completion of the Work are of the essence. The Work shall be prosecuted at such time, and in or on such part or parts of the Work as may be required to complete the Work as set forth in the Contract Documents.

3.3.2 Construction Schedule: A critical path method (CPM) construction schedule is required to be submitted within five (5) days of issuance of Notice to Proceed as required in the Specifications. The CPM schedule will be for Owner's information only. Silence or inaction with regard to Contractor's schedule shall not be construed as acquiescence or acceptance of the schedule as being binding on Owner. Unless specifically adopted by resolution or minute order of the El Dorado County Board of Supervisors, such schedule shall not be binding on the County of El Dorado. Contractor's schedule shall provide for the completion date not to exceed nor shall it provide for the completion date earlier than the time limits for completion set forth in the Contract Documents. Float, whether for the entire Project or for specific tasks therein, shall be deemed to be for the benefit of the Owner.

The Contractor shall keep the construction schedule current, and shall submit monthly updates to the Owner's Representative and Inspector, if any. The Contractor shall further prepare and keep current a schedule of submittals which is coordinated with the construction schedule, and which allows the Owner reasonable time to review the submittals.

3.4 SUBMITTALS

3.4.1 Use of Listed Manufacturers; Review of "Or Equals": Contractor shall utilize only the manufacturer designated in its Proposal for major equipment items listed therein. In accordance with the provisions of Section 3400 of the California Public Contract Code, but subject to Subsection (b) thereof, Contractor shall within 5 calendar days after Award of the Contract submit any substitution requests and shall submit data substantiating a request for a substitution of an "or equal" item. Failure to submit such substitution requests and substantiating data within 5 days shall subject such request for substitution to automatic denial.

3.4.2 Excessive Submittal Reviews: The cost of reviewing submittals shall be the Owner's responsibility, except that Contractor shall be responsible for the cost of the third and subsequent review of any one submittal.

3.4.3 Submittal Process: Submittals shall be processed as described in the Special Conditions.

3.5 STATE LABOR REQUIREMENTS

3.5.1 Hours of Work:

1. Eight hours of labor shall constitute a legal day's work upon all work done hereunder, and it is expressly stipulated that no workman employed at any time by the Contractor, or by any subcontractor under this Contract, upon the Work, shall be required or permitted to work thereon more than 8 hours in any 1 calendar day and/or more than 40 hours in any 1 calendar week except as provided in Section 1815 of the Labor Code of California, and it is further expressly stipulated that for each and every violation of said last named stipulation, said Contractor shall forfeit, as penalty to the said Owner, \$50.00 for each workman employed in the execution of this Contract, or by any subcontractor under this Contract, for each calendar day during which said workman is required or permitted to labor more than 8 hours in any 1 calendar day or more than 40 hours in any 1 calendar week in violation of the provisions of said Labor Code.
2. In accordance with the provisions of the Labor Code of the State of California, the Contractor, and each subcontractor, shall also keep an accurate record showing the names and actual hours worked for all workers employed by him in connection with the Work contemplated by the Agreement, which record shall be open at all reasonable hours to the inspection of the Owner or its officers or agents, and to the Chief of the Division of Labor Statistics and Law Enforcement or the Department of Industrial Relations, his deputies or agents.

3.5.2 Deleted.

3.5.3 Apprentice Employment:

1. Pursuant to the provisions of Section 1777.5 as amended, the Contractor or subcontractor employing tradesmen in any apprenticeable occupation shall apply to the joint apprenticeship committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a Certificate of Approval. The certificate will also fix the ratio of apprentices to journeymen that will be used in the performance of the Contract. All requirements and exceptions to those requirements set forth herein for Apprenticeship Employment are contained in Labor Code Section 1777.5 and are available from the applicable Joint Apprenticeship Committee.
2. The Contractor shall make contributions to funds established for the administration of the apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.
3. The Contractor and any subcontractor under him shall comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices. Information relative to apprenticeship standards, wage schedules, and other

requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

3.5.4 Wage Rates - State Labor Standards Provisions:

1. State prevailing wage rates shall apply when the State wage rate is higher than the federal wage rate. All Contractors and subcontractors are subject to the application of Section 1720 et seq. of the California Labor Code which details the regulations and procedures governing the payment of State prevailing wages.
2. All Contractors and subcontractors are subject to the provisions of Sections 1810-1814 of the California Labor Code which provide that the maximum hours a worker is to be employed is limited to eight hours a day and 40 hours a week and the Contractor or subcontractor shall forfeit, as a penalty, \$25 for each worker employed in the execution of the Contract for each calendar day during which a worker is required or permitted to labor more than eight hours in any calendar day or more than 40 hours in any calendar week and is not paid overtime
3. Section 1815 of the California Labor Code requires that notwithstanding the provisions of Sections 1810-1814, employees of Contractors who work in excess of eight hours per day and 40 hours per week shall be compensated for all hours worked in excess of eight hours per day at not less than 1-1/2 times the basic rate of pay.
4. Pursuant to Labor Code Section 1770 et seq., each laborer or mechanic of Contractor or any subcontractor engaged in work on the Project under this Contract shall be paid not less than the hourly wage rate of per diem wages set forth in the prevailing wage rate schedule published by the Director of Industrial Relations regardless of any contractual relationship which may be alleged to exist between Contractor or any subcontractor and such laborers and mechanics.
5. Any laborer or mechanic employed to perform work on the Project under this Contract, which work is not covered by any of the foregoing classifications, shall be paid not less than the prevailing rate of per diem wages specified herein for the classification which most nearly corresponds to the work to be performed by him.
6. The foregoing specified prevailing wage rates are minimum rates only, and the Contractor may pay any wage rate in excess of the applicable rate contained in this Contract.
7. Pursuant to Labor Code Section 1775, the Contractor as a penalty to the Owner shall forfeit \$50.00 for each calendar day, or portion thereof for each worker paid less than prevailing rate established by the Department of Industrial

Relations for such work or craft in which such worker is employed. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which the worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor.

8. An error on the part of an awarding body does not relieve the Contractor from responsibility for payment of the prevailing rate of per diem wages and penalties pursuant to Labor Code Sections 1770 - 1775.
9. Copies of the applicable prevailing wage rates are on file with the El Dorado County Department of Transportation, at 2850 Fairlane Court, Placerville, California 95667. See Pages SP-11(a) through SP-11(l).
10. All Contractors and subcontractors shall submit a signed Contractor's/Subcontractor's Certification Concerning State Labor Standards and Prevailing Wages to the County regarding State labor standards and prevailing wages within ten (10) days after execution of any contract or subcontract.

3.5.5 Federal Prevailing Wage: The Contractor's attention is directed to the following, which sets forth requirements under federal law. The Wage Scales contained herein are as of the date of advertising. Any modifications to the wage scales that take effect prior to bid opening will govern. For updates to wages scales see the website at

<http://www.access.gpo.gov/davisbacon/ca.html>

and click on El Dorado County.

GENERAL DECISION: **CA20080009** 04/18/2008 CA9

Date: April 18, 2008

General Decision Number: **CA20080009** 04/18/2008

Superseded General Decision Number: CA20070009

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Marin, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yolo and Yuba Counties in California.

BUILDING CONSTRUCTION PROJECTS (excluding Amador County only); DREDGING CONSTRUCTION PROJECTS (does not include hopper dredge work); HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); AND HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	02/08/2008
1	02/15/2008
2	02/22/2008
3	02/29/2008
4	03/07/2008
5	03/21/2008
6	03/28/2008
7	04/04/2008
8	04/18/2008

ASBE0016-001 01/01/2008

AREA 1: ALAMEDA, CONTRA COSTA, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONO, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN JOAQUIN, SHASTA, SIERRA, SISKIYOU, STANISLAU, SUTTER, TEHEMA, TRINITY, TULARE, TUOLUMNE, YOLO, & YUBA COUNTIES

Rates Fringes

Asbestos Workers/Insulator
(Includes the application of all insulating materials, Protective Coverings, Coatings, and Finishes to all types of mechanical systems)

Area 1.....	\$ 44.63	14.75
Area 2.....	\$ 37.48	14.75

ASBE0016-007 05/01/2006

AREA 1: MARIN & NAPA COUNTIES

AREA 2: REMAINING COUNTIES

	Rates	Fringes
Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)		
Area 1.....	\$ 26.75	5.42
Area 2.....	\$ 25.36	5.42

BOIL0549-002 10/01/2006

	Rates	Fringes
BOILERMAKER (1) Marin, Sacramento, Solano & Sonoma.....	\$ 33.34	20.11
(2) Remaining Counties.....	\$ 33.34	20.11

BRCA0003-001 08/01/2007

	Rates	Fringes
MARBLE FINISHER.....	\$ 27.22	11.67

BRCA0003-004 07/01/2007

AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES

AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
BRICKLAYER AREA 1.....	\$ 31.58	14.12
AREA 2.....	\$ 36.58	16.87

SPECIALTY PAY:

(A) Underground work such as tunnel work, sewer work, manholes, catch basins, sewer pipes and telephone conduit shall be paid \$1.25 per hour above the regular rate. Work in direct contact with raw sewage shall receive \$1.25 per hour in addition to the above.

(B) Operating a saw or grinder shall receive \$1.25 per hour above the regular rate.

(C) Gunitite nozzle person shall receive \$1.25 per hour above the regular rate.

BRCA0003-008 07/01/2007

	Rates	Fringes
TERRAZZO FINISHER.....	\$ 27.71	9.91
TERRAZZO WORKER/SETTER.....	\$ 36.78	17.22

BRCA0003-010 04/01/2007

	Rates	Fringes
TILE FINISHER		
Area 1.....	\$ 19.99	7.51
Area 2.....	\$ 20.07	9.91
Area 3.....	\$ 20.25	9.78
Area 4.....	\$ 19.74	9.26
Tile Layer		
Area 1.....	\$ 33.91	9.26
Area 2.....	\$ 32.27	10.96
Area 3.....	\$ 36.47	11.01
Area 4.....	\$ 33.31	10.96

AREA 1: Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter, Tehema, Yolo, Yuba
 AREA 2: Alpine, Amador
 AREA 3: Marin, Napa, Solano, Siskiyou
 AREA 4: Sonoma

BRCA0003-014 08/01/2007

	Rates	Fringes
MARBLE MASON.....	\$ 37.82	18.13

CARP0034-001 07/01/2007

	Rates	Fringes
Diver		
Assistant Tender, ROV		
Tender/Technician.....	\$ 32.15	21.915
Diver standby.....	\$ 36.37	21.915
Diver Tender.....	\$ 35.37	21.915
Diver wet.....	\$ 72.74	21.915
Manifold Operator (mixed gas).....	\$ 40.37	21.915
Manifold Operator (Standby).....	\$ 35.37	21.915

DEPTH PAY (Surface Diving):
 050 to 100 ft \$2.00 per foot
 101 to 150 ft \$3.00 per foot

151 to 220 ft \$4.00 per foot

SATURATION DIVING:

The standby rate shall apply until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. The diver rate shall be paid for all saturation hours.

DIVING IN ENCLOSURES:

Where it is necessary for Divers to enter pipes or tunnels, or other enclosures where there is no vertical ascent, the following premium shall be paid: Distance traveled from entrance 26 feet to 300 feet: \$1.00 per foot. When it is necessary for a diver to enter any pipe, tunnel or other enclosure less than 48" in height, the premium will be \$1.00 per foot.

WORK IN COMBINATION OF CLASSIFICATIONS:

Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

CARP0034-003 07/01/2007

	Rates	Fringes
Piledriver.....	\$ 32.15	21.915

CARP0035-001 08/01/2007

AREA 1: MARIN, NAPA, SOLANO & SONOMA

AREA 2: ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO & YUBA

	Rates	Fringes
Drywall Installers/Lathers:		
Area 1.....	\$ 33.25	18.80
Area 2.....	\$ 26.52	18.80
Drywall Stocker/Scraper		
Area 1.....	\$ 16.63	12.09
Area 2.....	\$ 13.26	12.09

PROJECTS \$50,000,000 AND OVER (AREA 2 ONLY):
\$3.50 additional per hour for Drywall Installers and Lathers.
\$1.75 additional per hour for Drywall Stockers and Scrappers.

CARP0035-004 07/01/2007

AREA 1: Marin, Napa, Solano, Sonoma Counties

AREA 4: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta,

Sierra, Siskiyou, Sutter, Tehama, Trinity, Yolo, Yuba counties

	Rates	Fringes
Carpenters:		
AREA 1:		
(1) Carpenter.....	\$ 33.25	18.36
(2) Hardwood Floor Layer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 33.40	18.36
(3) Bridge Builder.....	\$ 33.25	18.36
(4) Millwright.....	\$ 33.35	19.95
AREA 4:		
(1) Carpenter.....	\$ 26.02	18.36
(2) Hardwood Floor Layer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer.....	\$ 26.17	18.36
(3) Bridge Builder.....	\$ 33.25	18.36
(4) Millwright.....	\$ 28.52	19.95

CARP0035-010 07/01/2007

AREA 1: Marin, Napa, Solano & Sonoma Counties

AREA 2: Alpine, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc,
Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou,
Sutter, Tehama, Trinity, Yolo & Yuba Counties

	Rates	Fringes
Modular Furniture Installer		
Area 1		
Installer I.....	\$ 20.18	12.325
Installer II.....	\$ 16.75	12.325
Lead Installer.....	\$ 23.63	12.825
Master Installer.....	\$ 27.85	12.825
Area 2		
Installer I.....	\$ 16.58	12.325
Installer II.....	\$ 13.81	12.325
Lead Installer.....	\$ 19.38	12.825
Master Installer.....	\$ 22.80	12.825

ELEC0006-002 12/01/2006

MARIN, NAPA, SOLANO & SONOMA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communication Installer.....	\$ 26.72	3%+10.65
Sound & Communication Technician.....	\$ 30.42	3%+10.65

SCOPE OF WORK INCLUDES-

SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs], TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

 ELEC0180-001 06/01/2007

NAPA AND SOLANO COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 44.16	3%+15.44
ELECTRICIAN.....	\$ 39.25	3%+15.44

 ELEC0340-002 01/01/2008

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

	Rates	Fringes
Communications System		
Sound & Communications		
Installer.....	\$ 22.98	3%+9.05
Sound & Communications		
Technician.....	\$ 26.43	3%+9.05

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

- A. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS
 - Background foreground music Intercom and telephone

interconnect systems, Telephone systems, Nurse call systems, Radio page systems, School intercom and sound systems, Burglar alarm systems, Low voltage master clock systems, Multi-media/multiplex systems, Sound and musical entertainment systems, RF systems, Antennas and Wave Guide.

B. FIRE ALARM SYSTEMS

Installation, wire pulling and testing

C. TELEVISION AND VIDEO SYSTEMS Television monitoring and surveillance systems, Video security systems, Video entertainment systems, Video educational systems, Microwave transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter security systems
 Vibration sensor systems Card access systems Access control systems Sonar/infrared monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and Data Acquisition) PCM (Pulse Code Modulation) Inventory Control Systems Digital Data Systems Broadband and Baseband and Carriers Point of Sale Systems VSAT Data Systems Data Communication Systems RF and Remote Control Systems Fiber Optic Data Systems

WORK EXCLUDED Raceway systems are not covered (excluding Ladder-Rack for the purpose of the above listed systems). Chases and/or nipples (not to exceed 10 feet) may be installed on open wiring systems. Energy management systems. SCADA (Supervisory Control and Data Acquisition) when not intrinsic to the above listed systems (in the scope). Fire alarm systems when installed in raceways (including wire and cable pulling) shall be performed at the electrician wage rate, when either of the following two (2) conditions apply:

1. The project involves new or major remodel building trades construction.
2. The conductors for the fire alarm system are installed in conduit.

 ELEC0340-003 12/01/2007

ALPINE (West of Sierra Mt. Watershed), AMADOR, BUTTE, COLUSA, EL DORADO (West of Sierra Mt. Watershed), GLENN, LASSEN, NEVADA (West of Sierra Mt. Watershed), PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA (West of Sierra Mt. Watershed), SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

	Rates	Fringes
ELECTRICIAN		
Remaining area.....	\$ 36.18	3%+10.85
Sierra Army Depot, Herlong..	\$ 45.23	3%+10.85
Tunnel work.....	\$ 37.99	3%+10.85

CABLE SPLICER: Receives 110% of the Electrician basic hourly

rate.

ELEC0401-005 04/01/2004

ALPINE (east of the main watershed divide), EL DORADO (east of the main watershed divide), NEVADA (east of the main watershed), PLACER (east of the main watershed divide) and SIERRA (east of the main watershed divide) COUNTIES:

	Rates	Fringes
ELECTRICIAN.....	\$ 27.00	9.83

ELEC0551-004 06/01/2007

MARIN AND SONOMA COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 40.48	3%+12.53

ELEC0659-006 01/01/2006

MODOC and SISKIYOU COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 27.95	11.84

ELEC0659-008 02/01/2006

MODOC & SISKIYOU COUNTIES

	Rates	Fringes
Line Construction		
(1) Cable Splicer.....	\$ 38.71	11.00
(2) Lineman, Pole Sprayer, Heavy Line Equipment Man....	\$ 34.56	10.84
(3) Tree Trimmer.....	\$ 20.57	8.74
(4) Line Equipment Man.....	\$ 29.72	8.90
(5) Powdermen, Jackhammermen.....	\$ 25.92	8.76
(6) Groundman.....	\$ 24.19	8.69

ELEC1245-004 06/01/2007

ALL COUNTIES EXCEPT MODOC & SISKIYOU

	Rates	Fringes
LINE CONSTRUCTION		
(1) Lineman; Cable splicer..	\$ 41.02	12.22
(2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes,		

trenchers, cranes (50 tons and below), and overhead and underground distribution line equipment).....\$ 33.24 11.17
 (3) Groundman.....\$ 25.42 10.89
 (4) Powderman.....\$ 37.16 11.34

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day and day after Thanksgiving, Christmas Day

 ELEV0008-001 01/01/2008

	Rates	Fringes
ELEVATOR MECHANIC.....	\$ 52.66	16.285

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly rate as vacation pay credit for employees with more than 5 years of service, and 6% for 6 months to 5 years of service.
 PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.

 ENGI0003-008 07/01/2007

	Rates	Fringes
Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:)		
AREA 1:		
(1) Leverman.....	\$ 36.24	20.53
(2) Dredge Dozer; Heavy duty repairman.....	\$ 31.28	20.53
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 30.16	20.53
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 26.86	20.53
AREA 2:		
(1) Leverman.....	\$ 38.24	20.53
(2) Dredge Dozer; Heavy duty repairman.....	\$ 33.28	20.53
(3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator.....	\$ 32.16	20.53
(4) Bargeman; Deckhand; Fireman; Leveehand; Oiler..	\$ 28.86	20.53

AREA DESCRIPTIONS

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED,
NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN,
SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS,
SUTTER, YOLO, AND YUBA COUNTIES

AREA 2: MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2
AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Remainder

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY:

Area 1: Remainder

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border
with Shasta County

Area 2: Remainder

MADERA COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Except Eastern part

Area 2: Eastern part

MONTERREY COUNTY

Area 1: Except Southwestern part

Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County

Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:

Area 1: All but the Western border with Mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeastern border with
Shasta County
Area 2: Remainder

TUOLUMNE COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

ENGI0003-018 06/25/2007

"AREA 1" WAGE RATES ARE LISTED BELOW

"AREA 2" RECEIVES AN ADDITIONAL \$2.00 PER HOUR ABOVE AREA 1
RATES.

SEE AREA DEFINITIONS BELOW

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(AREA 1:)		
GROUP 1.....	\$ 36.09	19.62
GROUP 2.....	\$ 34.56	19.62
GROUP 3.....	\$ 33.08	19.62
GROUP 4.....	\$ 31.70	19.62
GROUP 5.....	\$ 30.43	19.62
GROUP 6.....	\$ 29.11	19.62

GROUP 7.....	\$ 27.97	19.62
GROUP 8.....	\$ 26.83	19.62
GROUP 8-A.....	\$ 24.62	19.62
POWER EQUIPMENT OPERATOR		
(Cranes and Attachments -		
AREA 1:)		
GROUP 1		
Cranes.....	\$ 36.97	19.62
Oiler.....	\$ 27.71	19.62
Truck crane oiler.....	\$ 30.00	19.62
GROUP 2		
Cranes.....	\$ 35.21	19.62
Oiler.....	\$ 27.50	19.62
Truck crane oiler.....	\$ 29.74	19.62
GROUP 3		
Cranes.....	\$ 33.47	19.62
Hydraulic.....	\$ 29.11	19.62
Oiler.....	\$ 27.22	19.62
Truck Crane Oiler.....	\$ 29.50	19.62
POWER EQUIPMENT OPERATOR		
(Piledriving - AREA 1:)		
GROUP 1		
Lifting devices.....	\$ 37.31	19.62
Oiler.....	\$ 28.05	19.62
Truck crane oiler.....	\$ 30.33	19.62
GROUP 2		
Lifting devices.....	\$ 35.49	19.62
Oiler.....	\$ 27.78	19.62
Truck Crane Oiler.....	\$ 30.08	19.62
GROUP 3		
Lifting devices.....	\$ 33.81	19.62
Oiler.....	\$ 27.56	19.62
Truck Crane Oiler.....	\$ 29.79	19.62
GROUP 4.....	\$ 32.04	19.62
GROUP 5.....	\$ 29.40	19.62
GROUP 6.....	\$ 27.17	19.62
POWER EQUIPMENT OPERATOR		
(Steel Erection - AREA 1:)		
GROUP 1		
Cranes.....	\$ 37.94	19.62
Oiler.....	\$ 28.39	19.62
Truck Crane Oiler.....	\$ 30.62	19.62
GROUP 2		
Cranes.....	\$ 36.17	19.62
Oiler.....	\$ 28.12	19.62
Truck Crane Oiler.....	\$ 30.40	19.62
GROUP 3		
Cranes.....	\$ 34.69	19.62
Hydraulic.....	\$ 29.74	19.62
Oiler.....	\$ 27.90	19.62
Truck Crane Oiler.....	\$ 30.13	19.62
GROUP 4.....	\$ 32.67	19.62
GROUP 5.....	\$ 31.37	19.62
POWER EQUIPMENT OPERATOR		
(Tunnel and Underground Work		
- AREA 1:)		
SHAFTS, STOPES, RAISES:		

GROUP 1.....	\$ 32.19	19.62
GROUP 1-A.....	\$ 34.66	19.62
GROUP 2.....	\$ 30.93	19.62
GROUP 3.....	\$ 29.60	19.62
GROUP 4.....	\$ 28.46	19.62
GROUP 5.....	\$ 27.32	19.62
UNDERGROUND:		
GROUP 1.....	\$ 32.09	19.62
GROUP 1-A.....	\$ 34.56	19.62
GROUP 2.....	\$ 30.83	19.62
GROUP 3.....	\$ 29.50	19.62
GROUP 4.....	\$ 28.36	19.62
GROUP 5.....	\$ 27.22	19.62

FOOTNOTE: Work suspended by ropes or cables, or work on a Yo-Yo Cat: \$.60 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Operator of helicopter (when used in erection work); Hydraulic excavator, 7 cu. yds. and over; Power shovels, over 7 cu. yds.

GROUP 2: Highline cableway; Hydraulic excavator, 3-1/2 cu. yds. up to 7 cu. yds.; Licensed construction work boat operator, on site; Power blade operator (finish); Power shovels, over 1 cu. yd. up to and including 7 cu. yds. m.r.c.

GROUP 3: Asphalt milling machine; Cable backhoe; Combination backhoe and loader over 3/4 cu. yds.; Continuous flight tie back machine assistant to engineer or mechanic; Crane mounted continuous flight tie back machine, tonnage to apply; Crane mounted drill attachment, tonnage to apply; Dozer, slope brd; Gradall; Hydraulic excavator, up to 3 1/2 cu. yds.; Loader 4 cu. yds. and over; Long reach excavator; Multiple engine scraper (when used as push pull); Power shovels, up to and including 1 cu. yd.; Pre-stress wire wrapping machine; Side boom cat, 572 or larger; Track loader 4 cu. yds. and over; Wheel excavator (up to and including 750 cu. yds. per hour)

GROUP 4: Asphalt plant engineer/box person; Chicago boom; Combination backhoe and loader up to and including 3/4 cu. yd.; Concrete batch plant (wet or dry); Dozer and/or push cat; Pull-type elevating loader; Gradesetter, grade checker (GPS, mechanical or otherwise); Grooving and grinding machine; Heading shield operator; Heavy-duty drilling equipment, Hughes, LDH, Watson 3000 or similar; Heavy-duty repairperson and/or welder; Lime spreader; Loader under 4 cu. yds.; Lubrication and service engineer (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator, asphalt; Rubber-tired scraper, self-loading (paddle-wheels, etc.); Rubber-tired earthmoving equipment (scrapers); Slip

form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed construction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment)

GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt); Mine or shaft hoist; Portable crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging capacity over 5 ft. depth; Vermeer T-600B rock cutter or similar

GROUP 6: Armor-Coater (or similar); Ballast jack tamper; Boom-type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self-propelled pipeline wrapping machine; Soils & materials tester; Tractor; Self-loading chipper; Concrete barrier moving machine

GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson; Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and

supported); Post driver; Roller (except asphalt); Chip Seal; Self-propelled automatically applied concrete curing machine (on streets, highways, airports and canals); Self-propelled compactor (without dozer); Signalperson; Slip-form pumps (lifting device for concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor (shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator; Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (self-propelled floating); Ross Carrier (construction site); Rotomist operator; Self-propelled tape machine; Shuttlecar; Self-propelled power sweeper operator (includes vacuum sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist, single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoe-trencher); Tub grinder wood chipper

ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Self-propelled boom-type lifting device, over 100 tons

GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Self-propelled boom-type lifting device 45 tons and under; Boom Truck or dual purpose A-frame truck, non-rotating over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Self-propelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge

mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Self-propelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler, land or barge mounted 45 tons and under

GROUP 4: Assistant operator in lieu of assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

STEEL ERECTORS

GROUP 1: Crane over 100 tons; Derrick over 100 tons; Self-propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

GROUP 3: Drill doctor; Mine or shaft hoist

GROUP 4: Combination slurry mixer cleaner; Grouting Machine

operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and
compressor (gunite); Compressor operator; Oiler; Pump
operator; Slusher operator

AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS, TUNNEL AND
UNDERGROUND [These areas do not apply to Piledrivers and
Steel Erectors]

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED,
NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN,
SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS,
SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS
NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts

Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border
with Shasta County

Area 2: Remainder

MADERA COUNTY

Area 1: Remainder

Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder

Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts

Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder

Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County

Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion

Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion

Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner

Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part

Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part

Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner

Area 2: Reaminder

TEHAMA COUNTY:

Area 1: All but the Western border with mendocino & Trinity
Counties

Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeaster border with Shasta County
Area 2: Remainder

TULARE COUNTY;

Area 1: Remainder
Area 2: Eastern part

TUOLUMNE COUNTY:

Area 1: Remainder
Area 2: Eastern Part

ENGI0003-019 06/25/2007

SEE AREA DESCRIPTIONS BELOW

	Rates	Fringes
POWER EQUIPMENT OPERATOR (LANDSCAPE WORK ONLY)		
GROUP 1		
AREA 1.....	\$ 27.81	18.91
AREA 2.....	\$ 29.81	18.91
GROUP 2		
AREA 1.....	\$ 24.21	18.91
AREA 2.....	\$ 26.21	18.91
GROUP 3		
AREA 1.....	\$ 19.60	18.91
AREA 2.....	\$ 21.60	18.91

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade Operator: All finish grade work regardless of equipment used, and all equipment with a rating more than 65 HP.

GROUP 2: Landscape Operator up to 65 HP: All equipment with a manufacturer's rating of 65 HP or less except equipment covered by Group 1 or Group 3. The following equipment shall be included except when used for finish work as long as manufacturer's rating is 65 HP or less: A-Frame and Winch Truck, Backhoe, Forklift, Hydragraphic Seeder Machine, Roller, Rubber-Tired and Track Earthmoving Equipment, Skiploader, Straw Blowers, and Trencher 31 HP up to 65 HP.

GROUP 3: Landscae Utility Operator: Small Rubber-Tired Tractor, Trencher Under 31 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts

Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County

Area 2: Remainder

MADERA COUNTY

Area 1: Remainder

Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder

Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts

Area 2: Remainder

MONTEREY COUNTY
Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:
Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:
Area 1: All but the Western border with Mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeast border with
Shasta County
Area 2: Remainder

TULARE COUNTY;
Area 1: Remainder
Area 2: Eastern part

TUOLUMNE COUNTY:
Area 1: Remainder
Area 2: Eastern Part

IRON0002-004 07/01/2007

Rates

Fringes

Ironworkers:

Fence Erector.....	\$ 29.62	20.915
Ornamental, Reinforcing and Structural.....	\$ 30.51	20.915

PREMIUM PAY:

\$3.00 additional per hour at the following locations:

China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$2.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$1.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0067-002 06/25/2007

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Asbestos Removal Laborer		
Areas A & B.....	\$ 16.75	5.93
LABORER (Lead Removal)		
Area A.....	\$ 32.38	6.03
Area B.....	\$ 31.38	6.03

ASBESTOS REMOVAL-SCOPE OF WORK: Site mobilization; initial site clean-up; site preparation; removal of asbestos-containing materials from walls and ceilings; or from pipes, boilers and mechanical systems only if they are being scrapped; encapsulation, enclosure and disposal of asbestos-containing materials by hand or with equipment or machinery; scaffolding; fabrication of temporary wooden barriers; and assembly of decontamination stations.

LABO0067-003 07/01/2007

AREA A: ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO & SANTA CLARA

AREA B: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SANCRCMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SIERRA, SHASTA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO & YUBA COUNTIES

	Rates	Fringes
LABORER (TRAFFIC CONTROL/LANE CLOSURE)		
Escort Driver, Flag Person		
Area A.....	\$ 24.89	13.28
Area B.....	\$ 23.89	13.28
Traffic Control Person I		
Area A.....	\$ 25.19	13.28
Area B.....	\$ 24.19	13.28
Traffic Control Person II		
Area A.....	\$ 22.69	13.28
Area B.....	\$ 21.69	13.28

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0067-006 06/25/2007

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, EL DORADO, FRESNO, GLENN, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

	Rates	Fringes
Laborers: (CONSTRUCTION CRAFT LABORERS - AREA A:)		
Construction Specialist		
Group.....	\$ 25.84	13.28
GROUP 1.....	\$ 25.14	13.28
GROUP 1-a.....	\$ 25.36	13.28
GROUP 1-c.....	\$ 25.19	13.28
GROUP 1-e.....	\$ 25.69	13.28
GROUP 1-f.....	\$ 25.72	13.28
GROUP 1-g (Contra Costa		

County).....	\$ 25.34	13.28
GROUP 2.....	\$ 24.99	13.28
GROUP 3.....	\$ 24.89	13.28
GROUP 4.....	\$ 18.58	13.28

See groups 1-b and 1-d under laborer classifications.

Laborers: (CONSTRUCTION CRAFT

LABORERS - AREA B:)

Construction Specialist

Group.....	\$ 24.84	13.28
GROUP 1.....	\$ 24.14	13.28
GROUP 1-a.....	\$ 24.36	13.28
GROUP 1-c.....	\$ 24.19	13.28
GROUP 1-e.....	\$ 24.69	13.28
GROUP 1-f.....	\$ 24.72	13.28
GROUP 2.....	\$ 23.99	13.28
GROUP 3.....	\$ 23.89	13.28
GROUP 4.....	\$ 17.58	13.28

See groups 1-b and 1-d under laborer classifications.

Laborers: (GUNITE - AREA A:)

GROUP 1.....	\$ 26.10	13.28
GROUP 2.....	\$ 25.60	13.28
GROUP 3.....	\$ 25.01	13.28
GROUP 4.....	\$ 24.89	13.28

Laborers: (GUNITE - AREA B:)

GROUP 1.....	\$ 25.10	13.28
GROUP 2.....	\$ 24.60	13.28
GROUP 3.....	\$ 24.01	13.28
GROUP 4.....	\$ 23.89	13.28

Laborers: (WRECKING - AREA A:)

GROUP 1.....	\$ 25.14	13.28
GROUP 2.....	\$ 24.99	13.28
GROUP 3.....	\$ 18.58	13.28

Laborers: (WRECKING - AREA B:)

GROUP 1.....	\$ 24.14	13.28
GROUP 2.....	\$ 23.99	13.28
GROUP 3.....	\$ 17.58	13.28

Landscape Laborer (GARDENERS,
HORTICULTURAL & LANDSCAPE

LABORERS - AREA A:)

(1) New Construction.....	\$ 24.89	13.28
(2) Establishment Warranty Period.....	\$ 18.58	13.28

Landscape Laborer (GARDENERS,
HORTICULTURAL & LANDSCAPE

LABORERS - AREA B:)

(1) New Construction.....	\$ 23.89	12.33
(2) Establishment Warranty Period.....	\$ 17.58	12.33

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive \$0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in-place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and bucket; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above

Group 1 wage rates. "Sewer cleaner" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shall receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 1-g, CONTRA COSTA COUNTY: Pipelayer (including grade checking in connection with pipelaying); Caulker; Bander; Pipewrapper; Conduit layer; Plastic pipe layer; Pressure pipe tester; No joint pipe and stripping of same, including repair of voids; Precast manhole setters, cast in place manhole form setters

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair

track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification "material cleaner" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of "form stripping, cleaning and oiling and moving to the next point of erection".

GUNITE LABORER CLASSIFICATIONS

- GROUP 1: Structural nozzle operator
- GROUP 2: Nozzle operator (including gun, pot); Ground person
- GROUP 3: Rebound
- GROUP 4: Guniting laborer

WRECKING WORK LABORER CLASSIFICATIONS

- GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)
- GROUP 2: Semi-skilled wrecker (salvaging of other building materials)
- GROUP 3: General laborer (includes all clean-up work, loading lumber, loading and burning of debris)

LABO0067-010 06/25/2007

	Rates	Fringes
Tunnel and Shaft Laborers:		
GROUP 1.....	\$ 30.50	13.28
GROUP 2.....	\$ 30.27	13.28
GROUP 3.....	\$ 30.02	13.28
GROUP 4.....	\$ 30.02	13.28
GROUP 5.....	\$ 29.57	13.28
GROUP 6.....	\$ 29.03	13.28

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman

GROUP 4: Steel form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 5: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading

GROUP 6: Dumpmen (any method); Grout crew; Reboundman; Swamper/ Brakeman

LABO0073-001 07/01/2007

	Rates	Fringes
Plasterer tender.....	\$ 26.17	12.68

LABO0139-002 07/01/2007

NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
LABORER: Mason Tender (Brick)...	\$ 25.18	13.27

LABO0185-002 07/01/2007

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
LABORER: Mason Tender (Brick)...	\$ 24.63	13.27

LABO0291-001 07/01/2007

MARIN COUNTY

	Rates	Fringes
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or water level \$6.00 additional per hour.

PAIN0016-008 01/01/2008

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 39.16	14.12

PAIN0169-004 01/01/2008

MARIN , NAPA & SONOMA COUNTIES; SOLANO COUNTY (west of a line defined as follows: Hwy. 80 corridor beginning at the City of Fairfield, including Travis Air Force Base and Suisun City; going north of Manakas Corner Rd., continue north on Suisun Valley Rd. to the Napa County line; Hwy. 80 corridor south on Grizzly Island Rd. to the Grizzly Island Management area)

	Rates	Fringes
GLAZIER.....	\$ 36.86	16.61

* PAIN0567-001 07/01/2007

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Painters: Brush and Roller.....	\$ 23.44	7.80

PREMIUMS:
Special Coatings (Brush), and Sandblasting = \$0.50/hr
Special Coatings (Spray), and Steeplejack = \$1.00/hr
Special Coating Spray Steel = \$1.25/hr
Swing Stage = \$2.00/hr

*A special coating is a coating that requires the mixing of 2 or more products.

PAIN0567-007 01/01/2008

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains) AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 24.25	8.60

PAIN0567-010 07/01/2007

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

	Rates	Fringes
Drywall		
(1) Taper.....	\$ 24.69	7.80
(2) Steeplejack - Taper, over 40 ft with open space below.....	\$ 26.19	7.80

PAIN0767-004 01/01/2008

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO (Remainder), SUTTER, TEHAMA, TRINITY, YOLO, YUBA

	Rates	Fringes
GLAZIER.....	\$ 31.02	15.25

PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

Employee required to wear a body harness shall receive \$1.50 per hour above the basic hourly rate at any elevation.

PAIN1176-001 07/01/2007

HIGHWAY IMPROVEMENT

	Rates	Fringes
Parking Lot Striping/Highway Marking:		
GROUP 1.....	\$ 26.76	11.54
GROUP 2.....	\$ 21.55	11.54
GROUP 3.....	\$ 22.18	11.54

CLASSIFICATIONS

GROUP 1: Striper: Layout and application of painted traffic stripes and marking; hot thermo plastic; tape, traffic stripes and markings

GROUP 2: Gamecourt & Playground Installer

GROUP 3: Protective Coating, Pavement Sealing

PAIN1237-001 01/01/2008

ALPINE; COLUSA; EL DORADO (west of the Sierra Nevada Mountains); GLENN; LASSEN (west of Highway 395, beginning at Stacey and including Honey Lake); MODOC; NEVADA (west of the Sierra Nevada Mountains); PLACER (west of the Sierra Nevada Mountains); PLUMAS; SACRAMENTO; SHASTA; SIERRA (west of the Sierra Nevada Mountains); SISKIYOU; SUTTER; TEHAMA; TRINITY; YOLO AND YUBA COUNTIES

	Rates	Fringes
SOFT FLOOR LAYER.....	\$ 28.01	12.57

PLAS0300-003 07/01/2007

	Rates	Fringes
PLASTERER		
AREA 295: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehema, Trinity, Yolo & Yuba Counties.....	\$ 31.82	13.30
AREA 355: Marin, Napa & Sonoma Counties.....	\$ 31.82	13.50

PLAS0300-005 07/01/2006

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 25.88	15.03

PLUM0036-005 01/01/2008

AREA 1: ALPINE; AMADOR (south of the San Joaquin River) COUNTIES

AREA 2: BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY AND YUBA COUNTIES

	Rates	Fringes
PLUMBER		
Area 1.....	\$ 33.75	16.18
Area 2.....	\$ 33.75	16.18

PLUM0038-002 07/01/2007

MARIN AND SONOMA COUNTIES

	Rates	Fringes
PLUMBER		
(1) Work on wooden frame		

structures 5 stories or less excluding high-rise buildings and commercial work such as hospitals, prisons, hotels, and schools.....\$ 38.00 26.46
 (2) All other work.....\$ 47.50 29.04

 PLUM0038-006 07/01/2007

MARIN & SONOMA COUNTIES

	Rates	Fringes
Landscape/Irrigation Fitter.....	\$ 34.45	18.92

 PLUM0343-001 07/01/2007

NAPA AND SOLANO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER		
Light Commercial.....	\$ 30.60	15.20
All Other Work.....	\$ 39.60	16.85

DEFINITION OF LIGHT COMMERCIAL:

Work shall include strip shopping centers, office buildings, schools and other commercial structures which the total plumbing bid does not exceed Two Hundred and Fifty Thousand (\$250,000) and the total heating and cooling does not exceed Two Hundred Fifty Thousand (\$250,000); or Any projects bid in phases shall not qualify unless the total project is less than Two Hundred Fifty Thousand (\$250,000) for the plumbing bid; and Two Hundred Fifty Thousand (\$250,000) for the heating and cooling bid. Excluded are hospitals, jails, institutions and industrial projects, regardless size of the project

FOOTNOTES: While fitting galvanized material: \$.75 per hour additional. Work from trusses, temporary staging, unguarded structures 35' from the ground or water: \$.75 per hour additional. Work from swinging scaffolds, boatswains chairs or similar devices: \$.75 per hour additional.

 PLUM0350-001 01/01/2007

EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake Tahoe area only); AND PLACER COUNTY (Lake Tahoe area only)

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 25.93	15.02

 PLUM0355-001 07/01/2007

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC,

NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA,
 SISKIYOU, SOLANO, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA
 COUNTIES

	Rates	Fringes
Underground Utility Worker /Landscape Fitter.....	\$ 24.35	7.85

PLUM0447-001 07/01/2007		

AMADOR (north of San Joaquin River), EL DORADO (excluding Lake
 Tahoe area), NEVADA (excluding Lake Tahoe area); PLACER
 (excluding Lake Tahoe area), SACRAMENTO AND YOLO COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER Journeyman.....	\$ 37.32	12.90
Light Commercial Work.....	\$ 25.73	9.02

ROOF0081-006 08/01/2007		

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
Roofer.....	\$ 28.95	12.65

ROOF0081-007 08/01/2007		

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA,
 PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER,
 TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

	Rates	Fringes
Roofer.....	\$ 22.82	13.88

SFCA0483-003 07/01/2007		

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

	Rates	Fringes
SPRINKLER FITTER (Fire Sprinklers).....	\$ 44.94	17.30

SFCA0669-003 04/01/2008		

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA,
 PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER,
 TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

	Rates	Fringes
SPRINKLER FITTER.....	\$ 32.65	15.05

SHEE0104-006 07/01/2007

MARIN, NAPA, SOLANO SONOMA & TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker Mechanical Contracts		
\$200,000 or less.....	\$ 41.32	19.78
All other work.....	\$ 44.90	20.88

SHEE0104-014 07/01/2007

MARIN, NAPA, SOLANO, SONOMA AND TRINITY COUNTIES

	Rates	Fringes
Sheet Metal Worker (Metal decking and siding only).....	\$ 33.08	19.21

SHEE0162-006 01/01/2008

AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER,
YOLO AND YUBA COUNTIES

	Rates	Fringes
SHEET METAL WORKER.....	\$ 35.04	17.74

SHEE0162-007 01/01/2008

ALPINE COUNTY

	Rates	Fringes
Sheet Metal Worker.....	\$ 29.32	16.18

SHEE0162-008 07/01/2005

BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER,
PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA,
YOLO AND YUBA COUNTIES

	Rates	Fringes
Sheet Metal Worker (Metal decking and siding only).....	\$ 32.84	15.20

SHEE0162-014 01/01/2008

BUTTE, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU
AND TEHAMA COUNTIES

	Rates	Fringes
SHEET METAL WORKER		

Mechanical Jobs \$200,000 & under.....	\$ 26.58	17.62
Mechanical Jobs over \$200,000.....	\$ 35.04	17.74

TEAM0094-001 07/01/2007

	Rates	Fringes
Truck drivers:		
GROUP 1.....	\$ 25.63	17.09
GROUP 2.....	\$ 25.93	17.09
GROUP 3.....	\$ 26.23	17.09
GROUP 4.....	\$ 26.68	17.09
GROUP 5.....	\$ 26.93	17.09

FOOTNOTES:

Articulated dump truck; Bulk cement spreader (with or without auger); Dumpcrete truck; Skid truck (debris box); Dry pre-batch concrete mix trucks; Dumpster or similar type; Slurry truck: Use dump truck yardage rate.
Heater planer; Asphalt burner; Scarifier burner; Industrial lift truck (mechanical tailgate); Utility and clean-up truck: Use appropriate rate for the power unit or the equipment utilized.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Dump trucks, under 6 yds.; Single unit flat rack (2-axle unit); Nipper truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump machine; Fork lift and lift jitneys; Fuel and/or grease truck driver or fuel person; Snow buggy; Steam cleaning; Bus or personhaul driver; Escort or pilot car driver; Pickup truck; Teamster oiler/greaser and/or serviceperson; Hook tender (including loading and unloading); Team driver; Tool room attendant (refineries)

GROUP 2: Dump trucks, 6 yds. and under 8 yds.; Transit mixers, through 10 yds.; Water trucks, under 7,000 gals.; Jetting trucks, under 7,000 gals.; Single-unit flat rack (3-axle unit); Highbed heavy duty transport; Scissor truck; Rubber-tired muck car (not self-loaded); Rubber-tired truck jumbo; Winch truck and "A" frame drivers; Combination winch truck with hoist; Road oil truck or bootperson; Buggymobile; Ross, Hyster and similar straddle carriers; Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 35 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under 7500 gals. Trucks towing tilt bed or flat bed pull trailers; Lowbed heavy duty transport; Heavy duty transport tiller person; Self-propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar

type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 35 yds. and under 65 yds.; Water pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbedk Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low bed Heavy Duty Transport over 7 axles

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial

contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

3.5.6 Certified Payroll: As required under the provisions of Labor Code Section 1776 Contractor and subcontractors shall keep accurate payroll records:

1. The payroll records shall show the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee by him or her in connection with the Project.
2. A certified copy of all payroll records enumerated above shall be available for inspection at all reasonable hours at the principal office of the Contractor as follows:
 - a. Make available or furnish to the employee or his or her authorized representative on request.
 - b. Make available for inspection or furnished upon request to a representative of the Owner, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
 - c. Make available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the Owner, the Division of Labor Standards Enforcement, or the Division of Apprenticeship Standards. The requesting party shall, prior to being provided the records, reimburse the costs of preparation by the Contractor, subcontractor, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the Contractor.
3. The Contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to Reinard W. Brandley, Consulting Airport Engineer, for availability to the Federal Aviation Administration.

3.5.7 Nondiscrimination Clause:

1. During the performance of this Agreement, the Contractor and its subcontractors shall not unlawfully discriminate, harass or allow harassment, against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave. The Contractor and its subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractor shall include the full text of the non-discrimination clause and standard equal employment opportunity provisions in all if its subcontracts.

3.5.8 Convict-Made Materials: Except as may be provided by law, the Contractor agrees that no materials manufactured or produced in a penal or correctional institution shall be incorporated in the construction under this Contract.

3.5.9 Suspension or Withholding of Insured Draws and Advances. The Owner may recommend to the Department withholding of funds during the course of construction where the Contractor has failed to comply with labor standards provisions within a 30 day period. The Owner's recommendation to the Department shall contain a narrative justification. Withholding from a draw or advance should not exceed sufficient amounts to cover actual or estimated wage underpayment. Suspension of a draw or advance is a drastic action taken only when a Contractor continues to violate labor standards provisions (e.g., continues to underpay employees) after notification to desist. The suspension of an entire draw or advance shall not take place because one or more subcontractors have failed to comply. If there is sufficient cause, payments of line items attributed to the Work of the subcontractors in violation should be deleted from the advance, and if the sum is sufficient to cover the estimated wage underpayments, an additional amount may be withheld. Suspension or withholding may also be requested by the Department of Labor. The failure of the Contractor to submit weekly payrolls over a substantial period of time shall be deemed particularly serious.

3.6 TAXES

3.6.1 Contractor Pays Taxes: The Contractor and subcontractors shall pay all local, state, and federal taxes upon labor or materials involved in their branch of the Work, cost of same to be included in the Contract price.

3.7 COMPLIANCE WITH LAW AND LOCAL REQUIREMENTS

3.7.1 Regulations: The Contractor and all subcontractors shall conform to and abide by all current city, county, and state laws, ordinances, rules, and regulations, and California Building Codes, as the same pertain to the Work contemplated by said Plans and Specifications.

3.7.2 Copies of Codes: Copies of the following shall be retained at all times at the project site by the Construction Superintendent:

- Uniform Building Code, 1997 Edition with 1998 California Amendments (CBC)
- Uniform Plumbing Code, 1998 California Addition
- National Electric Code, 1998 California Addition
- Uniform Mechanical Code, 1998 Addition
- Uniform Fire Code, 1997 California Addition
- Local Agency Code Requirements

3.7.3 Permits, Licenses, and Fees: The Contractor shall give all notices and shall procure and pay for all permits, licenses, and inspection fees that may be required to commence, carry on, and complete the Contract.

3.7.4 Patent Rights, Copyrights, Trade Names, and Royalties: The Contractor shall indemnify and save harmless the Owner and all persons acting under him for all liability on account of any patent rights, copyrights, or trade names which may affect the articles or materials or their application under the specifications. The Contractor shall pay all royalties, or other charges that may arise, due to methods, types of construction, processes, materials or use of equipment, and shall hold the Owner harmless from any charges whatsoever which may arise, and shall furnish written assurance, satisfactory to the Owner, that such charges have been paid.

3.8 GUARANTEE

3.8.1 Final Guarantee: The Contractor shall guarantee all materials and equipment furnished and Work performed for a period of 1 year. Contractor warrants and guarantees for a period of one year from the date of Notice of Completion that the Work is free from all defects due to faulty materials or workmanship and Contractor shall promptly make such corrections as may be necessary, including repairs of any damage to other parts of the Work resulting from such defects. Owner will give notice of observed defects with reasonable promptness. In the event that Contractor should fail to make such repairs, adjustments, or other work that may be made necessary by such defects, Owner may do so and charge Contractor the cost thereby incurred.

3.8.2 Extended Guarantees: If a guaranty exceeding one year is provided by the supplier or manufacturer of any equipment used in this Project, then the guarantee for such materials shall be extended for such term. Contractor expressly agrees to act as coguarantor of such equipment and materials, and Contractor shall supply Owner with all warranty and guaranty documents relative to equipment and materials incorporated in the job and guaranteed by their suppliers or manufacturers.

3.9 WARRANTY

3.9.1 Contract Warranty: The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new, unless otherwise required or permitted by the Contract, that the Work will be free from defects or flaws and is of the highest quality of workmanship and that the Work will conform with the requirements of the Contract. Work not conforming to these requirements, including substitutions not properly approved and authorized, shall be considered defective.

3.10 RESPONSIBILITY

3.10.1 Owner Not Liable for Damages: The Owner or its authorized representative shall not in any way or manner be answerable or suffer loss, damage, expense, or liability for any loss or damage that may happen to said Work, or part thereof, or in or about the same during its construction and before acceptance and the said Contractor shall assume all liabilities of every kind or nature arising from said Work, either by accident, negligence, theft, vandalism, or any cause whatever; and shall hold the Owner and its authorized representatives harmless from all

suits, losses or claims, liability of every kind and nature arising from accident, negligence, or any cause whatever, other than for the active negligence of the Owner, its officers, agents and employees.

3.10.2 Owner Not Liable for Debts: Indebtedness incurred for any cause in connection with this Work must be paid by the Contractor, and the Owner is hereby relieved at all times from any indebtedness or claim other than the Contract price.

3.10.3 Contractor Indemnifies Owner: To the fullest extent allowed by law, the Contractor shall defend, indemnify, and hold the County, the United States Government, and the State of California harmless against and from any and all claims, suits, losses, damages and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, County employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of or are connected with the Work, or the Contractor's services, operations, or performance of the Work, regardless of the existence or degree of fault or negligence on the part of the County, the Contractor, subcontractor(s) and employee(s) of any of these, except for the sole, or active negligence of the County, its officers and employees, or as expressly prohibited by statute. This duty of Contractor to indemnify and save County harmless includes the duties to defend set forth in California Civil Code Section 2778.

3.10.4 Environmental Indemnification: From and after recording of Notice of Completion, Contractor shall indemnify, defend, and save harmless Owner from all losses or damages resulting from injury to or death of any person and damage to property, and any fine, which is occasioned by or arises out of any breach of Environmental and Toxics Warranty, representations, or covenants of Contractor under this Contract. Contractor further agrees to indemnify and hold harmless Owner, its officers, employees, and agents, from and against any and all liability as follows:

1. Including all foreseeable and all unforeseeable consequential damages, directly or indirectly arising out of the use, generation, storage, or disposal of hazardous materials in any location by Contractor, and
2. Including, without limitation, the cost of any required or necessary repair, cleanup, or detoxification and the preparation of any closure or other required plans, whether such action is required or necessary prior to or following filing of the Notice of Substantial Completion to the full extent that such action is attributable, directly or indirectly, to the presence or use, generation, storage, release, threatened release, or disposal of hazardous materials by any person on the Project prior to filing of the Notice of Substantial Completion. Contractor's obligations pursuant to the foregoing indemnity shall survive the filing of Notice of Completion of the Project.
3. This agreement as to indemnity and reimbursement as above set forth to be undertaken by the Contractor shall survive the performance of the remainder of

said Contract and shall remain in full force and effect notwithstanding such performance.

4. The foregoing duties of indemnity shall not apply to loss, damage, expense, or liability caused solely by the active negligence of the Owner or the Owner's agents, servants or independent contractors.

3.11 WORK REQUIREMENTS

3.11.1 Conduct of Work: The Contractor shall confine the storage of his equipment and materials to limits as designated. He shall at all times exercise due caution and provide all necessary barricades and other safety equipment around the Work to protect the general public from injury to person and property during the entire time of performance of the Work. The Contractor shall not create excessive dust or noise.

3.11.2 Maintenance of Site: Strict prohibition against committing nuisances in or about the Work shall be maintained, and the Contractor shall not in any way obstruct or interfere with movements of traffic on any public highway or public right of way without first obtaining the necessary approval of the proper public agency.

3.11.3 Materials: Assume full responsibility for the protection and safekeeping of products under this Contract, stored on the site; move and store products under Contractor's control; obtain and pay for the use of additional storage or work areas needed for operations.

3.11.4 Clean Up of Site: The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials. If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor.

3.11.5 Cutting and Patching:

1. The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly.
2. The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

3.12 SUBCONTRACTORS

3.12.1 Contractor Responsible for Subcontractor's Acts: Contractor shall be fully responsible to Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

3.12.2 Contractor's Subcontract: Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to Contractor by the terms of the Contract Documents insofar as applicable to the Work of subcontractors and to give Contractor the same power as regards terminating any subcontract that Owner may exercise over Contractor under any provisions of the Contract Documents.

3.13 SUPERINTENDENT

3.13.1 Work Superintendent: The Contractor will employ and maintain on the worksite a qualified supervisor or Superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The Superintendent shall have full authority to act on behalf of the Contractor, and all communications given to the Superintendent shall be as binding as if given to the Contractor. The Superintendent shall be present on the site at all times as required to perform adequate supervision and coordination of the Work.

3.14 LABOR AND MATERIALS

3.14.1 Skilled Labor: All labor must be especially skilled for each kind of work, and must be thorough and first class in all respects. Any person whom the Inspector or Owner may deem incompetent or disorderly shall be promptly discharged and not re-employed.

3.14.2 Quality of Materials: All materials used on this Contract shall be new and the best market quality, unless specified or shown otherwise. All Work executed under this Contract shall be done in the best, most thorough, substantial and workmanlike manner and without flaws. All materials and labor shall be subject to the approval of the Inspector as to its quality and fitness, and shall be immediately removed if it does not meet with his approval. The Inspector may refuse to issue the certificate or payment until all defective materials or work have been removed and other material of proper quality substituted therefor. All removal and replacement with same shall be done at the Contractor's expense. Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned as directed by the manufacturer.

Article 4

ADMINISTRATION OF CONTRACT

4.1 ADMINISTRATION OF CONTRACT

4.1.1 Contract Communications: Unless otherwise provided in the Contract or when direct communications have specifically been authorized, all parties shall communicate through the Owner's Representative or the Inspector if the Owner so directs. Communications by and with the subcontractors and material suppliers shall be through the Contractor. Communications by Contractor to separate contractors, architect, or engineer shall be through the Owner's Representative.

4.1.2 Control of Work: The Owner's Representative or the Inspector will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility. The Owner's Representative or the Inspector will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Owner's Representative or the Inspector will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

4.1.3 Recommendation for Payments: Based on the his or her observations and evaluations of the Contractor's Applications for Payment, the Owner's Representative will review amounts due the Contractor and will recommend to Owner, payments to Contractor as set forth in the section 6.4.

4.1.4 Inspector's Authority: The Inspector will have the authority to stop work whenever necessary to ensure a proper execution of the Work. The Inspector will also have authority to reject Work which does not conform to the Contract Documents. Whenever the Inspector considers it necessary or advisable for implementation of the intent of the Contract Documents, the Inspector will have authority to require additional inspection or testing of the Work in accordance with the following section whether or not such Work is fabricated, installed, or completed. However, neither this authority of the Inspector nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Inspector to the Contractor, subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work. In the event an Inspector is not appointed by the Owner, the Owner's Representative shall have the authority set forth herein.

4.2 INSPECTION AND TESTING

4.2.1 Advance Notice: Contractor shall notify Owner's Representative and Inspector 24 hours prior to any day in which Contractor will 1) require an inspection of any portion of the Work, and 2) work in excess of 8 hours or any time Contractor intends to work weekends. Any work not performed subject to inspection will not be accepted and will be rejected and/ or ordered removed by Owner, or Inspector.

4.2.2 Access to Work: The Owner's Representative, the Engineer, and the Inspector will at all times have access to the Work. In addition, authorized representatives and agents of any participating Federal or State Agency shall be permitted to inspect all Work, materials, payrolls, records on personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the Work and also for any inspection or testing thereof.

4.2.3 Costs of Tests: The Owner shall bear all costs related to testing for conformance of the Work to the Contract requirements. However, if the Contractor has called for any testing, and that test fails, subsequent tests, and all related costs, shall be borne by the Contractor.

4.2.4 Preparation of Change Directives/Orders: The Owner's Representative or the Inspector, if one is appointed, will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in the article entitled CHANGES IN WORK.

4.3 CLAIMS

4.3.1 Concealed or Unforeseen Conditions: It is understood by both parties that Contractor has made a precontract investigation of the site. All concealed, unforeseen, or materially differing conditions are the responsibility of the Contractor in the absence of an actual material, intentional misrepresentation by the Owner as to the conditions on the site. Owner may have made available to Contractor information on conditions that may be encountered on the site. But, such information is for the exclusive use of the Owner, and Owner does not make any representations as to the completeness or the accuracy of the information made available. Contractor shall give written notice of any conditions encountered at the site which are unforeseen, concealed, or materially different from those set forth in the Plans or Specifications, or ordinarily encountered and generally recognized as inherent in the Work. Such written notice shall be given within 5 days of his discovery of any such facts.

4.3.2 Notice of Discovery of Hazardous Waste or Unusual Conditions:

1. The Contractor shall promptly, and before the following conditions are disturbed, notify the Owner in writing, in the event the Contractor encounters, after excavating to a depth of greater than four (4) feet, any of the following:
 - a. Material that the Contractor believes may be hazardous waste, as defined in section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.

- b. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in the contract.
2. The Owner shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work shall issue a change order under the procedures described herein.
3. In the event a dispute arises between the Owner and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for in the contract, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the Contractor and the Owner.

4.3.3 Time Limits on Claims: Claims by Contractor must be made within 21 days after occurrence of the event giving rise to such Claim, except that claims made due to delay or hindrances which Contractor claims was caused by Owner shall be made within 10 days after occurrence of the event giving rise to such Claim. Claims must be made by written notice. Failure to make such claim in writing in the time set forth herein shall bar Contractor from recourse for such claim. All claims must be filed on or before the payment date of Final Payment.

4.3.4 Claims for Additional Costs:

1. If Contractor wishes to make a Claim for an increase in the Contract Price, he shall give the Owner written notice thereof within the time set forth in Paragraph 4.3.2. This notice shall be given by the Contractor before proceeding to execute the work, except in an emergency endangering life or property in which case the Contractor shall, as soon as possible, advise Owner of his intent to do the Work.
2. Increases in Contract Price due to Claims shall be calculated based on the Cost Reimbursement method detailed in Paragraph 5.4.1.3.
3. Under no circumstances shall Contractor recover any administrative overhead costs or recover on the basis of any "Home Office" damages formula, "Total Cost" recovery formula, or any other such formula.

4.3.5 Claims for Additional Time:

1. If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate probable effect of delay on progress of the Work.
2. If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.
3. The Owner shall not be liable for any damages on account of any reasonable delay or hindrance of the Owner. However, Contractor shall be entitled to an extension of time for any delay or hindrance caused by the Owner. Any delay or hindrance by Owner which is unreasonable and not within the contemplation of the parties may subject Owner to a claim for damages. Contractor shall make any claims in writing within the time set forth in section 4.3, for any unreasonable delay or hindrance caused by Owner, and specifying the cause thereof as required in paragraph 4.3.6 entitled "Submittal of Claims".

4.3.6 Submittal of Claims: Any disputes relating to this Contract, or its breach, which is not disposed of by agreement shall be promptly submitted as a claim to and decided by the Owner's Representative who shall issue a written decision on the dispute. Claims shall be submitted by the Contractor to the Owner's Representative with adequate supporting data and include a demand for the Owner's Representative's decision. Adequate supporting data shall include, but is not limited to, a statement of the reasons for the asserted entitlement, the certified payroll, invoice for material and equipment rental, and an itemized breakdown of any adjustment sought.

4.3.7 Submission Under Penalty of Perjury: The Contractor shall certify, at the time of submission of a claim, as follows:

"I certify under penalty of perjury under the laws of the State of California, that the claim is made in good faith, that the supporting data are accurate and complete, and that the amount requested accurately reflects the contract adjustment for which the Owner is liable.

By: _____
Contractor's signature)"

4.4 DISPUTES RESOLUTION

4.4.1 Continue Work During Dispute: In the event of any dispute between the Owner and the Contractor, the Contractor will not stop Work but will prosecute the work diligently to completion in the manner directed by the Owner, and the dispute shall be resolved by a court of

law after completion of the Work. However, all disputes must be submitted by Contractor in accordance with the subsequent provisions of this section.

4.4.2 Requirements for Filing a Claim: For any claim subject to this Article, the following requirements apply: the claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by this contract for the filing of claims.

1. For claims of less than fifty thousand dollars (\$50,000), the Owner shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claims or relating to defenses or claims the Owner may have against the Contractor, any additional documentation supporting the claim or relating to defenses to the claim the Owner may have against the Contractor.

If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the Owner and the Contractor.

The Owner's written response to the claim, as further documented, shall be submitted to the Contractor within 15 days after receipt of the further documentation or within a period of time not greater than that taken by the Contractor in producing the additional information, whichever is greater.

2. For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the Owner shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to the defenses or claims the Owner may have against the Contractor.

If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the Owner and the Contractor.

The Owner's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days of receipt of the further documentation, or a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

3. If the Contractor disputes the Owner's written response, or the Owner fails to respond within the time prescribed, the Contractor may so notify the Owner, in writing, either within 15 days of receipt of the Owner's failure to respond within the time prescribed, respectively, and demand an informal conference to meet

and confer for settlement of the issues in dispute. Upon a demand, the Owner shall schedule a meet and confer conference within 30 days for settlement of the dispute.

4. If following the meet and confer conference the claim or any portion remains in dispute, the Contractor may file a claim pursuant to Chapter 1 (commencing with section 900) and Chapter 2 (commencing with section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code, and in accordance with Section 20104.2 of the Public Contract Code.

4.4.3 Owner's Review of Claim: The Owner's Representative shall review the facts pertinent to the claim, secure assistance from legal and other advisors, coordinate with the contract administrators, and promptly render a written decision on the claim. A copy of the decision shall be furnished to the Contractor by certified mail, return receipt requested, or any other method that provides evidence of receipt. The decision of the Owner's Representative shall be final and conclusive except as is otherwise provided herein.

4.4.4 Claims Exempt from Review: The procedures and remedies provided in this Section 4.4 do not apply to:

1. Any claims by the Owner.
2. Any claim for or respecting personal injury or death or reimbursement or other compensation arising out of or resulting from liability for personal injury or death.
3. Any claim or dispute relating to stop payment requests or stop notices.
4. Any claim related to the approval, refusal to approve, or substitution of subcontractors, regardless of tier, and suppliers.

4.4.5 Suit in El Dorado County Only: Any litigation arising out of this Contract shall be brought in El Dorado County. The Owner and the Contractor shall follow procedures established for all civil actions filed to resolve claims pursuant to Public Contract Code section 20104 et seq., including but not limited to section 20104.4.

4.4.6 Payment of Undisputed Portion of Claim: Payment by Owner of undisputed portion of claim; interest on arbitration award or judgment.

1. Owner shall pay Contractor such portion of a claim which is undisputed except as otherwise provided in the contract.

In any suit filed pursuant to Public Contract Code section 20104.4, the provisions of section 20104.6 shall apply.

Article 5

CHANGES IN WORK

5.1 WAIVER

5.1.1 Waivers of Contract Provisions: It is expressly understood and agreed that no waiver granted by the Inspector or the Owner of any term, provision, or covenant of this Contract shall constitute a precedent for breach of the same or any other terms, provisions, or covenants of this Contract.

5.2 CHANGES

5.2.1 Owner May Order Changes in Work: The Contractor agrees that the Owner, without invalidating the Contract, may order changes in Work by altering, adding to, or deducting from the Work, the Contract Amount being adjusted according to the provisions of Section 5.4. Contractor agrees to enter into a modification of his original Contract for such changes.

5.2.2 Cost Proposals: Upon request of the Owner for a quotation on the change to the Work, the Contractor shall promptly submit to Owner's Representative, and the Inspector, if one is appointed, in writing a detailed breakdown of the work and of the amount of deduction or addition claimed. In no case shall Cost Proposals be provided later than 30 calendar days from the date requested. The Owner's request for quotations on alterations to the Work shall not be considered authorization to proceed with the work prior to issuance of a Change Order, nor shall such request justify any delay in existing work. If Contractor fails to provide Cost Proposals within 30 calendar days, Owner may prepare the Cost Proposal based on estimates of labor, materials, and equipment. This proposal, prepared by Owner, shall be binding on the Contractor, will become the basis for Contract Price adjustment, and shall not be subject to dispute or claim.

5.2.3 Contract Change Instrument: Changes in work involving a change in Contract Price or Contract Time shall be done only pursuant to a Field Order, Change Order, or Construction Change Directive as set forth below in this article.

5.2.4 Changes Shall Conform to Contract: Changes in work shall be performed in conformance with applicable provisions of the Contract Documents, and the Contractor shall proceed promptly unless otherwise provided in the Field Order, Change Order, or Change Directive.

5.3 CONTRACT CHANGE INSTRUMENTS

5.3.1 Field Order: The Owner's Representative or the Inspector may order minor changes in work by use of a Field Order. These minor changes will involve neither changes in the Contract Price or Contract Time. If the Contractor disagrees that the change does not involve a change in cost or time, then a Change Order or Change Directive shall be used.

5.3.2 Change Order: The Change Order shall be used in cases where Owner and Contractor agree on the change in work, the amount of or method of computing the Contract Amount, and the amount of adjustment in Contract Time.

5.3.3 Change Directive: In the event that the Owner and Contractor do not agree on the proposed change in work, and/or the proposed adjustment of Contract Price and Time, or in the event it is essential that the Contractor proceed expeditiously and without delay, then Owner may, by issuance of a Construction Change Directive, order changes in work, and the Contractor shall promptly proceed with the change in work involved.

1. **Acceptance of Change Directive:** If Contractor agrees with the Change Directive, the Contractor shall by his signature thereon, indicate his acceptance of the terms of the Directive, including adjustments to price and time, and the Change Directive shall then be followed by a Change Order.
2. **Non-Acceptance of Change Directive:** If the Contractor disagrees with the method of computing an increase in Contract Price, then the amount of adjustment shall be computed by the Cost Reimbursement method detailed in Basis for Adjustment. Disagreements with amounts or credits, under the Cost Reimbursement method, or time, shall be considered a dispute, and processed under the section on Disputes Resolution.

5.4 BASIS OF ADJUSTMENT

5.4.1 Methods of Adjustment: The amount of adjustments to Contract Price, whether a credit or payment, shall be computed by one of the methods detailed below. The method used shall be at the sole determination of the Owner.

1. **Unit Prices:** Those prices stipulated in the Bid Proposal shall be utilized where they are applicable. In the event the change in original quantity is in excess of 25 percent of the original bid quantity, and the total dollar value of that bid is significant, the Owner shall review the unit price to determine if a new unit price shall be renegotiated. Unit prices for new items shall be negotiated and mutually agreed upon.
2. **Lump Sum:** A total lump sum for the Work negotiated and mutually acceptable to the Contractor and Owner. Lump sum quotations for modifications to the Work shall include substantiating documentation with an itemized breakdown of Contractor's and subcontractor's costs, including labor, materials, rentals, approved services, overhead, and profit all calculated as specified in the Cost Reimbursement method which follows.
3. **Cost Reimbursement (Extra Work):** In this method, the payment for Extra Work shall be made on a time and expense basis that is on an accounting of the Contractor's forces, materials, equipment, and other items of cost as required and

used to do the Work. Payment will be made for the documented actual cost of the following:

- a. Costs of labor, excluding supervisory personnel, including social security, old age and unemployment insurance, fringe benefits required by agreement, labor insurance and labor taxes established by law,
- b. Costs of materials, supplies, and equipment, including cost of transportation and sales tax, whether incorporated if paid for by the Contractor or his subcontractor,
- c. Rental costs, prevailing in the area, of machinery and equipment for the actual time used, and including transportation costs for items having value in excess of \$100,
- d. Costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work,

To the above cost the Contractor shall be allowed a markup of 20 percent on direct labor charges and 15 percent for all other cost items. When any or all of the Extra Work is done by one of the Contractor's subcontractors, the markups set forth above shall be applied to the subcontractor's actual costs to which a 5 percent markup shall be allowed the Contractor. These markups shall be considered to be full compensation, covering the cost of general supervision, administration, overhead, profit, and any and all other general expenses, including, but not limited to, uniforms, hand tools, safety equipment, travel and lodging.

5.5 EXTENSION OF TIME FOR COMPLETION

5.5.1 Contractor Delayed or Hindered: Should the Contractor be delayed or hindered in the completion of the Work by the neglect of the Owner, or by fire, by strikes, lockouts, embargoes or earthquakes, and any other causes the Inspector approves as not having been reasonably foreseeable at the time of execution of the Contract Documents, then the time allowance herein fixed for the completion of the Work shall be extended for a period equivalent to the time lost by reason of any or all of the causes aforesaid. Time extensions must be requested in accordance with Section 4.3.

5.5.2 Agreement on Time Extension: In addition, the Contractor and the Owner reserve the right to mutually agree in writing upon an extension of time for completion for causes other than enumerated above.

5.5.3 Time Extension Not Waiver: The granting of an extension of time by the Owner for performance by the Contractor shall not operate as a waiver or stop the Owner from claiming damages due to any other delays, prior or subsequent, which were not approved by the Owner as provided herein.

Article 6

PAYMENTS AND COMPLETION

6.1 GENERAL

6.1.1 Contract Price: The Contract Price is stated in the Contract is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

6.1.2 Waiver: Neither the acceptance of the Work by the Owner nor the payment any part or all of the sum due the Contractor hereunder shall constitute a waiver by the Owner of any claim which the Owner may have against the Contractor or Surety under this Contract or otherwise.

6.1.3 Manner of Paying Warrants: Payment becomes due under the terms of this Contract in the manner prescribed by law. The Auditor shall cause a warrant for the Certified amount to be drawn upon the proper fund of the Treasurer of the Owner, which warrant shall be approved and issued to Contractor within that period of time customarily required to process said warrants in the ordinary course of Owner business.

6.2 APPLICATIONS FOR PAYMENT

6.2.1 Submittal of Applications: Every thirty (30) days, the Contractor shall submit to the Owner's Representative an itemized Application for Payment for work completed to date. Such application shall be supported by such data substantiation the Contractor's right to payment as the Owner may require, such as copies of requisitions from subcontractors and material suppliers.

6.2.2 Schedule of Values: Before the first Application for Payment, the Contractor shall submit to the Owner's Representative a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Owner may require. This schedule, upon approval by the Owner, shall be used as a basis for reviewing the Contractor's Applications for Payment.

6.2.3 Basis for Payment: Each Application for Payment shall be based upon the Schedule of Values submitted pursuant to section 6.2.2. Applications shall indicate the percentage of completion of each major category of the Work as identified in the Schedule of Values as of the end of the month covered by the Application.

6.2.3 Work Free of Liens: The Contractor warrants that upon submittal of an Application for Payment, all work for which Certificates for Payment have been previously issued and payments received from the Owner shall be free and clear of liens, claims, security interests, or encumbrances against Contractor by subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment in relation to the Work.

6.3 CERTIFICATION FOR PAYMENT

6.3.1 Certification Determination: The Owner's Representative, will, within 7 days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certification for Payment, with a copy to the Contractor, for such amount as determined to be properly due, or notify the Contractor of the reasons for withholding certification in whole or in part as provided in section 6.4.1.

6.3.2 The Owner shall pay or cause to be paid to Contractor, an amount equal to ninety percent (90%) of the amount set forth in the approved Certificate for Payment within thirty (30) days of receipt of a full approved Application for Payment, and shall retain the remaining ten percent (10%) until the time provided for in section 6.6.4. The Owner shall withhold amounts pursuant to stop notices received in addition to the retainage. Failure of Owner to make payments provided herein in a timely manner shall not constitute a default by the Owner of the Contract, but may entitle the Contractor to interest as provided by law.

6.4 WITHHOLDING FROM PAYMENTS

6.4.1 Reasons for Withholding: The Owner, upon recommendation of the Inspector, may withhold payments, or on account of subsequently discovered evidence nullify the whole or a part of any progress or retention payments to such extent as may be necessary to protect the Owner from loss on account of:

1. Defective work or material not remedied or replaced.
2. The filing of claims or Stop Notices to withhold, or reasonable evidence indicating probable filing of such claims or notices.
3. Failure of the Contractor to make payments properly to subcontractors, or for materials or labor.
4. Failure to make payments to any person or entity for financial obligations of the Contractor under terms of this Contract.
5. A reasonable doubt that the Contract can be completed for the balance then unpaid.
6. Damage to another contractor.
7. Performance of work in violation of the terms of the Contract Documents.
8. Excessive costs to Owner.
9. Failure of Contractor to comply with requirements for timely submittal of specified documentation, including but not limited to construction schedules, cost proposals, and submittals.

6.4.2 Release of Payment: When the above grounds for withholding are removed, payment shall be made for amounts withheld because of them.

6.5 SUBSTITUTE SECURITIES FOR 10 PERCENT RETENTION

6.5.1 Escrow Account Requirements: The Contractor may at his request and expense, in lieu of the retention withheld by the Owner as provided herein, deposit securities equivalent to the amount withheld with a State or Federally chartered bank as an escrow agent. Securities eligible are those listed in California Government Code Section 16430, or bank or savings and loan certificates of deposit. The terms and conditions of the escrow shall be as set forth in Government Code Section 22300.

6.6 FINAL COMPLETION AND PAYMENT OF RETAINAGE

6.6.1 Affidavit of Payment: After the date of Substantial Completion of the Work, and before final acceptance of the Work, the Contractor shall file with the Owner his affidavit, sworn to before a Notary Public, stating that all workmen and persons employed, all firms supplying materials, and all subcontractors upon the project for either labor or material have been paid in full, except certain items, if any, to be set forth in such affidavit covering disputed claims, including claims for acceleration, disruption, delays, inefficiencies, and hindrance, or items in connection with which Stop Notices have been filed under the provisions of the Statutes of the State of California. The filing of such affidavit by the Contractor shall be one of the prerequisites to the making, by the Owner, of the 10 percent retainage payment on the Contract.

6.6.2 Final Inspection: Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner will promptly make such inspection and, when the Owner's Representative finds the work acceptable under the Contract Documents and the Contract fully performed, the Owner's Representative will promptly recommend to Owner that Owner may consider the Project complete and that Payment of Retainage may be made.

6.6.3 Final Certification: Before issuance of final payment, Contractor shall file, with Owner, a certificate in which he certifies that to the best of the Contractor's knowledge, information, and belief, and on the basis of observations and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents.

6.6.4 Payment of Retention: Thirty-five days after the notice of completion has been filed, provided the Work be fully completed and the Contract fully performed, the balance due under the Contract shall be paid, less any monies held for stop notices. These payments shall not be construed as an absolute acceptance of the work done up to the time of such payments. The Contractor, if requested by the Owner, shall furnish receipts or other vouchers showing his payments for materials and labor.

6.6.5 Notice of Completion: The Work shall be accepted in writing in the form of a Notice of Completion when the whole shall have been completed satisfactorily to the Owner. In judging the Work, no allowance for deviations from the original Specifications will be made unless already approved in writing at the proper times and in the manner as called for herein. The Notice of Completion shall be recorded.

6.6.6 Audits: Contractor shall maintain complete financial records for a minimum of three (3) years or fiscal years after the termination of this Agreement that clearly reflect the costs of work for which compensation is received under this Agreement. Any apportionment of costs shall be made in accordance with generally accepted accounting principles and shall evidence proper audit trails reflecting the true cost of work. All such records shall be available for inspection by the County and the Office of Criminal Justice Planning, through its authorized representatives, at reasonable times during normal business hours. In addition, Contractor agrees to extend to the County Contract Administrator or his/her designee the right to review and investigate record and program procedures.

Article 7

PROTECTION OF PERSONS AND PROPERTY

7.1 PROTECTION OF WORK, PROPERTY, AND PERSONS

7.1.1 Responsible for Damage to Owner's Property: The Contractor shall be entirely responsible for any damage to the property of the Owner due to careless handling of tools and/or materials or other causes attributed to the Contractor's Work in performing this Contract.

7.1.2 Responsible for Safety: The Contractor will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury, or loss to all employees on the Work and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

7.1.3 Safety and Convenience: The Contractor will comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction. The Contractor will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection. The Contractor will notify owners of adjacent utilities when prosecution of the Work may affect them.

7.1.4 Remedy Damages: The Contractor will remedy all damage, injury, or loss to any property caused, directly or indirectly, in whole or part, by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or anyone of whose acts any of them

would be liable, except damage or loss attributable to the sole fault or to the acts or omissions of the Owner or the Inspector or anyone employed by them and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.

7.1.5 Protection of Workers in Trenches: As required by Section 6705 of the California Labor Code, and in addition thereto, whenever work under the Contract involves the excavation of any trench or trenches 5 feet or more in depth, Contractor shall submit for acceptance by the Owner or by a registered civil or structural engineer, employed by the Owner, to whom authority to accept has been delegated, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation, or such trench or trenches. If such plan varies from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, the plan shall be prepared by a registered civil or structural engineer employed by the Contractor, and all costs therefor shall be included in the price named in the Contract for completion of the work as set forth in the Contract Documents. Nothing in this section shall be deemed to allow the use of a shoring, sloping, or other protective system less effective than that required by the Construction Safety Orders. Nothing in this section shall be construed to impose tort liability on the Owner, the Engineer, nor any of their officers, agents, representatives, or employees.

Article 8

INSURANCE AND BONDS

8.1 INSURANCE

GENERAL INSURANCE REQUIREMENTS: The Contractor shall provide proof of a policy of insurance satisfactory to the El Dorado County Risk Manager and documentation evidencing that the Contract maintains insurance that meets the following requirements:

1. Full Worker's Compensation and Employer's Liability Insurance covering all employees of the Contractor as required by law in the State of California.
2. Commercial General Liability Insurance of not less than One Million Dollars (\$1,000,000) combined single limit per occurrence for bodily injury and property damage, including but not limited to endorsements for the following coverage: Premises, personal injury, operations, products and completed operations, blanket contractual, and independent contractors liability.
3. Automobile Liability Insurance of not less than One Million Dollars (\$1,000,000) is required in the event motor vehicles are used by the Contractor in performance of the contract.

4. In the event Contractor is a licensed professional and is performing professional services under this contract, professional liability is required with a limit of liability of not less than One Million Dollars (\$1,000,000) per occurrence. For the purpose of this Agreement professional liability is not required.
5. Explosion, Collapse and Underground coverage is required when the scope of Work includes XCU exposures. For the purposes of this contract XCU coverage is not required.

PROOF OF INSURANCE REQUIREMENTS:

1. Contractor shall furnish proof of coverage satisfactory to the El Dorado County Risk Manager as evidence that the insurance required herein is being maintained. The insurance will be issued by an insurance company acceptable to the Risk Manager, or be provided through partial or total self-insurance likewise acceptable to the Risk Manager.
2. The County of El Dorado, the United States Government, its officers, officials, employees, and volunteers are included as additional insured, but only insofar as the operations under this agreement are concerned. This provision shall apply to all liability policies except Workers' Compensation and professional liability insurance policies. Proof that the County is named additional insured shall be made by providing the Risk Manager with a certified copy, or other acceptable evidence, of an endorsement to Contractor's insurance policy naming the County additional insured.
3. In the event Contractor cannot provide an occurrence policy, Contractor shall provide insurance covering claims made as a result of performance of this Contract for not less than three (3) years following completion of performance of this Agreement.
4. Any deductibles or self-insured retentions must be declared to and approved by the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to the County, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

INSURANCE NOTIFICATION REQUIREMENTS:

1. The insurance required herein shall provide that no cancellation or material change in any policy shall become effective except upon thirty (30) days prior written notice to the County of El Dorado at the office of the Department of Transportation, 2850 Fairlane Court, Placerville, CA 95667.

2. Contractor agrees that the insurance required herein shall be in effect at all times during the term of this agreement. In the event said insurance coverage expires at any time or times during the term of this contract, Contractor agrees to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the contract, or for a period of not less than one (1) year (for an occurrence policy) or three (3) years (for a claims made policy). New certificates of insurance are subject to the approval of the Risk Manager.

ADDITIONAL STANDARDS: Certificate shall meet such additional standards as may be determined by the contracting County Department either independently or in consultation with the Risk Manager, as essential for protection of the County.

COMMENCEMENT OF PERFORMANCE: Contractor shall not commence performance of this Agreement unless and until compliance with each and every requirement of the insurance provisions is achieved.

MATERIAL BREACH: Failure of Contractor to maintain the insurance required herein, or to comply with any of the requirements of the insurance provisions, shall constitute a material breach of the entire Agreement.

REPORTING PROVISIONS: Any failure to comply with the reporting provisions of the policies shall not affect coverage provided to the County, its officers, officials, employees or volunteers.

PRIMARY COVERAGE: The Contractor's insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers shall be in excess of the Contractor's insurance and shall not contribute with it.

PREMIUM PAYMENTS: The insurance companies shall have no recourse against the County of El Dorado, its officers, agents, employees or any of them for payment of any premiums or assessments under any policy issued by any insurance company.

CONTRACTOR'S OBLIGATIONS: Contractor's indemnity and other obligations shall not be limited by the insurance required herein and shall survive the expiration of this Agreement.

8.2 BONDS

8.2.1 General Requirements for Bonds: Before commencing any Work under the Contract, the Contractor shall file two of each bond with the Owner. These bonds shall be in the amounts and for the purposes specified below. They shall be Surety bonds and shall be issued by corporations duly and legally licensed to transact business in the State of California. They shall be maintained by him and at his expense during the entire life of the Contract or later as provided.

8.2.2 Performance Bond: One bond shall be in the amount of 100 percent of the Contract price, and shall guarantee the faithful performance of the Contract and shall insure the Owner during the life of the Contract and the Guarantee period. The Contractor may provide, subject to approval by the Owner, a separate guarantee bond upon completion of and acceptance of the work.

8.2.3 Payment Bond: One bond shall be in the amount of 100 percent of the Contract price, and shall guarantee the payment in full of all claims for labor and materials in accordance with the provisions of the laws of the State of California.

8.2.4 Change of Surety: If, at any time a Surety on such bonds becomes irresponsible or loses its right to do business in the State of California, the Owner may require another Surety which the Contractor shall furnish within 10 calendar days after receipt of written notice to do so. Evidence of authority of an attorney-in-fact acting for the corporate Surety must be provided in the form of a certificate as to his power of attorney and to the effect that it is not terminated and remains in full force and effect on the date of the bonds. The form of the bonds shall be subject to approval by the Owner.

Article 9

UNCOVERING AND CORRECTION OF WORK

9.1 DEVIATION FROM SPECIFICATIONS

9.1.1 Improper Work: If the Contractor shall vary from the Specifications in the form or quality of the Work, or the amount or value of the materials herein provided for, the Owner shall have the right to order such improper work or materials removed, remade, or replaced. In the event that the Work is ordered changed, any other work disturbed or damaged by such alteration shall be made good at the Contractor's expense.

9.2 CORRECTION OF WORK

9.2.1 Covered or Completed Work: If any work is covered contrary to the written instructions of the Owner's Representative, or the Inspector, if one is appointed, it must, if requested, be uncovered for observation and replaced at the Contractor's expense.

9.2.2 Inspection of Covered Work: If the Owner's Representative or the Inspector, if one is appointed, considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, upon request, will uncover, expose, or otherwise make available for observation, inspection, or testing as the Inspector may require, that portion of the Work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such Work is defective, the Contractor will bear all the expenses of such uncovering, exposure,

observation, inspection, and testing and of satisfactory reconstruction; if, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract price or an extension of the Contract time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and construction, and an appropriate Change Order shall be issued.

9.2.3 Rejected Work: The Contractor shall promptly remove from the premises all Work rejected by Owner for failure to comply with the Contract Documents, whether incorporated in the construction or not, and the Contractor shall promptly replace and reexecute the work either during the term of the Contract or during the warranty period, in accordance with the Contract Documents and without expense to the Owner and shall bear the expense of making good all Work of other contractors destroyed or damaged by such removal or replacement.

9.2.4 Cost of Correction: All removal and replacement Work shall be done at the Contractor's expense. If the Contractor does not take action to remove such rejected Work within 10 days after receipt of written notice, the Owner may remove such Work and store the materials at the expense of the Contractor. Owner also may perform such Work or repairs itself and charge the expense to the Contractor.

9.2.5 Correction During Guarantee Period: If, within 1 year after the date of substantial completion of the Work or designated portion thereof, or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so. This period of 1 year shall be extended with respect to portions of Work first performed after substantial completion by the period of time between substantial completion and the actual performance of the Work. This obligation under this subparagraph shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

Article 10

TERMINATION OR SUSPENSION OF CONTRACT

10.1 TERMINATION BY OWNER FOR CONVENIENCE

10.1.1 Right to Terminate: The Owner reserves the right to terminate the Contract at any time upon determination by the Owner's Representative that termination of the Contract is in the best interest of the Owner. Owner shall issue the Contractor a written notice specifying that the Contract is to be terminated.

10.1.2 Contractor's Duties: Upon receipt of said written notice, Contractor shall stop all work under the Contract except that specifically directed to be completed prior to acceptance, perform Work the Inspector deems necessary to secure the project for termination, remove equipment and plant from the site of work, take such action as is necessary to protect materials from

damage, dispose of materials not yet used in the Work as directed by the Owner, and clean up the site.

10.1.3 Payment for Work: If the Contract is terminated for Owner's convenience as provided herein, all finished or unfinished work and materials previously paid for shall, at the option of Owner, become its property. Contractor shall be paid an amount which reflects costs incurred for work provided to the date of notification of termination. In addition, Contractor shall be paid the reasonable cost, as solely judged by Owner, and without profit, for all work performed to secure the project for termination.

10.2 TERMINATION BY OWNER FOR CAUSE

10.2.1 Written Termination Notice: If the Contractor is adjudged as bankrupt or insolvent, or makes a general assignment for the benefit of its creditors or if a trustee or receiver is appointed for the Contractor or for any of its property, or if Contractor files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or on more than one occasion fails to supply sufficient skilled workmen or suitable material or equipment, or on more than one occasion fails to make prompt payments to subcontractors or for labor, materials, or equipment, or disregards the authority of the Owner's Representative, or the Inspector, if one is appointed, or otherwise violates any provision of the Contract Documents, then the Owner may, without prejudice to any other right or remedy and after giving the Contractor and its Surety a minimum of 10 days from delivery of a written termination notice, terminate the services of the Contractor and take equipment and machinery thereon owned by the Contractor and finish the Work by whatever method the Owner may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished.

10.2.2 Notice to Work or Quit: Without prejudice to other rights or remedies the Owner may have, if the Contractor fails to begin delivery of materials and equipment, to commence Work within the time specified, to maintain the rate of delivery of material, to execute the Work in the manner and at such locations as specified, or fails to maintain a work program which will ensure the Owner's interest, or, if the Contractor is not carrying out the intent of the Contract, an Inspector's written notice may be served upon the Contractor and the Surety on its faithful performance bond demanding satisfactory compliance with the Contract.

1. If the Contractor or its Surety does not comply with such notice within 5 days after receiving it, or after starting to comply, fails to continue, the Owner may exclude it from the premises and take possession of all material and equipment, and complete the Work by Owner's forces, by letting the unfinished Work to another Contractor, or by a combination of such methods.

10.2.3 Owner's Rights After Termination: Where the Contractor's services have been so terminated by the Owner, said termination shall not affect any right of the Owner against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor will not release the Contractor from compliance with the Contract Documents.

1. If the unpaid balance of the Contract price exceeds the direct and indirect costs of completing the Work, including compensation for additional professional services, such excess shall be paid to the Contractor. If the sums under the Contract are insufficient for completion, the Contractor or Surety shall pay to the Owner within 5 days after the completion, all costs in excess of the Contract price. In any event, the cost of completing the Work shall be charged against the Contractor and its Surety and may be deducted from any money due or becoming due from the Owner.
2. If the Surety assumes any part of the Work, it shall take the Contractor's place in all respect for that part and shall be paid by the Owner for all Work performed by it in accordance with the Contract. If the Surety assumes the entire Contract, all money due the Contractor at the time of its default shall be payable to the Surety as the work progressed, subject to the terms of the Contract.
3. The provisions of the section shall be in addition to all other rights and remedies available to the Owner under law.

10.2.4 Rights and Obligations of Parties: If after notice of termination under Paragraph 10.2.2, it is determined for any reason that the Contractor was not in default, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the provisions of Section 10.1, Termination by Owner for Convenience. The Contract shall be equitably adjusted to compensate for such termination in accordance with Section 10.1.

10.3 SUSPENSION OF WORK

10.3.1 Owner May Suspend: The Owner may suspend the Work or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the Contractor, by written notice to the Contractor and the Inspector which shall fix the date on which work shall be resumed.

10.3.2 Resumption of Work: The Contractor shall resume that Work on the dates so fixed. The Contractor shall be allowed an increase in the Contract price or an extension of the Contract time, or both, directly attributed to any suspension.

**** END OF SECTION ****

**DIVISION II
DISADVANTAGED BUSINESS ENTERPRISE (DBE)
INDEX**

**PLACERVILLE AIRPORT
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23
AIP NO. 3-06-0188-11**

SECTION 1. – PROPOSAL REQUIREMENTS AND CONDITIONS

- 1-1.01 Disadvantaged Business Enterprise (DBE)
- 1-1.02 DBE Availability Advisory
- 1-1.03 Submission of DBE Information

SECTION 2. – PRECONSTRUCTION CONFERENCE AND WEEKLY MEETINGS

- 2-1.01 Requirements

SECTION 3. – MISCELLANEOUS

- 3-1.01 DBE Records
- 3-1.02 DBE Certification Status
- 3-1.03 Performance of DBE Subcontractors and Suppliers
- 3-1.04 DBE Subcontracting
- 3-1.05 Prompt Progress Payment to Subcontractors
- 3-1.06 Prompt Payment of Withheld Funds To Subcontractors

SECTION 1 – PROPOSAL REQUIREMENTS AND CONDITIONS

1-1.01 DISADVANTAGED BUSINESS ENTERPRISE (DBE);-- This project is subject to Part 26, Title 49, Code of Federal Regulations entitled “Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs” (DBE Regulations). The DBE Regulations in their entirety are incorporated herein by this reference.

Policy - It is the policy of the Department of Transportation (DOT) that Disadvantaged Business Enterprises (DBE’s) as defined in 49 CFR Part 26 shall have an equitable opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the Department of Transportation of the County of El Dorado has adopted this policy; therefore the DBE requirements of 49 CFR Part 26 apply to this agreement.

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

Bidders shall be fully informed respecting the requirements of the Regulations and the County’s Disadvantaged Business Enterprise (DBE) Program developed pursuant to the Regulations; particular attention is directed to the following matters:

- A. A DBE must be a for profit small business concern as defined pursuant to Section 3 of U.S. Small Business Act and Small Business Administration regulations promulgated pursuant thereto, that meets the definition under Title 49 Code of Federal Regulations Part 26.
- B. A DBE may participate as a prime contractor, subcontractor, joint venture partner with a prime or subcontractor, vendor of material or supplies, or as a trucking company.
- C. A DBE joint venture partner must be responsible for specific contract items of work, or portions thereof. Responsibility means actually performing, managing and supervising the work with its own forces. The DBE joint venture partner must share in the capital contribution, control, management, risks and profits of the joint venture commensurate with its ownership interest.
- D. A DBE must perform a commercially useful function, i.e., must be responsible for the execution of a distinct element of the work and must carry out its responsibility by actually performing, managing and supervising the work.
- E. DBEs must be certified by either the State of California Department of Transportation (Caltrans), or by a participating agency which certifies in conformance with Title 49, Code of Federal Regulations, Part 26, as of the date of bid opening. It is the Contractor’s responsibility to verify that DBEs are certified. Listings of certified DBEs are available from the following sources:

1. Caltrans' DBE Directory, which is published quarterly. This Directory may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916) 445-3520.

2. Caltrans' web site at <http://www.dot.ca.gov/hq/bep/index.htm>.

F. Credit for materials or supplies purchased from DBEs will be as follows:

1. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies will be credited. A DBE manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

2. If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies will be credited. A DBE regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a DBE regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this paragraph G.2. if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not DBE regular dealers within the meaning of this paragraph G.2.

3. Credit for materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer will be limited to the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, provided the fees are reasonable and not excessive as compared with fees charged for similar services.

G. Credit for DBE trucking companies will be as follows:

1. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting the DBE goal;

2. The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract;
 3. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks its owns, insures, and operates using drivers it employs;
 4. The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract;
 5. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE;
 6. For the purposes of this paragraph H, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.
- I. Noncompliance by the Contractor with the requirements of the regulations constitutes a breach of this contract and may result in termination of the contract or other appropriate remedy for a breach of this contract.
 - J. Bidders are encouraged to use services offered by financial institutions owned and controlled by DBEs.

1-1.02 DBE AVAILABILITY ADVISORY: To assist bidders in ascertaining DBE availability for specific items of work, the Agency advises that it has determined that DBEs could reasonably be expected to compete for subcontracting opportunities on this project, and their likely availability for work on this project is three (3%) percent. The Agency also advises that participation of DBEs in the specified percentage is not a condition of award.

The race neutral DBE availability advisory for this project is three percent (3%) of the total bid amount. Based on the Ninth Circuit Court Decision in the *Western States Paving Company v. Washington State Department of Transportation*, the Department of Transportation of the County of El Dorado, Placerville Airport has determined that it is appropriate to use a race/gender-neutral DBE goal. The County encourages all Contractors to take active race/gender-neutral steps to include DBEs in this and other airport contracts. Race/gender-neutral steps include the following: unbundling large contracts; identifying portions of work for subcontracting; provision of assistance in bonding and financing; technical assistance; etc. This contract can be awarded without the lowest responsive bidder meeting the goal or demonstrating good faith efforts to meet the goal.

1-1.03 SUBMISSION OF DBE INFORMATION: In accordance with Section 26.11 of Title 49 Code of Federal Regulations Part 26 each bidder shall submit the name, address, DBE/non-

DBE status, age, and annual gross receipts of its firm and each subcontractor to whom the bidder proposes to subcontract portions of the work. Each bidder shall submit this information with its Proposal using the “DBE PROGRAM BIDDERS LIST INFORMATION” form located in the Proposal section of these Contract Documents.

****END OF SECTION****

SECTION 2 – PRECONSTRUCTION CONFERENCE AND WEEKLY MEETINGS

2-1.01 REQUIREMENTS -- A pre-construction conference will be scheduled by the Resident Engineer (RE) or Construction Inspector (CI) between the RE/CI and the Contractor or their representative after the project is awarded and prior to the issuance of the Notice to Proceed. The conference will be held at the construction site to discuss the work each DBE subcontractor will perform and important aspects of the project and all essential matters pertaining to the prosecution and the satisfactory completion of the project as required, and the Contractor shall bring all required schedules and documents to the meeting.

Before work can begin on a subcontract, the Owner will require the Contractor to submit a completed "Subcontracting Request," Exhibit 16-B of the Caltrans Local Assistance Procedures Manual (LAPM) or equivalent. When the RE receives the completed form it will be checked for agreement of the first tier subcontractors and DBEs. The RE/CI will not approve the request when it identifies someone other than the DBE or first tier subcontractor listed in the previously completed "DBE PROGRAM BIDDERS LIST INFORMATION" included in the Proposal. The "Subcontracting Request" will not be approved until any discrepancies are resolved. If an issue cannot be resolved at that time, or there is some other concern, the RE/CI will require the Contractor to eliminate the subcontractor in question before signing the subcontracting request. A change in the DBE or first tier subcontractor may be addressed during a substitution process at a later date.

Suppliers, vendors, or manufacturers listed on the "DBE PROGRAM BIDDERS LIST INFORMATION" will be compared to those listed in the completed "Notice of Materials to be Used," Exhibit 16-I of the LAPM or equivalent. Differences must be resolved by either making corrections or requesting a substitution.

Substitutions will be subject to the Subletting and Subcontracting Fair Practices Act (FPA). The Owner will require contractors to adhere to the provisions within Subletting and Subcontracting Fair Practices Act (State Law) Sections 4100-4114. FPA requires the Contractor to list all subcontractors in excess of one half of one percent (0.5%) of the Contractor's total bid or \$10,000, whichever is greater. The statute is designed to prevent bid shopping by contractors. The FPA explains that a contractor may not substitute a subcontractor listed in the original bid except with the approval of the awarding authority.

The RE/CI will give the Contractor a blank Exhibit 17-F, "Final Report--Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors" from the Caltrans LAPM. This form must be completed and returned to the County before the County will issue final payment.

****END OF SECTION****

SECTION 3 - MISCELLANEOUS

3-1.01 DBE RECORDS -- In the event a Contractor's bid is accepted for award of the contract, the Contractor shall maintain records showing the name and business address of each first-tier subcontractor. The records shall also show the name and business address of every DBE subcontractor, DBE vendor of materials and DBE trucking company, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all of these firms. DBE prime contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.

Upon completion of the contract, a summary of these records shall be prepared on "**Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First Tier Subcontractors**" **Form CEM-2402(F) (copy attached)** and certified correct by the Contractor or the Contractor's authorized representative, and shall be furnished to the County within ninety (90) days from the date of contract acceptance. The amount of \$10,000 will be withheld from payment until a satisfactory form is submitted.

Prior to the fifteenth (15th) of each month, the Contractor shall submit documentation to the County showing the amount paid to DBE trucking companies. The Contractor shall also obtain and submit documentation to the County showing the amount paid by DBE trucking companies to all firms, including owners-operators, for the leasing of trucks. If the DBE leases trucks from a non-DBE, the Contractor may count only the fee or commission the DBE receives as a result of the lease agreement.

The Contractor shall also obtain and submit documentation to the County showing the truck number, owner's name, California Highway Patrol CA number, and if applicable, the DBE certification number of the owner of the truck for all trucks used during that month. This documentation shall be submitted on "**Monthly DBE Trucking Verification**" **Form CEM-2404(F) (copy attached)**

3-1.02 DBE CERTIFICATION STATUS -- If a DBE subcontractor is decertified during the life of the project, the decertified subcontractor shall notify the Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Owner.

Upon completion of the contract, Form CEM-2403 (F) indicating the DBE's existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Owner within 90 days from the date of contract acceptance.

3-1.03 PERFORMANCE OF DBE SUBCONTRACTORS AND SUPPLIERS – The subcontractors listed by the Contractor in conformance with Section 2-1.06, "Required Listing of Proposed Subcontractors," of the Caltrans Standard Specifications, shall perform the work and supply the materials for which they are listed, unless the Contractor has received prior written authorization to perform the work with other forces or to obtain the materials from other sources.

The Contractor should notify the Engineer in writing of any changes to its anticipated DBE participation. This notice should be provided prior to the commencement of that portion of the work.

3-1.04 DBE SUBCONTRACTING -- Attention is directed to the provisions in Section 8-1.01, "Subcontracting," of the Caltrans Standard Specifications, and Section 20, "Proposal Requirements and Conditions," and Section 30, "Award and Execution of Contract," of the General Provisions of these specifications.

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

The provisions in the third paragraph of Section 8-1.01, "Subcontracting," of the Caltrans Standard Specifications, that the Contractor shall perform with the Contractor's own organization contract work amounting to not less than 50 percent of the original contract price, is not changed by the Federal Aid requirement specified under "Subletting of Contract," in the Instructions to Bidders that the Contractor perform not less than 30 percent of the original contract work with the Contractor's own organization.

Each subcontract and any lower tier subcontract that may in turn be made shall include the "STANDARD FEDERAL CONTRACT CLAUSES AND REQUIREMENTS FOR CONSTRUCTION CONTRACTS," included in Attachment E to the Contract. This requirement shall be enforced as follows:

Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

3-1.05 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS -- Attention is directed to the provisions in Sections 10262 and 10262.5 of the Public Contract Code and Section 7108.5 of the Business and Professions Code concerning prompt payment to subcontractors.

The prime Contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 10 days from the receipt of each payment the prime Contractor receives from the Owner. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors.

3-1.06 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS -- The Contractor shall return all moneys withheld in retention from the subcontractor within 30 days after receiving payment for work satisfactorily completed, even if the other contract work is not completed and has not been accepted in conformance with Section 7-1.17, "Acceptance of Contract," of the Caltrans Standard Specifications. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the

Contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or noncompliance by a subcontractor.

The prime Contractor agrees further to release retainage payments to each subcontractor within 30 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors.

****END OF SECTION****

**STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 LOCAL ASSISTANCE - FEDERAL - FINAL REPORT - UTILIZATION OF
 DISADVANTAGED BUSINESS ENTERPRISES (DBE), FIRST-TIER
 SUBCONTRACTORS**



Revised 8/04

CONTRACT NUMBER		COUNTY	LOCATION	PROJECT DESCRIPTION	FEDERAL AID PROJECT NO.	ADMINISTERING AGENCY			CONTRACT COMPLETION DATE	
PRIME CONTRACTOR/CONSULTANT				BUSINESS ADDRESS		FEDERAL SHARE (For local agency to complete) \$			FINAL CONTRACT AMOUNT \$	
CONTRACT ITEM No.	DESCRIPTION OF WORK PERFORMED AND MATERIAL PROVIDED	SUBCONTRACTOR NAME AND BUSINESS ADDRESS	DBE CERT. NUMBER & EXP. DATE	CONTRACT PAYMENTS					FEDERAL SHARE \$	
				NON-DBE	DBE	DBE (MINORITY)	DBE (NON- MINORITY WOMEN)	DBE (MINORITY WOMEN)	DATE WORK COMPLETE	DATE OF FINAL PAYMENT
\$ _____ ORIGINAL DBE COMMITMENT _____ Original DBE %				TOTAL PAYMENTS	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	DBE GOAL ATTAINMENT _____
List all First Tier Subcontractors and all Disadvantaged Business Enterprises (DBEs) regardless of tier, whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of work) was different than that approved at time of award, provide comments on the back of the form. List actual amount paid to each of the DBE even if different than originally listed for goal credit.										
CONTRACTOR/CONSULTANT REPRESENTATIVE'S SIGNATURE						BUSINESS PHONE NUMBER			DATE	
RESIDENT PROJECT ENGINEERS SIGNATURE						BUSINESS PHONE NUMBER			DATE	
AGENCY										

Distribution: (1) Original plus one copy to DLAE included in the Report of Expenditures.
 (2) Copy - local agency files

EXHIBIT 17-F FINAL REPORT UTILIZATION OF DISADVANTAGED BUSINESSES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
MONTHLY DBE TRUCKING VERIFICATION
 CP-CEM-2404(F) (NEW 12/99)

CONTRACT NO.			MONTH				YEAR
Truck Owner	DBE Cert. No.	Company Name and Address	Truck No.	California Hwy. Patrol CA No.	Commission Or Amount Paid*	Date Paid	Lease Arrangement (✓ if applicable)
					\$		Lease Agreement with Non-DBE <input type="checkbox"/> with DBE <input type="checkbox"/>
					\$		Lease Agreement with Non-DBE <input type="checkbox"/> with DBE <input type="checkbox"/>
					\$		Lease Agreement with Non-DBE <input type="checkbox"/> with DBE <input type="checkbox"/>
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					\$		Lease Agreement with Non-DBE <input type="checkbox"/> with DBE <input type="checkbox"/>
					\$		Lease Agreement with Non-DBE <input type="checkbox"/> with DBE <input type="checkbox"/>
TOTAL AMOUNT PAID					\$		
PRIME CONTRACTOR			BUSINESS ADDRESS			BUSINESS PHONE NO.	
* Upon request all Lease Agreements shall be made available, in accordance with the Special Provisions.							
I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT							
CONTRACTOR REPRESENTATIVE'S SIGNATURE			TITLE			DATE	

CEM-2404F (NEW 12/99)

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**DIVISION III
FEDERAL AVIATION ADMINISTRATION (F.A.A.)
GENERAL PROVISIONS
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PLACERVILLE, EL DORADO COUNTY, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23
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SECTION 01

REPORTING REQUIREMENTS AND SANCTIONS

Failure to provide specific information, records, reports, certifications, or any other documents required for compliance with these specifications shall be considered noncompliance. The minimum documents required include the following:

1. Form SCLC-001 - LIST OF SUBCONTRACTORS - Due at time of Bid Opening.
2. Certified Payroll Reports - Due within seven (7) days of the ending date of the payroll period.
3. Eringe Benefit Statement - Due with first payroll report and any time fringe benefits change.
4. Apprenticeship Certifications - Due with first payroll report on which the apprentice appears.
5. Form CC-257 - MONTHLY EMPLOYMENT UTILIZATION REPORT - Due by fifth day of the month for the prior month.

Other documentation may be required depending on the source of funding for the project.

Contractors found by the Owner to be in noncompliance are to be advised of the specific deficiencies and urged to make immediate corrections. They should also be advised that monetary deductions may be made for failure to effect corrections or delinquencies.

If the contractor fails to correct a deficiency within 15 days after notification, a deduction may be made. In such cases, the deduction shall be 10% of the estimated value of the work done during the month, except that the deduction will not exceed \$10,000, nor be less than \$1,000, and shall be deducted from the next progress payment.

Deductions for noncompliance will be in addition to all other deductions provided for in these specifications and will apply irrespective of the number of instances of noncompliance. Deductions may be made separately and additively for each estimate period in which a new deficiency appears. When all deficiencies for a period have been corrected, the deduction covering that period will be released on the next progress payment. Otherwise, the deduction will be retained.

**** END OF SECTION ****

SECTION 10

DEFINITION OF TERMS

Whenever the following terms are used in these specifications, in the contract, in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be interpreted as follows:

10-01 AASHTO. The American Association of State Highway and Transportation Officials, the successor association to AASHO.

10-02 ACCESS ROAD. The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.

10-03 ADVERTISEMENT. A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.

10-04 AIP. The Airport Improvement Program, a grant-in-aid program, administered by the Federal Aviation Administration.

10-05 AIR OPERATIONS AREA. For the purpose of these specifications, the term air operations area shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.

10-06 AIRPORT. Airport shall mean Placerville Airport, Placerville, El Dorado County, California.

10-07 ASTM. The American Society for Testing and Materials.

10-08 AWARD. The acceptance, by the Owner, of the successful bidder's proposal.

10-09 BIDDER. Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.

10-10 BOARD OF SUPERVISORS. The Board of Supervisors of the County of El Dorado, a political subdivision of the State of California.

10-11 BUILDING AREA. An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.

10-12 CALENDAR DAY. Every day shown on the calendar.

10-13 CONTRACT. The written agreement covering the work to be performed. The awarded contract shall include, but is not limited to: Notice to Bidders; Completed Bid Proposal (Pages 1 through 27); Instructions to Bidders; the Contract including Attachment “A,” Contractor’s/ Subcontractor’s Certification Concerning State Labor Standards and Prevailing Wages; Attachment “B,” Drug-Free Workplace Certification; Attachment “C,” Equal Employment Opportunity Policy Statement; Attachment “D,” Harassment or Discrimination in Employment; and Attachment “E,” Standard Federal Contract Clauses and Requirements for Construction Contracts; Bidder's Bond; Withholding Exemption Certificate 590; Request for Taxpayer ID Number and Certification Form W-9; Certificate of Insurance; Performance Bond; Payment Bond; Guarantee; Local Agency Bidder – DBE Information; El Dorado County Specifications; Disadvantaged Business Enterprise (DBE); F.A.A. General Provisions; Special Conditions; Contract Drawings and Plans; Technical Provisions; Duly issued addenda; Duly issued interpretations; Supplemental Drawings issued; Shop Drawings and Manufacturers' Instructions approved; Approved Field Orders, Change Directives, and Change Orders.

10-14 CONTRACT ITEM (PAY ITEM). A specific unit of work for which a price is provided in the contract.

10-15 CONTRACT TIME. The number of working days, stated in the Contract, allowed for completion of the contract, including authorized time extensions.

10-16 DESIGN ENGINEER. The Engineer or engineering firm or his duly authorized representative employed or engaged by the Owner to be responsible for the design of the work. All requests for changes in quantities or design of any item shall be submitted in writing to the Design Engineer through the Project Engineer.

The Design Engineer is:

Reinard W. Brandley
Consulting Airport Engineer
6125 King Road, Suite 201
Loomis, California 95650-8004
(916) 652-4725/FAX (916) 652-9029
brandley@rwbrandley.com

10-17 DIRECTOR OF TRANSPORTATION. The Director of Transportation of El Dorado County acting personally or through agents or assistants duly authorized by him.

10-18 DRAINAGE SYSTEM. The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.

10-19 EQUIPMENT. All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.

10-20 EXTRA WORK. An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within intended scope of the contract as previously modified.

10-21 FAA. The Federal Aviation Administration of the U. S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his or her duly authorized representative.

10-22 FEDERAL SPECIFICATIONS. The Federal Specifications and Standards, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government.

10-23 FORCE ACCOUNT. Force account construction work is construction that is accomplished through the use of material, equipment, labor, and supervision provided by the Owner or by another public agency pursuant to an agreement with the Owner.

10-24 INTENTION OF TERMS. Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of the like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Owner.

Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.

10-25 LABORATORY. The official testing laboratories of the Owner or such other laboratories as may be designated by the Engineer.

10-26 LIGHTING. A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.

10-27 MAJOR AND MINOR CONTRACT ITEMS. A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20 percent of the total amount of the awarded contract. All other items shall be considered minor contract items.

10-28 MATERIALS. Any substance specified for use in the construction of the contract work.

10-29 NOTICE TO PROCEED. A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.

10-30 OWNER (SPONSOR). El Dorado County or its duly authorized representative. The term "sponsor" shall have the same meaning as the term "owner".

10-31 PAVEMENT. The combined surface course, base course, and subbase course considered as a single unit.

10-32 PAYMENT BOND. The approved form of security furnished by the Contractor and his/her surety as a guaranty that Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.

10-33 PERFORMANCE BOND. The approved form of security furnished by the Contractor and his/her surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.

10-34 PLANS. The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.

10-35 PROJECT. The agreed scope of work for accomplishing specific airport development with respect to a particular airport.

10-36 PROPOSAL. The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.

10-37 PROPOSAL GUARANTY. The security furnished with a proposal to guarantee that the bidder will enter into a contract if his/her proposal is accepted by the Owner.

10-38 RUNWAY. The area on the airport prepared for the landing and takeoff of aircraft.

10-39 SPECIFICATIONS. A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.

10-40 - STATE SPECIFICATIONS. State of California, Department of Transportation, Standard Specifications, current edition.

10-41 STRUCTURES. Airport facilities such as bridges; culverts; catch basins; inlets; retaining walls; cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.

10-42 SUBGRADE. The soil which forms the pavement foundation.

10-43 SUPERINTENDENT. The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.

10-44 SUPPLEMENTAL AGREEMENT. A written agreement between the Contractor and the Owner covering: 1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract, or 2) work that is not within the scope of the originally awarded contract.

10-45 SURETY. The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds which are furnished to the Owner by the Contractor.

10-46 TAXIWAY. For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways or aircraft parking areas.

10-47 WORKING DAY. A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least 6 hours toward completion of the contract. Unless work is suspended for causes beyond the Contractor's control, Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered as working days.

**** END OF SECTION ****

SECTION 20

PROPOSAL REQUIREMENTS AND CONDITIONS

20-01 ADVERTISEMENT (Notice to Bidders). Notice to Bidders, Instructions to Bidders and Proposal and Contract forms are bound in these specifications as "Bidding and Contract Documents" preceding the General Provisions.

20-02 QUALIFICATION OF BIDDERS. The successful bidder shall furnish the Owner at the time of bidding satisfactory evidence of his competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of a valid California Contractor's license for the specified type of work.

20-03 CONTENTS OF PROPOSAL FORMS. The Owner shall furnish bidders with proposal forms. All papers bound with or attached to the proposal forms are necessary parts and must not be detached.

The PROPOSAL PAY ITEMS BID PRICE SCHEDULE is included on Page P-3 of these specifications.

The plans, specifications, and other documents designated in the proposal form shall be considered a part of the proposal whether attached or not.

20-04 ISSUANCE OF PROPOSAL FORMS. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder should such bidder be in default for any of the following reasons:

- (a) Failure to comply with any qualification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- (b) Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Owner) at the time the Owner issues the proposal to a prospective bidder.
- (c) Contractor default under previous contracts with the Owner.
- (d) Unsatisfactory work on previous contracts with the Owner.

20-05 INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly or by implication agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the

plans and specifications. It is understood that the quantities may be increased or decreased as hereinafter provided in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 without in any way invalidating the unit bid prices.

20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

20-07 PREPARATION OF PROPOSAL. The bidder shall submit his/her proposal on the forms furnished by the Owner. All blank spaces in the proposal forms must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) in numerals for which bidder proposes to do each pay item furnished in the proposal. In case of conflict between unit prices and extensions, the unit prices shall govern.

The bidder shall sign his/her proposal correctly and in ink. If the proposal is made by an individual, his/her name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state under the laws of which the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of his/her authority to do so and that the signature is binding upon the firm or corporation.

20-08 IRREGULAR PROPOSALS. Proposals shall be considered irregular for the following reasons:

- (a) If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- (b) If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind which make the proposal incomplete, or otherwise ambiguous.
- (c) If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- (d) If the proposal contains unit prices that are obviously unbalanced.
- (e) If the proposal is not accompanied by the proposal guaranty specified by the Owner.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-09 BID SECURITY. A bid security shall be provided with each Bid. Bid security shall be in an amount of not less than ten percent of the total amount of the Bid and shall be cash, a certified check or cashier's check drawn to the order of the County of El Dorado or a Bidder's Bond executed by a surety satisfactory to the County of El Dorado in the form provided in the Proposal section of these Contract Documents. The Bidder to whom award is made shall provide Certificates of Insurance as required in Article 8 of the El Dorado County Standard Specifications, and shall complete and submit the Performance Bond and Payment Bond forms contained in the Contract Documents.

20-10 WITHDRAWAL OR REVISION OF PROPOSALS. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by telegram before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-11 PUBLIC OPENING OF PROPOSALS. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-12 DISQUALIFICATION OF BIDDERS. A bidder shall be considered disqualified for any of the following reasons:

(a) Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

(b) Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

(c) If the bidder is considered to be in "default" for any reason specified in the subsection titled ISSUANCE OF PROPOSAL FORMS of this section.

(d) Lack of competency as revealed by inability to produce a valid license as required by law.

**** END OF SECTION ****

SECTION 30

AWARD AND EXECUTION OF CONTRACT

30-01 CONSIDERATION OF PROPOSALS. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices and total extensions, the unit price shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

(a) If the proposal is irregular as specified in the subsection titled **IRREGULAR PROPOSALS** of Section 20.

(b) If the bidder is disqualified for any of the reasons specified in the subsection titled **DISQUALIFICATION OF BIDDERS** of Section 20.

(c) The Owner reserves the right to delete sections of the work and award a contract for the remaining portion of the work, or to proceed to do the work by any means that would be for the best interest of the Owner.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals; waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 AWARD OF CONTRACT. The award of a contract, if it is to be awarded, shall be made within 60 calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

Award of the contract shall be made by the Owner to the lowest, responsible responsive bidder whose proposal conforms to the cited requirements of the Owner.

The award of the contract is subject to approval of funding by the Federal Aviation Administration.

The contract form which will be used for this project is presented in these specifications.

30-03 CANCELLATION OF AWARD. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with the subsection titled **APPROVAL OF CONTRACT** of this section.

30-04 RETURN OF PROPOSAL GUARANTY. All proposal guaranties, except those of the three lowest bidders, will be returned immediately after the Owner has made a comparison of bids as hereinbefore specified in the subsection titled CONSIDERATION OF PROPOSALS of this section.

Proposal guaranties of the three lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidders' proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in the bid documents.

30-05 REQUIREMENTS OF CONTRACT BONDS. The Contractor shall furnish the Owner, within ten (10) calendar days, not including Sundays and holidays, of the notification of award of the contract for the work as called for in the specifications and prior to beginning of work, with the following separate surety bonds:

- (a) Performance Bond. Said bond shall be in an amount equal to one hundred percent (100%) of the contract price, shall be for the faithful performance of the contract, shall be approved by the Owner, and shall be secured from a surety or sureties satisfactory to said Owner.
- (b) Payment Bond for Public Works. Said bond shall be in an amount equal to one hundred percent (100%) of the contract price, shall be approved by the Owner, and shall be secured from a surety or sureties satisfactory to said Owner.

Each of said bonds shall be substantially in the form as set forth in the bid documents

30-06 EXECUTION OF CONTRACT. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return such signed contract to the Owner, along with the fully executed surety bond or bonds specified in the bid documents, within 10 calendar days, not including Sundays and holidays, after personal delivery or deposit in the mail, as the case may be, of the notification of award to the successful bidder. If the contract is mailed, special handling is recommended.

30-07 APPROVAL OF CONTRACT. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 FAILURE TO EXECUTE CONTRACT. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the 10 calendar day period specified in the bid documents shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidation of damages to the Owner.

**** END OF SECTION ****

SECTION 40

SCOPE OF WORK

40-01 INTENT OF CONTRACT. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 ALTERATION OF WORK AND QUANTITIES. The Owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. The Engineer shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost or the total cost of any major contract item by more than 25 percent (total cost being based on the unit prices and estimated quantities in the awarded contract). Alterations which do not exceed the 25 percent limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations as if the altered work had been a part of the original contract. These alterations which are for work within the general scope of the contract shall be covered by "Change Orders" issued by the Engineer. Change orders for altered work shall include extensions of contract time where, in the Engineer's opinion, such extensions are commensurate with the amount and difficulty of added work.

Should the aggregate amount of altered work exceed the 25 percent limitation hereinbefore specified, such excess altered work shall be covered by supplemental agreement. If the Owner and the Contractor are unable to agree on a unit price adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

All supplemental agreements shall be approved by the F.A.A. and shall include valid wage determinations of the U.S. Secretary of Labor when the amount of the supplemental agreement exceeds \$2,000. However, if the Contractor elects to waive the limitations on work that increases or decreases the originally awarded contract or any major contract item by more than 25 percent, the supplemental agreement shall be subject to the same U.S. Secretary of Labor wage determination as was included in the originally awarded contract.

All supplemental agreements shall require consent of the Contractor's surety and separate performance and payment bonds.

Once an item is 100% complete with reference to the original contract quantities and original contract unit prices, the Owner reserves the right to terminate all further work on this item by written order to the Contractor. Under such conditions, the Owner reserves the right to make such arrangements as it deems necessary (or desirable) in order to complete additional work under this item.

A major item shall be construed to be any item the total cost of which is equal to or greater than 20% of the total contract amount, computed on the basis of the proposal quantity and the contract unit price.

The County reserves the right to require additional payment or performance bonds to secure a change order.

Notwithstanding any other provisions of this contract, all change orders shall be approved by the County.

40-03 OMITTED ITEMS. The Engineer may, in the Owner's best interest, omit from the work any contract item, except major contract items. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be nonperformed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with the subsection titled PAYMENT FOR OMITTED ITEMS of Section 90.

40-04 EXTRA WORK. Should acceptable completion of the contract require the Contractor to perform an item of work for which no basis of payment has been provided in the original contract or previously issued change orders or supplemental agreements, the same shall be called Extra Work. Extra work that is within the general scope of the contract shall be covered by written change order. Change orders for such extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the Engineer's opinion, is necessary for completion of such extra work.

Should said Owner at any time during the progress of said work request any alterations, deviations, additions, or omissions from said specifications or working details or other contract documents, it shall be at liberty to do so; and the same shall in no way affect or make void the contract, but will be added to or deducted from the amount of said contract price, as the case may be, by a fair and reasonable valuation, agreed to in writing between the parties hereto. No extra work shall be performed or change be made unless in pursuance to a written order from the Owner, duly authorized by resolution of its governing body and by all agencies whose approval is required by law, stating that the extra work or change and the increased amount to be paid therefor is authorized. No claim for an addition to the contract sum shall be valid unless so ordered.

When determined by the Engineer to be in the Owner's best interest, he may order the Contractor to proceed with extra work by force account as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of Section 90.

Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract, shall be covered by a Supplemental Agreement as hereinbefore defined in the subsection titled SUPPLEMENTAL AGREEMENT of Section 10.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 MAINTENANCE OF TRAFFIC. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas of the airport with respect to his/her own operations and the operations of all his/her subcontractors as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in the subsection titled CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS in Section 70.

With respect to his/her own operations and the operations of all his/her subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying: personnel; equipment; vehicles; storage areas; and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport.

The Contractor shall schedule his/her work so that aircraft at all times have access to FBO and runway facilities.

At least one week prior to beginning an operation which could affect aircraft operations, the Contractor shall submit to the Engineer and receive approval of all such operations, including layout, equipment to be used, and method of operation.

Any vehicle operator who willfully violates the above Traffic Control procedures will be requested, through the Contractor, to leave the jobsite as per Section 80-05 of these specifications. Also, if in the opinion of the Engineer, the negligence of any person or persons on or around an active runway is of sufficient magnitude as to cause danger to life and property, the Engineer shall have the right to stop all work on this contract for a period of forty-eight (48) hours as a contractual penalty.

The Contractor, subcontractors, and all employees of the Contractor and/or subcontractors shall, by award of this contract, be governed by all rules and regulations of Placerville Airport and by orders and/or instructions from the Airport Manager or Owner relative to the use or occupation of any part of the Airport property.

During periods of active performance of work on the Airport by the Contractor, the operation of equipment will be governed by the safety provisions herein and as directed by the Engineer. At all other times, all equipment will be removed to locations approved by the Engineer at a distance no less than 150 feet from the centerline of any active runway plus any additional distance necessary to insure compliance with safety provisions.

Whenever the Contractor utilizes any public roads, aprons, taxiways, or any other paved areas on the Airport, he/she shall keep the pavement in a broom-clean condition at all times.

It will be necessary to maintain air traffic upon the various runways, taxiways, and aprons during the period of construction. The order and time at which the various taxiways may be closed shall be subject to the approval of the Owner.

The order and schedule of construction will depend upon the type and amount of equipment that the Contractor proposes to use on the work. After conference with Airport Management, FAA, and the Engineer and before beginning the work, the Contractor shall prepare and submit in writing and in chart form a schedule showing the anticipated time required and date of completion for each phase of the work.

When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish, erect, and maintain barricades, warning signs, flagmen and other traffic control devices in reasonable conformity with the manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office), unless otherwise specified herein. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street or highway.

The Contractor shall make his/her own estimate of all labor, materials, equipment, and incidentals necessary for providing the maintenance of aircraft and vehicular traffic as specified in this subsection.

The cost of maintaining the aircraft and vehicular traffic specified in this subsection shall not be measured or paid for directly, but shall be included in the various contract items.

The Contractor's employees, subcontractors, and equipment shall be confined to the haul routes as shown on the Construction Layout Plan. At the locations where trucks or equipment are to cross an active road, the Contractor shall station suitable flagmen.

The Contractor shall maintain these crossings in a broom-clean condition at all times. No separate payment will be made for any cost in connection with the traffic control system.

40-06 REMOVAL OF EXISTING STRUCTURES. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Engineer shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the Engineer in accordance with the provisions of the contract.

Except as provided in the subsection titled RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK of this section, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be utilized in the work as otherwise provided for in the contract and shall remain the property of the Owner when so utilized in the work.

40-07 RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be either embankment or waste, he may at his/her option either:

- (a) Use such material in another contract item, providing such use is approved by the Engineer and is in conformance with the contract specifications applicable to such use; or,
- (b) Remove such material from the site, upon written approval of the Engineer; or,
- (c) Use such material for his/her own temporary construction on site; or,
- (d) Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option (a), (b), or (c), Contractor shall request the Engineer's approval in advance of such use.

Should the Engineer approve the Contractor's request to exercise option (a), (b), or (c), the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at his/her own expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for his/her use of such material so used in the work or removed from the site.

Should the Engineer approve the Contractor's exercise of option (a), the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of his/her exercise of option (a), (b), or (c).

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-08 FINAL CLEANING UP. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property owner.

**** END OF SECTION ****

SECTION 50

CONTROL OF WORK

50-01 AUTHORITY OF THE ENGINEER. The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. He shall decide all questions which may arise as to the interpretation of the specifications or plans relating to the work, the fulfillment of the contract on the part of the Contractor, and the rights of different contractors on the project. The Engineer shall determine the amount and quality of the several kinds of work performed and materials furnished which are to be paid for under the contract.

The Engineer does not have to authority to accept pavements that do not conform to FAA specification requirements.

50-02 CONFORMITY WITH PLANS AND SPECIFICATIONS. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements and testing requirements that are specified (including specified tolerances) in the contract, plans or specifications.

If the Engineer finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications but that the portion of the work affected will, in his opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, he will advise the Owner of his determination that the affected work be accepted and remain in place. In this event, the Engineer will document his determination and recommend to the Owner a basis of acceptance which will provide for an adjustment in the contract price for the affected portion of the work. The Engineer's determination and recommended contract price adjustments will be based on good engineering judgment and such tests or retests of the affected work as are, in his opinion, needed. Changes in the contract price shall be covered by contract modifications (change order or supplemental agreement) as applicable.

If the Engineer finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the Engineer's written orders.

For the purpose of this subsection, the term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the Engineer's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's prosecution of the work, when, in the Engineer's opinion, such compliance is essential to provide an acceptable finished portion of the work.

For the purpose of this subsection, the term "reasonably close conformity" is also intended to provide the Engineer with the authority, after consultation with the F.A.A., to use good engineering judgment in his determinations as to acceptance of work that is not in strict conformity but will provide a finished product equal to or better than that intended by the requirements of the contract, plans, and specifications.

The Engineer will not be responsible for the contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. 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. In case of discrepancy, calculated dimensions will govern over scaled dimensions; plans shall govern over technical specifications, special provisions, contract general provisions, cited standards for materials or testing, and cited FAA advisory circulars; contract technical specifications shall govern over special conditions, contract general provisions, cited standards for materials or testing, and cited FAA advisory circulars; special conditions shall govern over contract general provisions, cited standards for materials or testing, and cited FAA advisory circulars; contract general provisions shall govern over cited standards for materials or testing and cited FAA advisory circulars.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, he shall immediately call upon the Engineer for his interpretation and decision, and such decision shall be final.

50-04 COOPERATION OF CONTRACTOR. The Contractor will be supplied with two copies each of the plans and specifications, one set to be marked for "as-builts" as specified in the Special Conditions, Section SC. Contractor shall have available on the work at all times one copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the Engineer and his inspectors and with other contractors in every way possible. The Engineer shall allocate the work and designate the sequence of construction in case of controversy between contractors. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as his/her agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Engineer or his authorized representative.

The Contractor shall confine his/her apparatus, the storage of materials, and the operations of his/her workmen to limits indicated by law, ordinances, permits or direction of the Owner, and shall not unreasonably encumber the premises with his/her materials.

The Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his/her employees or work and at the completion of the work shall remove all of

his/her rubbish from and about the work area, and all of his/her tools, scaffolding and surplus materials, and shall leave his/her work "broom clean", or its equivalent, unless more exactly specified. In case of dispute, the Owner may remove the rubbish and charge the cost to the several contractors, as the Owner shall determine to be just.

In order to coordinate activities with normal operational procedure of the Airport, the Contractor shall proceed with the work as directed by the Owner in such order as necessary.

50-05 COOPERATION BETWEEN CONTRACTORS. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each contractor shall conduct his/her work so as not to interfere with or hinder the progress of completion of the work being performed by other contractors. Contractors working on the same project shall cooperate with each other as directed.

Each contractor involved shall assume all liability, financial or otherwise, in connection with his/her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced by Owner because of the presence and operations of other contractors working within the limits of the same project.

The Contractor shall arrange his/her work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors within the limits of the same project. Contractor shall join his/her work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-08 CONSTRUCTION LAYOUT AND STAKES. The engineering drawings are believed to establish sufficient base lines as may be necessary for the proper control of the work.

The Engineer shall establish horizontal and vertical control only. The Contractor must establish all layout required for the construction of the work. Such stakes and markings as the Engineer may set for either his/her own or the Contractor's guidance shall be preserved by the Contractor. In case of negligence on the part of the Contractor, or his/her employees, resulting in the destruction of such stakes or markings, an amount equal to the cost of replacing the same may be deducted from subsequent estimates due the Contractor at the discretion of the Engineer.

The Contractor will be required to furnish all lines, grades and measurements from the control points necessary for the proper prosecution and control of the work contracted for under these specifications.

The Contractor must give weekly copies of the survey notes to the Engineer so that the Engineer may check them as to accuracy and method of staking. All areas that are staked by the Contractor must be checked by the Engineer prior to beginning any work in the area. The Engineer will make periodic checks of the grades and alignment set by the Contractor. In case of error on the part of the Contractor, or his/her employees, resulting in establishing grades and/or alignment that are not in

accordance with the plans or established by the Engineer, all construction not in accordance with the established grades and/or alignment shall be replaced without additional cost to the Owner.

No direct payment will be made, unless otherwise specified in the contract documents, for this labor, materials, or other expenses therewith. The cost thereof shall be included in the price of the bid for the various items of the Contract.

Construction Staking and Layout includes but is not limited to:

- Clearing and Grubbing perimeter staking.
- Rough Grade slope stakes at 100-foot stations.
- Drainage Swales slope stakes and flow line blue tops at 50-foot stations.
- Subgrade blue tops at 25-foot stations and 25-foot offset distance (max.) for the following section locations:
 - a. Runway – minimum 5 per station
 - b. Taxiways – minimum 3 per station
 - c. Holding apron areas – minimum 3 per station
 - d. Roadways – minimum 3 per station
- Base Course blue tops at 25-foot stations and 25-foot offset distance (max.) for the following section locations:
 - a. Runway – minimum 5 per station
 - b. Taxiways – minimum 3 per station
 - c. Holding apron areas – minimum 3 per station
- Pavement areas:
 - a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100 foot stations.
 - b. Between Lifts at 25-foot stations for the following section locations:
 - (1) Runways – each paving lane width
 - (2) Taxiways – each paving lane width
 - (3) Holding areas – each paving lane width
 - c. After finish paving operations at 50-foot stations
 - (1) All paved areas – Edge of each paving lane prior to next paving lot
 - d. Shoulder and safety area blue tops at 50-foot stations and at all break points with maximum of 50 foot offsets.
- Fence lines at 100-foot stations
- Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, VASI's, PAPI's, REIL's, Wind Cones, Distance Markers (signs), pull boxes and manholes.
- Drain lines, cut stakes and alignment on 25-foot stations, inlets and manholes.
- Painting and Striping layout (pinned with 1.5 inch PK nails) marked for paint contractor. (All nails shall be removed after painting.)
- Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet per pass (i.e. paving lane).

NOTE: Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the Engineer without additional cost to the Owner.

The Owner will perform all surveys required to determine quantities of all pay items.

50-07 AUTOMATICALLY CONTROLLED EQUIPMENT. Whenever batching or mixing plant equipment is required to be operated automatically under the contract and a breakdown or malfunction of the automatic controls occurs, the equipment may be operated manually or by other methods for a period of 48 hours following the breakdown or malfunction, provided the method of operations will produce results which conform to all other requirements of the contract.

50-08 AUTHORITY AND DUTIES OF INSPECTORS. Inspectors employed by the Owner shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

Inspectors employed by the Owner are authorized to notify the Contractor or his/her representative of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the Engineer for his decision.

50-09 INSPECTION OF THE WORK. All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a completed and detailed inspection.

If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portion of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the Owner may be ordered removed and replaced at the Contractor's expense unless the Owner's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the Owner, authorized representatives of the owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK. All work which does not conform to the requirements of the contract, plans, and specifications will be considered

unacceptable, unless otherwise determined acceptable by the Engineer as provided in the subsection titled CONFORMITY WITH PLANS AND SPECIFICATIONS of this section.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of the subsection titled CONTRACTOR'S RESPONSIBILITY FOR WORK of Section 70.

No removal work made under provision of this subsection shall be done without lines and grades having been given by the Engineer. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans or as given, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs (incurred by the Owner) from any monies due or to become due the Contractor.

50-11 LOAD RESTRICTIONS. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor shall be responsible for all damage done by his/her hauling equipment and shall correct such damage at his/her own expense.

50-12 MAINTENANCE DURING CONSTRUCTION. The Contractor shall maintain the work during construction and until the work is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 FAILURE TO MAINTAIN THE WORK. Should the Contractor at any time fail to

maintain the work as provided in the subsection titled MAINTENANCE DURING CONSTRUCTION of this section, the Engineer shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the Engineer's notification, the Engineer may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be deducted from monies due or to become due the Contractor.

50-14 PARTIAL ACCEPTANCE. If at any time during the prosecution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, Contractor may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, he may accept it as being completed, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 FINAL ACCEPTANCE. Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be completed in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The Engineer shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 CLAIMS FOR ADJUSTMENT AND DISPUTES. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, he/she shall notify the Engineer in writing of his/her intention to claim such additional compensation before he/she begins the work on which the claim is based. If such notification is not given or the Engineer is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit his/her written claim to the Engineer who will present it to the Owner for consideration.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final

payment based on differences in measurements or computations.

50-17 COST REDUCTION INCENTIVE. The provisions of this subsection will apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.

On projects with original contract amounts in excess of \$100,000, the Contractor may submit to the Engineer, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, design and safety standards. These provisions shall not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a value engineering proposal.

Not eligible for cost reduction proposals are changes in the basic design of a pavement type, runway and taxiway lighting, visual aids, hydraulic capacity of drainage facilities, or changes in grade or alignment that reduce the geometric standards of the project.

As a minimum, the following information shall be submitted by the Contractor with each proposal:

- (a) A description of both existing contract requirements for performing the work and the proposed changes, with a discussion of the comparative advantages and disadvantages of each;
- (b) An itemization of the contract requirements that must be changed if the proposal is adopted;
- (c) A detailed estimate of the cost of performing the work under the existing contract and under the proposed changes;
- (d) A statement of the time by which a change order adopting the proposal must be issued;
- (e) A statement of the effect adoption of the proposal will have on the time for completion of the contract; and
- (f) The contract items of work affected by the proposed changes, including any quantity variation attributable to them.

The Contractor may withdraw, in whole or in part, any cost reduction proposal not accepted by the Engineer, within the period specified in the proposal. The provisions of this subsection shall not be construed to require the Engineer to consider any cost reduction proposal which may be submitted.

The Contractor shall continue to perform the work in accordance with the requirements of the contract until a change order incorporating the cost reduction proposal has been issued. If a change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision should be made, or such other date as the Contractor may subsequently have requested in writing, such cost reduction proposal shall be deemed rejected.

The Engineer shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings from the adoption of all or any part of such proposal. In determining the estimated net savings, the Engineer may disregard the contract bid prices if, in the Engineer's judgement such prices do not represent a fair measure of the value of the work to be performed or deleted.

The Owner may require the Contractor to share in the Owner's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall acknowledge acceptance of it in writing. Such acceptance shall constitute full authority for the Owner to deduct the cost of investigating a cost reduction proposal from accounts payable to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a contract change order which shall specifically state that it is executed pursuant to this subsection. Such change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted and shall include any conditions upon which the Engineer's approval is based. The change order shall also set forth the estimated net savings attributable to the cost reduction proposal. The net savings shall be determined as the difference in costs between the original contract costs for the involved work items and the costs occurring as a result of the proposed change. The change order shall also establish the net savings agreed upon and shall provide for adjustment in the contract price that will divide the net savings equally between the Contractor and the Owner.

The Contractor's 50 percent share of the net savings shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work.

Acceptance of the cost-reduction proposal and performance of the cost reduction work shall not extend the time of completion of the contract unless specifically provided for in the contract change order.

**** END OF SECTION ****

SECTION 60

CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. The materials used on the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish complete statements to the Engineer as to the origin, composition, and manufacture of all materials to be used in the work. Such statements shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the Engineer's option, materials may be approved at the sources of supply before delivery is started. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

All material in which the quality of the product such as gradations, Atterberg Limits, Sand Equivalent, CBR, etc., is specified, shall meet those specifications when in the final as-compacted conditions and not the conditions at the stockpile or source of supply. Any deviation from these requirements shall be corrected by removal and replacement with materials that conform to the specifications. When the materials removed are screened and/or blended and reincorporated in the work, the materials as placed shall meet all the specification requirements. It shall be the Contractor's responsibility to coordinate his/her materials production and construction procedures so that the final in-place product is acceptable.

The Contractor shall furnish airport lighting equipment that conforms to the requirements of cited materials specifications. In addition, where an FAA specification for airport lighting equipment is cited in the plans or specifications, the Contractor shall furnish such equipment that is:

- (a) Listed in the FAA Advisory Circular AC 150/5345-53, Airport Lighting Equipment Certification Program that is in effect on the date of advertisement; and,
- (b) Produced by the manufacturer qualified (by FAA) to produce such specified and listed equipment.
- (c) All lighting equipment shall meet specification requirements when installed on the project. Should the lighting equipment not meet performance requirements when installed in the final position, they shall be rejected even if they are manufactured by an approved manufacturer and are on FAA-approved list of equipment.

The following airport lighting equipment is required for this contract and is to be furnished by the Contractor in accordance with the requirements of this subsection:

Equipment Name	Cited FAA Spec	Effective FAA AC or Approval Letter for Equipment & Manufacturer
Design and Installation Details for Airport Visual Aids	--	150/5340-30C
Airport Lighting Equipment Certification Program	--	150/5345-53C
Underground Electrical Cable for Airport Lighting Circuits	L-824	150/5345-7E
Constant Current Regulators, Regulator Monitors	L-828	150/5345-10F
Plug and Receptacle, Cable Connectors	L-823	150/5345-26C
Precision Approach Path Indicator (PAPI) Systems	L-881	150/5345-28F
Airport Light Bases, Transformer Housing, Junction Boxes and Accessories	L-867 L-868	150/5345-42F
Runway and Taxiway Light Fixtures	L-861	150/5345-46C
Isolation Transformers for Airport Lighting Systems	L-830 L-831	150/5345-47B

60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS. All materials used in the work shall be inspected, tested and approved by the Engineer before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Engineer shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the Engineer, shall be removed at the Contractor's expense. Unless otherwise designated, tests in accordance with the cited standard methods of AASHTO, ASTM, Federal Specifications, and all other cited methods, which are current on the date of advertisement for bids will be made by and at the expense of the Contractor. The testing organizations performing on site field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel, including the owner's representative at his/her request. Samples will be taken by a qualified representative of the Contractor. All materials being used are subject to inspection, test or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Owner's representative at his/her request.

The Contractor shall employ a testing organization to perform all Contractor required tests. The Contractor shall submit to the Engineer resumes on all testing organizations and individual persons who will be performing the tests. The Engineer will determine if such persons are qualified. All the test data shall be reported to the Engineer after the results are known. A legible, handwritten copy of all test data shall be given to the Engineer daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the Engineer showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

60-03 CERTIFICATION OF COMPLIANCE. The Engineer may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the Engineer.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

- (a) Conformance to the specified performance, testing, quality or dimensional requirements; and,
- (b) Suitability of the material or assembly for the use intended in the contract work.

Should the Contractor propose to furnish an "or equal" material or assembly he shall furnish the manufacturer's certificate of compliance as hereinbefore described for the specified brand name material or assembly. However, the Engineer shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The Engineer reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

60-04 PLANT INSPECTION. The Engineer or his authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for his acceptance of the material or assembly.

Should the Engineer conduct plant inspections, the following conditions shall exist:

- (a) The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom he has contracted for materials.
- (b) The Engineer shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

(c) If required by the Engineer, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material which has been tested and approved at the source of supply after it has been delivered to the site. The Engineer shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

60-05 ENGINEER'S FIELD OFFICE AND LABORATORY. When specified and provided for as a contract item, the Contractor shall furnish a building for the exclusive use of the Engineer as a field office and field testing laboratory. The building shall be furnished and maintained by the Contractor as specified herein and shall become property of the Contractor when the contract work is completed.

60-06 STORAGE OF MATERIALS. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Engineer. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Engineer. Private property shall not be used for storage purposes without written permission of the owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the Engineer a copy of the property owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at his/her entire expense, except as otherwise agreed to (in writing) by the owner or lessee of the property.

60-07 UNACCEPTABLE MATERIALS. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the Engineer.

No rejected material or assembly, the defects of which have been corrected by the Contractor, shall be returned to the site of the work until such time as the Engineer has approved its use in the work.

Rejection of materials by the Engineer shall be final and conclusive upon the Contractor. An omission by the Engineer to reject unspecified materials shall not be construed as a waiver of any requirement. Delivery to the work site of unspecified materials may be grounds for an order rejecting all further materials by the manufacturer of the unspecified material.

60-08 OWNER-FURNISHED MATERIALS. The Contractor shall furnish all materials required to complete the work, except those specified herein (if any) to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified herein.

All costs of handling, transportation from the specified location to the site of work, storage, and installing owner-furnished materials shall be included in the unit price bid for the contract item in which such owner-furnished material is used.

After any owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss or other deficiencies which may occur during the Contractor's handling, storage, or use of such owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of owner-furnished materials.

Rejection of materials by the Engineer shall be final and conclusive upon the Contractor. An omission by the Engineer to reject unspecified materials shall not be construed as a waiver of any requirement. Delivery to the work site of unspecified materials may be grounds for an order rejecting all further materials by the manufacturer of the unspecified material.

**** END OF SECTION ****

SECTION 70

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

70-01 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of all Federal and State laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all its officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by Contractor or Contractor's employees or subcontractors.

In addition to the general requirements, Contractor's attention is directed to, and Contractor shall be responsible for conducting the project in compliance with all laws of the State of California governing the construction of public works, including, without limitation, the following:

- a. The California Health and Safety Code and all applicable administrative code regulations adopted pursuant thereto.
- b. All laws governing the employment of labor, qualifications for employment of aliens, payment of employees, convict-made materials, domestic and foreign materials, and accident prevention.
- c. Title XIX of the California Code of Regulations entitled, "Public Safety," Chapter 1, State Fire Marshal, subchapter 1, "General Fire and Panic Safety".
- d. General Industrial Safety Orders. Contractor, and all subcontractors, shall observe and conform to the provisions of Title VIII of the California Code of Regulations relating to safe and proper use, construction, disposal, etc., of materials, machinery, and building appurtenances as therein set forth.
- e. Rules and regulations of local utilities.
- f. Local City and/or County ordinances.
- g. Code rules and safety orders. All work and materials shall be in full accordance with the latest rules and regulations of the State Fire Marshal; the National Board of Fire Underwriters; the National Electrical Code; State Industrial Accident Commission's Safety Orders; the safety orders of the Division of Industrial Safety; and Department of Industrial Relations.
- h. The Contractor shall conform to the requirements of Sections 4216 and 4217 of the Government Code, as latest amended, relating to subsurface installations.

All of the above laws and regulations are expressly incorporated in this contract, and are as much a part of the Contract Documents as if they were incorporated in their entirety in these general provisions.

Nothing in the specifications is to be construed to permit work not conforming to the above, and expense in compliance with the above work shall be borne by the Contractor. Whenever the specifications and working details require higher standards or larger sizes than those required by the ordinances, codes and statutes, the specifications and working details shall take priority over the ordinances, codes and statutes.

The Contractor shall not interpret the enumeration set forth above as being a complete listing of all applicable laws. It is the Contractor's responsibility to inform himself/herself regarding the requirements of all applicable laws and to obey them, and Contractor agrees by execution of the Contract Documents to do so at his/her sole cost, expense, and risk.

All work, materials, work safety procedures and equipment shall be in full accordance with the latest Cal/OSHA rules and regulations.

Contractor warrants that Contractor and each of his/her subcontractors shall, in performance of this contract, comply with each and every compliance order issued pursuant to Cal/OSHA. The Contractor assumes full and total responsibility for compliance with Cal/OSHA standards by his/her subcontractors as well as himself. The cost of complying with any compliance order and/or payment of any penalty assessed pursuant to Cal/OSHA shall be borne by the Contractor. Contractor shall save, keep and hold harmless the Owner, and all officers, employees, and agents thereof, from all liabilities, costs, or expenses, in law or in equity, that may at any time arise or be set up because of Contractor's or a subcontractor's non-compliance or alleged non-compliance with Cal/OSHA requirements. Nothing contained herein shall be deemed to prevent the Contractor and his/her subcontractors from otherwise allocating between themselves responsibility for compliance with Cal/OSHA requirements; provided, however, that the Contractor shall not thereby be, in any manner whatsoever, relieved of his/her responsibility to the Owner as hereinabove set forth.

70-02 LAWS AFFECTING PUBLIC WORKS. Attention to bidders is called to necessity of being familiar with the various Federal, state and local laws affecting public work, especially (but not limited to) those laws relating to hours of employment, minimum wages, payment of wages, sanitary and safety conditions for workers, worker's compensation insurance, type and kind of materials that can be used, non-discrimination in employment and affirmative action programs. Federal monies are to be utilized by Owner for this Project, and Contractor shall comply with applicable regulations and hold harmless the Owner for its failure to comply. Certain of those provisions are set forth herein. The existence of these provisions does not excuse the Contractor from complying with other statutory requirements or provisions which are not set forth in these contract documents.

70-03 PERMITS, LICENSES, AND TAXES. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notice necessary and incidental to the due and lawful prosecution of the work.

70-04 PATENTED DEVICES, MATERIALS AND PROCESSES. If the Contractor is required or desires to use any design, device, material or process covered by letters of patent or copyright, Contractor shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the surety shall indemnify and save harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the prosecution or after the completion of the work.

Before final payment is made on account of this contract, Contractor shall furnish acceptable proof to County of proper release from all such fees or claims.

70-05 RESTORATION OF SURFACES DISTURBED BY OTHERS. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work.

Should the owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such owners by arranging and performing the work in this contract so as to facilitate such construction, reconstruction or maintenance by others. When ordered as extra work by the Engineer, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-06 FEDERAL AID PARTICIPATION. For AIP contracts, the United States Government has agreed to reimburse the Owner for some portion of the contract costs. Such reimbursement is made from time to time upon the Owner's (sponsor's) request to the FAA. In consideration of the United States Government's (FAA's) agreement with the Owner, the Owner has included provisions in this contract pursuant to the requirements of Title 49 of the United States Code (USC) and the Rules and Regulations of the FAA that pertain to the work.

As required by the USC, the contract work is subject to the inspection and approval of duly authorized representatives of the Administrator, FAA and is further subject to those provisions of the rules and regulations that are cited in the contract, plans, or specifications.

No requirement of the USC, the rules and regulations implementing the USC, or this contract shall be construed as making the Federal Government a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-07 SANITARY, HEALTH, AND SAFETY PROVISIONS. The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his/her employees as may

be necessary to comply with the requirements of the state and local Board of Health, or of other bodies or tribunals having jurisdiction.

Attention is directed to Federal, state, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions which are unsanitary, hazardous, or dangerous to his/her health or safety.

It is a condition of this contract, and shall be made a condition of each subcontract entered into pursuant to this contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health or safety, as determined under Construction Safety and Health Standards Title 29, CFR, Part 1518, 36FR7340, promulgated by the U.S. Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act, 82 Stat. 96.

The responsibility for maintaining a safe working site shall be the Contractor's, and the Owner or its representatives undertakes no obligation to suspend the work or notify the Contractor of any hazardous conditions or non-compliance with safety laws.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without previous instructions or authorizations from the Owner, is authorized and shall act at the Contractor's discretion and risk to prevent such threatened loss or injury, and Contractor shall bear all costs of such action. Contractor immediately shall notify the Engineer of such actions, and thereafter shall comply with any instructions issued by the Engineer.

70-08 PUBLIC CONVENIENCE AND SAFETY. The Contractor shall control his/her operations and those of his/her subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to his/her own operations and those of his/her subcontractors and all suppliers in accordance with the subsection titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80 hereinafter.

70-09 BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS. The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs, and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area shall be a maximum of 18 inches high. Unless otherwise specified, barricades shall be spaced not more than 25 feet apart.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual of

Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office).

When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and associated lighting conforming to the requirements of AC 150/5340-1J, Standards for Airport Markings.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stockpiles, and his/her parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to AC 150/5370-2E, Operational Safety on Airports During Construction.

The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to AC 150/5370-2E.

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards prior to commencing work which requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their dismantling is directed by the Engineer.

Open-flame type lights shall not be permitted within the air operations areas of the airport.

70-10 USE OF EXPLOSIVES. The use or storage of explosives is not permitted on this Airport.

70-11 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his/her manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the nonexecution thereof by the Contractor, he/she shall restore, at his/her own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing or otherwise restoring as may be directed, or he/she shall make good such damage or injury in an acceptable manner.

70-12 THIRD PARTY BENEFICIARY CLAUSE. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create the public or any member thereof a third party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 OPENING SECTIONS OF THE WORK TO TRAFFIC. No portion of the work may be opened by the Contractor for public use until ordered by the Engineer in writing. Should it become necessary to open a portion of the work to public traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the Engineer, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provisions of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at his/her expense.

The Contractor shall make his/her own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

Contractor shall be required to conform to safety standards contained AC 150/5370-2E, Operational Safety on Airports During Construction (See Special Conditions.)

Contractor shall refer to the approved safety plan to identify barricade requirements and other safety requirements prior to opening up sections of work to traffic.

70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK. Until the Engineer's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the nonexecution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquakes, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of a public enemy or of governmental authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at his/her expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under his/her contract, and shall take adequate precautions to protect new tree growth and other important vegetable growth against injury.

The Contractor shall be solely responsible for any and all work done by his/her subcontractors or other employees, and all orders or instructions from the Owner shall be through Contractor to them.

Contractor is responsible for any loss or damage that may happen to the work or any part thereof during its progress; and also will make good any defects or flaws that may occur either in materials or construction during the progress of work or within one year after its completion and acceptance by the Owner.

70-15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS. As provided in the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control his/her operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and the owners are indicated as follows:

Utility Service or Facility	Person to Contact (Name, Title)	Owner's Address	Owner's Emergency Contact (Phone)
Pacific Gas and Electric (PG&E)	Dave Hinshaw Sr. Maj. Acct Rep.	343 Sacramento St. Auburn, CA 95603	(530) 889-5052
SBC	Carolyn Fraco Account Rep	2700 Watt Ave. Sacramento, CA 95821	(916) 593-2648
El Dorado Irrigation District		2890 Mosquito Road Placerville, CA 95667	(530) 622-4513

Not less than two full working days prior to performing any excavation, the Contractor shall notify Underground Service Alert (USA) by calling the toll-free number (800) 642-2444. The location of the subsurface installations shall be in accordance with Sections 4216 and 4217 of the Government Code, as latest amended. No excavation shall be performed until the subsurface installations have been located, hand-excavated and identified. The Contractor shall update the location of the subsurface installations in the proposed work area every 14 calendar days, as required.

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of his/her responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the owners of all utility services or other facilities of his/her plan of operations. Such notification shall be in writing addressed to THE PERSON TO CONTACT as provided hereinbefore in this subsection and the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section. A copy of each notification shall be given to the Engineer.

In addition to the general written notification hereinbefore provided, it shall be the responsibility of the Contractor to keep such individual owners advised of changes in his/her plan of operations that would affect such owners.

Prior to commencing the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such owner of his/her plan of operation. If, in the Contractor's opinion, the owner's assistance is needed to locate the utility service or facility or the presence of a representative of the owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer.

The Contractor's failure to give the two day's notice hereinabove provided shall be cause for the Engineer to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use excavation methods acceptable to the Engineer within 3 feet of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, he shall immediately notify the proper authority and the Engineer and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the Engineer continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to his/her operations whether or not due to negligence or accident. The contract owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or his/her surety.

70-15.1 FAA FACILITIES AND CABLE RUNS. The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the prosecution of the project work, shall comply with the following:

- a. The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.
- b. The Contractor shall notify the above named FAA Airway Facilities Point-of-Contact seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facilities outages.
- c. If prosecution of the project work requires a facility outage, the Contractor shall contact the above named FAA Point-of-Contact a minimum of 48 hours prior to the time of the required outage.
- d. If prosecution of the project work results in damages to existing FAA equipment or cables, the Contractor shall repair the damaged item in conformance with FAA Airway Facilities' standards to the satisfaction of the above named FAA Point-of-Contact.
- e. If the project work requires the cutting or splicing of FAA owned cables, the above named FAA Point-of-Contact shall be contacted a minimum of 48 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA Airway Facilities representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA Airway Facilities' specifications and require approval by the above named FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA Airway Facilities restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA Airway Facilities, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

70-16 FURNISHING RIGHTS-OF-WAY. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 PERSONAL LIABILITY OF PUBLIC OFFICIALS. In carrying out any of the contract provisions or in exercising any power or authority granted to him by this contract, there shall be no liability upon the Engineer, his authorized representatives, or any official of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 NO WAIVER OF LEGAL RIGHTS. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or his/her surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill his/her obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

70-19 ENVIRONMENTAL PROTECTION. The Contractor shall comply with all Federal, state, and local laws and regulations controlling pollution of the environment. He shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

70-20 ARCHAEOLOGICAL AND HISTORICAL FINDINGS. The Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during his/her operations, any building, part of a building, structure, or object which is incongruous with its surroundings, he shall immediately cease operations in that location and notify the Engineer. The Engineer will immediately investigate the Contractor's finding and will direct the Contractor to either resume his/her operations or to suspend operations as directed.

Should the Engineer order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract modification (change order or supplemental agreement) as provided in the subsection titled EXTRA WORK of Section 40 and the subsection titled PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT WORK of Section 90. If appropriate, the contract modification shall include an extension of contract time in accordance with the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of Section 80.

70-21 CONSTRUCTION CONTROLS TO PREVENT AIR AND WATER POLLUTION

70-21.1 Open Burning of Combustible Wastes. All State and local stipulations to minimize air pollution or danger from open burning shall govern. In addition, the following conditions shall be made a part of this construction contract under AIP:

- a. No tires, oils, asphalt paint, or coated metals are permitted in combustible waste piles.
- b. Burning will not be permitted within 1,000 feet of a residential or built-up area nor within 100 feet of any standing timber or flammable growth.
- c. Burning shall not be permitted unless the prevailing wind is away from a nearby town or built-up area.
- d. Burning shall not be permitted during a local air inversion or other climatic condition as would result in a pall of smoke over a nearby town or built-up area.

- e. Burning shall not be permitted when the danger of brush or forest fires is made known by State, local, or Federal officials.
- f. The size and number of fires shall be restricted to avoid the danger of brush or forest fires. Burning shall be done under surveillance of a watchman, who shall have fire-fighting equipment and tools readily available.

70-21.2 Alternatives to Open Burning

- a. Sound trees, stumps, and brush may be cut off within six inches above the ground and allowed to remain in areas outside of areas to be paved providing the depth of embankment will exceed three and one-half feet. Tap roots and other projections over one and one-half inches in diameter shall be grubbed-out to a depth of at least 18 inches below the finished subgrade or slope elevation. Spoil material removed by clearing and grubbing may be buried outside of airport construction graded areas, paved or to be paved areas, existing or future runway sites, and taxiway safety or apron areas.
- b. Wood may be salvaged for firewood or commercial use, or it may be chipped and disposed of for use as mulch.
- c. Logs, brush, etc., may be removed to an authorized disposal area or disposed of to the general public without charge.

70-21.3 Air Pollution Controls

- a. Common construction operations which may cause excessive dust include:
 - 1. Quarry drilling and rock crushing.
 - 2. Clearing, grubbing, and stripping.
 - 3. Excavation and placement of embankment.
 - 4. Cement and aggregate handling.
 - 5. Cement or lime stabilization.
 - 6. Blasting.
 - 7. Use of haul roads.
 - 8. Sandblasting or grinding.
- b. Other construction items which may cause air pollution are:

1. Volatiles escaping from asphalt and cutback materials.
 2. Use of herbicides or fertilizers.
 3. Smoke from asphalt plants or from heater/planers.
- c. Control of dust and other air pollutants shall be made the responsibility of the Contractor and may include:
1. Drilling apparatus equipped with water or chemical dust controlling systems.
 2. Exposing the minimum area of land.
 3. Applying temporary mulch with or without seeding.
 4. Use of water sprinkler trucks.
 5. Use of covered haul trucks.
 6. Use of stabilizing agents in solution.
 7. Use of dust palliatives and penetration asphalt on temporary roads.
 8. Use of wood chips in traffic and work areas.
 9. Use of vacuum-equipped sandblasting systems.
 10. Use of plastic sheet covering.
 11. Restricting the application rate of herbicides to recommended dosage. Materials should be covered and protected from the elements. Application equipment and empty containers shall not be rinsed and discharged so as to pollute a stream, etc., or the ground water.
 12. Bituminous mixing plants shall be equipped with a dust collector, to waste or return uniformly to the hot elevator all or any part of the material collected as stated in specification P-401 in Advisory Circular 150/5370-10, as latest revised.
 13. Delay of operations until climate or wind conditions dissipate or inhibit the potential pollutants (see Paragraphs a and b above) in a manner satisfactory to the Engineer.

70-21.4 Permanent and Temporary Water Pollution Control (Soil Erosion)

- a. Construction shall include temporary pollution control measures to insure that soil erosion which might cause water pollution is kept to a minimum. Such measures, as determined by the Engineer, may consist of construction of berms, dikes, dams, drains and sediment basins, or use of fiber mats, woven plastic filter cloths or other erosion devices or methods.
 1. Prior to the start of construction, the Contractor shall submit, for approval, his/her schedule of accomplishment of temporary erosion and pollution control work for the project, including haul roads and borrow areas and his/her plan for disposal of waste materials.
 2. The Contractor shall complete all permanent erosion control features at the earliest practicable time.
 3. In the event that temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls in a timely manner, the work shall be performed by the Contractor at his/her own expense.
 4. In case of repeated failures on the part of the Contractor to control erosion/pollution, the right is reserved by the Engineer to employ outside assistance to provide the necessary corrective measures. Such incurred costs, plus related engineering costs, shall be charged to the Contractor and appropriate deductions made from the Contractor's progress payments.

70-21.5 Other Water Pollution Controls

- a. The Contractor shall not be permitted frequent fording of live streams with construction equipment; therefore, temporary bridges or other structures shall be used wherever such crossings adversely affect sediment levels and an appreciable number of stream crossings are necessary.
- b. All waterways shall promptly be cleared by the Contractor of falsework, piling, debris, or other obstructions placed during construction work and not a part of the finished work.
- c. Water from aggregate washing or other operations containing sediment shall be treated by filtration, a settling basin, or other means sufficient to reduce the sediment content to not more than that of the stream, etc., into which it is discharged.
- d. Pollutants such as fuels, lubricants, bitumens, raw sewage, and other harmful materials shall not be discharged into or near rivers, streams, and impoundments or into natural or man-made channels leading thereto. Wash water or waste from concrete mixing or curing operations shall not be allowed to enter live streams, etc.

70-21.6 Conflict with Other Controls

In the event of conflict between these requirements and pollution control laws, rules or regulations of other Federal, State, or local agencies, the more restrictive laws, rules, or regulations shall apply.

**** END OF SECTION ****

SECTION 80

PROSECUTION AND PROGRESS

80-01 SUBLETTING OF CONTRACT. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Engineer.

Should the Contractor elect to assign his/her contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner. In case of approval, the Contractor shall file copies of all subcontracts with the Engineer.

The Contractor shall perform, with his organization, an amount equal to at least 25 percent of the total contract cost.

Bidders are notified that Public Contract Code Section 4104 provides as follows:

4104. Listing of subcontractors in bid or offer – See “Subcontractors Listing” included in the Bid Proposal. Any officer, department, board, or commission taking bids for the construction of any public work or improvement shall provide in the Specifications prepared for the work or improvements or in the general conditions under which bids will be received for the doing of the work incident to the public work or improvement, that any person making a bid or offer to perform the work shall, in his/her bid or offer, set forth:

- a. The name and the location of the place of business of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement in an amount in excess of one-half (1/2) of one percent (1%) of the General Contractor's total bid or \$10,000, whichever is greater.
- b. The portion of the work which will be done by each subcontractor under the Act.

Pursuant to the provisions of Section 4107, inclusive, of the Public Contract Code of the State of California, the Contractor shall not without consent of the Owner, either:

- a. Substitute any persons as subcontractors in place of the subcontractors designated in his/her original bid.
- b. Permit any subcontractor to be assigned or transferred to allow any work to be performed by anyone other than the original subcontractor listed in his/her bid.
- c. Other than in the performance of change orders, sublet or subcontract, any portion of the work in excess of one-half of one percent of his bid to which his/her original bid did not designate a subcontractor.

Should the Contractor violate any of the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code, his/her so doing shall be deemed a violation of this contract, and the Owner may cancel the contract, or may assess the Contractor a penalty in the amount not more than ten (10) percent of the amount of the subcontract involved, or may both cancel the contract and assess the penalty.

80-02 NOTICE TO PROCEED. The notice to proceed shall state the date on which it is expected the Contractor will begin the construction and from which date contract time will be charged. The Contractor shall begin the work to be performed under the contract within 5 calendar days of the date set by the Engineer in the written notice to proceed, but in any event, the Contractor shall notify the Engineer at least 24 hours in advance of the time actual construction operations will begin.

80-03 PROSECUTION AND PROGRESS. Unless otherwise specified, the Contractor shall submit his/her progress schedule for the Engineer's approval within 5 calendar days after the effective date of the notice to proceed. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised schedule for completion of the work within the contract time and modify his/her operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the work be discontinued for any reason, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the notice to proceed is issued by the Owner.

The work schedule shall include the hours of the day and the day of the week the Contractor is going to work.

Once the work schedule has been approved by the Engineer and after the start of the work, 48-hours prior notice is required to modify the work schedule.

An updated work schedule and the job progress status shall be submitted in writing at the weekly Coordination Meeting.

80-04 LIMITATION OF OPERATIONS. The Contractor shall control his/her operations and the operations of his/her subcontractors and all suppliers so as to provide for the free and unobstructed movement of aircraft in the AIR OPERATIONS AREAS of the airport.

When the work requires the Contractor to conduct his/her operations within an AIR OPERATIONS AREA of the airport, the work shall be coordinated with airport management (through the Engineer)

at least 48 hours prior to commencement of such work. The Contractor shall not close an AIR OPERATIONS AREA until so authorized by the Engineer and until the necessary temporary marking and associated lighting is in place as provided in the subsection titled BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS of Section 70.

When the contract work requires the Contractor to work within an AIR OPERATIONS AREA of the airport on an intermittent basis (intermittent opening and closing of the AIR OPERATIONS AREA), the Contractor shall maintain constant communications as hereinafter specified; immediately obey all instructions to vacate the AIR OPERATIONS AREA; immediately obey all instructions to resume work in such AIR OPERATIONS AREA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AIR OPERATIONS AREA until the satisfactory conditions are provided. The following AIR OPERATIONS AREA (AOA) cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as follows:

<u>AOA</u>	<u>Time Periods AOA Can be Closed</u>	<u>Type of Communications Required When Working in AOA</u>	<u>Control Authority</u>
Runways	None	Two-Way Radio	El Dorado County
Taxiways	None	Two-Way Radio	"

Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction (See Special Conditions).

80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION. All Contractors' operations shall be conducted in accordance with the project safety plan and the provisions set forth within the current version of Advisory Circular 150/5370-2. The safety plan included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a plan that details how it proposes to comply with the requirements presented within the safety plan.

The contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks of the safety plan measures to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the safety plan and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved safety plan unless approved in writing by the Owner or Engineer.

80-05 CHARACTER OF WORKERS, METHODS, AND EQUIPMENT. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations and, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the Engineer.

Should the Contractor fail to remove such persons or person, or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Engineer may suspend the work by written notice until compliance with such orders.

All equipment which is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than specified in the contract, he may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this subsection.

80-06 TEMPORARY SUSPENSION OF THE WORK. The Engineer shall have the authority to suspend the work wholly, or in part, for such period or periods as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the prosecution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out

orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Engineer, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Engineer within the time period stated in the Engineer's order to resume work. The Contractor shall submit with his/her claim information substantiating the amount shown on the claim. The Engineer will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather, for suspensions made at the request of the Contractor, or for any other delay provided for in the contract, plans, or specifications.

If it should become necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. He shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME. The number of working days allowed for completion of the work shall be stated in the proposal and contract and shall be known as the CONTRACT TIME.

(a) When the contract time is a specified completion date, it shall be the date on which all contract work shall be substantially completed.

(b) CONTRACT TIME based on WORKING DAYS shall be calculated weekly by the Engineer. The Engineer will furnish the Contractor a copy of his/her weekly statement of the number of working days charged against the contract time during the week and the number of working days currently specified for completion of the contract (the original contract time plus the number of working days, if any, that have been included in approved CHANGE ORDERS or SUPPLEMENTAL AGREEMENTS covering EXTRA WORK).

The Engineer shall base his weekly statement of contract time charged on the following considerations:

(1) No time shall be charged for days on which the Contractor is unable to proceed with the principal item of work under construction at the time for at least 6 hours with the normal work force employed on such principal item. Should the normal work force be on a double-shift, 12 hours shall be used. Should the normal work force be on a triple-shift, 18 hours shall apply. Conditions beyond the Contractor's control such as strikes, lockouts, unusual delays in transportation, temporary suspension of the principal item of work under construction or temporary suspension of the entire work which have been ordered by the Engineer for reasons not the fault of the Contractor, shall not be charged against the contract time.

(2) The Engineer will not make charges against the contract time prior to the effective date of the notice to proceed.

(3) The Engineer will begin charges against the contract time on the first working day after the effective date of the notice to proceed.

(4) The Engineer will not make charges against the contract time after the date of final acceptance as defined in the subsection titled FINAL ACCEPTANCE of Section 50.

(5) The Contractor will be allowed one week in which to file a written protest setting forth his/her objections to the Engineers' weekly statement. If no objection is filed within such specified time, the weekly statement shall be considered as acceptable to the Contractor.

The contract time (stated in the proposal) is based on the originally estimated quantities as described in the subsection titled INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES of Section 20. Should satisfactory completion of the contract require performance of work in greater quantities than those estimated in the proposal, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in contract time shall not consider either the cost of work or the extension of contract time that has been covered by change order or supplemental agreement and shall be made at the time of final payment.

If the Contractor finds it impossible for reasons beyond his/her control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, Contractor may, at any time prior to the expiration of the contract time as extended, make a written request to the Engineer for an extension of time setting forth the reasons which Contractor believes will justify the granting of his/her request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, Engineer may extend the time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

80-08 FAILURE TO COMPLETE ON TIME. For each working day that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section) the sum specified in the contract Article 10 and proposal as liquidated damages will be deducted from any money due or to become due the Contractor or his/her surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in his/her contract.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

80-09 DEFAULT AND TERMINATION OF CONTRACT. The Contractor shall be considered in default of his/her contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

- (a) Fails to begin the work under the contract within the time specified in the "Notice to Proceed," or
- (b) Fails to perform the work or fails to provide sufficient workers, equipment or materials to assure completion of work in accordance with the terms of the contract, or
- (c) Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- (d) Discontinues the prosecution of the work, or
- (e) Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- (f) Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- (g) Allows any final judgment to stand against him unsatisfied for a period of 10 days, or
- (h) Makes an assignment for the benefit of creditors, or
- (i) For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Engineer consider the Contractor in default of the contract for any reason hereinbefore, he shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the Engineer of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the prosecution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such

expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 TERMINATION FOR NATIONAL EMERGENCIES. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the prosecution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the Engineer.

Termination of the contract or a portion thereof shall neither relieve the Contractor of his/her responsibilities for the completed work nor shall it relieve his/her surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 WORK AREA, STORAGE AREA AND SEQUENCE OF OPERATIONS. The Contractor shall obtain approval from the Engineer prior to beginning any work in all areas of the airport. No operating runway, taxiway, or Air Operations Area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate his/her work in such a manner as to insure safety and a minimum of hindrance to flight operations. All Contractor equipment and material stockpiles shall be stored a minimum of 250 feet from the centerline of an active runway. No equipment will be allowed to park within the approach area of an active runway at any time. No equipment shall be within 250 feet of an active runway at any time.

**** END OF SECTION ****

SECTION 90

MEASUREMENT AND PAYMENT

90-01 MEASUREMENT OF QUANTITIES. All work completed under the contract will be measured by the Engineer, or his/her authorized representatives, using United States Customary Units of Measurement or the International System of Units.

The method of measurement and computations to be used in determination of quantities of materials furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meter) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which said items are placed.

The average end area method will be used for computing volumes of earthwork and other quantities which may be paid for on a volume basis.

The thickness of plates and galvanized steel used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inches.

The term "ton" will mean the short ton consisting of 2,000 pounds (907 kilograms) avoirdupois. All materials which are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designated by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material be paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured by the gallon (liter) or ton (kilogram). When measured by volume, such volumes will be measured at 60 degrees F (15 degrees C) or will be corrected to the volume at 60 degrees F (15 degrees C) using ASTM D 1250 for asphalts or ASTM D 633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, may be used for computing quantities.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

Rental of equipment will be measured by the time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account work as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of this section.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales.

Scales shall be accurate within one-half percent of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one-tenth of one percent of the nominal rated capacity of the scale, but not less than one pound (454 grams). The use of spring

balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector can safely and conveniently view them.

Scale installations shall have available ten standard 50-pound (2.3 kilogram) weights for testing the weighing equipment or suitable weights and devices for other approved equipment.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales "overweighing" (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighing-accuracy test will be reduced by the percentage of error in excess of one-half of one percent.

In the event inspection reveals the scales have been "underweighing" (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

The Contractor shall furnish the Engineer with duplicate licensed weighmaster certificates showing the actual net weights.

When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the Engineer. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

90-02 SCOPE OF PAYMENT. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the prosecution thereof, subject to the provisions of the subsection titled NO WAIVER OF LEGAL RIGHTS of Section 70.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 COMPENSATION FOR ALTERED QUANTITIES. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from his/her unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 PAYMENT FOR OMITTED ITEMS. As specified in the subsection titled OMITTED ITEMS of Section 40, the Engineer shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the Engineer omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Engineer's order to omit or nonperform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Engineer's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the Engineer's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature and amount of such costs.

90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK. Extra work, performed in accordance with the subsection titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work. When the change order or supplemental agreement authorizing the extra work requires that it be done by force account, such force account shall be measured and paid for based on expended labor, equipment, and materials plus a negotiated and agreed upon allowance for overhead and profit, but not to exceed the following:

Direct Labor	20%
Materials	15%
Equipment Rental	15%
Other Services & Equipment	15%
Subcontract costs	5%

(a) Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

(b) Comparison of Record. The Contractor and the Engineer shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor and the Engineer or their duly authorized representatives.

(c) Statement. No payment will be made for work performed on a force account basis until the Contractor has furnished the Engineer with duplicate itemized statements of the cost of such force account work detailed as follows:

(1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.

(2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

(3) Quantities of materials, prices, and extensions.

(4) Transportation of materials.

(5) Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by a receipted invoice for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

Labor, materials, and equipment may be furnished by the Contractor, subcontractor, or others on behalf of the Contractor. However, the County will deal directly with and make all payments to the Contractor only.

90-06 PARTIAL PAYMENTS. Progress payments shall be made at least once each month as the work progresses. The last working day of each month may be designated as the monthly payment date which will terminate each working month. This date or an alternate date agreed upon by the Engineer and the Contractor shall terminate each working month for the duration of the contract.

The Contractor shall, on the date established, prepare and submit a bill to County for work accomplished during the previous working month, based on the various contract bid items and the unit bid prices. Such partial payment may also include the delivered actual cost of those materials stockpiled and stored in accordance with the subsection entitled PAYMENT FOR MATERIALS ON HAND of this section. Consultation with the Engineer may be necessary to determine the amount of work accomplished on lump sum items.

No partial payment will be made when the amount due the Contractor since the last estimate amounts to less than five hundred dollars.

From the total of the amount determined to be payable on a partial payment, 10 percent of such total amount will be deducted and retained by the owner until the final payment is made, except as may be provided (at the Contractor's option) in the subsection titled PAYMENT OF WITHHELD FUNDS of this section. The balance (90 percent) of the amount payable, less all previous payments, shall be certified for payment. Should the Contractor exercise his/her option, as provided in the subsection titled PAYMENT OF WITHHELD FUNDS of this section, no such 10 percent retainage shall be deducted.

When not less than 95 percent of the work has been completed the Engineer may, at his/her discretion and with the consent of the surety, prepare an estimate from which will be retained an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final retained percentage or final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 PAYMENT FOR MATERIALS ON HAND. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

(a) The material has been stored or stockpiled in a manner acceptable to the Engineer at or on an approved site.

(b) The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.

(c) The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.

(d) The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.

(e) The Contractor has furnished the Owner evidence that the material so stored or stockpiled is insured against loss by damage to or disappearance of such materials at anytime prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of his/her responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this subsection.

90-08 PAYMENT OF WITHHELD FUNDS. Security deposits may be made by the Contractor in lieu of withholding as called for herewith:

Pursuant to Section 22300 of the Public Contract Code of the State of California, the Contractor may substitute a deposit of securities in lieu of the County withholding any monies from the total amount of the performance by the Contractor as set forth in the estimate prepared by the Engineer.

At the request and expense of the Contractor, securities having a value equivalent to or greater than the amount to be withheld may be deposited with a state or federally chartered bank as escrow agent payable either in whole or in part to the County upon demand and certification by the Engineer that the Contractor has defaulted in the performance of his obligation under the contract and setting forth the amount of said security needed to satisfy the completion of the obligation of the Contractor.

Securities eligible for investment under this section shall include those listed in Section 16430 of the Government Code, and bank or savings and loan certificates of deposit.

The Contractor shall be the beneficial owner of any securities substituted for monies withheld and shall receive any interest thereon.

Any escrow agreement entered into pursuant to this provision shall provide that: 1) securities having a value equal to or greater than 10% of the amount of the performance by the Contractor shall be deposited in the escrow; 2) the escrow agent shall convert such securities to cash and deliver such cash to the Engineer immediately upon receipt by the escrow agent of a demand by the Engineer

certifying that the Contractor has failed to perform all or part of the agreement after notice and specifying the amount of cash to be delivered to the County; and 3) that the escrow agent may not release any securities to the Contractor until such time as the escrow agent is notified in writing by the Engineer that the contract is complete and the time for filing of stop notices has expired. The form of such escrow agreement shall be in the form set forth in Public Contract Code Section 22300.

90-09 ACCEPTANCE AND FINAL PAYMENT. When the contract work has been accepted in accordance with the requirements of the subsection titled FINAL ACCEPTANCE of Section 50, the Engineer will prepare the final estimate of the items of work actually performed. The Contractor shall approve the Engineer's final estimate or advise the Engineer of his/her objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the Engineer shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the Engineer's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the Engineer's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

After the Contractor has approved, or approved under protest, the Engineer's final estimate, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payment shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of the subsection titled CLAIMS FOR ADJUSTMENTS AND DISPUTES of Section 50 or under the provisions of this subsection, such claims will be considered by the Owner. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

Simultaneously with the Contractor's request for final payment, the Contractor shall submit the following items to the County:

- a) Contractor shall submit his declaration under penalty of perjury stating that all workers and persons employed, all firms supplying the materials, and all subcontractors upon the project have been paid in full, and that there are no claims outstanding against the project for either labor or materials, except certain items, if any, to be set forth in detail in the declaration.
- b) Contractor shall submit a complete and accurate set of "As-built Record Drawings" prepared by the Contractor. All changes and modifications shall be indicated on a record set of drawings in red ink.
- c) Contractor shall submit proof acceptable to County of proper release from all claims

regarding patents and/or copyrights pursuant to Section 70, Subparagraph 70-03, hereof.

- d) Contractor shall submit five (5) sets of description completely covering the operation and maintenance of the mechanical and electrical installation. The descriptions shall include charts, diagrams, performance curves, catalog information, lubrication manuals, and details pertaining to the functioning of various items of equipment. Such description shall be divided logically into "systems" on the basis of operation, without respect to trades, subcontractors or arbitrary specifications sections. The relationship of the "systems" shall be clearly and concisely detailed.

The retention payment shall not be due and payable until the expiration of thirty-five (35) days from the filing and recording of the Notice of Completion of the work. The amount deducted from the final estimate and retained by the County will be paid to the Contractor, except such amounts as are required to be withheld by properly executed and filed notices to stop payment, or as may be authorized by the Contract.

**** END OF SECTION ****

**DIVISION IV
SPECIAL CONDITIONS
INDEX**

**PLACERVILLE AIRPORT
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA**

**RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23**

AIP NO. 3-06-0188-11

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SECTION SC
SPECIAL CONDITIONS

(1) LOCATION

The site of the work is at Placerville Airport, Placerville, El Dorado County, California. Prior to the submission of his/her bid, each bidder shall visit the site and acquaint himself/herself with local conditions, including but not limited to roads available, source of materials, water, electric power, the relation of the finished grade to the existing grade, and conditions of existing pavements, including haul routes.

(2) WORK TO BE DONE

The work to be done under this contract consists of AIP Project No. 3-06-0188-11 at Placerville Airport, Placerville, California. The work consists of furnishing all materials, plant and equipment, and performing all necessary labor in accordance with the prepared plans, specifications, and special provisions as directed by the County or its authorized representative, as follows:

- Replace Medium Intensity Runway Lights (MIRL) on Runway 5-23, Phase 2
- Replace VASI with new 2-Box PAPI on Runway 23.
- Furnish New Regulator, Electrical Vault Modifications.
- Perform all work and furnish all materials incidental to the above and in accordance with the prepared plans, specifications and special provisions and/or as directed by El Dorado County or its authorized representative.

(3) PLANS AND SPECIFICATIONS

The work shall conform to the plans and specifications marked, *“Placerville Airport, Placerville, El Dorado County, California, Runway 5-23 Lighting Rehabilitation (Phase II), Replacement of VASI With New 2-Box PAPI - Runway 23, AIP No. 3-06-0188-11, Bid #GS-08-1019.”*

In case of conflict between the plans, specifications and other contract documents, these documents shall govern in the following order:

- 1st - Change Order or Supplemental Agreement
- 2nd - Addendum to the Plans and Specifications
- 3rd - Technical Provisions
- 4th - Special Conditions
- 5th - Construction Plans
- 6th - Disadvantaged Business Enterprise (DBE)
- 7th - El Dorado County Specifications
- 8th - Federal Aviation Administration (F.A.A.) General Provisions
- 9th - FAA Specifications and Advisory Circulars

(4) CONSTRUCTION SCHEDULE

The sequence of construction shall be as shown on the plans or as directed by the Engineer. A critical path method (CPM) construction schedule is required to be submitted within five (5) days of issuance of Notice to Proceed as required in the Specifications. This schedule shall show the proposed construction schedule for various items and phases of work and shall also provide space to show the current status of the work. This schedule shall show both calendar and working days on the construction time line.

The Contractor shall submit eight (8) copies of the schedule for approval. No work shall be started until the construction schedule has been approved.

The Contractor shall maintain a copy of this schedule on the project site. This schedule shall be updated and submitted to the Engineer for approval weekly.

(5) CLOSURES OF RUNWAYS, TAXIWAYS, AND APRONS

There will be no closures of airport facilities during the construction of this project. Aircraft shall at all times have the right of way.

The runway will not be closed during the installation of the light system, but the following requirements must be adhered to during this phase of the work:

- Contractor's personnel and equipment shall never get closer to the side of the runway pavement than seven (7) feet.
- When working next to the runway, Contractor shall move personnel and equipment back from the edge of the runway a distance of 40 feet whenever an aircraft takes off from or lands on the runway.
- Contractor shall monitor Unicom frequency (122.8 MHz) whenever working on the runway lights to assist in identifying when aircraft are operating on the runway.
- Contractor shall install barricades on all open trenches and remove them when the trenches and light base excavations are backfilled.
- No section of trench or light base shall be left open overnight and no barricades shall be left in place overnight.
- Runway lights must be reconnected and operational each night. Temporary cables on ground surface will be allowed.

When Contractor is working within 80 feet of the centerline of Runway 5-23 he shall maintain radio contact (122.8 MHz) and move back to a point 80 feet from runway centerline when requested.

When boring under a taxiway is being performed for duct installation, that taxiway can be closed if properly barricaded. Only one taxiway shall be closed at a time.

The Contractor shall provide suitable lighted barricades to assure closure of portions of the Airport as shown on the plans or as directed by the Engineer. These barricades shall be 18" high barricades. At the completion of work each day the pavement on the runway and taxiway in area where work has progressed during the day shall be restored to operating condition, cleaned, and opened to all traffic except in areas designated to be closed. All barricades shall be removed. Payment for the furnishing, maintaining, operating, and placing of lighted barricades or temporary markings will be made under Item P-149 of these specifications.

It shall be the Contractor's responsibility to require all personnel to observe the safety requirements of the Airport to restrict all personnel and equipment to the work and storage areas assigned to the Contractor.

(6) HAULING ROUTES ON AIRPORT PROPERTY

In order to avoid confusion with aircraft during the construction and to avoid damage to the existing pavement and to the adjacent lands, the Contractor's equipment shall be restricted to certain hauling routes as directed by the Engineer. The road will be open to the Contractor at all times throughout construction. If the Contractor should find that it is desirable to improve this road, he may do so but will receive no payment for any improvements that he may make. It shall be the responsibility of the Contractor to provide adequate safeguards, including flagmen, so that the operations at the Airport will not be hindered. In addition, it shall be the responsibility of the Contractor to repair any damage caused by his equipment to these paved areas. Vehicle loads shall not exceed legal highway load limits.

(7) CONTRACTOR'S STORAGE AND OFFICE AREA

The proposed location has been shown on the plans for the Contractor's storage and office area. It shall be the responsibility of the Contractor to determine the availability of water, power, gas, and electricity for this area. He shall make all necessary arrangements to provide these services to meet his requirements.

The Contractor shall provide toilet facilities for his personnel in this area. Such facilities shall conform to the requirements of the El Dorado County Health Department.

At completion of the contract, the Contractor shall remove all plant, equipment, stockpiles, etc., from the work area. Contractor shall restore all storage and office areas and service roads to the original condition prior to any work in the area. Contractor shall not receive any separate payment for any of this restoration or clean up.

(8) MARKING OF CONSTRUCTION EQUIPMENT

All construction equipment shall display orange and white checkered flags, 3'x3'. These flags shall be so located on the equipment as to be plainly visible to all aircraft. No equipment shall

be parked on or over the paved area of the airfield or within the runway protection zone. Parking areas for equipment will be designated by the Project Engineer.

(9) AIRCRAFT RIGHT OF WAY AND ACCESS

Aircraft on the parking apron shall at all times have the right of way. Aircraft shall have access to all airport apron facilities at all times. All aircraft shall at all times be protected from all equipment, materials, and dust. Contractor will be required to initiate effective dust control measures as needed at no additional cost to Owner.

(10) PROTECTION OF CABLES AND CONTROLS

Due to the critical nature of certain utilities to the operation of the Airport, the following Special Provisions for Protection of Cables and Controls shall apply:

The Contractor is hereby informed that there are installed on the Airport certain structural facilities served by underground cable and other electric power cables serving other facilities. Such facilities and electric cables must be fully protected during the entire construction time. Work under this contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time. Approval is subject to withdrawal at any time because of changes in weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason determined by the Engineer acting under the orders and instructions of the airport management. Any instructions to the Contractor to clear any given area, at any time, by the Engineer or Airport Management (by radio or other means) shall be immediately executed. Construction work shall be commenced in the cleared area only when additional instructions are issued by the proper authorities.

Power and control cables leading to and from any facilities will be marked in the field by the Engineer for the information of the Contractor before any work in their general vicinity is started. Thereafter, through the entire time of this construction, they shall be protected from any possible damage, including crossing with unauthorized equipment, etc.

These special conditions intend to make perfectly clear the need for protection of cables and other electrical facilities by this Contractor at all times.

The Contractor shall immediately repair, with identical material by skilled workmen, any underground cables serving airport facilities that are damaged by his/her workers, equipment, or work. Prior approval of the Engineer or of the representative designated by Airport Management must be obtained for the materials, workers, time of day or night, and for the method of repairs for any temporary or permanent repairs the Contractor proposes to make to any airport facilities and cables damaged by this Contractor.

It is recognized that the Owner will incur costs for employees' salaries, engineering fees and otherwise in connection with the damage, inspection and repair of any such damage caused by the Contractor; and consequently that the Owner may incur loss of income by reason of the diversion of aircraft traffic from the airport resulting from interruption of the use of airport facilities; and that

such expenses and loss of income are not measurable now and may not be reasonably ascertainable at the time of any incident caused by the Contractor. The Owner and the Contractor hereby agree to the assessment of liquidated damages in lieu of such expenses or other damages incurred by the Owner. In addition to the obligation of the Contractor to immediately repair any cables or facilities damaged by the Contractor as set forth above, the sum of \$300 for each day or portion of a day that the equipment is inoperable shall be deducted from any money due the Contractor; or if no money is due the Contractor, the Owner shall have the right to recover said sum or sums from the Contractor, from the surety, or from both. The amount of these deductions is not considered a penalty.

(11) AIRPORT SECURITY

During the course of the contract, the Contractor shall be responsible for maintaining security against unauthorized access to the Airport. The Contractor will be held responsible for any fines, damages, or civil penalties filed against the Owner for the Contractor's failure to maintain the regulations set forth herein.

In accordance with the requirements of the Federal Aviation Administration, the Contractor shall take all steps necessary to assure Owner that the backgrounds of all employees have been checked to the extent necessary to assure that permitting them unescorted access to any area on the airport controlled for security reasons is appropriate. This background check, to the extent allowable by law, shall include at a minimum references and prior employment histories to the extent necessary to verify representations made by the employee relating to employment in the preceding 5 years.

All equipment, vehicle and personnel travel shall be restricted to designated work sites.

Only vehicles used for construction purposes shall enter the work boundaries. Contractor personnel may, however, be allowed to park their personal vehicles within a designated staging area. All vehicles shall have identifying markings on them that show that they are authorized on the Airport. All personnel working on the airport shall wear identification such as badges or hard hats with contractor's logo to show that they are authorized on the airport.

All security measures must be coordinated with Airport Management and the Engineer and must be approved prior to implementation.

Only Contractor and subcontractor employees are permitted in the work sites. They must enter and exit the airport areas restricted to public access and airport operations area only through the designated Contractor gate. Contractor shall control these gates such that unauthorized vehicles are not allowed access to the Airport.

In the event of an emergency, men and equipment shall be moved immediately at the direction of Airport Management or the Engineer.

**(12) SPECIAL SAFETY REQUIREMENTS DURING CONSTRUCTION
(AC 150/5370-2E)**

A. GENERAL SAFETY REQUIREMENTS

Throughout the construction project, the following safety and operational practices should be observed:

- Operational safety should be a standing agenda item during progress meetings throughout the construction project.
- The contractor and airport operator shall perform onsite inspections throughout the project, with immediate remedy of any deficiencies, whether caused by negligence, oversight, or project scope change.
- Airport runways and taxiways remain in use by aircraft to the maximum extent possible
- Aircraft use of areas near the contractor's work will be controlled to minimize disturbance to the contractor's operation.
- Contractor, sub-contractor, and supplier employees or any other unauthorized persons must be restricted from entering or remaining in airport area that would be hazardous.
- Construction that is within the safety area of an active runway, taxiway, or apron that is performed under normal operational conditions must be performed when the runway, taxiway, or apron is closed or restricted and initiated only with prior permission from the airport operator.
- The contracting officer, airport operator, or other designated airport representative may order the contractor to suspend operations; move personnel, equipment, and materials to a safe location; and stand by until aircraft use is completed.

B. CONSTRUCTION MAINTENANCE AND FACILITIES MAINTENANCE

Before beginning any construction activity, the contractor must, through the airport operator, give notice (using the Notice to Airmen (NOTAM) System) of proposed location, time, and date of commencement of construction. Upon completion of work and return of all such areas to standard conditions, the contractor must, through the airport operator, verify the cancellation of all notices issued via the NOTAM System. Throughout the duration of the construction project, the contractor must:

- Be aware of and understand the safety problems and hazards described in AC 150/5370-2, *Operational Safety on Airports During Construction*.
- Conduct activities so as not to violate any safety standards contained in AC 150/5370-2 or any of the references therein.
- Inspect all construction and storage areas as often as necessary to beware of conditions.
- Promptly take all actions necessary to prevent or remedy any unsafe or potentially unsafe conditions as soon as they are discovered.

C. APPROACH CLEARANCE TO RUNWAYS

Runway thresholds must provide an unobstructed approach surface ratio over equipment and materials.

D. RUNWAY AND TAXIWAY SAFETY AREA (RSA and TSA)

A runway must be closed/partially closed if construction activity will occur within the RSA. Construction activity within the TSA/obstacle-free zone is permissible when the taxiway is open to aircraft traffic if adequate wingtip clearance exists between the aircraft and equipment/material; evacuations, trenches, or other conditions are conspicuously marked and lighted; and local NOTAMs are in effect for the activity. The NOTAM should state that, “personnel and equipment are working adjacent to Runway 5-23.”

(1) Procedures for protecting runway edges

- Limit construction to no closer than 200 feet from the runway centerline, unless the runway is closed or restricted to aircraft operations requiring lesser standard RSA that is equal to the RSA available during the construction.
- Prevent personnel, material, and/or equipment from penetrating OFZ.
- Coordinate construction activity with the Airport Manager, FAA Regional Airports Office, or Airports District Office and through the airport operator issue an appropriate NOTAM.

Runway	Aircraft Approach Category	Airplane Design Group	RSA Width in Feet Divided by 2
5-23	B	I	120

(2) Runway ends

- Maintain the RSA from the runway threshold to a point at least the distance from the runway threshold as existed before construction activity, unless the runway is closed or restricted to aircraft operations requiring a RSA that is equal to the RSA width available during construction. This may involve the use of declared distances and partial runway closures.
- Ensure all personnel, materials, and/or equipment are clear of the applicable threshold siting criteria surface as defined in Appendix, “Threshold Siting Requirements,” of AC 150/5370-2.
- Prevent personnel, material and/or equipment, from penetrating the OFZ.
- Ensure adequate distance for blast protection is provided, as needed.

- Coordinate construction activity with the Airport Manager, FAA Regional Division Office, and, through the airport operator, issue an appropriate NOTAM.
- Provide a drawing showing the profile of the appropriate surfaces of each runway end where construction will take place. Where operations by turbojet aircraft are anticipated, review takeoff procedures and jet blast characteristics of aircraft, and incorporate safety measures for construction workers in the contract documents.

Runway End Number	Airplane Design Group	Aircraft Approach Category	Minimum Safety Area Behind Threshold	Minimum Unobstructed Approach Slope
5	I	B	240 ft.	20:1
23	I	B	240 ft.	20:1

E. CLOSED RUNWAY MARKINGS AND LIGHTING

No closed runway marking is required on this project.

F. HAZARDOUS AREA MARKING AND LIGHTING

Hazardous areas on the movement area will be marked with barricades. The markings restrict access and make hazards obvious to aircraft, personnel, and vehicles. During periods of low visibility and at night, identify hazardous areas with yellow omnidirectional flashing lights. The hazardous area marking and lighting will be supplied by the contractor, and are depicted on the plans.

G. VEHICLE OPERATION MARKING AND CONTROL

- (1) When any vehicle, other than one that has prior approval from the airport operator, must travel over any portion of an aircraft movement area, it shall be escorted and properly identified. To operate in those areas during daylight hours, the vehicle must have a flag or beacon attached to it. Any vehicle operating on the movement areas during hours of darkness or reduced visibility should be equipped with a flashing dome type light, the color of which is in accordance with local or state codes.
- (2) It may be desirable to clearly identify the vehicles for control purposes by either assigned initials or numbers that are prominently displayed on each side of the vehicle. The identification symbols should be a minimum 8-inch, block-type characters of a contrasting color, and easy to read. They may be applied either by using tape or a water-soluble paint to facilitate removal. Magnetic signs are also

acceptable. In addition, all vehicles must display identification media as specified in the approved security plan.

- (3) Employee parking shall be as shown on the plans and designated by the engineer.
- (4) Access to the job site shall be as shown on the plans and as designated by the engineer.
- (5) At 14 CFR part 139 certificated airports, all vehicle operators having access to the movement area shall be familiar with airport procedures for the operation of ground vehicles and the consequences of non-compliance.
- (6) If the airport is certificated and/or has a security plan, the airport operator should check for guidance on the additional identification and control of construction equipment.

H. NAVIGATIONAL AIDS

Not applicable.

I. LIMITATIONS ON CONSTRUCTION

Additional limitations on construction shall include:

- (1) Prohibit open-flame welding or torch cutting operations unless adequate fire safety precautions are provided and these operations have been authorized by the engineer.
- (2) Prominently mark open trenches, excavations, and stockpiled materials at the construction site with alternating orange and white flags and light these obstacles during hours of restricted visibility and darkness.
- (3) Marking and lighting of closed, deceptive, and hazardous areas on airports, as appropriate.
- (4) Constrain stockpiled material to prevent its movement as a result of the maximum anticipated aircraft blast and forecast wind conditions.

J. RADIO COMMUNICATIONS

Vehicular traffic located in or crossing an active movement area must have a working two-way radio in contact with the Airport Manager or be escorted by a flag person. The driver, through personal observation, should confirm that no aircraft is approaching the vehicle position. Construction personnel may operate in a movement area without two-way radio communication provided a NOTAM is issued closing the area and that the area is properly marked to prevent incursions. Two-way radio communications are required between contractors and the Airport Manager. Continuous monitoring is required.

K. DEBRIS

Waste and loose material must not be placed in active movement areas. Materials tracked onto these areas must be removed continuously during the work project.

(13) SUBMITTALS AND/OR SHOP DRAWINGS.

- a) The specifications indicate the desired equipment and materials as to type and quality. Wherever proprietary names are listed in these specifications, it shall be interpreted that the words “or approved equal” follow, unless otherwise specified. The words “or approved equal” shall be interpreted as meaning equal in every respect as determined by the Engineer.
- b) Within five (5) working days after the Notice to Proceed, the Contractor shall submit to the Engineer for approval a complete list of all equipment and materials intended to be used on the job. The list shall include the following information for each item.

Name of Item
FAA Specifications Number (If Any)
Manufacturer’s Name
Manufacturer’s Catalog Number
Size, Type and Rating

The Contractor shall submit a sufficient number of copies of the equipment and materials list for the Contractor’s use and to allow the Owner to retain five (5) copies.

- c) Within five (5) calendar days after Engineer’s approval of the equipment and materials list, the Contractor shall submit to the Engineer for written approval copies of all shop drawings and all equipment and materials submittals. The shop drawings and equipment/materials submittals shall be complete showing all details.
- d) The Contractor shall review and sign all shop drawings prior to submitting same for Engineer’s approval. All shop drawings received without the Contractor’s signature will be subject to return without review or comment.

It shall be the responsibility of the Contractor to specifically point out any variation or discrepancy between the shop drawings or manufacturers’ instructions he submits and the Contract Documents. Failure by the Contractor to identify in his/her letter of transmittal any variation, discrepancy, or conflict with the contract drawings may result in the shop drawing or submittal being returned to the Contractor for resubmittal.

- e) The shop drawings shall show completely the work to be done, but approval by the Engineer shall not be construed as waiving any of the requirements of the contract and particularly shall not be construed as relieving the Contractor of full responsibility for

fitting his/her equipment in the spaces provided; or from responsibility to fulfill the contract at no extra cost to the Owner, within the completion time.

- f) **The Contractor shall submit a sufficient number of copies of all shop drawings and equipment and materials submittals for the Contractor's use and to allow the Owner to retain five (5) copies.** Fax submittals will only be acceptable as preliminary submittals and are to be followed up with hard copies.

(14) SUBMITTAL AND SHOP DRAWING APPROVALS

The Engineer will review all submittals and shop drawings and return them to the Contractor. If the Contractor's submittal or shop drawings are incomplete or the product submitted does not meet specification requirements, the Engineer will reject the submittal or shop drawing and the Contractor will be required to resubmit. Resubmittals shall address all comments from the Engineer. Partial resubmittals may be returned without action. The review of the first submittal and one resubmittal on any item will be made by the Engineer at no cost to the Contractor. The Contractor will be charged for and shall reimburse the Owner for the Engineer's costs of reviewing the second and each subsequent resubmittal. The Engineer's costs will be charged to the Owner and deducted from the Contractor's progress payments.

(15) ASSIGNMENT OF ANTI-TRUST ACTIONS

The Contractor is required to comply with Public Contract Code Section 7103.5(b), which states:

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

(16) CONTRACTOR'S RECORD DRAWINGS

Contractor shall be provided one extra set of working plans and specifications, which Contractor shall keep at the site of the work at all times. The following information shall be inserted and dimensioned on said drawings and specifications, in RED by the Contractor: The exact location of all installations in their finished condition, including all electrical installations; all changes in construction, materials and installed equipment; adequate dimensional data, both horizontal and vertical, to allow location of covered installations; the identification of changes authorized by change order, and the number of that change order. Upon completion of the work, said drawings and specifications shall be returned to the Design Engineer prior to the final payment.

Drawings shall be subject to the inspection of the Engineer at all times and shall be kept current weekly with all work instructions, change orders, and construction adjustments shown thereon and initialed by the Inspector.

Progress payments or portions thereof may be withheld if drawings are not maintained as stated above. At the final inspection the Contractor shall submit record drawings to the Inspector for review and comment by the Engineer. The work will not be formally accepted until the record drawings are accepted by the Engineer.

(17) OPERATION AND MAINTENANCE MANUALS

For use in subsequent maintenance and operations, the Contractor shall furnish six (6) bound and indexed copies of maintenance and operation information supplied by the manufacturer covering all equipment and systems included in the contract. The submittal shall include, but not be limited to:

- Approved Equipment Submitted for the Project
- Drawings
- Illustrations
- Parts Lists
- Wiring Diagrams of Systems
- Internal Wiring Diagrams and Circuit Board Schematics and Layout Drawings
- Manufacturer's Recommended Spare Parts List
- Name, Address and Phone Number of Nearest Parts and Service Agency
- Systems Balance Data
- Maintenance and Service Instructions, Including Recommended Lubrication
- Operation Instructions
- Software, Including Annotated Source Lists and Programs

This submittal is required for all mechanical, electrical, instrumentation, control, communications, sound, control or special equipment and systems. The Contractor shall submit the required data for review at least thirty (30) days prior to the final inspection date. Corrections, additions, and/or resubmittal of data shall be made as directed by the Engineer.

The Engineer, and other persons as he may designate, shall receive complete maintenance and operating instructions for all items included above prior to final inspection of the project.

(18) TESTING AND ACCEPTANCE OF MATERIALS

All materials in which quality of the product such as gradation, Atterberg Limits, sand equivalent, CBR, etc., is specified, shall meet those specifications when in the final as-compacted condition and not the condition at the stockpile or source of supply. Any deviation from these requirements shall be corrected by removal and replacement with materials that conform to the specifications. When the materials removed are screened and/or blended and reincorporated in the work, the materials as placed shall meet all specification requirements. It shall be the Contractor's

responsibility to coordinate his materials, production and construction procedures so that the final compacted product is acceptable.

(19) EXISTING CONDITIONS

Test borings and test pits have been excavated throughout the site and the results of these tests are available for inspection. These borings show the conditions prior to the start of any construction on the Airport property. The Owner assumes no responsibility for the accuracy of the data presented. The Contractor shall be responsible for obtaining and verifying any and all soils and subsoil data required to prepare his bid.

The Contractor shall be fully responsible for handling any water or water-related problems that may arise during the construction of this project without additional compensation over and above that provided for in the unit prices bid.

(20) COORDINATION MEETING

In order to coordinate the work, a weekly meeting will be held during the construction phase of the work in the Airport Manager's Office.

The time of this meeting will be determined at a time convenient to the Owner, Engineer and Contractor. The Contractor's superintendent must attend these meetings.

At this weekly meeting the Contractor shall submit in writing an updated progress report for the total work and a schedule defining the work for the following week. Except for emergencies or unforeseen circumstances, this schedule shall be followed.

**** END OF SECTION ****

**DIVISION V
TECHNICAL PROVISIONS
INDEX**

**PLACERVILLE AIRPORT
PLACERVILLE, EL DORADO COUNTY, CALIFORNIA
RUNWAY 5-23 LIGHTING REHABILITATION (PHASE II)
REPLACEMENT OF VASI WITH NEW 2-BOX PAPI – RUNWAY 23
AIP NO. 3-06-0188-11**

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ITEM P-147 WATERING

Description

147-1.1 This item shall consist of furnishing and applying water required for compaction of embankments, dust control, and other purposes in accordance with requirements of these specifications or as directed by the Engineer.

Construction Methods

147-2.1 Water, when required, shall be applied at locations, in amounts, and during hours, including nights, as directed by the Engineer. An adequate water supply shall be provided by the Contractor. The equipment used for watering shall be of ample capacity and of such design as to assure uniform application of water in the amounts directed by the Engineer.

The Contractor shall develop his own water supply for this project and pay all fees and permits as required by local code, ordinance or law.

The Contractor will be required to maintain the area in such a manner that dust will not be detrimental to aircraft or airport operations.

Method of Measurement and Basis of Payment

147-3.1 No separate payment shall be made for watering, but it shall be considered as a subsidiary obligation of the Contractor covered under the respective items of work.

Testing and Material Requirements

Test and Short Title

Material and Short Title

None

None

**** END OF SECTION ****

ITEM P-148 STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

148-1.0 GENERAL. The Contractor is required to hire a "California Registered Civil Engineer" to develop and submit for approval a Storm Water Pollution Prevention Plan (SWPPP), which includes not only the attachments but an Erosion Control Plan. The objectives of the SWPPP as stated in Section A of the State Water Resources Control Board Order No. 99-08-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity are:

- To identify pollutant sources that may affect the quality of discharges of storm water associated with construction activity (storm water discharge) from the construction site, and
- To identify, construct, and implement storm water pollution prevention measures (control practices) to reduce pollutants in storm water discharges from the construction site both during and after construction is completed.

Therefore, the SWPPP to be developed by the Contractor's Civil Engineer shall identify the Best Management Practices (BMPs), which are required for the Contractor's operations to meet these objectives. BMPs are measures or practices used to reduce the amount of pollution entering surface water and the storm sewer collection system. BMPs may take the form of a process, activity, or physical structure. The SWPPP shall describe in detail the methods used to comply with those BMPs.

THE PLAN MUST BE APPROVED BY THE ENGINEER PRIOR TO ANY CLEARING, GRADING OR EXCAVATION WORK. Acceptance of the plan does not preclude the Contractor from responsibility for taking the proper actions to prevent contaminants and/or sediments from leaving the construction site should any unforeseen circumstances occur. The Contractor shall take immediate action if directed by the Engineer, or if the Contractor observes contaminants and/or sediments entering any surface or groundwater drainage, to prevent further storm water from entering the drainage.

To aid the Contractor in the preparation of the SWPPP, the SWRCB Order No. 99-08-DWQ can be found at the State of California Water Resources Control Board, Storm Water Program website at http://www.swrcb.ca.gov/stormwtr/gen_const.html. The SWPPP Template and Attachments are provided at the State of California Department of Transportation, Storm Water and Pollution Control website at <http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.htm> and should be followed by the Contractor during preparation of the SWPPP. Supporting information to be provided by the Owner for use by the Contractor during preparation of the SWPPP includes a topographic base map and a site map. Provision for Post-Construction Storm Water Management (Section A; Item 10) and Maintenance, Inspection and Repair (Section A; Item 11) shall be addressed by the Owner for incorporation into the Contractor's "approved" SWPPP.

148-2.0 METHOD OF MEASUREMENT AND BASIS OF PAYMENT. The Contractor will be paid separately for the preparation of the SWPPP at the lump sum price bid for this work. The

lump sum price bid shall include all materials, equipment, time, and other work required to complete the item.

Payment will be made under:

SWPPP Submitted by California
Registered Civil Engineer (P-148) - Lump Sum

**** END OF SECTION ****

ITEM P-149 MARKING AND LIGHTING OF CLOSED AIRPORT FACILITIES

Description

149-1.0 GENERAL. The construction of this project requires certain areas of the airfield to be barricaded to identify construction activity adjacent to active sections of the runway and taxiways. Barricading of these areas shall be in accordance with construction plans. Marking of closed airfield facilities and temporary facilities shall be in accordance with these specifications and F.A.A. Advisory Circular No. 150/5340-1J, "Standards for Airport Markings." The airport will not be closed during construction of this project.

149-2.0 CLOSED AIRPORT FACILITY MARKING. Any area that is closed for air or vehicular traffic shall be marked and/or lighted barricades placed adjacent to the pavement. These markings or barricades must be maintained in good condition at all times during the closure or they shall be repaired or replaced as directed by the Engineer.

All closed markings or structures shall be securely fastened or weighted to prevent displacement by high winds or jet blast. Maximum height of structures used on the airfield pavements, except for flags, shall be fourteen inches.

When the Contractor is working in a closed area, he may move the markings during his operations, but they must be replaced at the end of the working day and when work is not being performed in the area.

Closure marking on structures shall be placed as directed by the Engineer.

149-3.0 HAZARD LIGHTING OF CONSTRUCTION AREAS. In accordance with the construction schedule, the Contractor shall outline probable access to construction areas and block access to work areas by use of suitable lighted barricades. On all airfield pavement, except for flags, no part of the barricade or light shall extend fourteen (14) inches above the paved surface. Lights shall be flashing red and have at least five (5) candelas effective intensity for night marking. Barricades shall be painted alternate orange and white diagonal striping. These lighted barricades shall remain in place until such time as the new construction is open to traffic.

Barricades shall be securely fastened or weighted so that they will not be disturbed by high winds or jet blast.

149-4.0 METHOD OF MEASUREMENT AND BASIS OF PAYMENT. Method of measurement and basis of payment for marking and lighting of closed Airport facilities shall be Lump Sum. This lump sum price shall be full compensation for furnishing all labor, materials, tools, and incidentals necessary to perform this item of work, including the runway lighting modifications.

Payments will be made for marking and lighting of closed airport facilities on a monthly basis with the monthly progress payments. The percentage of marking and lighting of closed airport facilities payment made will be equal to the percentage of total project, completed, as determined by the Engineer.

Payment will be made under:

Marking and Lighting of Closed Airport Facilities (P-149)	-	Lump Sum
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**** END OF SECTION ****

ITEM P-150 MOBILIZATION

Description

150-1.0 Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for work on the projects; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project.

Method of Measurement

150-2.0 The method of measurement for Mobilization shall be lump sum. This contract lump sum price paid for mobilization shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in mobilization as specified. No separate payment will be made for demobilization.

Basis of Payment

150-3.0 Attention is directed to Section 90-06, "Partial Payments," and 90-09, "Acceptance and Final Payment." Payments for mobilization will be made as follows:

Payments will be made for mobilization on a monthly basis with the monthly progress payments. The percentage of the mobilization payment made will be equal to the percentage of total project completed, as determined by the Engineer.

Adjustment provisions in Section 40-02, "Alteration of Work and Quantities" and 40-04, "Extra Work," and retention of funds provisions in said Section 90-06, "Partial Payments," shall not apply to the contract lump sum item of mobilization.

When other contract items are adjusted as provided in said Sections 40-02 and 40-04, if the costs applicable to such item of work include mobilization costs, such mobilization costs will be deemed to have been recovered by the Contractor by payments made for mobilization, and will be excluded from consideration in determining compensation under said Sections 40-02 and 40-04.

Payment will be made under:

Mobilization (P-150) - Lump Sum

**** END OF SECTION ****

ITEM P-156 TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL

Description

156-1.1 This item shall consist of temporary control measures as shown on the plans or as ordered by the Engineer to control water pollution, soil erosion, air pollution, and siltation through use of berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, watering, and other erosion control devices or methods.

The temporary erosion control measures contained herein shall be coordinated with permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.

The temporary control may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites.

The Contractor's attention is directed to Section 70-22.3, Air Pollution Controls, of the General Conditions of these specifications.

Materials

156-2.1 GRASS. Grass which will not compete with the grasses sown later for permanent cover shall be a quick-growing species (such as ryegrass, Italian ryegrass, or cereal grasses) suitable to the area providing a temporary cover.

156-2.2 MULCHES. Mulches may be hay, straw, fiber mats, netting, bark, wood chips, or other suitable material reasonably clean and free of noxious weeds and deleterious materials.

156-2.3 FERTILIZER. Fertilizer shall be a standard commercial grade and shall conform to all Federal and state regulations and Association of Official Agricultural Chemists standards.

156-2.4 SLOPE DRAINS. Slope drains may be constructed of pipe, fiber mats, rubble, portland cement concrete, bituminous concrete, or other materials that will adequately control erosion.

156-2.5 WATER. Dust shall be carefully controlled in all construction areas, all soil and select fill borrow areas, and all haul roads and storage areas to assure that no dust will be allowed to pass through or be deposited on any aircraft operational areas. Sprinkling with water or other approved methods shall be employed to control dust.

156-2.6 OTHER. All other materials shall meet commercial grade standards and shall be approved by the Engineer before being incorporated into the project.

Construction Requirements

156-3.1 GENERAL. In the event of a conflict between these requirements and pollution control laws, rules, or regulations of other Federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

The Engineer shall be responsible for assuring compliance to the extent that construction practices, construction operations, and construction work are involved.

156-3.2 SCHEDULE. Prior to start of construction, the Contractor shall submit schedules for accomplishment of temporary and permanent erosion control work, as are applicable for clearing and grubbing; grading; construction; paving; and structures at watercourses. The Contractor shall also submit a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials. The work shall not be started until erosion control schedules and methods of operations for the applicable construction have been accepted by the Engineer.

156-3.3 STORM WATER POLLUTION PREVENTION PLAN. The contractor is required to hire a "California Registered Civil Engineer" to develop and submit for approval a Storm Water Pollution Prevention Plan (SWPPP). For details see Section P-148 of these specifications.

156-3.4 AUTHORITY OF ENGINEER. The Engineer has the authority to limit the surface area of erodible earth material exposed by clearing and grubbing, to limit the surface area of erodible earth material exposed by excavation, borrow and fill operations, and to direct the Contractor to provide immediate permanent or temporary pollution control measures to minimize contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment.

156-3.5 CONSTRUCTION DETAILS. The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the accepted schedule. Except where future construction operations will damage slopes, the Contractor shall complete permanent seeding and mulching and other specified slope protection work in stages, as soon as substantial areas of exposed slopes can be made available. Temporary erosion and pollution control measures will be used to correct conditions that develop during construction that were not foreseen during the design stage; that are needed prior to installation of permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.

Where erosion is likely to be a problem, clearing and grubbing operations should be scheduled and performed so that grading operations and permanent erosion control features can follow immediately thereafter if the project conditions permit; otherwise, temporary erosion control measures may be required between successive construction stages.

The Engineer will limit areas of clearing and grubbing, excavation, borrow, and embankment operations in progress, commensurate with the Contractor's capability and progress in keeping finish grading, mulching, seeding, and other such permanent control measures current in accordance with accepted schedules. Should seasonal limitations make such coordination unrealistic,

temporary erosion control measures shall be taken immediately to the extent feasible and justified, as determined by the Engineer.

In the event that temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or are ordered by the Engineer, such work shall be performed by the Contractor at his/her own expense.

The Engineer may increase or decrease the area of erodible earth material to be exposed at one time as determined by analysis of project conditions.

The erosion control features installed by the Contractor shall be acceptably maintained by the Contractor throughout the construction period.

Whenever construction equipment must cross watercourses at frequent intervals, and such crossings will adversely affect the sediment levels, temporary structures should be provided.

Pollutants such as fuel, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into or near rivers, streams, and impoundments or into natural or manmade channels leading thereto.

Basis of Payment

156-4.1 Payment for the SWPPP will be made under Item P-148. There will be no separate payment for any other work performed under this section. Work performed under this section shall be considered incidental to other items of this Contract.

**** END OF SECTION ****

ITEM P-610 STRUCTURAL PORTLAND CEMENT CONCRETE

Description

610-1.1 This item shall consist of either plain or reinforced structural Portland cement concrete, prepared and constructed in accordance with these specifications, at locations and of form and dimensions shown on the plans. Concrete shall be composed of coarse aggregate, fine aggregate, Portland cement, fly ash and water.

Concrete shall be used for construction of drainage and electrical boxes, headwalls, electrical duct encasement, duct markers, and other miscellaneous items.

Materials

610-2.1 GENERAL. Only approved materials, conforming to requirements of these specifications, shall be used in the work. The materials may be subjected to inspection and tests at any time during their preparation or use. The source of supply of each of the materials shall be approved by the Engineer before delivery or use is started. Representative preliminary samples of materials shall be submitted by the Contractor, when required, for examination and test. The materials shall be stored and handled to insure preservation of their quality and fitness for use and shall be located to facilitate prompt inspection. All equipment for handling and transporting materials and concrete must be clean before any material or concrete is placed therein.

In no case shall the use of pit-run or naturally mixed aggregates be permitted. Naturally mixed aggregate shall be screened and washed, and all fine and coarse aggregates shall be stored separately and kept clean. The mixing of different kinds of aggregates from different sources in one storage pile or alternating batches of different aggregates will not be permitted.

Aggregate shall be free of substances that are deleteriously reactive with the alkalis in the cement in an amount sufficient to cause excessive expansion of the concrete. Acceptable aggregate shall be based on satisfactory evidence furnished by the Contractor that the aggregate is free from such materials. This evidence shall include service records of concrete of comparable properties under similar conditions of exposure and/or certified records of tests by a testing laboratory that meets the requirements of ASTM C 1077. Tests shall be made in accordance with ASTM C 227, ASTM C 295, ASTM C 289, and C 1293 as required.

Aggregates shall be free of substances that are deleteriously reactive with the alkalis in the cement in an amount sufficient to cause excessive expansion of the concrete. Acceptable aggregate shall be based on satisfactory evidence furnished by the Contractor that the aggregate is free from such material. This evidence shall include service records of concrete of comparable properties under similar conditions of exposure and/or certified records of tests by a testing laboratory that meet the requirements of ASTM C 1077. Tests shall be made in accordance with ASTM C 295, C 1260, and/or C 1293 as required. The Contractor shall conduct a petrographic analysis, ASTM C 295, on the aggregates proposed for this Portland cement concrete. The

Contractor shall also provide evidence on aggregates from operational pits and quarries to demonstrate that the proposed aggregates are not alkali reactive.

The Contractor shall conduct mortar-bar expansion tests on mortar bars for alkali silica reaction, Tests ASTM C 1260 and C 1293. If the materials meet the test requirements of ASTM C 1293 or C 1260, the aggregates shall be considered acceptable for use. If the aggregates tested fail the test requirements of ASTM C 1260, then the Contractor at his/her option may conduct tests in accordance with ASTM C 1293 and/or find another source of aggregate. If the aggregate is tested in accordance with ASTM C 1293 and it meets all requirements, it shall be accepted even though it fails to meet requirements of ASTM C 1260. If it fails all requirements of ASTM C 1293, it shall be rejected.

610-2.2 COARSE AGGREGATE. The coarse aggregate for concrete shall meet requirements of ASTM C 33. Percentage of wear shall be not more than 45 at 500 revolutions as determined by ASTM C 535.

Coarse aggregate shall be well graded from coarse to fine and shall meet one of the gradations shown in Table 1, when tested in accordance with ASTM C 136.

610-2.3 FINE AGGREGATE. Fine aggregate for concrete shall meet requirements of ASTM C 33.

Fine aggregate shall be well graded from fine to coarse and shall meet the grading requirements of Table 2, when tested in accordance with ASTM C 136:

TABLE 1. REQUIREMENTS FOR GRADATION OF COARSE AGGREGATE							
Sieve Designation (Square Openings)	Percentage by Weight Passing Sieves						
	2"	1½"	1"	¾"	½"	⅜"	No. 4
No. 4 to ¾-inch	--	--	100	90-100	--	20-55	0-10
No. 4 to 1 inch	--	100	90-100	--	25-60	--	0-10
No. 4 to 1½ inch	100	95-100	--	35-70	--	10-30	0-5

TABLE 2. REQUIREMENTS FOR GRADATION OF FINE AGGREGATE	
Sieve Designation (Square Openings)	Percentage by Weight Passing Sieves
3/8-inch	100
No. 4	95-100
No. 16	45-80
No. 30	25-55
No. 50	10-30
No. 100	2-10

Blending will be permitted, if necessary, in order to meet gradation requirements for fine aggregate.

Fine aggregates deficient in percentage of material passing the No. 50 mesh sieve may be accepted, provided that such deficiency does not exceed 5 percent and is remedied by addition of pozzolanic or cementitious materials other than Portland cement, as specified in 610-2.6 on admixtures, in sufficient quantity to produce required workability as approved by the Engineer.

610-2.4 CEMENT. The cement used shall be Type II Portland cement conforming to the requirements of ASTM C 150. The content of total alkalies shall not exceed 0.6 percent by weight calculated as NA_2O plus K_2O .

Portland Cement shall meet the requirements of the above specifications for both tensile and compressive strengths and for time of setting by both the Gillmore and Vicat Methods.

If, for any reason, cement becomes partially set or contains lumps of caked cement, it shall be rejected. Cement salvaged from discarded or used bags shall not be used.

Fly ash may be used for 20 percent cement replacement by weight in all concrete. Fly ash shall meet the following specification requirements:

Fly ash shall meet all specification requirements of ASTM C 618, Class F, except that:

- Loss on Ignition shall be less than 2.0 percent.
- Water requirement of concrete mix made with fly ash replacement shall be no more than 98 percent of the water requirement of control concrete made with cement only. Total cement content in control mix shall be same as cement and fly ash in the test mix.

- Shrinkage of concrete mix made with fly ash replacement shall be no more than 100 percent of shrinkage of control concrete made with cement only. Total cement content in control mix shall be same as cement and fly ash in the test mix.
- 90 day flexural or compressive strength of the mix made with fly ash replacement shall be equal to or greater than the flexural strength or compressive strength of the control mix made with cement only.
- Fly ash shall have less than 10 percent by weight of CaO.

The Contractor shall furnish vendors' certified test reports for each carload, or equivalent, of cement shipped to the project. The report shall be delivered to the Engineer before permission to use the cement is granted. All such test reports shall be subject to verification by testing sample materials received for use on the project.

610-2.5 WATER. The water used in concrete shall be free from sewage, oil, acid, strong alkalis, vegetable matter, and clay and loam. If the water is of questionable quality, it shall be tested in accordance with AASHTO T 26.

610-2.6 ADMIXTURES. Any material added to concrete mix shall be submitted for review by the Engineer. Before approval of any material, the Contractor shall be required to submit results of complete physical and chemical analyses made by an acceptable testing laboratory. In addition to these analyses, the Contractor shall submit copies of manufacturer's descriptive literature describing use, properties and recommended quantity of material to be used. Subsequent tests shall be made of samples taken by the Engineer from material being furnished or proposed for use on the work to determine whether the admixture is uniform in quality with that approved.

Air-entraining admixtures shall meet the requirements of ASTM C 260 and shall be of the MB-VR vinsol-resin type. Air-entraining admixtures shall be added at the mixer in amounts necessary to produce specified air contents. All Portland cement concrete shall contain sufficient air-entraining agent to entrain five percent \pm one percent air.

Water-reducing, set-controlling admixtures shall meet requirements of ASTM C 494, Type A, water-reducing, or Type D, water-reducing and retarding. Water-reducing admixtures shall be added at the mixer separately from air-entraining admixtures in accordance with manufacturer's printed instructions.

610-2.7 PREMOLDED JOINT MATERIAL. The premolded joint material for expansion joints shall meet requirements of one of the following: ASTM D 994, D 1751, or D 1752.

610-2.8 JOINT FILLER. The filler for joints shall meet requirements of ASTM D 6690, or Item P-605, unless otherwise specified in the proposal.

610-2.9 STEEL REINFORCEMENT. The concrete reinforcing shall consist of deformed steel conforming to ASTM A 615; deformed bars of rail steel meeting ASTM A 996; or welded wire fabric meeting ASTM A 185. All steel reinforcement shall be Grade 60.

610-2.10 CALCIUM CHLORIDE. Calcium chloride will not be permitted for use as an accelerator.

610-2.11 COVER MATERIALS FOR CURING. The curing materials shall conform to one of the following specifications:

- | | |
|--|------------|
| (a) Waterproof Paper for Curing Concrete | ASTM C 171 |
| (b) Polyethylene Sheeting for Curing Concrete | ASTM C 171 |
| (c) Burlap Cloth Made from Jute or Kenaf | ASTM C 171 |
| (d) Liquid Membrane-Forming Compounds for Curing Concrete (Type 2) | ASTM C 309 |

Construction Methods

610-3.1 GENERAL. The Contractor shall furnish all labor, materials, and services necessary for, and incidental to, completion of all work as shown on the drawings and specified herein. All machinery and equipment owned or controlled by the Contractor, which he proposes to use on the work, shall be of sufficient size to meet requirements for the work, and shall be such as to produce satisfactory work; all work shall be subject to the inspection and approval of the Engineer. Contractor shall employ, at all times, a sufficient force of workmen of such experience and ability that the work can be prosecuted in a satisfactory and workmanlike manner.

610-3.2 CONCRETE PROPORTIONS. The concrete shall consist of a mixture of coarse aggregate, fine aggregate, Portland cement, and water. All aggregates and bulk cement shall be measured by weight. In proportioning aggregates and mixing water, compensation shall be made for weight of moisture in the aggregates, and this shall be determined periodically.

CONCRETE PROPORTIONS		
Concrete Class	A	B
Concrete Use	Structural Concrete	Type I Duct
Minimum 28-day Compressive Strength - psi	3,000	2,000
Maximum Size Aggregate - inch	1	3/8
Maximum Water:Cement Ratio - Gallon/Sack	6.0	7.0
Minimum Cement Content - Sacks/Cu. Yd.	6.0	5.0
Air Content	5% ± 1	5% ± 1
Slump Range - inch	2-5	2-5

The proportions in the above table are based on use of well-graded aggregates.

In addition to the above requirement, the combined gradation of the aggregates shall conform to the following:

COMBINED GRADATION PERCENT PASSING BY WEIGHT		
Sieve Size	Class A	Class B
1½ inch	100	
1 inch	90-100	
¾ inch	70-90	100
⅜ inch	45-65	90-100
No. 4	31-47	60-80
No. 8	23-40	
No. 16	17-35	40-70
No. 30	10-23	20-50
No. 50	2-10	10-30
No. 100	0-3	1-8
No. 200	0-2	0-3
Combined Gradation for Class B Concrete shall be submitted by Contractor and approved by Engineer.		

Quantities shown for cement and water shall control, and weights of aggregates shall be varied to secure proper yield based on absolute volumes. When a special mix requiring a reduction in water is desired, quantities of aggregate shall be increased to maintain specified yield.

Yield test, made in accordance with specification ASTM C 138, will be made to determine cement content per cubic yard of concrete. If at any time such cement content is found to be less than specified, batch weights shall be reduced until the amount of cement per cubic yard of concrete conforms to requirements.

Net mixing water shall be adjusted for moisture contained in the aggregates, and for moisture which they will absorb, in order to determine proper amounts of water to be added at the mixer. Absorption of the fine and coarse aggregates shall be determined by ASTM C 128 and C 127, respectively.

When an air-entraining agent or air-entraining Portland cement is used, there will be a bulking of mortar due to the amount of entrained air. To keep cement factor at the specified amount, weight of fine aggregate shall be reduced, as directed by the Engineer. Reduction in the fine aggregate shall be determined by yield tests. Under average conditions, reduction of sand should be about 3 percent of the total weight of fine and coarse aggregate. Air content shall be between 4 and 6 percent, by volume.

Air content by volume shall be based on measurements made on concrete immediately after discharge from the mixer in accordance with ASTM C 173 or C 231.

Slump of Portland cement concrete shall be determined in accordance with ASTM C 143.

Concrete will be tested at an age of 28 days in accordance with ASTM C 39 and shall develop specified minimum compressive strengths.

Mix designs shall be submitted by the Contractor to the Engineer for review at least 10 working days prior to production of concrete. No concrete will be placed until the Contractor has received written approval from the Engineer for the mix designs. If required, the Contractor shall furnish results of laboratory and field tests previously made for the mix designs.

610-3.3 CONTROL TESTS. When directed by the Engineer, the Contractor shall make test cylinders or beams from concrete as mixed for the work.

Concrete cylindrical test specimens shall be made in accordance with ASTM C 39 and beam specimens shall be made in accordance with ASTM C 78. Contractor shall cure and store test specimens under such conditions as directed. The Engineer will make compressive/flexural strengths tests at no expense to the Contractor.

610-3.4 PROPORTIONING AND MEASURING DEVICES. When package cement is used, each batch shall contain one or more whole sacks of cement. Aggregates shall be measured separately by weight. If aggregates are delivered to mixer in batch trucks, exact amounts for each mixer charge shall be contained in each batch compartment. The weighing boxes or hoppers shall be approved by the Engineer and shall provide means of regulating flow of aggregates into batch boxes so that required and exact weights of aggregate can be readily determined.

610-3.5 MIXING. The concrete may be mixed at the construction site, at a central point, or wholly or partially in truck mixers. Whichever mixing process is used, concrete of specified proportions and consistency shall be produced. Mixing of the concrete shall conform to the requirements of ASTM C 94.

610-3.6 MIXING CONDITIONS. The concrete shall be mixed only in quantities required for immediate use. The concrete shall not be mixed while air temperature is below 40 degrees F. without permission of the Engineer. If permission is granted for mixing under such conditions, aggregates or water, or both shall be heated and the concrete shall be placed at a temperature not less than 50 degrees nor more than 90 degrees F. The Contractor shall be held responsible for any

defective work resulting from freezing or injury in any manner during placing and curing, and shall replace such work at his expense.

Retempering of concrete by adding water or any other material shall not be permitted.

Delivery of concrete shall be in such a manner that concrete is deposited at uninterrupted intervals.

610-3.7 FORMS. The concrete shall not be placed until all forms and reinforcement have been inspected and approved by the Engineer. The forms shall be suitable material and shall be of type, size, shape, quality, and strength to build the structure as shown on the plans. The forms shall be true to line and grade and shall be mortar-tight and sufficiently rigid to prevent displacement and sagging between supports. The Contractor shall be responsible for their adequacy. Surfaces of forms shall be smooth and free from irregularities, dents, sags, and holes.

The internal ties shall be arranged so that, when forms are removed, no metal will show in concrete surfaces or discolor the surface when exposed to weathering. All forms shall be wetted with water or with a nonstaining mineral oil applied shortly before concrete is placed. The forms shall be constructed for removal without injuring concrete or concrete surface. The forms shall not be removed before expiration of at least 30 hours from vertical faces, walls, slender columns, and similar structures; forms supported by falsework under slabs, beams, girders, arches, and similar construction shall not be removed until tests indicate that at least 60 percent of the concrete design strength has been attained.

610-3.8 PLACING REINFORCEMENT. All reinforcement shall be accurately placed, as shown on the plans, and shall be firmly held in position during concreting. The bars shall be fastened together at intersections. Reinforcement shall be supported by approved metal chairs. Shop drawings, lists, and bending details shall be supplied by the Contractor and approved by the Engineer prior to erection on the project.

610-3.9 EMBEDDED ITEMS. Before placing concrete, any items that are to be embedded shall be firmly and securely fastened in place as indicated. All such items shall be clean and free from coating, rust, scale, oil, or any foreign matter. The embedding of wood shall be avoided. The concrete shall be spaded and consolidated around and against embedded items.

610-3.10 PLACING CONCRETE. All concrete shall be placed during daylight, unless otherwise approved. The concrete shall not be placed until depth and character of foundation, adequacy of forms and falsework, and placing of the steel reinforcing have been approved. The concrete shall be placed as soon as practical after mixing and in no case later than one hour after water has been added to the mix. The method and manner of placing concrete shall be such to avoid segregation and displacement of the reinforcement. Troughs, pipes, and chutes shall be used as an aid in placing concrete when necessary. Dropping concrete a distance of more than five feet, or depositing a large quantity at one point, will not be permitted. The concrete shall be placed upon clean, damp surfaces, free from running water, or upon properly consolidated soil.

The concrete shall be compacted with suitable mechanical vibrators operating within the concrete. When necessary, vibrating shall be supplemented by hand spading with suitable tools to assure

proper and adequate compaction. The vibrators shall be manipulated so as to work the concrete thoroughly around reinforcement and embedded fixtures and into corners and angles of the forms. The vibration at any joint shall be of sufficient duration to accomplish compaction but shall not be prolonged so segregation occurs. Concrete deposited under water shall be carefully placed in a compact mass in its final position by means of a tremie, a closed bottom dump bucket, or other approved method and shall not be disturbed after being deposited.

610-3.11 CONSTRUCTION JOINTS. When placing of concrete is suspended, necessary provisions shall be made for joining future work before placed concrete takes its initial set. For proper bonding of old and new concrete, such provisions shall be made for dovetails, reinforcing bars or other devices as may be prescribed. The work shall be arranged so that a section begun on any day shall be finished during daylight of the same day. Before depositing new concrete on or against concrete which has hardened, surfaces of hardened concrete shall be cleaned by sandblasting, wetted, and covered with a neat coating of cement paste or grout.

610-3.12 EXPANSION JOINTS. Expansion joints shall be constructed at such points and of such dimensions as may be indicated on the drawings. Premolded filler shall be cut to the shape of surfaces being joined. Filler shall be fixed firmly against the surface of the concrete already in place in such manner that it will not be displaced when concrete is deposited against it.

610-3.13 DEFECTIVE WORK. Any defective work disclosed after forms have been removed shall be immediately removed and replaced. If any dimensions are deficient, or if the concrete surface is bulged, uneven, or shows honeycomb, which in the opinion of the Engineer cannot be repaired satisfactorily, the entire section shall be removed and replaced at the expense of the Contractor.

610-3.14 SURFACE FINISH. All exposed concrete surfaces shall be true, smooth, free from open or rough spaces, depressions, or projections. Concrete in horizontal plane surfaces shall be brought flush with finished top surface at proper elevation and shall be struck-off with a straightedge and floated. Mortar finishing shall not be permitted, nor shall dry cement or sand-cement mortar be spread over the concrete during the finishing of horizontal plane surfaces.

When directed, exposed concrete surfaces shall be a rubbed finish. If forms can be removed while the concrete is still green, the surface shall be pointed and wetted and then rubbed with a wooden float until all irregularities are removed. If concrete has hardened before being rubbed, a carborundum stone shall be used to finish surfaces. When approved, finishing can be done with a rubbing machine.

610-3.15 CURING AND PROTECTION. All concrete shall be properly cured and protected by the Contractor. The work shall be protected from elements, flowing water, and from defacement of any nature during building operations. The concrete shall be cured as soon as it has sufficiently hardened by covering with an approved material, such as white pigmented curing compound or moist blankets. Water-absorptive coverings shall be thoroughly saturated when placed and kept saturated for a period of at least three days. All curing mats or blankets shall be sufficiently weighed or tied down to keep the concrete surface covered and to prevent the surface from being exposed to currents of air. Where wooden forms are used, they shall be kept wet at all times until

removed to prevent opening of joints and drying out of concrete. Traffic shall not be allowed on concrete surfaces for seven days after concrete has been placed or as directed by the Engineer.

610-3.16 DRAINS OR DUCTS. Drainage pipes, conduits, and ducts that are to be encased in concrete shall be installed before the concrete is placed. Pipes shall be held rigidly to prevent displacement or movement during placing of the concrete.

610-3.17 COLD WEATHER PROTECTION. If concrete is placed at temperatures below 40 degrees F., the Contractor shall provide satisfactory methods and means to protect the mix from injury by freezing. The aggregates, or water, or both, shall be heated in order to place the concrete at temperatures between 50 degrees and 90 degrees F.

610-3.18 FILLING JOINTS. All joints which require filling shall be thoroughly cleaned, and any excess mortar or concrete shall be cut out with proper tools. Joint filling shall not be started until after final curing and shall be done only when the concrete is completely dry. Cleaning and filling shall be carefully done with proper equipment and in a manner to obtain a neat looking joint free from excess filler.

Basis of Payment

610-4.1 There will be no separate payment for structural Portland cement concrete. Payment for this item shall be included in the price for the specific item of work.

Testing Requirements

ASTM C 31	Making and Curing Test Specimens in the Field
ASTM C 39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C 78	Flexural Strength of Concrete (Using Simple Beam With Third-Point Loading)
ASTM C 127	Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate
ASTM C 128	Density, Relative Density (Specific Gravity), and Absorption of Fine Aggregate
ASTM C 136	Sieve Analysis of Fine and Coarse Aggregate
ASTM C 138	Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
ASTM C 143	Slump of Hydraulic-Cement Concrete
ASTM C 173	Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C 227	Potential Alkali Reactivity of Cement-Aggregate Combinations (Mortar-Bar Method)
ASTM C 231	Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C 289	Potential Alkali-Silica Reactivity of Aggregates (Chemical Method)
ASTM C 295	Guide for Petrographic Examination of Aggregates for Concrete
ASTM C 535	Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C 1077	Practice for Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
ASTM C 1293	Concrete Aggregates by Determination of Length Change of Concrete Due to Alkali-Silica Reaction
AASHTO T 26	Water

Material Requirements

ASTM A 185	Steel Welded Wire Reinforcement, Plain, for Concrete
ASTM A 615	Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM A 996	Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement
ASTM C 33	Concrete Aggregates
ASTM C 94	Ready-Mixed Concrete
ASTM C 150	Portland Cement
ASTM C 171	Sheet Materials for Curing Concrete
ASTM C 260	Air-Entraining Admixtures for Concrete
ASTM C 309	Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C 494	Chemical Admixtures for Concrete
ASTM C 618	Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
ASTM D 994	Preformed Expansion Joint Filler for Concrete (Bituminous Type)
ASTM D 1751	Preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-Extruding and Resilient Bituminous Types)
ASTM D 1752	Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction
ASTM D 6690	Joint and Crack Sealants, Hot-Applied, for Concrete and Asphalt Pavements

**** END OF SECTION ****

ITEM L-100 LIGHTING AND ELECTRICAL WORK

Description

100-1.1 GENERAL. Section L-100 is an F.A.A. general specification covering lighting and electrical work. Only those portions of this section that pertain to the work in this project will govern.

The airfield electrical work to be done under this contract shall include the furnishing of all supervision, labor, materials, tools, equipment, and incidentals necessary to install, remove, and modify obstruction lighting, power supplies, cabling, electrical conduit, ducts, pull boxes, electrical vault equipment, and all other electrical work as shown on the drawings.

Work shall be in accordance with Federal Aviation Administration Advisory Circular No. 150/5370-10C, "Standards for Specifying Construction of Airports," as modified herein, other FAA Advisory Circulars and Specifications referred to herein, and other requirements as specified herein.

The electrical work shall comply with latest adopted editions, codes and standards applicable to this Contract as follows:

- ANSI C2, National Electrical Safety Code
- California Administrative Codes
- California Electrical Code
- El Dorado County Standard Construction Specifications
- FAA, Advisory Circulars
- FAA, Orders
- NEC, National Electrical Code (NFPA No. 70)
- NECA, Standard for Installation
- NEMA, Standard for Materials and Products
- NFPA No. 101, Life Safety Code
- UL, Underwriters' Laboratories
- Occupational Safety and Health Act (OSHA)
- Uniform Building Code (latest edition)
- Local Codes, if applicable
- Title 24, California Building Standards Code

All work shall be performed in strict accordance with these contract specifications, drawings, and any instructions that may be furnished by the Engineer during execution of the work to aid in interpretation of said drawings and specifications. Installation details, material and equipment specifications shall be in conformance with all applicable FAA advisory circulars. The Contractor shall furnish written proof of FAA approval on all equipment covered by FAA specifications as part of the submittal package. The Contractor shall keep these specifications on file at his airport construction office.

The specifications indicate desired materials as to type and quality. Wherever proprietary names are listed in these specifications, it shall be interpreted that the words "or approved equal" follow. "Or approved equal" shall be interpreted as meaning equal in every respect as determined by the Engineer.

Nothing in these plans and specifications is to be construed as permitting work not conforming with governing codes and regulations. Where two or more codes conflict, the most restrictive shall apply.

100-1.2 RELATED DOCUMENTS. The general provisions of the contract apply to the work specified in the items L-100, L-108, L-109, L-110, L-115, and L-125.

100-1.3 SUMMARY OF WORK. The work to be performed includes furnishing all labor, supplies, materials, equipment, transportation, and services required to augment, move, install, and complete electrical work as specified herein and as shown on the contract drawings.

100-1.3.1 The work includes, but is not limited to, the following:

(a) Maintain, in operation, all existing field electrical facilities and circuits required for active runways and taxiways while this improvement work is in progress, including protection of airport personnel, aircraft, and vehicles; furnish and maintain temporary circuits, and place augmented airport lighting into operation. Field lighting on active runways and taxiways shall be operable at all times.

(b) Furnish and install underground cable in accordance with specifications, at the locations shown on the plans. Test all circuit loops after installation of new cables.

(c) Furnish and install all raceways and duct lines at the locations indicated and in accordance with specifications, ready for installation of cables. Excavate and backfill trenches, and install cable marking tape.

(d) Protect the existing airport electrical vault and control building from any damage to building, equipment, and wiring while adding or improving the existing equipment in accordance with the plans. Additions to the electrical system may include panelboards, transformers, disconnect switches, and regulators.

(e) Furnish and install new electrical handholes, pull boxes, and manholes at locations shown.

(f) Furnish and install new 10 kW regulator and controls.

(g) Remove existing stake-mounted runway lights, and furnish and install new runway edge lights with new bases.

(h) Furnish and install new transformer for existing airfield guidance signs.

- (i) Furnish and install new Precision Approach Path Indicator (PAPI), complete.
- (j) Furnish and install all new electrical equipment, conduits, cabling systems, etc., as shown on the plans and required to complete all electrical equipment and functions in the electrical vault to operate and control all airfield lighting, all control and navigation facilities.
- (k) Ground all equipment, enclosures, and conduits installed under this contract as shown in the plans or as called for by the authority having jurisdiction.
- (l) Other items required to complete foregoing. The omission of expressed reference to any parts necessary for or reasonable incidental to the complete installation shall not be construed as releasing the Contractor from furnishing such parts.

100-1.3.2 All items of general work required, such as excavation, cutting, patching, etc., shall be included in this Contract. The general work requirements are as follows:

- (a) Closures of runways and taxiways for extended periods shall be by schedule established by Owner. All work shall be scheduled to minimize the impact and duration of shutdowns. The Contractor shall keep the Engineer informed of scheduled work which will affect existing equipment and operations. Minimum 3 working day advance notice shall be given to the Engineer and approval received for any disconnections or shutdowns. Any interruptions of power for active systems must be scheduled with and approved by the Engineer. Penalties for unscheduled interruptions of active systems shall be assessed at a rate of \$100 per hour or fraction of an hour.
- (b) The plans are diagrammatic. Locations of equipment to be installed are shown in the plans, but the actual installation will depend on field conditions and the nature of the equipment furnished. When conditions which will adversely affect the installation become apparent, the Engineer shall be notified in writing.
- (c) The Contractor shall provide task lighting for night work. Task lighting shall be adequate to accurately see the task being performed. Refer to IES recommended illumination levels.

The Contractor shall at all times keep the construction areas free from accumulations of waste material and rubbish, and prior to completion of work shall remove any rubbish from and about the project, and all tools, reels, equipment, and materials not a part of the project. Upon completion of the construction, the Contractor shall leave the work and premises in a clean, neat, and safe condition satisfactory to the Engineer. The Contractor shall be responsible for the proper performance in all respects, in whole and in part, of the electrical equipment and for the mechanical installation of electrical equipment until acceptance of the entire work by the Engineer.

The Contractor shall protect all work, materials, and equipment from damage of any cause whatever, and shall provide adequate and proper storage facilities during progress of the work. He shall provide for safety and good condition of all work until final acceptance of the work by the Engineer, and replace all damaged or defective work, materials and equipment before requesting final acceptance.

All equipment shall be thoroughly cleaned of dirt, cement, bituminous materials, etc., and all corners scraped out and free of debris prior to installation.

100-1.4 SUBMITTALS.

(a) The specifications indicate the desired equipment and materials as to type and quality. Wherever proprietary names are listed in these specifications, it shall be interpreted that the words "or approved equal" follow, unless otherwise specified. The words "or approved equal" shall be interpreted as meaning equal in every respect as determined by the Engineer.

(b) Within five (5) working days after the Notice to Proceed, the Contractor shall submit to the Engineer for approval a complete list of all equipment and materials intended to be used on the job. The list shall include the following information for each item.

Name of Item
FAA Specifications Number (If Any)
Manufacturer's Name
Manufacturer's Catalog Number
Size, Type and Rating

(c) The Contractor shall submit a sufficient number of copies of the equipment and materials list for the Contractor's use and to allow the Owner to retain five (5) copies.

(d) Before any orders are placed, and within five (5) calendar days after Engineer's approval of the equipment and materials list, the Contractor shall submit to the Engineer for written approval copies of shop drawings for all electrical and lighting equipment and all equipment and materials submittals. The shop drawings and equipment/materials submittals shall be complete showing all details.

(e) The Contractor shall review, approve and sign all shop drawings prior to submitting same for Engineer's approval. All shop drawings received without the Contractor's signature will be subject to return without comment.

It shall be the responsibility of the Contractor to specifically point out any variation or discrepancy between the shop drawings or manufacturers' instructions he submits and the Contract Documents. Failure by the Contractor to identify in his letter of transmittal any variation, discrepancy, or conflict with the contract drawings may result in the shop drawing or submittal to be returned to the Contractor for resubmittal.

(f) The shop drawings shall show completely the work to be done, but approval by the Engineer shall not be construed as waiving any of the requirements of the contract and particularly shall not be construed as relieving the Contractor of full responsibility for fitting his equipment in the spaces provided; or from responsibility to fulfill the contract at no extra cost to the Owner, within the completion time.

(g) The Engineer will review all submittals and shop drawings and return them to the Contractor. If the Contractor's submittal or shop drawings are incomplete or the product submitted does not meet specification requirements, the Engineer will reject the submittal or shop drawing and the Contractor will be required to resubmit. Resubmittals shall address all comments from the Engineer. Partial resubmittals may be returned without action. The review of the first submittal and one resubmittal on any item will be made by the Engineer at no cost to the Contractor. The Contractor will be responsible for the Engineer's review costs for each subsequent resubmittal. These costs will be charged to the Owner and back charged to the Contractor. Costs will be deducted from the Contractor's progress payments.

100-1.4.1 Submittal Format. The submittal shall consist of manufacturer's brochures and cut sheets describing the equipment and materials he plans to incorporate in the work. These sheets shall be sequentially ordered by specification number with the reference specification number shown on the bottom right of each sheet. They shall be organized by the specification item number (L-100, L-108, etc.) with a tabbed divider sheet separating each item section. The submittal shall clearly show the equipment manufacturer's name, catalog number, size, type, and/or rating. The conformance to FAA criteria or other standards where called for shall be clearly indicated for each item. When used, cut sheets shall show all pertinent information by boldly circling all necessary data, as specified herein. Each sheet shall be dedicated to one piece of equipment, and all sheets shall be sequentially numbered (i.e., 1/50; indicating page 1 of 50 total pages). All sheets shall be 8-1/2" x 11" or 17" x 11". When these sizes are unpractical, a folded 24" x 36" drawing may be substituted. All drawings shall be to scale. All sheets shall be bound in a 3-ring binder that is sized according to the total number of sheets. Each submittal shall show on the cover the complete job name and number, date, contractor's name, and the words: "Electrical Submittal". A checklist showing all required and proposed submittals shall be prepared by the contractor and submitted to the Engineer within seven (7) days after the preconstruction conference.

Samples of conduit, duct, fixtures, fittings, cables, tapes, etc., may be required by the Engineer or required in these specifications. After they have been reviewed, samples will be returned in tested condition to the Contractor. In the event any items of material or equipment contained in the list fail to comply with specification requirements, such items will be rejected. All rejected items shall be amended to meet the criteria and then resubmitted for approval by the Engineer.

Substitutions of materials referenced herein is allowed. Any substitution shall be included in the submittal package. Manufacturer's part numbers are provided for reference only.

100-1.5 PERMITS. The County will obtain all required permits.

100-1.6 DRAWINGS. The drawings, which constitute an integral part of this Contract, shall serve as the working drawings. They indicate the extent and general layout of the lighting and signing system, arrangement of circuits, cables through ducts, connections to existing circuit cables, and other work. Field verification of scale dimensions is required to determine actual locations, distances, and levels. The Contractor shall research in the field the exact routing and identification of all circuits which extend through, serve or are affected by the area where work is to commence. No extra compensation will be allowed because of minor differences between work shown on the drawings and field conditions. The Contractor shall check the plans and specifications and, if any

portion of the work is found to be omitted, unclear, or in error, the Contractor shall immediately notify the Engineer. The directions of the Engineer shall be followed and the work completed accordingly.

(a) The design drawings may be utilized in the preparation of the shop or working drawings showing the permanent construction, as described in L-100.

(b) The plans and specifications are complementary and what is called for in either one shall be as binding as if called for in both.

(c) Where a disagreement exists between the plans and specifications, the item or arrangements of better quality, greater quantity, or higher cost shall be included in the base bid.

(d) Any discrepancies between the drawings, Advisory Circulars, and field conditions must be resolved with the Engineer before proceeding. All agreements shall be verified in writing.

(e) "As-built" drawings covering equipment installed under previous contracts and which relate to this contract will be available for the Contractor. The airport cannot, however, guarantee the accuracy of these drawings. Those conditions which will affect the work under this contract should be verified prior to any design/fabrication/installation commitment.

(f) Detail dimensions shown on the plans are approximate and shall be field verified before construction. All differences shall be submitted to the Engineer in writing before construction begins.

100-1.7 RECORD DRAWINGS. This work shall be in compliance with the requirements of Division IV. The Contractor shall mark up a set of blueline prints to show the as-built conditions which differ from the contract plans. All changes shall be recorded by a skilled draftsman with at least three years experience. The Engineer will furnish a newly printed set of blueline drawings to be used for this purpose. As-built drawings will be checked monthly by the Engineer for accurateness and partial payments will be withheld until the record drawings are completely updated. The mark-up set shall be kept at the site, and any changes or deviations shall be recorded within one week. The Contractor shall furnish one as-built drawing set to the Engineer upon completion. This work shall be completed and accepted by the Engineer before approval of final payment.

100-1.8 MAINTENANCE AND OPERATING INSTRUCTIONS. The Contractor shall provide the Owner with complete instructions in the proper care and operation of the equipment installed under this contract. As part of the final inspection, and final acceptance will not be given until, the Owner's representative is made knowledgeable about the system.

The Contractor shall also collect and assemble into each of six hardcover books the installation details, instructions, parts list, source of local supply, schematics of actual equipment and operations, and directions supplied by the manufacturer with all equipment. A complete set of approved submittal documentation shall be included in the final Maintenance and Operating Instructions. If cut sheets are included showing various models and features of the equipment

supplied, the specific model and features shall be clearly indicated to show only the options of the equipment that are actually provided and installed. Final acceptance of the work will be withheld until such data has been presented complete to the Engineer for transmission to the Owner. The submittal checklist shall serve as an index and checklist for these books.

100-1.9 TRAINING. The Contractor shall provide the airport maintenance staff training on the operation and maintenance of the new transformers and obstruction lights. This instruction shall be performed by manufacturer's technicians or personnel who are trained and qualified for this purpose. Training shall be coordinated with the availability of the Owner's personnel. Two weeks advance notice of training dates shall be given. Training shall be considered as part of the final inspection, and final acceptance will not be given until the training class has been given.

100-1.10 SAFETY RULES. The Electrical Safety Rules shall be observed and complied with in every detail, and any violation thereof shall be cause for immediate termination of the Contractor's authority to proceed with the work and recourse to his Surety for completion of the Project. The Electrical Safety Rules are as follows:

(a) The Contractor shall be responsible for conforming with the safety requirements of Appendix 1 to AC 150/5370-2E.

(b) Electrical circuits, operating over 300 volts, phase-to-ground shall be deenergized before work is accomplished thereon. Work on energized systems shall be accomplished by trained personnel, properly insulated, and done with extreme caution.

(c) Electrical circuits shall be considered deenergized only when one of the following conditions exist:

1. Switches connecting subject circuit to the energy supply are observed in the OPEN position, with an air break, and safety-tagged and padlocked in the OPEN position;

2. Electrically operated switches are visibly OPEN, blocked or racked in the OPEN position, and safety-tagged and padlocked OPEN;

3. Whenever the supply circuit break is not visible and clearly identified, the circuit shall be grounded using bolted clamps and connectors capable of withstanding bolted fault conditions. The ground connection shall be safety-tagged before work thereon, when the ground connection is not within sight of the work area.

4. Oil switches observed OPEN in a sight window, and tagged OPEN; or oil fuse cutouts with fuse carrier removed and tagged OPEN.

(d) Use of Red Safety Tags:

1. Safety tags shall be filled out and connected to any switch or equipment opened for protection of personnel working upon circuits connected thereto.

2. Safety tags shall be removed only by the employee who placed the tag, or by another employee designated in writing by the employee who placed the tag, to remove the tag. Removal of a safety tag placed by an employee not available at the time of need to remove may be authorized by the Electrical Superintendent or his designated representative, only after carefully checking that the circuit is ready to be energized.

3. Equipment with a safety tag attached shall not be operated, and connections with a safety tag attached shall not be changed.

4. Insulated cables, operated at over 300 volts to ground, shall be handled when energized only with rubber gloves tested to 15,000 volts.

5. Insulated cables, which have been in operation, shall be cut only with a grounded cable shears, or shall be grounded by driving a grounded sharp tool through the shielding and the conductors before cutting.

6. All personnel working around energized electrical equipment operating at over 750 volts shall wear standard insulated, nonconducting hard hats, and shall wear no garments with metallic zipper fasteners.

7. Ladders used in any electrical work shall be of wood or fiberglass construction.

8. Contractors engaged on El Dorado County projects or working upon El Dorado County property, shall be governed by El Dorado County rules. The Contractor shall designate a supervisor for all contract personnel and operations; said supervisor shall be on the job wherever contract operations are in progress.

100-1.11 CONSTRUCTION SEQUENCING. The Contractor shall notify the Engineer within 24 hours of completion of each task completed as described below:

(a) Disconnect and present all existing lights and light fixtures to the Airport Electrician for inspection. All lights identified by the Airport Electrician as requiring replacement or maintenance shall be exchanged with an appropriate light without a lamp.

(b) The Contractor shall reinstall all lights and fixtures and test them in the presence of the Engineer. Any and all lights which fail to light correctly shall have new lamps installed, or work as required to correct the problem.

Equipment and Materials

100-2.1 GENERAL

(a) Airport lighting equipment and materials covered by Federal Aviation Administration (FAA) specifications shall have the prior approval of the FAA, and be listed in

Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program, current edition.

(b) All other equipment and materials covered by other referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification when requested by the Engineer. Whenever Underwriters' Laboratories has a published standard applicable to the equipment furnished for this contract, the furnished equipment shall be listed by UL.

(c) Materials and equipment shall be as specified herein. When materials are used that are not specifically designated herein, they shall be in accordance with the best industry standards and practices for equipment of this type. All components and parts shall be suitable for operation under the environmental conditions specified herein. Metal parts shall be either inherently corrosion-resistant or shall be suitably protected to resist corrosion or oxidation during extended service life.

(d) The Contractor shall supply material for electrical and lighting systems such that all components of a given system are of the same manufacturer; for example, all transformers shall be from one manufacturer. All lights and series isolation transformers shall be from one manufacturer. This shall minimize the number and types of spare parts required.

100-2.2 HARDWARE CORROSION PROTECTION. In order to prevent deterioration due to corrosion, all bolts, nuts, studs, washers, pins, terminals, springs, hangers, and similar fastenings and fittings shall be of an approved corrosion-resisting material and/or be treated in an approved manner to render it adequately resistant to corrosion. All hardware such as cap screws, set screws, tap bolts, nuts, washers, etc., shall be of the type recommended by the manufacturer, or if a manufacturer's recommendation is not available, shall be stainless steel type 304, SAE grade 2, if they are used outdoors unless specified otherwise on the plans. Brass, bronze, or hot-dip galvanized ferrous hardware will be considered for indoor use. All bolts, screws, nuts, etc., shall be coated with a layer of "Neverseize" compound.

All ferrous metalwork shall be galvanized. If any galvanizing is damaged, the metal work shall be refinished by cleaning, treating with one coat of wash primer conforming to Federal (Military) Specification MIL-P-152388, and shall be given one shop coat of zinc-rich base paint (zinc dust paint) conforming to Federal Specification TT-P-641F Type II, immediately when the wash primer is dry.

100-2.3 PARTS RATING. All parts shall be of adequate rating for the application and shall not be operated beyond the parts manufacturer's recommended ratings.

100-2.4 ENVIRONMENTAL CONDITIONS. The equipment installed outdoors shall be designated for continuous outdoor operation under the following environmental conditions unless specified elsewhere:

(a) Temperature: Any ambient temperature from minus 20°F to plus 120°F.

- (b) Altitude: 5000 Mean Sea Level (MSL).
- (c) Humidity: Up to 100 percent.
- (d) Sand and Dust: Exposure to windblown sand and dust particles.
- (e) Wind: Operation at wind velocities up to 100 miles per hour.

(f) Water: Components provided for underground installation, direct buried or installed in underground housing, shall be suitable for continuous operation, continuously or intermittently submerged in water.

100-2.5 SALVAGE. Except as otherwise specified or indicated on the drawings, all electrical materials and equipment to be salvaged or "stored" shall become the property of the Airport, and shall be moved by the Contractor to a site at the airport designated by the Engineer at no additional cost to the airport. All wastes such as removed asphalt, concrete, and excess dirt shall be disposed of as directed by the Engineer, including disposal on-site.

100-2.6 TESTING. All materials and finishes are subject to testing. Material inspection and testing and strength tests on the concrete will be performed by the Airport at no expense to the Contractor other than material used. The Contractor shall assist the Engineer in obtaining samples during the course of construction work. The testing of electrical equipment shall conform to the description of the individual specification sections.

It shall be the Contractor's responsibility to demonstrate to the satisfaction of the Engineer that the lighting circuits are continuous and free from short circuits and unspecified grounds, that circuits are properly connected and operable. The Contractor shall megger all existing cables that must be spliced into, and shall record and report all readings to the Engineer for cable megger readings both before modification and after. The Contractor shall provide all labor, equipment, and materials required for testing.

100-2.7 INSPECTION. Provide for electrical inspections by the authority having jurisdiction. No work shall be concealed or enclosed until after inspections. If work is concealed or enclosed without inspection and approval, the Contractor shall be responsible for all expense and work required to open and restore the concealed area in addition to all required modifications.

100-2.8 WARRANTY. The Contractor shall provide a written 1-year warranty guaranteeing all work installed under this contract. It shall cover all parts and labor against defective parts or workmanship necessary to repair or bring into proper operation any equipment including, but not limited to, fixtures, transformers, regulators, panelboards, transformers, circuit breakers, conduit system, pull boxes and light bases. The regulators shall be guaranteed under the terms of the manufacturer's and dealer's standard warranty for a period of two years and shall cover full parts and labor. The warranty shall start upon the acceptance of all work as accepted by the Engineer. Final payment will be withheld until receipt of the warranty by the Engineer.

Construction Methods

100-3.1 GENERAL. Installation shall be performed by experienced and skilled persons to obtain only the best workmanship. All equipment shall be set square and true with construction. The work shall be under constant supervision by the Contractor, or by an authorized and competent foreman with five years experience, until completion. The Contractor shall be licensed in the state of California with at least five years experience in airfield electrical systems.

All existing and new pull boxes and other electrical equipment within the boundary limits of this Contract shall be adjusted and leveled to the final finish grade required on this project. The Contractor shall review plans and coordinate with civil grading.

100-3.2 INSTALLATION METHOD. The methods used for the installation of electrical system and equipment shall conform to the National Electric Contractors' Association (NECA) published "Standard of Installation" except where specifically specified or shown otherwise, and to the requirements of the National Electrical Code and its revisions as adopted by the local agency having jurisdiction.

All electrical materials, construction methods, and installation shall be in accordance with applicable Federal Aviation Administration's advisory circulars including amendments, the National Electrical Code, and the American National Standards Institute Standard C2.

Workmanship shall be consistent with the best commercial practices for installations of this type.

The workmanship shall be first class and in accordance with the highest standards for the electrical industry. The installations and adjustments shall be by competent electricians.

The responsibility for the correct and satisfactory installation and operation of all materials and equipment required herein shall rest with the Contractor. Before any equipment is ordered, a complete schedule of materials and detailed shop drawings covering all items of equipment and brochures of the materials proposed for installation shall be submitted for approval by the Engineer as described in Item L-100.

100-3.3 SITE CONDITIONS. At least five working days prior to commencing construction operations in an area which may involve underground utility facilities, the Contractor shall notify the Engineer and the owners of each underground utility facility shown on the plans. The FAA will assist the Contractor in locating FAA cables.

The existence of any known buried wires, conduits, pull boxes, ducts, or other facilities is shown in a general way only. It will be the duty of the Contractor, with the help of airport personnel, to visit the site and make exact determination of the existence and location of any facilities prior to commencing any work. It is understood that the Contractor will be responsible for making the exact determination of the location and condition of such facilities. A toll-free number for Underground Service Alert (USA) is (800) 642-2444. The Contractor is required to call this number and Dave Nicolls, Airport Operations at (530) 622-0459, 48 hours in advance before performing excavation work within the project site. Any and all costs shall be paid for by the Contractor. The Contractor

shall obtain from the Engineer copies of contract drawings from previous construction projects, and examine these drawings and verify at the site the location of all below grade utilities in the vicinity of the work performed under this contract.

All items damaged by the Contractor's workers or equipment shall be replaced immediately at the Contractor's expense.

100-3.4 INTERRUPTIONS. Interruptions of runway and taxiway lighting circuits may be necessary during construction. The Contractor shall provide a reliable shunt cable to provide temporary continuity of service to runway and taxiway lights during construction where required. The Contractor shall not interrupt any circuit or perform any work that might endanger any circuit until approval of the Engineer has been received. Temporary cables shall be protected and identified as a hazard. All interruptions of or work on active circuits shall be approved by and coordinated with the Engineer. All active circuits that have been interrupted or worked upon shall be tested by the Contractor prior to leaving for the day.

The Contractor shall be responsible for installing, maintaining, protecting, and removing all required temporary jumper cables used to maintain power to electrical circuits.

For the permanent installation, all temporary connections and re-routing of circuits shall be replaced with new materials installed in accordance with the specifications and as shown on the plans.

The Contractor shall remove all circuit cables from their respective power sources in the vault before working on the cables in the field. All such cables shall be so marked at the point of disconnection to prevent accidental reconnection. This work is incidental to the electrical work and no separate payment will be made. See Item L-100, SAFETY RULES.

100-3.5 CODES. The Contractor shall comply with all ordinances, laws, regulations, and codes applicable to the work involved and as referenced in these specifications. This does not relieve the Contractor from furnishing and installing work shown or specified which may be beyond the requirements of such ordinances, laws, regulations, and codes.

Method of Measurement and Basis of Payment

100-4.1 No separate measurement or payment shall be made for items in L-100.

Material Requirements

AC 150/5345-53	Airport Lighting Equipment Certification Program
AC 150/5370-2	Operational Safety on Airports During Construction
AC 150/5370-10	Standards for Specifying Construction of Airports
MIL-P-152388	Wash Primer Specification
TT-P-641F	Type II, Base Paint, Zinc-Rich

**** END OF SECTION ****

ITEM L-108 UNDERGROUND POWER CABLE FOR AIRPORTS

Description

108-1.1 This item shall consist of furnishing and installing power cables within conduit or duct banks in accordance with these specifications at the locations shown on the plans. It shall include cable splicing, cable marking, cable testing, and all incidentals necessary to place the cable in operating condition as a completed unit to the satisfaction of the Engineer. This item shall not include the installation of duct banks or conduit, trenching and backfilling for duct banks or conduit, or furnishing or installation of any cable for FAA facilities. Requirements and payment for trenching and backfilling for the installation of underground conduit and duct banks is covered under Item L-110, "Airport Underground Electrical Duct Banks and Conduits," of these specifications. This item shall include all cable required for this project.

All work and materials shall be in full accordance with requirements set forth in Section L-100 of these specifications.

Equipment and Materials

108-2.1 GENERAL.

(a) Airport lighting equipment and materials covered by FAA specifications shall have the prior approval of the Federal Aviation Administration, Airports Service, Washington, D.C. 20591, and shall be listed in Advisory Circular 150/5345-53, Airport Lighting Equipment Certification Program, current version.

(b) All other equipment and materials covered by other referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification, when requested by the Engineer.

(c) Manufacturer's certifications shall not relieve the Contractor of the Contractor's responsibility to provide materials in accordance with these specifications and acceptable to the Engineer. Materials supplied and/or installed that do not materially comply with these specifications shall be removed, when directed by the Engineer, and replaced with materials which do comply with these specifications, at the sole cost of the Contractor.

(d) All materials and equipment used to construct this item shall be submitted to the Engineer for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be boldly and clearly made

with arrows or circles. Contractor is solely responsible for delays in project accruing directly or indirectly from late submissions or resubmissions of submittals.

(e) The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the plans and specifications. The Engineer reserves the right to reject any and all equipment, materials or procedures which, in the Engineer's opinion, do not meet the system design and the standards and codes specified herein.

(f) All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least one (1) year from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner. The Contractor shall be responsible to maintain an insulation resistance of 50 megohms minima with isolation transformers connected in new circuits and new segments of existing circuits through the end of the contract warranty period.

(g) Prior to purchasing materials, the Contractor shall submit a list of materials as described in Item L-100 and in this Section 108-2.1.

108-2.2 CABLE. Underground cable for airfield lighting facilities shall be Type C, No. 8 AWG, copper, 7 strand, single conductor cable with 5,000 volt cross-linked polyethylene insulation and shall conform to the requirements of Advisory Circular 150/5345-7E, "Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits." Conductor sizes noted above shall not apply to leads furnished by manufacturers on airfield lighting transformers and fixtures.

Cable type, size, number of conductors, strand and service voltage shall be as specified in the plans and/or proposal.

108-2.3 CABLE CONNECTIONS. In-line connections of underground primary cables shall be of the type called for in the plans or in the proposal, and shall be one of the types listed below. When the plans or the proposal permit a choice of connection, the Contractor shall indicate in the bid the type of connection he proposes to furnish. No separate payment will be made for cable connections.

a. The Cast Splice. A cast splice, employing a plastic mold and using epoxy resin equal to that manufactured by Minnesota Mining and Manufacturing Company, "Scotchcast" Kit No. 82--B, or as manufactured by Hysol Corporation, "Hyseal Epoxy Splice" Kit No. E1135, or equivalent, for potting the splice is acceptable.

b. The Field-attached Plug-in Splice. Figure 3 of AC 150/5345-26C, Specification for L-823 Plug and Receptacle, Cable Connectors, employing connector kits, is acceptable for field attachment to single conductor cable. It shall be the Contractor's responsibility to determine the outside diameter of the cable to be spliced and to furnish appropriately sized connector kits and/or adapters and heat shrink tubing with integral sealant.

c. The Factory-Molded Plug-in Splice. Specification for L-823 Connectors, Factory-Molded to Individual Conductors, is acceptable.

In all the above cases, connections of cable conductors shall be made using crimp connectors utilizing a crimping tool designed to make a complete crimp before the tool can be removed. All L-823/L-824 splices and terminations shall be made in accordance with the manufacturer's recommendations and listings.

Immediately after the cable connector is installed in a manhole or light base, the connector shall be connected to the transformer or the connectors or the ends of the cables shall be connected together to avoid corrosion.

On all connector kits, both primary circuit and secondary circuit, silicone shall be applied to the connector kit to seal and protect the kit.

108-2.4 SPLICER QUALIFICATIONS. Every airfield lighting cable splicer shall be qualified in making cable splices and terminations on cables rated above 5,000 volts AC. The Contractor shall submit to the Engineer proof of the qualifications of each proposed cable splicer for the cable type and voltage level to be worked on. Cable splicing/terminating personnel shall have a minimum of three (3) years continuous experience in terminating/splicing medium voltage cable.

108-2.5 CABLE IDENTIFICATION TAGS. Cable identification tags shall be made from a non-corrosive material with the circuit identification stamped or etched onto the tag. The tags shall be of the type as detailed on the plans.

108-2.6 TAPE. Electrical tapes shall be Scotch Electrical Tapes – number Scotch 88 (1-1/2" wide) and Scotch 130C linerless rubber splicing tape (2" wide), as manufactured by the Minnesota Mining and Manufacturing Company, or an approved equal. Splices shall have a double wrap of Scotch 88 over a double wrap of Scotch 130 tape. Overlay of each wrap shall be 50 percent.

108-2.7 ELECTRICAL COATING. Scotchkote shall be as manufactured by Minnesota Mining and Manufacturing Company, or approved equivalent.

108-2.8 HEAT SHRINK KITS. Heat shrink kits shall be designed to fit all common L-823 connectors. The sleeve shall be coated with the sealant at the ends only, leaving the connector clean and reusable. The sleeve shall provide moisture, oil, and fuel protection suitable for installation in base cans or direct burial. Heat shrink kits shall be Raychem Airport Lighting Splice Kits (APL), or approved equal. The sleeve shall be of sufficient length to encase the new half of the connector kit and extend beyond the end of the connector kit a minimum of two inches onto the cable.

Heat shrink kits shall be applied to all connector kits that are disconnected and then reconnected in this project. The heat shrink kit shall be applied only on the final reconnected system and is not required for the temporary cabling system.

108-2.9 EXISTING CIRCUITS. Whenever the scope of work requires connection to an existing circuit, the circuit's insulation resistance shall be tested in the presence of the Engineer. The test

shall be performed in accordance with this item and prior to any activity affecting the respective circuit. The Contractor shall record the results on forms acceptable to the Engineer. When the work affecting the circuit is complete, the circuit's insulation resistance shall be checked again, in the presence of the Engineer. The Contractor shall record the results on forms acceptable to the Engineer. The second reading shall be equal to or greater than the first reading or the Contractor shall make the necessary repairs to the circuit to bring the second reading above the first reading. All repair costs, including a complete replacement of the L-823 connectors, L-830 transformers and L-824 cable if necessary, shall be borne by the Contractor. All test results shall be submitted in the Operation and Maintenance (O&M) Manual.

108-2.10 DUCT PLUGS. Duct plugs shall be suitable for the conduit size used. They shall be equipped with a pull-rope tie-off hook.

108-2.11 PULLING LUBRICANT. The cable pulling lubricant shall be "Wire Quick" (type WQ) manufactured by O-Z/Gedney, or equal.

Construction Methods

108-3.1 GENERAL. The Contractor shall install the specified cable at the locations indicated in the airport lighting layout plans.

The existing runway lights, ducts, and cable at each end of the runway as shown on the plans are new and are to be protected by the Contractor. The new cable and duct called for in this contract shall tie into the existing system at the last light base installed in the previous contract.

Cable connections will be permitted only at the light locations or in manholes, handholes or pull boxes. The Contractor shall be responsible for providing cable in as continuous lengths as possible for home runs or other long cable runs without connections, unless otherwise authorized in writing by the Engineer or shown in the plans.

At light bases where connectors are installed a three-foot loop of slack cable shall be required for each connection. Where a cable runs continuously through a light base, 2.0 feet of slack cable shall be coiled in the light base. At each concrete handhole not less than nine (9) feet of cable loop or sufficient slack cable to remove the connection from manhole or handhole shall be required for each connection. At each pull box not less than three (3) feet of cable loop shall be required for each connection.

Cables which are installed in manholes or handholes shall be carefully formed around the holes, avoiding sharp bends or kinks, with all cable adequately supported on cable racks. All splices shall be supported on cable racks in such a manner that the movement of the cable shall not place a strain on the splice nor cause the splice to slip from the rack.

Bends of a radius less than eight times the diameter of cable shall not be allowed. Cable that has been kinked shall not be installed.

All cables which are installed in handholes or pull boxes with more than one cable in the handhole or pull box shall be identified by means of plastic electrical tape. This tape shall be securely fastened to the cable. This circuit color coding shall be as shown on the plans, or as directed by the Engineer.

Color coding of all new cables shall consist of not less than two wraps of specified colors. Length of each color wrapped on the cable shall be not less than two inches. Color coding shall be 12 inches behind each connector kit and on both sides of the connector kit. Color coding shall be performed in every handhole, manhole, or pull box. If one cable is continuous through the box, it shall be color-coded. Cables which are existing in handholes or manholes, etc., in which the Contractor is required to install cables in this contract and are not color coded, shall be color coded by the Contractor at no additional cost. All cables in the Vault Test Panel shall also be color-coded.

Tape shall be Scotch Vinyl Plastic Electrical Tape for Color Coding #35, or approved equal. Colors shall conform to those specified - no deviation will be permitted.

108-3.2 INSTALLATION IN DUCT BANK OR CONDUIT. All cable shall be installed in duct banks or conduit unless otherwise shown on the plans or directed by the Engineer. This item includes the installation of the cable in duct banks or conduit as described below. The maximum number and voltage ratings of cables installed in each single duct or conduit, and the current-carrying capacity of each cable shall be in accordance with the latest National Electric Code, or the code of the local agency having jurisdiction.

There are existing ducts under the cross taxiways through which the cable for the runway and taxiway circuits pass. These ducts are filled with dirt and will be abandoned. New ducts will be bored under the taxiways and terminated in pull boxes. On the Phase I contract the pull boxes were installed but the new ducts were not bored under the taxiway. The old cable at three locations, as shown on the plans, was spliced into the new cable to maintain the circuit in operation. In this contract the Contractor shall pull new cable through the new ducts under the cross taxiways in this area into the existing pull boxes and splice into the new cable placed in the Phase I contract.

The Contractor shall make no connections or splices of any kind in cables within conduits or duct banks. All splices shall be made in light bases or handholes.

Duct banks or conduits shall be installed as a separate item in accordance with Item L-110, "Airport Underground Electrical Duct Banks and Conduit." The Contractor shall run a mandrel through duct banks or conduit prior to installation of cable to insure that the duct is open, continuous, and clear of debris. The Contractor shall swab out all conduits/ducts and clean base can, manhole, etc., interiors immediately prior to pulling cable. Once cleaned and swabbed the base cans and all accessible points of entry to the duct/conduit system shall be kept closed except when installing cables. Cleaning of ducts, base cans, manholes, etc. is incidental to the pay item of the item being installed. All raceway systems left open, after initial cleaning, for any reason shall be re-cleaned at the Contractor's expense. All accessible points shall be kept closed when not installing cable. The Contractor shall verify existing ducts proposed for use in this project as clear and open. The Contractor shall notify the Engineer of any blockage in the existing ducts. The cable shall be installed in a manner to prevent harmful stretching of the conductor, injury to the insulation, or

damage to the outer protective covering. The ends of all cables shall be sealed with moisture-seal tape providing moisture-tight mechanical protection with minimum bulk, or alternately, heat shrinkable tubing before pulling into the conduit and it shall be left sealed until connections are made. Where more than one cable is to be installed in a conduit under the same contract, all cable shall be pulled in the conduit at the same time. Where new cables are to be installed in a duct in which cable already exists, the existing cable shall be carefully removed without damage, the new cable added, and all cables pulled in the duct at the same time. The pulling of a cable through ducts or conduits may be accomplished by hand winch or power winch with the use of cable grips or pulling eyes. Maximum pulling tensions shall be governed by cable manufacturer's recommendations. A non-hardening lubricant recommended for the type of cable being installed shall be used where pulling lubricant is required. Where new cables are pulled into ducts, a pull cord as specified in Section L-110 shall be pulled with the cables. Duct or conduit markers temporarily removed for excavations shall be replaced as required.

The manufacturer's minimum bend radius or the NEC requirements, whichever is more restrictive, shall apply. Cable installation, handling and storage shall be per manufacturer's recommendations. During cold weather, particular attention shall be paid to the manufacturer's minimum installation temperature. Cable shall not be installed when the temperature is at or below the manufacturer's minimum installation temperature. At the Contractor's option, the Contractor may submit a plan, for review by the Engineer, for heated storage of the cable and maintenance of an acceptable cable temperature during installation when temperatures are below the manufacturer's minimum cable installation temperature.

Cable shall not be dragged across base can or manhole edges, pavement or earth. When cable must be coiled, lay cable out on a canvas tarp or utilize other appropriate means to prevent abrasion to the cable jacket.

108-3.3 SPLICING. Connections of the type shown in the plans shall be made by experienced personnel regularly engaged in this type of work and shall be made as follows:

(a) Cast Splices. These shall be made by using crimp connectors for jointing conductors. Molds shall be assembled, and the compound shall be mixed and poured in accordance with manufacturer's instructions and to the satisfaction of the Engineer.

(b) Field-attached Plug-in Splices. These shall be assembled in accordance with manufacturer's instructions. These splices shall be made by plugging directly into mating connectors. In all cases the joint where the connectors come together shall be wrapped with at least one layer of rubber or synthetic rubber tape and one layer of plastic tape, one-half lapped, extending at least 1-1/2 inches (37 mm) on each side of the joint.

(c) Factory-Molded Plug-in Splices. These shall be made by plugging directly into mating connectors. In all cases, the joint where the connectors come together shall be wrapped with at least one layer of rubber or synthetic rubber tape and one layer of plastic tape, one-half lapped, extending at least 1-1/2 inches (37 mm) on each side of the joint.

Heat shrinkable tubing shall be installed following manufacturer's instructions. Direct flame heating shall not be permitted unless recommended by the manufacturer. Cable surfaces within the limits of the heat-shrink application shall be clean and free of contaminants prior to application.

Splices shall be made only in handholes, junction boxes, pull boxes or light bases.

108-3.4 REMOVAL OF EXISTING CABLE. All abandoned cables encountered in existing duct runs, including all ducts in multiple duct runs, shall be removed and disposed of by the Contractor. No separate payment will be made for removal and disposal of these existing abandoned cables.

108-3.5 TESTING. The Contractor shall furnish all necessary equipment and appliances for testing the electrical systems and underground cable circuits before and after installation. Tests are to be made after a two-hour circuit energization. The Contractor shall perform all tests in the presence of the Engineer. The Contractor shall demonstrate the electrical characteristics to the satisfaction of the Engineer. All costs for testing are incidental to the respective item being tested. For phased projects the tests must be completed by phase and results meeting the specifications below must be maintained by the Contractor throughout the entire project as well as during the ensuing warranty period.

After installation, the Contractor shall test and demonstrate to the satisfaction of the Engineer the following:

- (a) That all affected lighting power and control circuits (existing and new) are continuous and free from short circuits.
- (b) That all affected circuits (existing and new) are free from unspecified grounds.
- (c) That the insulation resistance to ground of all non-grounded series circuits or cable segments is not less than 50 megohms.
- (d) That the insulation resistance to ground of all non-grounded conductors of new multiple circuits or circuit segments is not less than 50 megohms.
- (e) That all affected circuits (existing and new) are properly connected in accordance with applicable wiring diagrams.
- (f) That all affected circuits (existing and new) are operable. Tests shall be conducted that include operating each control not less than 10 times and the continuous operation of each lighting and power circuit for not less than 1/2 hour.

The equipment for determination of insulation resistance to ground shall be rated at not less than 500 volts. The equipment shall be operated in accordance with the manufacturer's instructions and readings taken at 30-second and one-minute intervals, unless otherwise specified by the manufacturer.

Two copies of tabulated results of all cable tests performed shall be supplied by the Contractor to the Engineer. Where connecting new cable to existing cable, ground resistance tests shall be performed on the new cable prior to connection to the existing circuit.

There are no approved "repair" procedures for items that have failed testing other than complete replacement.

Method of Measurement

108-4.1 Cable installed in duct, conduit, loops and terminations in boxes to be paid for shall be the number of linear feet measured in place, completed, ready for operation, and accepted by the Engineer. No separate payment will be made for removal and replacement of any existing cables.

Basis of Payment

108-5.1 Payment will be made at the contract unit price for each size and type of cable installed in duct in place by the Contractor and accepted by the Engineer. This price shall be full compensation for furnishing all materials, including all splice kits, and for all preparation and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Airfield Cable, L824, 1/C, No. 8, Type C, 5 KV, Furnish and Install in Duct or Conduit (L-108)	-	per Linear Foot
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FAA Specifications Referenced in Item L-108

<u>Number</u>	<u>Title</u>
AC 150/5345-53	Airport Lighting Equipment Certification Program.
AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits.
AC 150/5345-26	Specification for L-823 Plug and Receptacle Cable Connectors.

**** END OF SECTION ****

ITEM L-109 INSTALLATION OF AIRPORT VAULT EQUIPMENT

Description

109-1.1 This item shall consist of installation of new equipment in the vault as shown on the plans and as directed by the Engineer. Work shall also include connection of lighting controls to lighting control systems in the vault and all wiring necessary to make the system operational.

All work shall be in conformance with all applicable national, state and local electrical codes, which shall govern over any possible conflict with these plans or specifications and with the requirements of Section L-100 of these specifications.

New equipment to be furnished and installed in the electrical vault shall consist of the following items:

- 1 - 10 KW - 6.6A regulator – 240 volt input
- All other electrical equipment, conduits, cabling, systems, etc., as shown on the plans and required to complete all electrical equipment and functions in the electrical vault required to provide an operational electrical vault to operate and control all airfield lighting and navigation facilities as shown on the plans.

Equipment and Materials

109-2.1 GENERAL.

(a) Airport lighting equipment and materials covered by the Federal Aviation Administration specifications shall have prior approval of the FAA, Airports Service, Washington, D.C. 20591, and shall be listed in the current publication of Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program.

(b) All other equipment and materials shall be subject to acceptance through manufacturer's certification of compliance with applicable specification when requested by the Engineer.

(c) The specifications indicate desired materials as to type and quality. Wherever proprietary names are listed in these specifications, it shall be interpreted that the words "or approved equal" follow. "Or approved equal" shall be interpreted as meaning equal in every respect as determined by the Engineer.

(d) Manufacturer's certifications shall not relieve the Contractor of the Contractor's responsibility to provide materials in accordance with these specifications and acceptable to the Engineer. Materials supplied and/or installed that do not materially comply with these specifications shall be removed, when directed by the Engineer, and replaced with materials which do comply with these specifications, at the sole cost of the Contractor.

(e) All materials and equipment used to construct this item shall be submitted to the Engineer for approval prior to ordering the equipment and within five (5) calendar days after Engineer's approval of the equipment and materials list. Eight copies of submittals, consisting of marked catalog sheets or shop drawings, shall be provided for all panels, regulators, pull boxes, cabinets, and other items to be installed in the vault building. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be boldly and clearly made with arrows or circles. Contractor is solely responsible for delays in project accruing directly or indirectly from late submissions or resubmissions of submittals.

(f) The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the plans and specifications. The Engineer reserves the right to reject any and all equipment, materials or procedures which, in the Engineer's opinion, do not meet the system design and the standards and codes specified herein.

(g) All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least one (1) year from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

(h) All work materials, equipment and installation shall be in full accordance with current requirements of the following authorities:

- Occupational Safety and Health Act (OSHA).
- National Electric Code (NEC).
- National Board of Fire Underwriters.
- California Administrative Code (CAC):
 - Title 8, Safety Orders.
 - Title 17, Public Health.
 - Title 19, Fire and Panic Safety Standard.
- National Fire Code (latest edition).
- Uniform Building Code (latest edition).
- Uniform Mechanical Code (latest edition).
- Uniform Plumbing Code (latest edition).
- Local Codes, if applicable.

NOTE: Nothing in these plans and specifications is to be construed as permitting work not conforming to governing codes and regulations. Where two or more codes conflict, the most restrictive shall apply.

Should any changes to plans or specifications be necessary for compliance with these requirements, the Contractor shall notify the Engineer at once and cease work on all parts of the contract which are affected.

The Contractor shall obtain and pay all fees and permits required by any of the legally-constituted public authorities for installation or construction of work included under this Section. The Contractor shall schedule and pay for any inspections or examinations so required, and deliver certificates of all such inspections to the Engineer.

(i) Tests and Standards: Tests, standards, or recommended procedures of the following agencies shall relate to all parts of these Specifications and shall be considered a minimum.

American National Standards Institute (ANSI).
Underwriters Laboratories, Inc. (U.L.).
National Electric Manufacturers Association (NEMA).
Electrical Testing Laboratories (ETL).
National Fire Protection Association (NFPA).
Insulated Cable Engineers Association (ICEA).
Institute of Electrical and Electronic Engineers (IEEE).
Illumination Engineering Society (IES).

(j) The drawings indicate diagrammatically desired location or arrangement of conduit runs, outlets, equipment, etc., and are to be followed as closely as possible. Proper judgment must be exercised to secure the best possible installation in available space and to overcome difficulties caused by space limitations or interference of structural conditions wherever encountered.

(k) The Contractor shall do all cutting and patching of construction work and buildings which may be required for proper installation of electrical work.

(l) The Contractor shall protect all work, materials, and equipment from damage of any cause whatever, and shall provide adequate and proper storage facilities during progress of the work. He shall provide for safety and good condition of all work until final acceptance of the work by the Engineer, and replace all damaged or defective work, materials and equipment before requesting final acceptance.

(m) The Contractor shall provide and keep current a complete "AS-BUILT" record set of construction drawings, which shall be corrected daily and show every change from original drawings and specifications and exact "as-built" locations, sizes, and kinds of equipment. This set of prints shall show all changes in conduit runs, circuits, and size and number of conductors. Two as-bid sets of prints and one copy of any revised print will be furnished to the Contractor at no cost for this purpose. Additional prints requested by the Contractor will be charged at printing costs. One set of drawings shall be kept on the Project site and shall be used only as a record set. "AS-BUILT" drawing set shall be available to inspectors throughout the project.

109-2.2 MATERIALS.

(a) Unless otherwise noted, all material and equipment shall be new, of the type, capacity and quality specified and free from defects. Material shall bear the label of, or be listed by, the Underwriters' Laboratories unless of a type for which label or listing service is not provided.

(b) Unless specified otherwise, all materials and equipment shall be manufactured and assembled in the United States of America. Materials shall be of the same brand or manufacture throughout for each class of material or equipment wherever possible.

(c) Equipment shall be the product of a manufacturer who has, for a period of not less than five (5) years, been in successful manufacture of the equipment and who has a nationally distributed catalog covering ratings and specifications of said equipment.

109-2.3 RIGID STEEL CONDUIT. Rigid steel conduit and fittings shall conform to requirements of Federal Specification WW-C-581.

Rigid steel conduit shall have a zinc-coated exterior and may be zinc-coated or enameled on the interior. Couplings and locknuts, etc., shall be hot-dipped galvanized or sherardized. All couplings and fittings shall be of the threaded type.

Bushings for standard weight rigid steel conduit shall be non-metallic for one inch and smaller. For conduits 1-1/4" and larger, insulated metallic bushings shall be used. Bushings shall be O.Z. Electrical Manufacturing Type "B" regular or Type "BL" grounding.

Joints in all conduit installed exposed to weather shall be liquid and gas tight.

Conduit bends, other than factory ells shall have a radius of not less than 10 times the internal diameter of the conduit.

Conduits placed against concrete or masonry above ground shall be fastened with pipe straps or one-screw conduit clamps attached to the concrete by means of expansion anchors and screws.

109-2.4 BUS CONNECTORS. Connectors shall be Brundy Type NT for copper tubing. Connectors for insulated bus cable shall be of proper size and type for services intended.

109-2.5 BUS SUPPORTS. Bus supports shall be Westinghouse No. 527892, insulated for 7,500 volts, single clamp type for 2-bolt flat mounting.

109-2.6 SQUARE DUCT. Square duct shall be manufactured by Square D Company or Trumbull Manufacturing Co. and shall be sized as shown on the plans. The entire front on each section of duct shall be hinged for ready access to the interior.

109-2.7 GROUND RODS. Ground rods where shown shall be copper of the lengths and diameter shown on the plans. If not shown, ground rods shall be a minimum of 3/4-inch diameter, 8.0 feet long.

109-2.8 REGULATOR AND REGULATOR SUPPORTS. New regulators shall conform to Advisory Circular 150/5345-10F, "Specification for Constant Current Regulators and Regulator Monitors," 10 kW, Type L-828. All dry type 10 kW regulators shall be placed such that the bottom of the regulator is six inches (6") above the floor. The Contractor shall design the unistrut frames to support the load imposed by the regulator and shall obtain approval of the design by the Engineer prior to installation.* There will be no separate payment for these frames. The cost will be considered incidental to the cost of the regulators.

All new regulators shall meet the following requirements:

- (a) Types: Regulators shall be L828 regulators without monitoring - dry type.
- (b) Classes: Regulators shall be Class 1 - 6.6 amperes output current.
- (c) Styles: Regulators shall be Style 1 - 3 brightness steps.
- (d) Ratings: Sizes - 10 KW out
 Voltage (input) - 240 volts.
 Frequency - 60 hz.
- (e) Control Power: 120-volt internal.
- (f) Options:
 - 1. The 10 KW regulators shall have taps for following loads - 10 KW, 7.5 KW, 4 KW.
 - 2. All regulators shall have circuit board compatibility with large constant current regulators.
- (g) Operations and Maintenance Manuals: Six copies of the manuals shall be furnished for each size regulator.

109-2.9 WIRE.

- (a) General.
 - 1. All conductors shall be delivered to site in original unbroken packages, plainly marked or tagged as follows:

*The frame shall be designed such that it can be extended both vertically and horizontally to allow installation of future regulators above and along the side of the regulator installed in this contract.

Underwriters' labels

Size, kind and insulation of wire

Name of manufacturing company and trademark of wire

Month and year of manufacture. Cable shall not be more than two years old when delivered to the site.

2. All conductors shall be minimum of 98 percent conductivity, soft draw copper.
 3. All branch circuit wiring joints, splices and taps for conductors #8 and smaller shall be made with UL-listed connectors for 600 volts and shall be Scotch-Lock Type "B" connectors used only in junction boxes. Wire nuts will not be permitted.
 4. All splices necessary for proper installation and completion of the work shall be taped. Tape shall be 3-M "Scotch" #33 plastic electrical tape. All connections and splices shall be electrically and mechanically perfect, and in strict compliance with all code requirements.
 5. Bolt-type solderless connectors shall be tightened and then retightened after 24 to 48 hours has elapsed before taping.
 6. All debris and moisture shall be removed from conduits, boxes, and cabinets.
 7. No oil, grease, or similar substances shall be used to facilitate pulling of conductors. Mineralac, linseed soap or a specifically approved wire-pulling compound may be used.
 8. Wire in panel cabinets and wiring gutters shall be neatly grouped, tied together T&B Model Ty-Rap cable strap, or laced with #12 standard lacing twine and fanned out to terminals. No more than 7 cables shall be included in any bundle.
 9. All control wiring shall be color-coded and color continuity maintained throughout the system. See specifications Section L-108.
- (b) Control Cables. All control cables shall be No. 12 stranded copper, single or multiconductor THW or THWN/THNN.
- (c) Power and Field Lighting Circuits.
1. 600 volts maximum - Wire shall be insulated for at least 600 volts. Wire shall be THW and shall be stranded copper.
 2. 5,000 volts maximum, Field Lighting Cable - Wire shall be #8 AWG or larger, shall be rated up to 5,000 volts and shall conform to AC 150/5345-7E "Specification for L-824 Underground Electrical Cables for Airport Lighting" for Type C cable. Wires shall be of type, size and number shown on the plans.

109-2.10 CONTACTORS, RELAYS, TIME SWITCHES, PHOTOCELLS, ETC. Shall be as shown on Drawings.

109-2.11 TERMINAL CABINETS.

(a) Shall be of panelboard type construction and finish with hinged door and flush lock. Door shall provide maximum size opening to box interior. Provide with 5/8" plywood backboard, finished with two coats insulating varnish finish.

(b) Top of cabinet shall be mounted at +6'-6" above finished floor. Provide minimum of three 3/4" empty conduits from all recessed cabinets, etc., to accessible space above ceiling. Drawings may require additional conduit stubs.

(c) Cabinets shall be provided with suitable barriers to isolated devices in accordance with Codes.

109-2.12 FAA-APPROVED EQUIPMENT. Certain items of airport lighting equipment to be installed in the vault are covered by individual FAA equipment specifications. These specifications are listed below:

AC 150/5345-7E, "Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits."

AC 150/5345-10F, "Specification for Constant Current Regulators and Regulator Monitors." New regulators are 10 kW, dry type, Class 1, Style 1 or 20 kW dry or oil-cooled type, Class 1, Style 1 with an input voltage of 240 volts and a control voltage of 120 volts AC. New regulators shall be L828.

AC 150/5345-26C, "Specification for L-823 Plug and Receptacle, Cable Connectors."

AC 150/5345-47B, "Isolation Transformers for Airport Lighting Systems."

Construction Methods

109-3.0 GENERAL. Coordinate work with that of all contractors on the job for an efficient and effective completion of the project. Refer to the contract documents of other trades for construction details.

Existing equipment that is to remain in the regulator room shall be maintained in operation throughout project, with necessary shutdowns permitted only during daylight hours. The Contractor shall request permission to shut down regulators at least 48 hours prior to planned shut down period. Temporary wiring of equipment may be permitted to maintain equipment in operation; but only after review of a written request from the Contractor stating reasons for the temporary wiring and approval by the Engineer.

109-3.1 WORKING SPACE. Adequate working space shall be provided around electrical equipment in strict compliance with the Electrical Safety Orders. In general provide six and one-half feet (6'-6") of headroom and thirty-six inches (36") minimum clear work space in front of panelboards and controls for 120/208 volt equipment, and forty two inches (42") for 277/480 volt equipment and forty-eight inches for equipment 600 - 2500 volts.

109-3.2 EQUIPMENT IDENTIFICATION.

(a) Nameplates shall be installed on electrical equipment, including switchboards, panelboards, disconnect switches, time switches, contactors, motor starters, etc., and wall switches for lighting or other devices where the control function is not self-evident.

(b) Nameplate shall adequately describe the item and its function, or use of the particular equipment involved.

(c) Nameplate material shall be laminated phenolic plastic, black front and back with white core, engraved and fastened with cadmium plated steel self-taping screws, or brass bolts, or with a plastic resin adhesive glue.

(d) Painted stenciled legend with contrasting color or engraving legend directly on equipment filled with contrasting color paint may be used.

109-3.3 GROUNDING AND BONDING.

(a) Provide grounding and bonding for all electrical equipment in accordance with the applicable codes, rules and regulations. Permanently and effectively ground all raceway systems, supports, cabinets, panels, motor frames, lighting fixtures, grounding type receptacles and utilization apparatus. Obtain good contact between conduit, tubing and fittings, cabinets, outlet boxes, and equipment.

(b) Ground the service and enclosure and the secondary side of on-site transformer. Provide bonding conductor inside flexible metal conduit. All non-metallic raceways exclusive of signal systems shall contain a bonding conductor properly bonded to equipment at either end and to metallic portions of the same raceway.

109-3.4 TESTS. Test all wiring and connections for continuity and grounds before any fixtures or equipment are connected and where such tests indicate faulty insulation or other defects, they shall be located, repaired and tested again at the Contractor's expense. Electrical loads shall be balanced at the panelboards and motors shall be checked for correct rotation.

109-3.5 EQUIPMENT MOUNTING. Equipment, straps, boxes, etc., when anchored to masonry and concrete surfaces, shall be anchored with wedge type anchors, Red Head, Wej-It, or equal.

109-3.6 DUCT AND CONDUIT. The wire gutters and rigid steel conduit shall be installed as shown on the plans. Wire gutters shall be firmly secured to the walls or ceiling of regulator room or

equipment racks. Wall brackets for square duct shall be installed at all joints two feet or more apart with intermediate brackets as recommended by the manufacturer. Access to the front of all square duct shall not be restricted by any equipment or supports. Hinged covers shall be placed to open from the front side with hinges at the front bottom.

The rigid steel conduit shall be installed between square duct and equipment or panels as shown. Conduit shall be secured to walls of regulator room with clamps as specified in 109-2.2 of this Section, supported from the ceiling by Unistrut or equal racks mounted from the ceiling, or connected to cabinets or panels at locations shown on the plans.

109-3.7 WIRING AND CONNECTIONS. The Contractor shall make all necessary electrical connections in the regulator room in accordance with wiring diagrams furnished and as directed by the Engineer. Wiring for terminal blocks shall provide sufficient length on each control lead to make future changes in connections at the terminal block. This shall be accomplished by running each control lead the longest way around the box to the proper terminal. Leads shall then be neatly laced in place. All wiring shall be neatly cabled and fanned. Contractor shall provide complete interconnect drawings to Engineer for approval at least ten (10) days before work is to be scheduled.

109-3.8 RADIO CONTROL EQUIPMENT. The existing radio control and photocell shall be connected as shown on the plans to control operation of the runway and taxiway lights and PAPI units both during daylight hours and at night with and without radio control as shown on the plans.

Basis of Payment

109-5.1 Payment shall be made at the contract unit price for each 10 kW 6.6 amp regulator installed, complete in place, furnished and installed complete and operational, accepted by the Engineer.

Payment shall be made at contract lump sum price under the "Vault Labor and Equipment" item to complete all vault work and airfield lighting control systems in the vault that are not paid for separately. This lump sum price shall be full compensation for furnishing all new equipment and materials; for all preparation, assembly, and installation of all equipment and materials; and for all labor, equipment, tools, and incidentals necessary to complete this item of work and to provide a complete operating system as described in these specifications, as shown on the plans and as directed by the Engineer.

Payment will be made under:

Furnish and Install 10 kW, 6.6 amp. Regulator, Complete in Place (L-109)	-	per Each
Vault Labor and Equipment (L-109)	-	Lump Sum

FAA Specifications Referenced in Item L-109

<u>Number</u>	<u>Title</u>
AC 150/5340-30	Design and Installation Details for Airport Visual Aids
AC 150/5345-53	Airport Lighting Equipment Certification Program
AC 150/5345-7E	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-10F	Specification for Constant Current Regulators and Regulator Monitors
AC 150/5345-26C	Specification for L-823 Plug and Receptacle, Cable Connectors
AC 150/5345-47B	Isolation Transformers for Airport Lighting Systems

Federal Specifications Referenced in Item L-109

WW-C-581	Rigid Steel Conduit and Fittings
TT-E-527	Alkyd Enamel

ICEA Specifications Referenced in Item L-109

S-66-524 NEMA No. WC7-1971	Polyethylene-insulated Wire and Cable
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Federal Standards Referenced in Item L-109

FAA:STD-001	Finishes for Equipment
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ITEM L-110 AIRPORT UNDERGROUND ELECTRICAL DUCT BANKS AND CONDUIT

Description

110-1.1 This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete) installed in accordance with this specification at the locations and in accordance with the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all trenching, backfilling, removal, and restoration of any paved areas; concrete encasement, connection of new ducts to existing manholes, mandreling, pulling lines, duct markers, plugging of conduits, and testing of the installation as a completed system ready for installation of cables, in accordance with the plans and specifications and to the satisfaction of the Engineer. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.

All work and materials shall be in full accordance with requirements set forth in Section L-100 of these specifications.

Equipment and Materials

110-2.1 GENERAL.

(a) All equipment and materials covered by referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification when so requested by the Engineer.

(b) Manufacturer's certifications shall not relieve the Contractor of the Contractor's responsibility to provide materials in accordance with these specifications and acceptable to the Engineer. Materials supplied and/or installed that do not materially comply with these specifications shall be removed, when directed by the Engineer, and replaced with materials which do comply with these specifications, at the sole cost of the Contractor.

(c) All materials and equipment used to construct this item shall be submitted to the Engineer for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be boldly and clearly made with arrows or circles. Contractor is solely responsible for delays in project accruing directly or indirectly from late submissions or resubmissions of submittals.

(d) The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the plans and specifications. The Engineer reserves the right to reject any and all equipment, materials or procedures which, in the Engineer's opinion, do not meet the system design and the standards and codes specified herein.

(e) All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least one (1) year from final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

110-2.2 PLASTIC CONDUIT. All ducts shall consist of plastic conduit. The plastic conduit and fittings shall conform to the requirements of Fed. Spec. W-C-1094, Underwriters Laboratories Standards UL 651, and Article 347 of the current National Electrical Code and shall be one of the following, as shown on the plans:

(a) **Type I** - Type I ducts shall be concrete-encased. Concrete shall be Class B and shall develop a minimum compressive strength not less than 2000 psi in 28 days. Ducts shall be Schedule 40 PVC, Carlon PVC P&C Duct Type EB, PV-Duit Type A, or approved equal, installed at locations with size and number as shown on the plans. Conduit shall be supplied in 20-foot lengths. Connections, bending, cutting and installation shall be as recommended by the manufacturer.

(b) **Type II** - Type II ducts shall be direct burial duct. This duct shall be Carlon Type 40 PV-Duit, heavy wall Schedule 40 PVC, or approved equal installed at locations with size and number as shown on the plans. Connections, bending, cutting and installation shall be as recommended by the manufacturer.

(c) **Directional Bored Duct** – One-way, three-inch duct shall be directional bored under each cross taxiway as designated on the plans. The duct shall be located with a minimum of 18-inch cover. The duct shall be bored from two feet (2') beyond one edge of the taxiway to two feet (2') beyond the other edge of the taxiway, and the remaining portion of the duct excavated and placed as Type I duct into the new or existing L867 Size E pull boxes. The directional boring equipment shall be such that the Contractor can control alignment and depth of the duct and that no void exists around the duct after it is in place.

At Contractor's option, conduit for Type I Duct may be used for Type II Ducts, providing it is encased with concrete in accordance with the requirements for Type I Duct except that concrete shall develop a compressive strength of not less than 1500 psi when tested at 28 days.

The type of adhesive shall be as recommended by the conduit/fitting manufacturer.

110-2.3 CONDUIT SPACERS. Conduit spacers shall be prefabricated interlocking units manufactured for the intended purpose. They shall be of double wall construction made of high grade, high density polyethylene complete with interlocking cap and base pads. They shall be designed to accept No. 4 reinforcing bars installed vertically.

110-2.4 CONCRETE. The concrete shall conform to Section P-610, Structural Portland Cement Concrete, Class B, using 3/8-inch maximum size coarse aggregate. Concrete shall develop minimum compressive strengths stated.

110-2.5 REINFORCING STEEL. The reinforcing steel shall be of the size shown on the plans and shall conform to requirements of Section P-610 of these specifications.

110-2.6 DETECTABLE WARNING TAPE. Plastic, detectable, color as noted magnetic tape shall be polyethylene film with a metallized foil core and shall be 4-6 inches wide. Detectable tape is incidental to the respective bid item.

Construction Methods

110-3.1 GENERAL. The Contractor shall install underground duct banks and conduits at the approximate locations indicated on the plans. The Engineer shall indicate specific locations as the work progresses, if required to differ from the plans. Duct banks and conduits shall be of the size, material, and type indicated on the plans or specifications. Where no size is indicated in the plans or in the specifications, conduits shall be not less than 2 inches inside diameter or comply with the National Electrical Code based on cable to be installed, whichever is larger. All duct bank and conduit lines shall be laid to grade toward access points and duct or conduit ends for drainage where possible. Grade shall provide at least 3 inches drop per 100 feet. On runs where it is not practicable to maintain a one-way grade, the duct bank and conduit lines shall be graded from the center in both directions toward access points or conduit ends with a drain into the storm drainage system. Pockets or traps where moisture may accumulate shall be avoided. No duct bank or underground conduit shall be less than 18 inches below finished grade. Where under pavement, the top of the duct bank shall not be less than 18 inches below the subgrade.

The Contractor shall mandrel each individual conduit whether the conduit is direct-buried or part of a duct bank. An iron-shod mandrel not more than 1/4-inch smaller than the bore of the conduit shall be pushed or pulled through each conduit. All new ducts shall be mandreled after installation and prior to installation of cables or pull ropes.

The Contractor shall swab out all conduits/ducts and clean base can, manhole, pull boxes, etc., interiors immediately prior to pulling cable. Once cleaned and swabbed the base cans, manholes, pull boxes, etc. and all accessible points of entry to the duct/conduit system shall be kept closed except when installing cables. Cleaning of ducts, base cans, manholes, etc. is incidental to the pay item of the item being cleaned. All raceway systems left open, after initial cleaning, for any reason shall be re-cleaned at the Contractor's expense. All accessible points shall be kept closed when not installing cable. The Contractor shall verify existing ducts proposed for use in this project as clear and open. The Contractor shall notify the Engineer of any blockage in the existing ducts.

Each individual conduit, whether the conduit is direct-buried or part of a duct bank, shall be provided with a 1/4-inch or larger, 200 pound test polypropylene pull rope for pulling the permanent wire. The ends shall be secured and sufficient length left in access points to prevent it from slipping

back into the conduit. Where spare ducts are installed, as indicated on the plans, open ends shall be plugged with removable tapered plugs, designed by the duct manufacturers. Pull ropes installed in these spare ducts shall be tied to eyes provided on the plugs.

All conduits shall be securely fastened in place during construction and shall be plugged to prevent contamination from entering the conduits. Any conduit section having a defective joint shall be replaced. Ducts shall be supported and spaced apart using approved spacers at intervals not to exceed 5 feet.

Where new ducts enter existing handholes, manholes or other structures, Contractor shall provide a clean, neat opening of proper size to install the new duct. All ducts shall terminate in handholes or manholes with an approved end bell. New duct shall then be grouted into existing structure with an approved expansive grout. Contractor shall repair all damage to existing structures caused by his operations to satisfaction of the Engineer. No separate payment will be made for installation of new ducts into existing manholes, handholes or other structures.

Concrete encased duct banks shall be utilized when crossing under pavements expected to carry aircraft loads.

Where new ducts cross existing pavement, the pavement shall be cut to a neat, straight line prior to excavation. In addition, any areas of spalling or undermining of existing pavement along edges of the trench shall also be line-cut as directed by the Engineer.

Trenches for new conduits and duct banks may be excavated manually or with mechanical trenching equipment unless in pavement, in which case they shall be excavated with mechanical trenching equipment. Trenches excavated adjacent to or connecting to existing ducts or handholes shall be excavated by hand. Mechanical equipment will not be permitted. Walls of trenches shall be essentially vertical to minimize surface area disturbance. Blades of graders shall not be used to excavate the trench.

Contractor shall ascertain type of soil or rock to be excavated before bidding. When rock is encountered, the rock shall be removed to a depth of at least 3 inches below the required conduit or duct bank depth and it shall be replaced with bedding material of earth or sand containing no mineral aggregate particles that would be retained on a 1/4-inch sieve. All such rock removal shall be performed. This work will not be paid for separately but will be considered incidental to this item of work.

Underground electrical warning (caution) tape shall be installed in the trench above all underground duct banks and conduits in unpaved areas. Contractor shall submit a sample of the proposed warning tape for approval by the Engineer. If not shown on the plans, the warning tape shall be located six inches above the duct/conduit.

Joints in plastic conduit shall be prepared in accordance with the manufacturer's recommendations for the particular type of conduit. Plastic conduit shall be prepared by application of a plastic cleaner and brushing a plastic solvent on the outside of the conduit ends and on the inside of the couplings. The conduit fitting shall then be slipped together with a quick one-quarter turn twist to

set the joint tightly. Where more than one conduit is placed in a single trench, or in duct banks, joints in the conduit shall be staggered a minimum of 2 feet.

Where more than one duct is installed in a run, they shall be installed on suitable "chairs" and adequate spacers installed to assure uniform spacing and anchorage for the ducts. Spacers shall not exceed duct manufacturer's recommendations for size and type of duct. Unless otherwise specified, duct shall remain in the same relative position to each other throughout entire length of the run.

Changes in direction of runs exceeding 10 degrees, either vertical or horizontal, shall be accomplished using manufactured sweep bends.

Whether or not specifically indicated on the drawings, where the soil encountered at established duct bank grade is an unsuitable material, as determined by the Engineer, the unsuitable material shall be removed and replaced with suitable material. Alternatively, additional duct bank supports that are adequate and stable shall be installed, as approved by the Engineer.

All excavation shall be unclassified and shall be considered incidental to the respective L-110 pay item of which it is a component part. Dewatering necessary for duct installation, erosion and turbidity control, in accordance with Federal, State and Local requirements, is incidental to its respective pay item as a part of Item L-110. The cost of all excavation, regardless of type of material encountered, shall be included in the unit price bid for the L-110 item.

Unless otherwise specified, excavated materials that are deemed by the Engineer to be unsuitable for use in backfill or embankments shall be removed and disposed of off site.

Any excess excavation shall be filled with suitable material approved by the Engineer and compacted.

The Contractor shall install sufficient shoring and bracing to insure safety of workmen, protect the work, and protect adjacent improvements. Shoring and bracing shall comply with the rules, orders, and regulations of the California Division of Industrial Safety. The Contractor shall submit a plan for protection of workmen.

Insofar as possible, sheeting shall not extend below duct bottom. All sheeting, timbering, lagging, and bracing shall, unless otherwise required by the Engineer, be removed during backfilling, and in such a manner to prevent movement of ground or damage to duct or other structures. When the Engineer requires that sheet piling, lagging, and bracing be left in place, such materials shall be cut off where designated and upper parts withdrawn. If steel piling is utilized, it may be withdrawn with compacting of backfill to proceed as it is removed.

Failure to comply with any of the rules, orders, or regulations mentioned herein shall be sufficient cause for, but shall not place any responsibility upon, the Engineer to immediately suspend the work. Contractor shall be responsible for adequacy of all shoring and bracing and compliance with law, and failure of the Engineer to suspend work or notify the Contractor of any inadequacy of shoring and bracing or non-compliance with the law shall not relieve the Contractor of this

responsibility. Compensation for losses incurred by the Contractor for any such suspension will not be allowed.

No separate payment will be made for shoring and bracing or for supplies required for placing and removal of shoring and bracing as herein specified. These costs shall be considered incidental to the work and no separate payment will be made therefor.

It is the Contractor's responsibility to locate existing utilities within the work area prior to excavation. Where existing active cables cross proposed installations, the Contractor shall insure that these cable(s) are adequately protected. Where crossings are unavoidable, no splices will be allowed in the existing cables, except as specified on the plans. Installation of new cable where such crossings must occur shall proceed as follows:

(a) Existing cables shall be located manually. Unearthed cables shall be inspected to assure absolutely no damage has occurred.

(b) Trenching, etc. in cable areas shall then proceed with approval of the Engineer, with care taken to minimize possible damage or disruption of existing cable, including careful backfilling in area of cable.

In the event that any previously identified cable is damaged during the course of construction, the Contractor shall be responsible for the complete repair.

110-3.2 DUCT BANKS. Unless otherwise shown in the plans, duct banks shall be installed so that the top of concrete envelope is not less than 18 inches below the bottom of the base course layers where installed under runways, taxiways, aprons, or other paved areas, and not less than 18 inches below finished grade where installed in unpaved areas.

Unless otherwise shown on the plans, duct banks under paved areas shall extend at least 3 feet beyond edges of pavement or 3 feet beyond any underdrains which may be installed alongside paved areas. Trenches for duct banks shall be opened complete length within the scheduled work area before concrete is placed so that if any obstructions are encountered, proper provisions can be made to avoid them. All duct banks shall have concrete not less than 3 inches thick beneath the duct. Where two or more conduits in the duct bank are intended to carry conductors of equivalent voltage insulation rating, the Contractor shall space the conduits not less than 1-1/2 inches apart (measured from outside wall to outside wall) using prefabricated plastic spacers appropriate for the type of duct unless otherwise shown on the plans. Where two or more conduits in the duct bank are intended to carry conductors of differing voltage insulation rating, the Contractor shall space the conduits not less than 3 inches apart (measured from outside wall to outside wall). As conduit laying progresses, concrete not less than 3 inches thick shall be placed around sides and top of the conduits. End bells or couplings shall be installed flush with the concrete encasement at access points.

Conduits forming the duct bank shall be installed using conduit spacers. No. 4 reinforcing bars shall be driven vertically into the soil a minimum of 6 inches to anchor the assembly into the earth prior to placing the concrete encasement. For this purpose, the spacers shall be fastened down with

locking collars attached to the vertical bars. Spacers shall be installed at 5-foot intervals. Spacers shall be in the proper sizes and configurations to fit the conduits. Locking collars and spacers shall be submitted to the Engineer for review prior to use.

All pavement surfaces that are to have ducts installed therein shall be neatly saw cut to form a vertical face. All excavation shall be included in the contract price for the duct.

Install a plastic, detectable, color as noted, 4-6 inch wide tape 8 inches minimum below grade above all underground conduit or duct lines not installed under pavement.

When existing cables are to be placed in split duct, encased in concrete, the cable shall be carefully located and exposed by hand tools. Prior to being placed in duct, the Engineer shall be notified so that he may inspect the cable and determine that it is in good condition. Where required, split duct shall be installed as shown on the drawings or as required by the Engineer.

110-3.3 CONDUITS WITHOUT CONCRETE ENCASEMENT. Trenches for single-conduit lines shall be not less than 6 inches nor more than 12 inches wide, and the trench for 2 or more conduits installed at the same level shall be proportionately wider. Trench bottoms for conduits without concrete encasement shall be made to conform accurately to grade so as to provide uniform support for the conduit along its entire length.

A layer of bedding material, at least 4 inches thick (loose measurement) shall be placed in the trench bottom. Bedding material shall consist of sand, and it shall contain no particles that would be retained on a 1/4-inch sieve, and have no more than 10 percent passing a No. 200 sieve. Sand shall have a plasticity index less than 6. Bedding material shall be tamped until firm.

Unless otherwise shown in plans, conduits for direct burial shall be installed so that the tops of all conduits are at least 24 inches below finished grade.

Where two or more individual conduits intended to carry conductors of equivalent voltage insulation rating are installed in the same trench without concrete encasement, they shall be spaced not less than 2 inches apart (measured from outside wall to outside wall) in a horizontal direction and not less than 6 inches apart in a vertical direction. Where two or more individual conduits intended to carry conductors of differing voltage insulation rating are installed in the same trench without concrete encasement, they shall be spaced not less than 3 inches apart (measured from outside wall to outside wall) in a horizontal direction and not less than 6 inches apart in a vertical direction.

Trenches shall be opened the complete length between normal termination points before conduit is installed so that if any obstructions are encountered, proper provisions can be made to avoid them.

Conduits shall be installed using conduit spacers. No. 4 reinforcing bars shall be driven vertically into the soil a minimum of 6 inches to anchor the assembly into the earth while backfilling. For this purpose, the spacers shall be fastened down with locking collars attached to the vertical bars. Spacers shall be installed at 5-foot intervals. Spacers shall be in the proper sizes and configurations

to fit the conduits. Locking collars and spacers shall be submitted to the Engineer for review prior to use.

110-3.4 BACKFILLING FOR CONDUITS. For conduits, 8 inches of sand (loose measurement) shall be placed around the conduits and carefully tamped around and over them with hand tampers. The remaining trench shall then be backfilled and compacted in accordance with the plans. Material used for backfill shall be select material not larger than 4 inches in diameter.

The trenches shall not be excessively wet and shall not contain pools of water during backfilling operations.

The trench shall be completely backfilled and tamped level with adjacent surface; except that, where sod is to be placed over the trench, backfilling shall be stopped at a depth equal to thickness of sod to be used, with proper allowance for settlement.

Any excess excavated material shall be removed and disposed of on Airport property in the location as shown on the plans or as directed by the Engineer.

110-3.5 BACKFILLING FOR DUCT BANKS. After concrete-encased ducts have been properly installed and concrete has had time to set, trench shall be backfilled in accordance with the details as shown on the plans for paved and unpaved areas. Where duct banks are installed under pavement one moisture/density test per lift shall be made for each 250 linear feet of duct bank or one work period's construction, whichever is less. If necessary to obtain desired compaction, backfill material shall be moistened or aerated as required.

The trenches shall not be excessively wet and shall not contain pools of water during backfilling operations.

The trench shall be completely backfilled and tamped level with adjacent surface; except that, where sod is to be placed over the trench, backfilling shall be stopped at a depth equal to thickness of sod to be used, with proper allowance for settlement.

Any excess excavated material shall be removed and disposed of on Airport property in the location as shown on the plans or as directed by the Engineer.

110-3.6 RESTORATION. All areas disturbed by the trenching, storing of dirt, cable laying, pad construction and other work shall be restored to its original condition. Restoration shall include any necessary backfilling, compaction, or regrading. The Contractor shall be held responsible for maintaining all disturbed surfaces and replacements until final acceptance.

Where ducts are installed in paved areas the pavement section shall be restored as shown on the plans.

Method of Measurement

110-4.1 The quantity of underground conduits and duct banks to be paid for under this item shall be the number of linear feet of conduits and duct banks installed, measured in place, completed, and accepted. This quantity shall include encasement, locator tape, and trenching and backfill with designated resolution. Separate measurement shall be made for the various types and sizes. No measurement or payment shall be made for existing duct removed.

No separate measurement will be made for extending conduits into or around new or existing manholes or pull boxes. The measurement of conduit in these areas will be for the total conduit system for the full distance including the manhole or pull box.

Basis of Payment

110-5.1 Payment will be made at contract unit prices for each type and size of single-way or multi-way conduit and duct bank completed and accepted including trench and backfill with the designated material. These prices shall be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials; and for all labor, equipment, tools, and incidentals necessary to complete these items.

Payment will be made under:

Underground Electrical Duct, Type II, 1-way, 2-inch (L-110)	-	per Ln. Ft.
Underground Electrical Duct, Type I, 2-way, 4-inch (L-110)	-	per Ln. Ft.
Underground Electrical Duct, Type I, 1-way, 3-inch (L-110)	-	per Ln. Ft.
Directional Bored Duct, 1-way, 3-inch (L-110)	-	per Ln. Ft.

Material Requirements

<u>Number</u>	<u>Title</u>
Fed. Spec. W-C-1094	Conduit and Conduit Fittings; Plastic, Rigid (Canceled – Replaced by UL 514 Boxes, Nonmetallic Outlet, Flush Device Boxes & Covers, and UL 651 Standard for Conduit & Hope Conduit, Type EB & A Rigid PVC)
UL 651	Schedule 40 and 80 Rigid PVC Conduit

Testing Requirements

ASTM D 1557	Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort
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**** END OF SECTION ****

ITEM L-115 ELECTRICAL MANHOLES AND JUNCTION STRUCTURES

Description

115-1.1 This item shall consist of electrical manholes and junction structures (handholes, pull boxes, junction cans, etc.) installed in accordance with this specification, at the indicated locations and conforming to the lines, grades, and dimensions shown on the plans or as required by the Engineer. This item shall include the installation of each electrical manhole and/or junction structure with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the Engineer.

Equipment and Materials

115-2.1 GENERAL.

(a) All equipment and materials covered by referenced specifications shall be subject to acceptance through manufacturer's certification of compliance with the applicable specification when so requested by the Engineer.

(b) Manufacturer's certifications shall not relieve the Contractor of the Contractor's responsibility to provide materials in accordance with these specifications and acceptable to the Engineer. Materials supplied and/or installed that do not materially comply with these specifications shall be removed, when directed by the Engineer, and replaced with materials which do comply with these specifications, at the sole cost of the Contractor.

(c) All materials and equipment used to construct this item shall be submitted to the Engineer for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Submittal data shall be presented in a clear, precise and thorough manner. Original catalog sheets are preferred. Photocopies are acceptable provided they are as good a quality as the original. Clearly and boldly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be boldly and clearly made with arrows or circles. Contractor is solely responsible for delays in project accruing directly or indirectly from late submissions or resubmissions of submittals.

(d) The data submitted shall be sufficient, in the opinion of the Engineer, to determine compliance with the plans and specifications. The Engineer reserves the right to reject any and all equipment, materials or procedures which, in the Engineer's opinion, do not meet the system design and the standards and codes specified herein.

(e) All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least one (1) year from

final acceptance by the Owner. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

115-2.2 L-867 HANDHOLES. L-867 handholes shall conform to requirements of AC 150/5345-42F, "Specification for Airport Light Bases, Transformer Houses, Junction Boxes, and Accessories," and shall be Type L-867, Class I or II, Size E (24" diameter) as shown on the plans, and 36 inches deep. Covers shall be 3/8-inch thick galvanized steel plates in unpaved areas and 3/4-inch thick plates in paved areas. Cover shall conform to requirements of AC 150/5345-42F. Non-metal bases shall be supplied with all-metal tops.

115-2.3 JUNCTION CANS. Junction cans shall be L-867 Class I (non load bearing) cans encased in concrete. The cans shall have a galvanized steel blank cover, gasket, and stainless steel hardware. Covers shall be 3/8-inch thickness.

115-2.4 MORTAR. The mortar shall be composed of one part of Portland cement and two parts of mortar sand, by volume. The Portland cement shall conform to the requirements of ASTM C 150, Type I. The sand shall conform to the requirements of ASTM C 144. Hydrated lime may be added to the mixture of sand and cement in an amount not to exceed 15 percent of the weight of cement used. The hydrated lime shall meet the requirements of ASTM C 6. The water shall be clean and free of deleterious amounts of acid, alkalis or organic material. If the water is of questionable quality, it shall be tested in accordance with AASHTO T-26.

115-2.5 CONCRETE. All concrete used in structures shall conform to the requirements of Item P-610, Structural Portland Cement Concrete, of these specifications.

115-2.6 FRAMES AND COVERS. The frames shall conform to one of the following requirements:

- a. Gray iron castings shall meet the requirements of ASTM A 48.
- b. Malleable iron castings shall meet the requirements of ASTM A 47.
- c. Steel castings shall meet the requirements of ASTM A 27.
- d. Structural steel for frames shall conform to the requirements of ASTM A-283, Grade D.
- e. Ductile iron castings shall conform to the requirements of ASTM A 536.
- f. Austempered ductile iron castings shall conform to the requirements of ASTM A 897.

All castings shall be designed to support an aircraft weighing 80,000 pounds with dual wheel landing gear.

All castings or structural steel units shall conform to the dimensions shown on the plans and shall be designed to support the loadings specified.

Each frame and cover unit shall be provided with fastening members to prevent it from being dislodged by traffic, but which will allow easy removal for access to the structure.

All castings shall be thoroughly cleaned. After fabrication, structural steel units shall be galvanized to meet the requirements of ASTM A 123.

Each cover shall have the word "ELECTRIC" or other approved designation cast on it. Each frame and cover shall be as shown on the plans or approved equivalent. No cable notches are required.

115-2.7 LADDERS. Ladders, if specified, shall be galvanized steel or as shown on the plans.

115-2.8 REINFORCING STEEL. All reinforcing steel shall be deformed bars of new billet steel meeting the requirements of ASTM A 615, Grade 60.

115-2.9 BEDDING/SPECIAL BACKFILL. Bedding or special backfill shall be as shown on the plans

115-2.10 PLASTIC CONDUIT. Plastic conduit shall comply with Item L-110, Airport Underground Electrical Duct Banks and Conduits.

115-2.11 CONDUIT TERMINATORS. Conduit terminators shall be pre-manufactured for the specific purpose and sized as required or as shown on the plans.

115-2.12 PULLING-IN IRONS. Pulling-in irons shall be manufactured with 7/8-inch diameter hot-dipped galvanized steel or stress-relieved carbon steel roping designed for concrete applications (7 strand, 1/2-inch diameter with an ultimate strength of 270,000 psi). Where stress-relieved carbon steel roping is used, a rustproof sleeve shall be installed at the hooking point and all exposed surfaces shall be encapsulated with a polyester coating to prevent corrosion.

115-2.13 GROUND RODS. Ground rods shall be one piece copper. The ground rods shall be of the length and diameter specified on the plans, but in no case shall they be less than 8 feet long or less than 5/8-inch in diameter.

Construction Methods

115-3.1 UNCLASSIFIED EXCAVATION. It is the Contractor's responsibility to locate existing utilities within the work area prior to excavation. Damage to utility lines, through lack of care in excavating, shall be repaired or replaced to the satisfaction of the Engineer without additional expense to the Owner.

The Contractor shall perform excavation for structures and structure footings to the lines and grades or elevations shown on the plans or as staked by the Engineer. The excavation shall be of sufficient size to permit the placing of the full width and length of the structure or structure footings shown.

All excavation shall be unclassified and shall be considered incidental to the respective L-115 pay item of which it is a component part. Dewatering necessary for L-115 structure installation, erosion and turbidity control, in accordance with Federal, State and Local requirements is incidental to its respective pay item as a part of Item L-115. The cost of all excavation, regardless of type of material encountered, shall be included in the unit price bid for the L-115 item.

Boulders, logs or all other objectionable material encountered in excavation shall be removed. All rock and other hard foundation material shall be cleaned of all loose material and cut to a firm surface either level, stepped or serrated, as directed by the Engineer. All seams, crevices, disintegrated rock and thin strata shall be removed. When concrete is to rest on a surface other than rock, special care shall be taken not to disturb the bottom of the excavation. Excavation to final grade shall not be made until just before the concrete or reinforcing is to be placed.

The Contractor shall provide all bracing, sheeting, and shoring necessary to implement and protect the excavation and the structure as required for safety or conformance to governing laws. The cost of bracing, sheeting and shoring shall be included in the unit price bid for the structure.

Unless otherwise provided, bracing, sheeting and shoring involved in the construction of this item shall be removed by the Contractor after the completion of the structure. Removal shall be effected in a manner that will not disturb or mar finished masonry. The cost of removal shall be included in the unit price bid for the structure.

After each excavation is completed, the Contractor shall notify the Engineer. Structures shall be placed after the Engineer has approved the depth of the excavation and the suitability of the foundation material.

Prior to installation, The Contractor shall provide a minimum of six (6) inches of sand or a material approved by the Engineer as a suitable base to receive the structure. The base material shall be compacted and graded level and at proper elevation to receive the structure in proper relation to the conduit grade or ground cover requirements, as indicated on the plans.

115-3.2 CONCRETE STRUCTURES. Concrete structures shall be built on prepared foundations conforming to the dimensions and form indicated on the plans. The concrete and construction methods shall conform to the requirements specified in Item P-610. Any reinforcement required shall be placed as indicated on the plans and shall be approved by the Engineer before the concrete is placed.

115-3.3 PRECAST UNIT INSTALLATIONS. Precast units shall be installed plumb and true. Joints shall be made watertight by use of sealant at each tongue-and-groove joint and at roof of manhole. Excess sealant shall be removed and severe surface projections on exterior of neck shall be removed.

115-3.4 PLACEMENT AND TREATMENT OF CASTINGS, FRAMES AND FITTINGS.

All castings, frames and fittings shall be placed in the positions indicated on the plans or as directed by the Engineer and shall be set true to line and to correct elevation. If frames or fittings are to be set in concrete or cement mortar, all anchors or bolts shall be in place and position before the concrete or mortar is placed. The unit shall not be disturbed until the mortar or concrete has set.

Field connections shall be made with bolts, unless indicated otherwise. Welding will not be permitted unless shown otherwise on the approved shop drawings and written permission is granted by the casting manufacturer. Erection equipment shall be suitable and safe for the workers. Errors in shop fabrication or deformation resulting from handling and transportation that prevent the proper assembly and fitting of parts shall be reported immediately to the Engineer and approval of the method of correction shall be obtained. Approved corrections shall be made at Contractor's expense.

Anchor bolts and anchors shall be properly located and built into connection work. Bolts and anchors shall be preset by the use of templates or such other methods as may be required to locate the anchors and anchor bolts accurately.

Pulling-in irons shall be located opposite all conduit entrances into structures to provide a strong, convenient attachment for pulling-in blocks when installing cable. Pulling-in irons shall be set directly into the concrete walls of the structure.

115-3.5 INSTALLATION OF LADDERS. Ladders shall be installed such that they may be removed if necessary. Mounting brackets shall be supplied top and bottom and shall be cast in place during fabrication of the structure or drilled and grouted in place after erection of the structure.

115-3.6 REMOVAL OF SHEETING AND BRACING. In general, all sheeting and bracing used to support the sides of trenches or other open excavations shall be withdrawn as the trenches or other open excavations are being refilled. That portion of the sheeting extending below the top of a structure shall be withdrawn, unless otherwise directed, before more than six (6) inches of material is placed above the top of the structure and before any bracing is removed. Voids left by the sheeting shall be carefully refilled with selected material and rammed tight with tools especially adapted for the purpose or otherwise as may be approved.

The Engineer may order the Contractor to delay the removal of sheeting and bracing if, in his judgment, the installed work has not attained the necessary strength to permit placing of backfill.

115-3.7 BACKFILLING. After a structure has been completed, the area around it shall be backfilled in horizontal layers not to exceed six (6) inches in thickness measured after compaction to the dry density of 95 percent minimum. Each layer shall be deposited all around the structure to approximately the same elevation. The top of the fill shall meet the elevation shown on the plans or as directed by the Engineer.

Backfill shall not be placed against any structure until permission is given by the Engineer. In the case of concrete, such permission shall not be given until tests made by the laboratory under supervision of the Engineer establish that the concrete has attained sufficient strength to provide a factor of safety against damage or strain in withstanding any pressure created by the backfill or the methods used in placing it.

Where required, the Engineer may direct the Contractor to add, at his own expense, sufficient water during compaction to assure a complete consolidation of the backfill. The Contractor shall be responsible for all damage or injury done to conduits, duct banks, structures, property or persons due to improper placing or compacting of backfill.

115-3.8 CONNECTION OF DUCT BANKS. To relieve stress of joint between concrete-encased duct banks and structure walls, reinforcement rods shall be placed in the structure wall and shall be formed and tied into duct bank reinforcement at the time the duct bank is installed.

115-3.9 GROUNDING. A ground rod shall be installed in the floor of all concrete structures so that the top of rod extends 6 inches above the floor. The ground rod shall be installed within 1 foot of a corner of the concrete structure. Ground rods shall be installed prior to casting the bottom slab. Where the soil condition does not permit driving the ground rod into the earth without damage to the ground rod, the Contractor shall drill a 4-inch diameter hole into the earth to receive the ground rod. The hole around the ground rod shall be filled throughout its length, below slab, with Portland cement grout. Ground rods shall be installed in precast bottom slab of structures by drilling a hole through bottom slab and installing the ground rod. Bottom slab penetration shall be sealed watertight with Portland cement grout around the ground rod.

A grounding bus of 4/0 bare stranded copper shall be exothermically bonded to the ground rod and loop the concrete structure walls. The ground bus shall be a minimum of 1 foot above the floor of the structure and separate from other cables. No. 2 AWG bare copper pigtails shall bond the grounding bus to all cable trays and other metal hardware within the concrete structure. Connections to the grounding bus shall be exothermic. Hardware connections may be mechanical, using a lug designed for that purpose.

115-3.10 CLEANUP AND REPAIR. After erection of all galvanized items, damaged areas shall be repaired by applying a liquid cold-galvanizing compound conforming MIL-P-21035. Surfaces shall be prepared and compound applied in accordance with manufacturer's recommendations.

Prior to acceptance, the entire structure shall be cleaned of all dirt and debris.

115-3.11 RESTORATION. After the backfill is completed, the Contractor shall dispose of all surplus material, dirt and rubbish from the site. The Contractor shall restore all disturbed areas equivalent to or better than their original condition. All sodding, grading and restoration shall be considered incidental to the respective L-115 pay item.

The Contractor shall grade around structures as required to provide positive drainage away from the structure.

Areas with special surface treatment, such as roads, sidewalks, or other paved areas shall have backfill compacted to match surrounding areas, and surfaces shall be repaired using materials comparable to original materials.

After all work is completed, the Contractor shall remove all tools and other equipment, leaving the entire site free, clear and in good condition.

115-3.12 INSPECTION. Prior to final approval, the electrical structures shall be thoroughly inspected for conformance with the plans and this specification. Any indication of defects in materials or workmanship shall be further investigated and corrected. The earth resistance to ground of each ground rod shall not exceed 25 ohms. Each ground rod shall be tested utilizing the fall-of-potential ground impedance test as described by ANSI IEEE Standard 81. This test shall be performed prior to establishing connections to other ground electrodes.

115-3.13 DUCT EXTENSION TO EXISTING DUCTS. Where existing concrete encased ducts are to be extended, the duct extension shall be concrete encased plastic conduit. The fittings to connect the ducts together shall be standard manufactured connectors designed and approved for the purpose. The duct extensions shall be installed according to the concrete encased duct detail and as shown on the plans.

Method of Measurement and Basis of Payment

115-4.1 Payment will be made at the contract unit price for each size and type of handhole furnished and placed, accepted by the Engineer.

Payment for identification marking for all electrical handholes shall be included in unit prices for the item.

This price shall be full compensation for furnishing all materials, for all preparation, assembly and installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Furnish and Install L-867 Size E Pull Box , Complete in Place (L-115)	-	per Each
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Material Requirements

ANSI/IEEE Std 81	IEEE Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System
AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-26	Specification for L-823 Plug and Receptacle Cable Connectors
AC 150/5345-42	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories
FED SPEC J-C-30	Cable and Wire, Electrical Power, Fixed Installation (cancelled; replaced by AA-59544 Cable and Wire, Electrical (Power, Fixed Installation))
ASTM B.3	Soft or Annealed Copper Wire
ASTM B.8	Concentric-Lay-Stranded Copper Conductor, Hard, Medium-Hard, or Soft

**** END OF SECTION ****

ITEM L-125 INSTALLATION OF AIRPORT LIGHTING SYSTEMS

Description

125-1.0 This item consists of the following:

- Removing existing stake-mounted runway lights.
- Furnishing and installing new runway edge lights with new light bases.
- Furnishing and installing new 100-watt transformers to provide power to existing airfield guidance signs.
- Furnishing and installing new Precision Approach Path Indicator (PAPI).

This work shall be accomplished in accordance with these specifications, referenced standards and specifications and the applicable Advisory Circulars. The systems are to be installed at the location and in accordance with the dimensions, design and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the Engineer.

Where new cable or duct is to be installed adjacent to or connected to existing cable or duct, the excavation shall be by hand; no mechanical equipment shall be used.

All work and materials shall be in full accordance with requirements set forth in Section L-100 of these specifications.

125-1.2 Additional details pertaining to a specific system covered in this item are contained in the advisory circulars listed as follows:

- (a) AC 150/5345-53C, Airport Lighting Equipment Certification Program
- (b) AC 150/5340-30C, Design and Installation Details for Airport Visual Aids
- (c) AC 150/5345-28F, Precision Approach Path Indicator (PAPI) Systems
- (d) AC 150/5345-46C, Specification for Runway and Taxiway Light Fixtures

Equipment and Material

125-2.1 GENERAL.

(a) The airport lighting equipment and materials covered by FAA specifications shall have the prior approval of the Federal Aviation Administration, Airports Service, Washington, D.C. 20591, and shall be listed in Advisory Circular 150/5345-53, Airport Lighting Equipment Certification Program, latest edition.

(b) All other equipment and materials covered by other referenced specifications shall be subject to acceptance through the manufacturer's certification of compliance with the applicable specifications.

(c) Lists of the equipment and materials required for a particular system are contained in the applicable advisory circulars.

(d) Prior to installation, the Contractor shall submit eight copies of shop drawings of all proposed materials and equipment to the Engineer for approval.

(e) All materials and equipment shall be FAA-approved and/or listed by the Underwriters' Laboratory, except as called for in these specifications.

(f) **Light Bases.** All light bases and handholes shall conform to AC 150/5345-42F "Specification for Airport Light Bases, Transformer Houses, Junction Boxes and Accessories" and shall be Type L867 Class I or II, conforming to the size and requirements as shown on the plans. Non-steel bases shall have an all-metal top. All L867 light bases for runway edge lights and L867 handholes shall have precast concrete rings and shall be adjustable.

125-2.2 MEDIUM INTENSITY RUNWAY EDGE LIGHTS. Medium intensity runway edge lights shall conform to the requirements of AC 150/5345-46C, "Specification for Runway and Taxiway Light Fixtures." Base-mounted runway edge lights shall be Mode 1, 6.6 amp, Type L-861 with 45-watt incandescent or quartz lamps and glass lenses.

The color of the lens or filter shall be as shown on the plans.

Lights shall be mounted such that the top of the light is 14 inches above the ground.

Isolation transformers shall conform to the requirements of AC 150/5345-47B, "Series to Series Isolation Transformers for Airport Lighting Systems" and shall be Type L830-1. All transformers for medium intensity runway edge lights and signs shall be 6.6 amp primary and 6.6 amp secondary.

Light bases shall conform to AC 150/5345-42F, "Specification for Airport Light Bases, Transformer Houses, Junction Boxes, and Accessories," and shall be of the type and size shown on the plans.

125-2.3 PRECISION APPROACH PATH INDICATOR (PAPI) SYSTEMS. A new 2-box PAPI shall be installed for Runway 23. The materials and installation shall conform to AC 150/5345-28F, "Precision Approach Path Indicator (PAPI) Systems," to the manufacturer's instructions and to the details as shown on the plans. The PAPI shall be Type L-881, Style A, Class I or II with Lamp Bypass device.

The power for the PAPI shall be from the existing 120/240 volt distribution panel as shown on the plans.

The PAPI units shall be furnished with one tilt switch level and one optical bench.

125-2.4 PAPI CONTROL UNIT. The PAPI control unit shall be furnished and installed in accordance with the requirements set forth on the plans. The PAPI control unit shall control the PAPI to operate in the following manner:

- (a) During daylight hours the PAPI unit shall be on at all times.
- (b) After dusk the PAPI unit shall be controlled by the radio controller such that it comes on when the runway lights come on and goes off when the runway lights go off. The control unit shall be energized by the secondary power from an L830 series transformer connected in series to the runway edge lighting circuit.

125-2.5 SERVICE ROAD. A new service road shall be constructed to serve the PAPI units from the runway. Soil shall be excavated to provide for six inches (6") of aggregate base course and then the existing subgrade in the roadway section shall be scarified to a depth of six inches (6") and recompacted to a relative compaction of 95 percent based on ASTM D 1557. After the subgrade has been compacted, the subgrade surface shall be finish graded to subgrade level and then six inches (6") of aggregate base course shall be placed and compacted to 95 percent of maximum dry density obtained from the ASTM D 1557 compaction test. Aggregate base course shall meet the requirements of the State of California Department of Transportation Standard Specifications Section 26, Class 2.

125-2.6 TAPE. Rubber and plastic electrical tapes shall be Scotch Electrical Tape Number 33 as manufactured by the Minnesota Mining and Electrical Company, or an approved equal.

125-2.7 CONCRETE. Concrete and reinforcing steel shall meet requirements of Section P-610 of these specifications. The concrete shall be Class A and shall have a compressive strength of not less than 3,000 PSI in 28 days unless otherwise noted on the plans.

125-2.8 CONDUIT. Rigid steel conduit and fittings shall conform to the requirements of Federal Specification WW-C-581.

125-2.9 DUCT. PVC duct shall conform to the requirements of Section L-110 of these specifications.

125-2.10 INSTRUCTION MANUAL. Eight copies of instruction manuals shall be furnished for all new lights and PAPI units. This manual shall contain at least the following information:

- a. Diagram showing layout of parts and wiring.
- b. Complete parts list with their part numbers and the names and addresses of the component suppliers.
- c. Assembly and installation instructions, including dimensions, recommended torque and special mounting requirements.

- d. Maintenance instructions, including durability information on yield devices for elevated lights.

Construction Methods

125-3.1 GENERAL. The inspection and testing of airfield lighting systems will be required during the progress of construction. These tests and acceptance during the progress of construction are very important, as many components of certain of the systems will not be accessible for corrective action after final installation.

125-3.2 PLACING LIGHTS. The new light fixtures shall be installed at the location indicated and in accordance with the details shown on the plans, or as directed by the Engineer.

All light fixtures shall be placed and leveled so that the light fixture is within 1 degree of being level. The light fixtures shall also be aligned such that the centerline of all light fixtures is the same distance from the centerline of the pavement section within a maximum tolerance of 0.04 ft. The light base shall maintain the specified tolerances of 1 degree maximum tilt, ∇ 0.04 ft. maximum alignment discrepancy and 0.06 ft. maximum settlement below edge of surrounding soil for a period of one (1) year after the project is accepted, or the Contractor shall correct the deficiencies under the guarantee.

Light units and lamps which are damaged by the Contractor shall be replaced with new at no additional expense to the Owner.

125-3.3 REMOVAL OF EXISTING LIGHTS. The existing Runway 5-23 edge lights are stake mounted. The stake-mounted lights and transformers shall be removed and disposed of by the Contractor except for the lenses, which will be delivered to the Owner.

125-3.4 PLACING PAPI. The new PAPI shall be installed at the location indicated and in accordance with the details shown on the plans, or as directed by the Engineer.

Existing light units and lamps which are damaged by the Contractor shall be replaced with new at no additional expense to the Owner.

125-3.5 SERVICE ROAD. The service road shall be placed at the location and grades shown on the plans and these specifications. The cost of furnishing all materials, labor, and equipment to construct this service road will be included in the lump sum price for furnishing and installing the new PAPI.

125-3.6 REMOVAL OF EXISTING VASI SYSTEM. The existing VASI system shall be removed including all equipment above the foundations, including the mounting bolts. The removed VASI system shall be delivered to Airport Maintenance. The cost of removing the existing VASI system shall be included in the lump sum price for furnishing and installing the new PAPI.

125-3.7 TESTING. During the progress of the work and prior to final inspection, the Contractor shall inspect the airfield lighting installation for the items as listed below and verify that the equipment has been installed in accordance with these specifications.

- (a) The installed light unit is inspected to determine if the equipment has been installed at the proper elevation.
- (b) The alignment of all units is checked to determine if all lighting fixtures have been installed in accordance with design and installation requirements.
- (c) The fixtures are checked to determine if the securing screws have been tightened in accordance with manufacturer's recommendations.
- (d) The lighting fixtures are visually inspected to determine if the lenses and channels in front of the lenses are clean.

All lamps in all light fixtures shall be installed for checkout. The Contractor shall be aware that operations with excessive open isolation transformer loads can damage a monocyclus-type resonant circuit regulator, and any such damage shall be remedied by the Contractor.

The open-circuit protective device shall be checked, then allowed a five-minute cooling period before rechecking. Continuous cycling of the protective device can overheat and burn out the thermal relay.

The complete system shall be checked by continuous operation for not less than one-half hour as a complete system including the functioning of each control not less than 10 times. Test the completed circuits in accordance with the applicable provisions of Section L-108 of these specifications.

The Contractor shall check all cables, wiring and splices to obtain assurance that the installation is in accordance with Section L-108 of these specifications. Check underground cable and wire before the installation is completed.

Method of Measurement and Basis of Payment

125-4.1 Removing the existing runway lights, including the mounting stakes, transformer and light, will be paid for at the contract lump sum price.

The quantity of new runway edge lights to be paid under this section shall be paid for by the number of lights, including new light, transformer, lamp, light base, etc., furnished and installed.

Payment for furnishing and installing new 100-watt L830 series transformers in the existing guidance sign circuit will be at the unit cost for each transformer furnished and installed.

Payment for the 2-box Precision Approach Path Indicator (PAPI) system installed under this section shall be on a lump sum basis for the 2-box PAPI unit furnished and installed complete in place and accepted by the Engineer. This lump sum price shall include the cables from the power control unit to the individual light units, PAPI control unit, photocell and all other materials and equipment necessary to complete the item and make it operational. Removing the existing VASI system shall be included in the bid price for the new PAPI. Construction of the service road to the PAPI shall be included in the bid price for the new PAPI.

The aforementioned measurements and payments shall be full compensation for furnishing all materials and for furnishing all labor, equipment, tools, and incidentals necessary to complete the respective items of work.

Payment for the L867 handholes to be installed with specific items of work will be paid for as part of that specific item of work and no separate payment shall be made therefor.

Payment will be made under:

Remove Existing Stake-Mounted Runway Edge Lights (L-125)	-	Lump Sum
New Medium Intensity Runway Edge Lights, Base-Mounted, Complete in Place (L-125)	-	per Each
Furnish and Install 100-watt Transformers For Existing Airfield Guidance Signs (L-125)	-	per Each
Furnish and Install New 2-box Precision Approach Path Indicator (PAPI), Complete in Place (L-125)	-	Lump Sum

FAA Specifications Referenced in Item L-125

<u>Number</u>	<u>Title</u>
AC 150/5340-30C	Design and Installation Details for Airport Visual Aids
AC 150/5345-53C	Airport Lighting Certification Program
AC 150/5345-28F	Precision Approach Path Indicator Systems
AC 150/5345-42F	Specification for Airport Light Bases, Transformer Houses, Junction Boxes and Accessories
AC 150/5345-46C	Specification for Runway and Taxiway Light Fixtures
AC 150/5345-47B	Series to Series Isolation Transformers for Airport Lighting Systems

Federal Specifications Referenced in Item L-125

WW-C-581	Conduit, Metal, Rigid; and Coupling, Elbow; and Nipple, Electrical Conduit: Zinc-Coated
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**** END OF SECTION ****