IRVINE UNIFIED SCHOOL DISTRICT REQUEST FOR QUALIFICATIONS AND REQUEST FOR PROPOSALS

CLEAN ENERGY JOBS ACT PROPOSITION 39 LIGHTING RETROFIT SERVICES AT NINE DISTRICT SITES RFQ/RFP No. 16/17-01MO

The Irvine Unified School District ("District") requests qualified Contractor firms ("Contractor") to submit their qualifications and proposal for the following services ("Services"):

Turn-key Construction services for Lighting Fixture Retrofit and Replacement projects including design, management, labor, materials, tools, equipment, supplies, and related services for the installation of high efficiency lighting equipment and controls in accordance with the Scope of Work (SOW) Attachment "A" and the Detailed Lighting Audit Attachment "C".

Work shall be performed at the following nine (9) district facilities and schools:

- Canyon View Elementary School, 12025 Yale Ct, Irvine CA 92620-0210
- District Office, 5050 Barranca Parkway, Irvine, CA 92604-4652
- Early Childhood Learning Center, 1 Smoketree, Irvine, CA 92604-3158
- Plaza Vista School, 670 Paseo Westpark, Irvine, CA 92606-8946
- South Lake Middle School, 655 West Yale Loop, Irvine, CA 92614-7939
- Springbrook Elementary School, 655 Springbrook North, Irvine, CA 92614-7568
- Turtle Rock Elementary School, 5151 Amalfi Dr., Irvine, CA 92603-3443
- University High School, 4771 Campus Dr., Irvine, CA 92612-3298
- Westpark Elementary School, 25 San Carlo, Irvine, CA 92614-7314

Through this RFQ/RFP, the District intends to procure and implement energy conservation measures via the procurement process as prescribed by Government Code section 4217.10 et seq. based on a best value evaluation and highest score achieved for the weighted criteria outlined in Section 7.1.

All RFQ/RFP Proposals shall be submitted on forms furnished by the District. RFQ/RFP Proposals must conform with, and be responsive to, the RFQ/RFP and Contract Documents, copies of which may be obtained from the District as set forth above. Only RFQ/RFP Proposals submitted to the District prior to the date and time set forth below shall be considered. Interested Firms should mail or deliver **one (1) original** Proposal and six (6) **copies** in hardcopy and **one (1)** in **electronic format** on a CD or flash drive in a sealed box/package, as further described herein, to:

Irvine Unified School District 100 Nightmist Irvine, CA 92618

ATTN: Joe Hoffman, Director of Maintenance and Operations

All Proposals are due by 10:00 am, on Tuesday, February 28, 2017. Faxed, electronically transmitted, or late proposals will not be accepted. Please note, the RFQ/RFP will be reviewed after the proposal submission date and will not be publicly opened.

Firms must attend Mandatory Site Walks on Tuesday, February 14 and Wednesday, February 15, 2017. Firms not in attendance for the entirety of both site walks will be deemed ineligible to propose on this RFQ/RFP. Site walk is expected to last a minimum of four (4) hours each day and a mandatory *sign-in* at ALL locations will be required. A District provided bus will depart at 9:30 am sharp. Parking is available in the District's parking lot or on the street.

Pre-Bid Conference/Mandatory Job Walk Meeting Location 9:00 am - Tuesday, February 14, and Wednesday, February 15, 2017 District Office

5050 Barranca Parkway, Irvine CA 92604-4652

Pre-Bid Clarifications (RFI's) regarding this Request for Qualifications and Request for Proposals ("RFQ/RFP") must be received in writing via email to Angel Ayala at aayala@ccorpusa.com by 5:00 pm, Friday, February 17, 2017. Responses will be issued by 5:00 pm, Monday, February 20, 2017 via email and/or website posting.

Requests for material substitutions must be received in writing via email to Angel Ayala at aayala@ccorpusa.com by 5:00 pm, Friday, February 17, 2017. Responses will be issued by 5:00 pm, Monday, February 20, 2017 via email and/or website posting.

This RFQ/RFP is not a formal request for bids, or an offer by the District to contract with Firm(s) responding to this RFQ/RFP. The District reserves the right to reject any and all Proposals. The District also reserves the right to amend this RFQ/RFP as necessary. All materials submitted to the District in response to this RFQ/RFP shall remain the property of the District. The District reserves the right to seek proposals from, or to contract with, any Firm not participating in this process. The District shall not be responsible for the costs of preparing any proposal in response to the RFQ/RFP.

General Information/Instruction for Statement of Qualifications and Proposals.

- **1.1.** The District invites qualified Firms to submit a Statement of Qualifications and Proposal (together, "Proposal(s)") related to its ability to provide the Services as indicated herein.
- 1.2. The District is currently seeking Proposals to provide lighting retrofit services for the lighting retrofit projects at nine (9) District school and facility sites. Through this RFQ/RFP, the District intends to procure and implement energy conservation, cogeneration, and/or alternate energy supply sources via the procurement process as prescribed by Government Code section 4217.10 et seq.

2. Description of Site(s).

2.1. Work shall be performed at the following nine (9) district school and facility sites:

- Canyon View Elementary School, 12025 Yale Ct, Irvine CA 92620-0210
- District Office, 5050 Barranca Parkway, Irvine, CA 92604-4652
- Early Childhood Learning Center, 1 Smoketree, Irvine, CA 92604-3158
- Plaza Vista School, 670 Paseo Westpark, Irvine, CA 92606-8946
- South Lake Middle School, 655 West Yale Loop, Irvine, CA 92614-7939

- Springbrook Elementary School, 655 Springbrook North, Irvine, CA 92614-7568
- Turtle Rock Elementary School, 5151 Amalfi Dr., Irvine, CA 92603-3443
- University High School, 4771 Campus Dr., Irvine, CA 92612-3298
- Westpark Elementary School, 25 San Carlo, Irvine, CA 92614-7314

3. <u>Description of Services</u>.

- **3.1.** District intends to award Services of this RFQ/RFP per the contract as follows:
 - 3.1.1. Construction Services Pursuant to the Agreement and General Conditions.
 - 3.1.1.1 The selected Firm shall perform the Services of the *Agreement and General Conditions* attached hereto within **Attachment "B"**, including the performance of the following services, without limitation: including the performance of the following services, without limitation: engineering, auditing, design, procurement, construction management, installation, construction, and training services related to the Lighting Retrofit projects.
- **3.2.** Firm shall provide in its Proposal a detailed Statement of Services that it proposes to provide.
- 4. <u>Content of Proposals</u>. Proposals must be concise, well organized, and demonstrate Firm's qualifications. Proposals shall be formatted as outlined below. Proposals shall be no longer than <u>twenty-five (25), bound,</u> double-sided pages, 8½" x 11" paper, inclusive of résumés, forms, and pictures, (Exclusive of Forms), and tabbed according to the numbering system reflected below. <u>If any of the information required in sections below are not included in the submission, proposal can be deemed non-responsive.</u>
 - **4.1. Letter of Interest.** A dated Letter of Interest must be submitted, including the legal name of the Firm, address, telephone and fax numbers, and the name, title, and signature of the person(s) authorized to submit the Proposal on behalf of the Firm. The Letter of Interest should provide a brief statement of Firm's experience indicating the unique background and qualities of the Firm, its personnel, and what will make the Firm qualified to provide the Services.
 - **4.2. Firm Information**. Provide a comprehensive narrative of the Services offered by Firm. The narrative should include the following:
 - 4.2.1. Provide a brief history of Firm, and, if a joint venture, of each participating Firm. Identify legal form, ownership, and senior officials of company(ies). Describe number of years in business and types of business conducted.
 - 4.2.2. Describe Firm's philosophy and how Firm intends to work with District administration officials to perform the Services.
 - 4.2.3. Include resumes of key personnel who would be performing Services for the District. Specifically, define the role of each person and outline his or her

- individual experience and responsibilities. Indicate personnel who will serve as primary contact(s) for the District. Indicate Firm's and personnel's availability to provide the Services.
- 4.2.4. Provide a list of all Firm licenses and certifications held. Firm must have a class C-10 license for electrical work.
- 4.2.5. Provide a statement of Firm's financial resources. Include a certification of correctness of Firm's statement of financial resources and a current Profit and Loss Statement.
- 4.2.6. Describe your Firm's safety program. Include proof of your firm's safety Experience Modification Rating (EMR) or equivalent.
- 4.2.7. Provide a statement of ALL claim(s) filed against Firm in the past five (5) years. Briefly indicate the nature of the claim and the resolution, if any, of the claim(s).
- 4.2.8. Include letters of reference or testimonials, if available. Firm should limit letters of reference or testimonials to *no more than five (5)*.
- 4.2.9. Any other data that may assist the District in understanding Firm's qualifications and expertise.

4.3. Prior Relevant Experience.

- 4.3.1. Provide a list of <u>ALL</u> K-12 and Community College Districts for which Firm has provided the same or similar Services to in the past five (5) years. Limit your response to no more than the five (5) most recent districts. Include the names of the district, a description of services provided, and the name of the contact person and telephone number at the district. Also, indicate the Firm's personnel that performed services for each district.
- 4.3.2. List other public entities that the Firm would like the District to consider in its evaluation.

4.4. Schedule

4.4.1 Provide a schedule of the work to meet required Project Milestones, in the following table. Contractor will have access to site during normal working hours and on weekends. Reference contract for "Good Neighbor Policy" for conditions required by the City of Irvine for working hours and noise abatement.

Activity	ECLC, Plaza Vista, West Park Milestones	Canyon View, Springbrook	All Other Sites Milestone Dates
	Dates	Milestone Dates	
Firm Selection Notification	March 6 2017	March 6 2017	March 6 2017
Award of Contract / Notice to Proceed (NTP)	NTP by March 2017	NTP by March 2017	NTP by March 2017
Material Product Submittals	20 Calendar Days from NTP	20 Calendar Days from	20 Calendar Days from NTP
Mobilization	June 10, 2017	June 10, 2017	June 10, 2017
Construction	June 12, 2017 – July 12, 2017	July 8, 2017 – August 15, 2017	June 12, 2017 – August 15, 2017
Commissioning (Milestone per site)	10 days prior to Completion	10 days prior to Completion	10 days prior to Completion
Completion	July 12, 2017	August 15, 2017	August 15, 2017

Table 1: Milestone Dates

- **4.5 Compensation**. Provide Firm's proposed fee for performance of the Services indicated below:
 - 4.5.1 Detailed Lighting Audits. Provide all information for lighting and controls material and labor on Detailed Lighting Audits (Attachment "C"). Firm Proposed Fee should include lighting and controls material and labor costs for each site; construction costs, equipment costs, Firm's mark-up on subconsultant and subcontractor prices, general conditions, and all other categories of costs, expenses, fees, or charges that Firm anticipates will be a part of its price to complete this portion of the Services.
 - 4.5.2 Firms shall provide and include the following lump sum bid allowance in Bidder's Total Price. The cost(s) shall be utilized at Owner discretion, direction and approval. Firm shall include all direct/indirect, overhead/profit, field supervision, management and/or administrative cost(s) for all bid allowance cost(s) listed in the Total Lump Sum Base Bid Amount. Firm shall itemize cost(s) on Schedule of Values. Cost(s) will be itemized, in detail specific invoice, and attached to pending Applications for Payment, as utilized. Contractor shall not be allowed any Overhead/Profit and Bond charges for work charged to the Allowance.
 - **4.5.3** Lump Sum Bid Allowance; \$200,000 to be used <u>AT THE DISCRETION OF THE DISTRICT.</u>
- **4.6 Conflict of Interest.** If applicable, provide a statement of any recent, current, or anticipated contractual obligations that relate to similar work that may have a potential to conflict with the Firm's providing the Services to the District.
- **4.7 Additional Information.** Provide any additional information, options, or features related to Firm's program or its Services that Firm believes the District will find helpful in the District's evaluation and selection process.

- 4.8 Form of Agreements. Provide Firm's proposed revisions, if any, to District's Contract Agreement. PLEASE NOTE: The District will not consider any substantive changes to the Form of Agreement if they are not submitted at or before the proposal due date.
- **Contractor Registration.** Firm shall ensure that it and its Subcontractors comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner, and are registered pursuant to Labor Code section 1725.5. Firm and its subcontractors shall comply with Labor Code section 1725.5 to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of the Contract.
- 6. Prevailing Wages. Pursuant to sections 1770 et seq. of the California Labor Code, Firm and all Subcontractors under the Firm shall pay all workers on all work performed pursuant to the Contract not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the State of California Department of Industrial Relations (DIR) for the type of work performed and the locality in which the work is to be performed within the boundaries of the District. Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by the DIR are available from the District or on the internet (http://www.dir.ca.gov).

7. District's Evaluation / Selection Process.

- 7.1. The District intends to select one (1) of the Firms—but reserves the right to select more than one (1) Firm—that best meet(s) the District's needs to perform the Services as described in this RFQ/RFP. From the Firms that provide Proposals to the District, the District may, at its discretion, interview some or all of those Firms. One (1) or more Firms may be selected and recommended to the governing board of the District for approval ("Successful Firm"). The Successful Firm will be selected based on qualifications and demonstrated competence that include relevant experience with public agencies, including local agencies, and a proven track record of success for these types of Services. A "best value" method of selection will be utilized. The "best value" method includes, but is not limited to, the following selection criteria:
 - 7.1.1. Technical expertise;
 - 7.1.2. Team experience;
 - 7.1.3. Recent success with similar energy conservation scope of work;
 - 7.1.4. Proximity of offices and availability of qualified staff;
 - 7.1.5. Prior experience with K-12 school and Community College districts;
 - 7.1.6. Approach in providing Services;
 - 7.1.7. Schedule; and
 - 7.1.8. Pricing.

RFQ Selection Criteria	Evaluation Weight
Proposal Completeness	5%
Firm Information/Safety EMR/Financials	20%
Prior Relevant Experience	20%
Project Schedule and Phasing	15%
Price	40%
Total	100%

Table 2: Evaluation Weights

The District reserves the right to contract with any Firm responding to this RFQ/RFP for all or portions of the Services, to reject any proposal as non-responsive, and not to contract with any Firm for the Services described herein. The District makes no representation that participation in the RFQ/RFP process will lead to an award of contract or any consideration whatsoever. The District reserves the right to seek proposals from or to contract with any Firm not participating in this process. The District shall in no event be responsible for the cost of preparing any proposal in response to this RFQ/RFP.

Responses to this RFQ/RFP will become the property of the District and subject to the California Public Records Act, Government Code sections 6250, et seq. Those elements in each response that are trade secrets as that term is defined in Civil Code section 3426.1(d) or otherwise exempt by law from disclosure and which are prominently marked as "TRADE SECRET," "CONFIDENTIAL," or "PROPRIETARY" may not be subject to disclosure. The District shall not be liable or responsible for the disclosure of any such records including, without limitation, those so marked if disclosure is deemed to be required by law or by an order of the Court. A Firm that indiscriminately identifies all or most of its response as exempt from disclosure without justification may be deemed non-responsive. In the event the District is required to defend an action on a Public Records Act request for any of the contents of a response marked "Confidential," "Proprietary," or "Trade Secret," the Firm agrees, by submission of its response for the District's consideration, to defend and indemnify the District from all costs and expenses, including attorneys' fees, in any action or liability arising under the Public Records Act.

8. Attachments

- 8.1. Attachment "A" SCOPE OF WORK
 - 8.1.1. Site Maps
- **8.2. Attachment "B" DISTRICT FORMS:** Proposer shall complete all required forms in "**Attachment B"** and include them in a separate section of the submitted proposal.
 - 8.2.1. Information Required of Bidder
 - 8.2.2. Bid Bond
 - 8.2.3. Proposal Form
 - 8.2.4. Faithful Performance Bond
 - 8.2.5. Payment Bond
 - 8.2.6. Designation of Subcontractors
 - 8.2.7. Noncollusion Declaration
 - 8.2.8. Workers' Compensation Certificate

- 8.2.9. Guarantee
- 8.2.10. Insurance Requirements
- 8.2.11. Certificate of Liability Insurance and Endorsement Sample (Review Only)
- 8.2.12. Certificate Regarding Non-Asbestos
- 8.2.13. Drug Free Workplace Certification
- 8.2.14. District Rules and Regulations
- 8.2.15. Criminal Records Check (Review Only)
- 8.2.16. Criminal Records Check Certification
- 8.2.17. Shop Drawing Transmittal
- 8.2.18. Agreement and General Conditions (Review Only)
- 8.2.19. Public Works Contractor Registration Law SB 854 (Review Only)
- 8.3. Attachment "C" DETAILED LIGHTING AUDITS
- 8.4. Attachment "D" LIGHTING SPECIFICATIONS

Attachment "A" SCOPE OF WORK (SOW) –

The Contractor shall provide all of the necessary engineering, material procurement, management, labor, materials, tools, equipment, supplies, services, components, and disposal and comply with the contract's General Conditions to successfully complete the retrofit and replacement lighting system scope of work to the satisfaction of the Owner. This project is funded by Proposition 39 and emphasizes energy savings. The projects are located at the following sites:

- Canyon View Elementary School, 12025 Yale Ct, Irvine CA 92620-0210
- District Office, 5050 Barranca Parkway, Irvine, CA 92604-4652
- Early Childhood Learning Center, 1 Smoketree, Irvine, CA 92604-3158
- Plaza Vista School, 670 Paseo Westpark, Irvine, CA 92606-8946
- South Lake Middle School, 655 West Yale Loop, Irvine, CA 92614-7939
- Springbrook Elementary School, 655 Springbrook North, Irvine, CA 92614-7568
- Turtle Rock Elementary School, 5151 Amalfi Dr, Irvine, CA 92603-3443
- University High School, 4771 Campus Dr., Irvine, CA 92612-3298
- Westpark Elementary School, 25 San Carlo, Irvine, CA 92614-7314

GENERAL DESCRIPTION OF SCOPE OF WORK

Lighting retrofit work consists of the following elements. These elements are described in detail for each school in (Attachment C- Detailed Lighting Audit).

- 1. Interior lighting troffer retrofit kits, fluorescent fixtures being replaced with LED Lamps and Drivers, and fixture replacements on all other fixtures (material and labor). Refer to Attachment C- Detailed Lighting Audit Sheet for exact quantities.
- 2. Exterior Compact Fluorescent fixtures being replaced with LED lamps or LED retrofit kits: Refer to Attachment C- Detailed Lighting Audit for exact quantities.
- 3. Exterior Linear Fluorescent fixtures being replaced with LED Lamps and Drivers: Refer to Attachment C- Detailed Lighting Audit for exact quantities.
- 4. Exterior high-intensity-discharge (HID) fixtures being replaced with new LED fixtures: Refer to Attachment C- Detailed Lighting Audit for exact quantities.
- 5. Controls (occupancy, photo sensors and dimming) where indicated in Attachment C- Detailed Lighting Audit.

Verification of Details

The scope of work includes a **Detailed Lighting Audit (Attachment C)** which is a separate excel spreadsheet provided to the Contractor with existing fixture type and quantities for bidding purposes. Contractor assumes all the responsibility for accurate fixture counts, specifications of fixtures, lamps, ballasts, ballast compatibility with LED lamps, controls and other items required to successfully complete the lighting retrofit and meet the necessary building and safety codes as more fully described in the specifications and general conditions.

Contractor shall become familiar with details of work in the field and shall advise OWNER of any discrepancy prior to performing any tasks, including but not limited to existing and proposed lighting quantities, lighting wattages, number of lamps, building and area locations of fixtures, etc. The Contractor shall thoroughly investigate and satisfy itself of the conditions affecting the work prior to construction start.

Contractor will be allowed access to the sites for construction between June 12 – August 15, 2017, all work must be completed and commissioned by August 15, 2017. Access to the following sites will only be allowed between June 12 – July 12:

- Early Childhood Learning Center, 1 Smoketree, Irvine, CA 92604-3158
- Plaza Vista School, 670 Paseo Westpark, Irvine, CA 92606-8946
- Westpark Elementary School, 25 San Carlo, Irvine, CA 92614-7314

Access to the following sites will only be allowed between July 8 – August 15:

- Springbrook Elementary School, 655 Springbrook North, Irvine, CA 92614-7568
- Canyon View Elementary School, 12025 Yale Ct, Irvine CA 92620-0210

Contractor shall have the sole responsibility and shall bear any and all risk for delivery, unloading, storage, and disposal of materials and equipment for the performance of the contract. The contractor will not have access to District facilities for any storage. Contractor shall have the sole responsibility for providing secure staging area for equipment and materials.

Submittal Requirements

This project is exempt from Division of the State Architect ("DSA") review and approval per provisions of the California Code of Regulations (CCR), Title 24, Interpretation of Regulations Section 22 (IR-A22). CONTRACTOR is responsible for the review of electrical specifications, lighting performance specifications, detailed lighting audits, and related design criteria prior to the purchase of materials and installation of the work. CONTRACTOR shall submit the following information:

- 1. **Material Product Submittals** with fixture type, manufacturer, wattage, quantity; cut sheets, and product warranties (*submitted within 10 days from Notice to Proceed*).
- 2. Proposed controls method and control plan (line diagram) for each room/area for all lighting fixtures.

Pre- and Post- Construction Requirements

Contractor shall verify the operation of all work contained in this scope of work through the installation of a demonstration room at each site prior to the start of construction and purchase of materials to ensure existing ballast and existing lighting controls compatibility with replacement LED lamp and/or fixture. A punch list of all deficiencies shall be developed and rectified by the Contractor within two (2) weeks of final installation. Contractor Final payments will not be issued until system is successfully demonstrated.

Utility Rebate Program Requirements

The District has determined that this project is eligible for Southern California Edison ("SCE") lighting rebates and incentives. In addition to specifications requirements, the CONTRACTOR shall comply with the following requirements for lighting rebates:

- All new lighting fixtures, retrofit kits and components <u>must</u> carry the appropriate designated Underwriters Laboratory (UL) or Electrical Testing Laboratory (ETL) label and have been qualified by ENERGY STAR® and/or Design Lights Consortium (DLC) Qualified Products List. All lighting material must conform to utility program eligibility standards in order to qualify for incentives.
- Manufacturer's specification sheets must be submitted to the District for rebate application, documenting the characteristics of lamps, ballasts and fixtures.
- Wattage of the replacement fixture, in all cases, must be less than the wattage of the existing lamp.
- All installations must be installed in accordance with all applicable local, state and national codes and ordinances.
- CONTRACTOR must submit all material, product, and equipment invoices or purchase orders to the
 district for use in rebate processing of Southern California Edison, Los Angeles Department of Water
 & Power, and all other utility programs.
- CONTRACTOR is expressly responsible for any required documents, forms, invoices, and other
 materials necessary to obtain Midstream Incentives as part of the DISTRICT project incentive
 package. Midstream Point of Purchase program participation is the responsibility of the
 CONTRACTOR to secure and ensure that Midstream incentives are passed through as a financial
 benefit to the DISTRICT. Any <u>available</u> rebates eligible through the Midstream program not provided
 to the DISTRICT will become the financial responsibility of the CONTRACTOR to compensate the
 DISTRICT the total incentive amount.

Commissioning Requirements

Contractor shall provide information to the District of pre-installation and post-installation foot-candle measurements in at least three (3) locations in each interior room <u>TYPE</u> at desk level (36 inches from floor). The readings should be taken at the same locations for pre and post installation measurements for proper comparison and be provided in a table format. Contractor's measuring device/light meter/detector photometer shall be calibrated prior to use in accordance with manufacturer's requirements.

Title 24 Acceptance Testing

Contractor shall perform Title 24 Acceptance Testing in accordance with 2013 Title 24 Part 6, Lighting Control Acceptance and Testing requirements for **only** those areas in which scope of work requires the

installation of lighting controls devices/equipment. Contractor shall provide a separate line item cost for this work as part of the total proposed price.

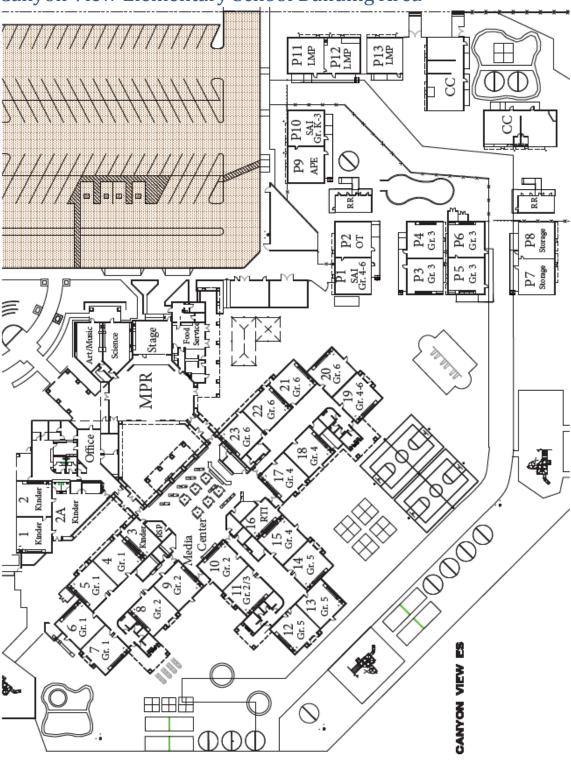
Closeout Documents

CONTRACTOR shall meet all requirements of the General Conditions for closeout, CONTRACTOR shall provide to the District the following document precedent to Closeout:

- 1. As built spreadsheet of all the lighting fixtures and sensors (both interior and exterior)
- 2. Foot-Candle Measurement Table (Interior only)
- 3. Disposal Manifest for all lighting fixtures
- 4. List of Manufacturers with contact information and parts reordering information for all products installed

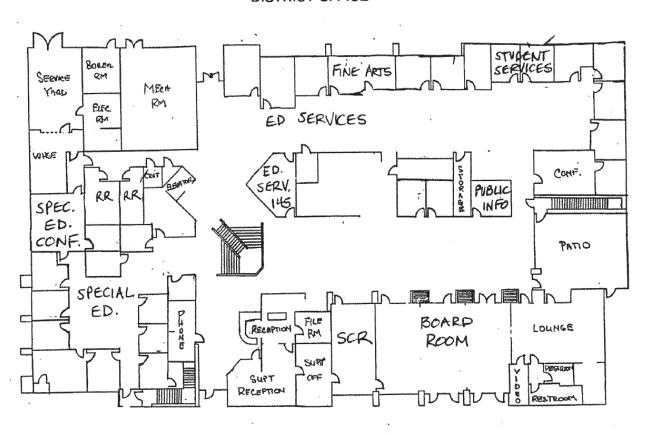
8.1.1 Site Maps



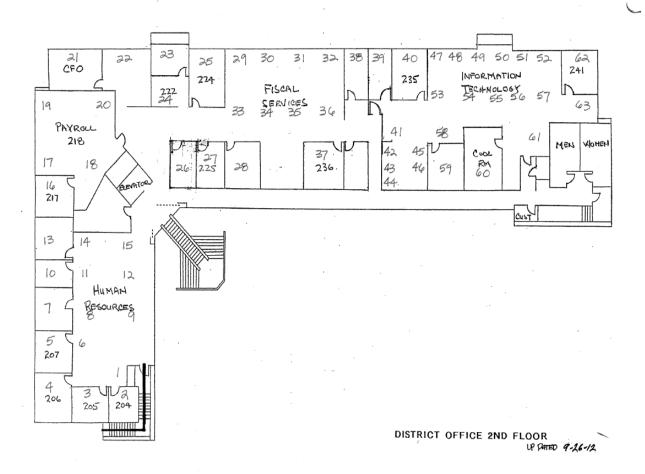


District Office Building Area

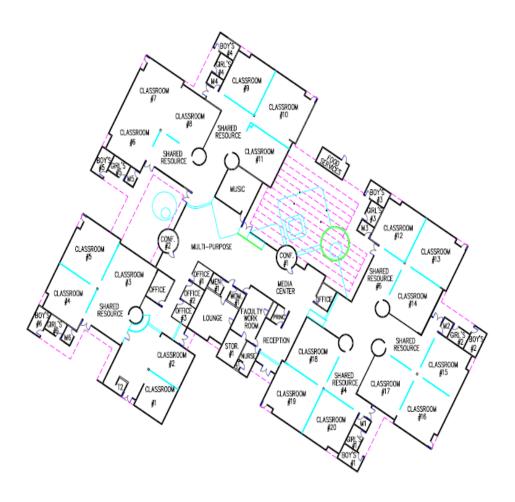
DISTRICT OFFICE



FIRST FLOOR



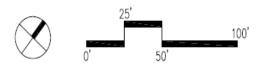
Early Childhood Learning Center Building Area



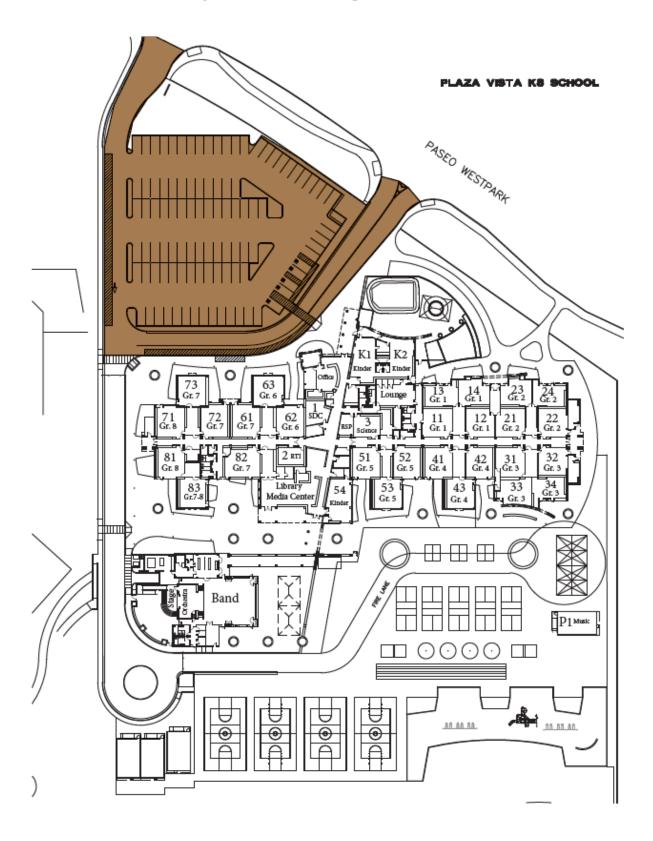
MAIN BUILDING AREA: 33,314 SF FOOD SERVICES BUILDING AREA: 210 SF

I.U.S.D

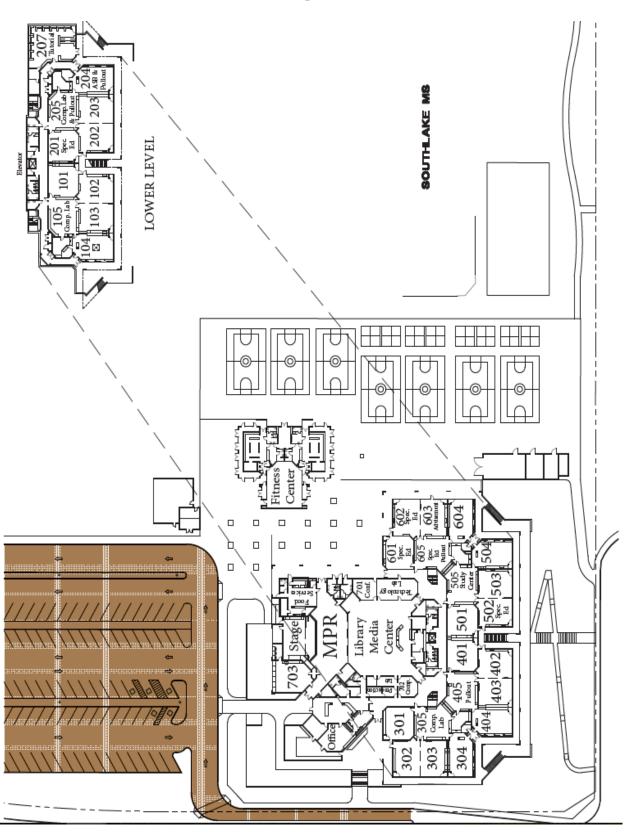
REVISED BY MNO 9/27/05



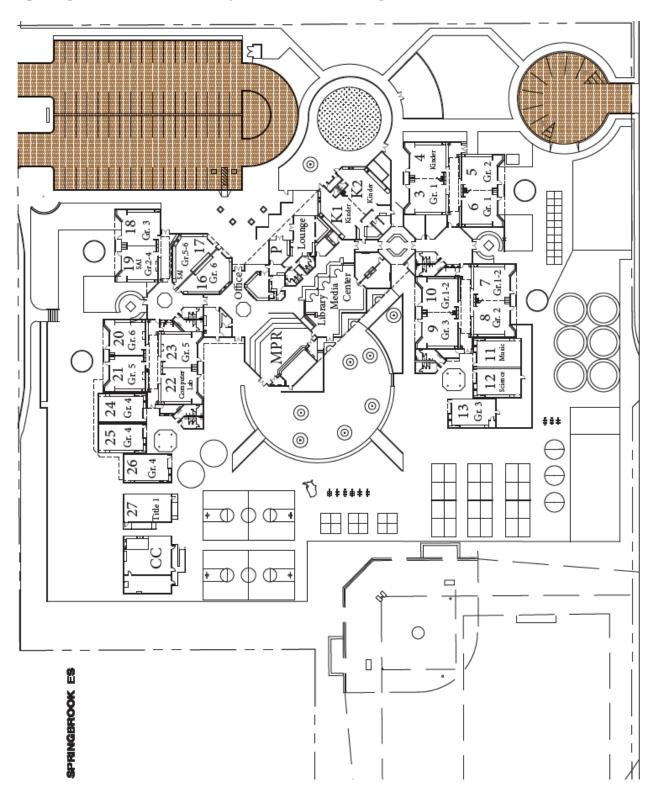
Plaza Vista Elementary School Building Area



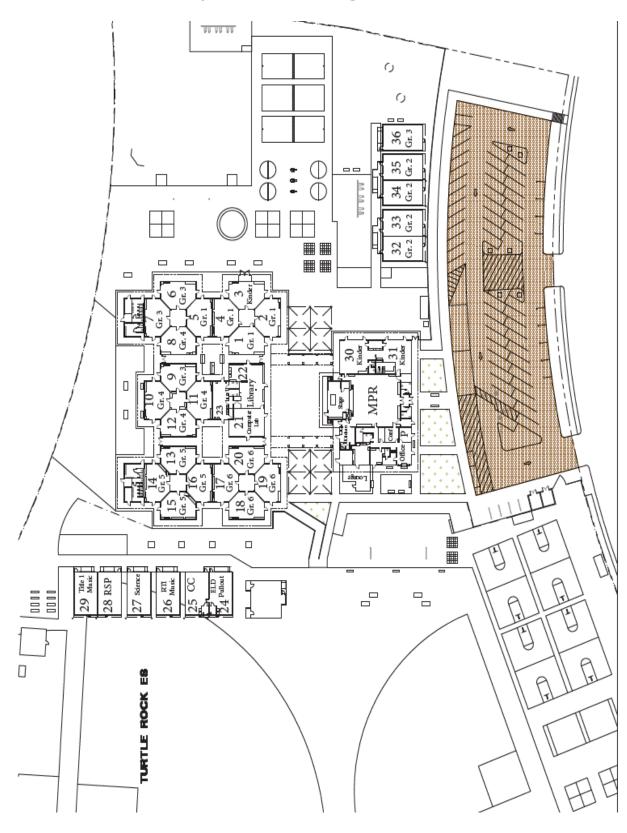
South Lake Middle School Building Area



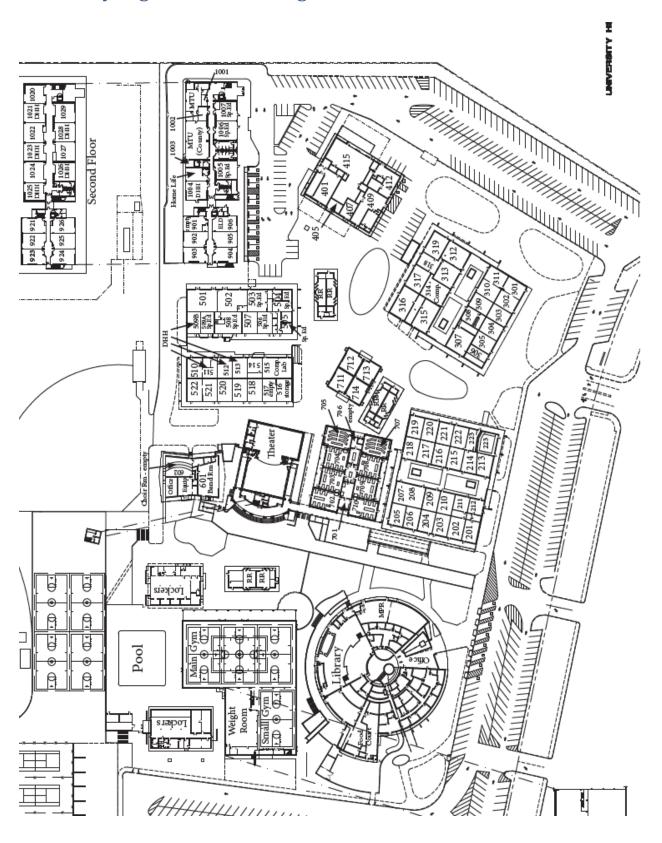
Springbrook Elementary School Building Area



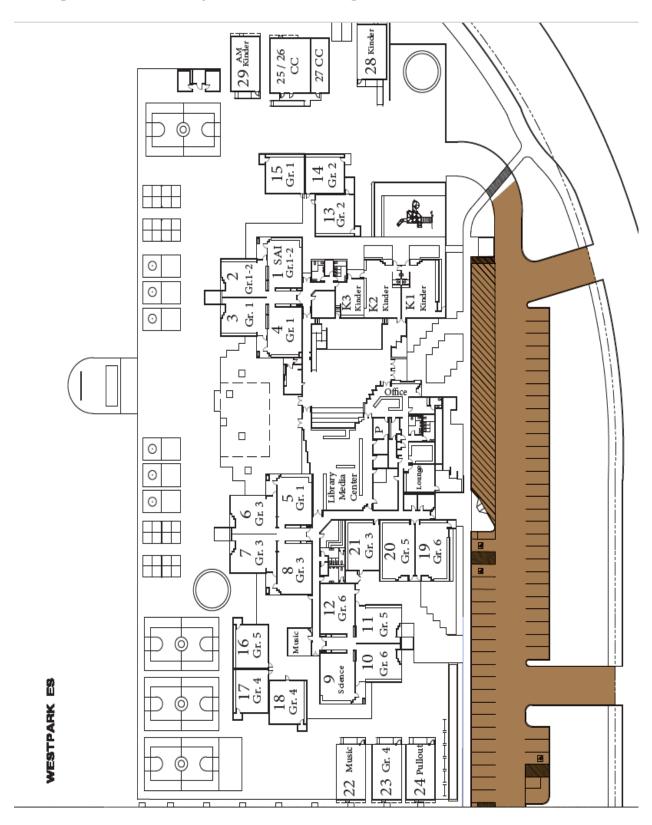
Turtle Rock Elementary School Building Area



University High School Building Area



Westpark Elementary School Building Area



Attachment "B" DISTRICT REQUIRED FORMS

District Forms: Proposer shall complete all required forms in "Attachment B" and include them in a separate section of the submitted proposal.

- 1.1.1. Information Required of Bidder
- 1.1.2. Bid Bond
- 1.1.3. Proposal Form
- 1.1.4. Faithful Performance Bond
- 1.1.5. Payment Bond
- 1.1.6. Designation of Subcontractors
- 1.1.7. Noncollusion Declaration
- 1.1.8. Workers' Compensation Certificate
- 1.1.9. Guarantee
- 1.1.10. Insurance Requirements
- 1.1.11. Certificate of Liability Insurance and Endorsement Sample (Review Only)
- 1.1.12. Certificate Regarding Non-Asbestos
- 1.1.13. Drug Free Workplace Certification
- 1.1.14. District Rules and Regulations
- 1.1.15. Criminal Records Check (Review Only)
- 1.1.16. Criminal Records Check Certification
- 1.1.17. Shop Drawing Transmittal
- 1.1.18. Agreement and General Conditions (Review Only)
- 1.1.19. Public Works Contractor Registration Law SB 854 (Review Only)

INFORMATION REQUIRED OF BIDDER

The Bidder shall furnish <u>all</u> the following information. Bidder shall carefully read and answer all questions to ensure completeness and accuracy. Failure to comply with this requirement may cause rejection of the bid. Additional sheets may be attached if necessary. "You" or "your" as used herein refers to the bidder and any of its owners, officers, directors, shareholders, principals, responsible managing officer (RMO) or responsible managing employee (RME). DISTRICT has discretion to request additional information depending on the Project.

Telephone:			Fax No.:
Individual	Partnership	Corporation	Joint Venture (che
Bidder's Licen	se No		Class:
	tion Data		
License Expira	on Date		
Have you ever	se holder been licensed und		or different license number?
Name of Licens Have you ever	se holder been licensed und	er a different name	or different license number?
Name of Licens Have you ever Yes No _	se holder been licensed und If "Yes," give	er a different name e name and license	or different license number?

Pers	on who inspected work site:		
Nan	ne and Title:		
Date	e of Inspection:		
Hov	many years experience have you had in school construction work?		
(a)	as a general contractor?		
(b)	as a subcontractor?		
Hov	ow many years experience have you had in public construction work?		
(a)	as a general contractor?		
(b)	as a subcontractor?		
com and	e you ever been terminated from a school or any public construction project prior to the pletion of the project? Yes No If the answer is "Yes," give dates, names addresses of school/public agency and details.		
Hav Yes	e you ever been barred from bidding on any school or public construction project? No If the answer is "Yes," give dates, names and addresses of ool/public agency and details		
	e you ever defaulted on any school or public construction project that resulted in a claim		

project in	been assessed damages (i.e., liquidated damages) for any public conthe past ten (10) years? Yes No If the answer is "Yes," gd addresses of public agency and details
answer is	ever brought any claim(s) against a public agency? Yes No "Yes," please explain in detail name of public agency, nature of the
outcome.	
Have you years?	ever failed to complete a school or public construction project in the last Yes No If the answer is "Yes," provide name of public as

o you now or have you ever had any onnection with any officer, employee or es No If so, please elabora ist at least five (5) of your most recent s	or consultant of the state.	et business, f DISTRICT or	
onnection with any officer, employee or ses No If so, please elaborates ist at least five (5) of your most recent s	or consultant of the state.	n projects.	
onnection with any officer, employee or ses No If so, please elaborates ist at least five (5) of your most recent s	or consultant of the state.	n projects.	
)		1 0	
)		1 0	
2)			
l)			
<u> </u>			
re you currently under contract for anot Yes," please provide the following infor		No	If the answer is
Project Number 1:			
ame of Project:			
etailed Description:			
ame of Project Owner:			
ontract Amount:			
ompletion Date:			
Project Number 2:			
ame of Project:			

	Name of Project Owner:
	Contract Amount:
	Completion Date:
	(c) Project Number 3:
	Name of Project:
	Detailed Description:
	Name of Project Owner:
	Contract Amount:
	Completion Date:
	(d) Project Number 4:
	Name of Project:
	Detailed Description:
	Name of Project Owner:
	Contract Amount:
	Completion Date:
	(e) Project Number 5:
	Name of Project:
	Detailed Description:
	Name of Project Owner:
	Contract Amount:
	Completion Date:
(22) DISTF inform	Are there projects not listed above that will be undertaken during the duration of RICT's Project? Yes No If the answer is "Yes," please provide the following
	(a) Project Number 1:
	Name of Project:
	Detailed Description:

Name of Project Owner:
Contract Amount:
Completion Date:
(b) Project Number 2:
Name of Project:
Detailed Description:
Name of Project Owner:
Contract Amount:
Completion Date:
(c) Project Number 3:
Name of Project:
Detailed Description:
•
Name of Project Owner:
Contract Amount:
Completion Date:
(d) Project Number 4:
Name of Project:
Detailed Description:
Zeumeu Zesenpuom.
Name of Project Owner:
Contract Amount:
Completion Date:
(e) Project Number 5:
Name of Project:
Detailed Description:

Na	ame of Project Owner:
	ontract Amount:
	ompletion Date:
A	dditional information required:
co	st of References - Public construction projects of similar nature in a school/community ollege/university within the last five (5) years. DISTRICT has discretion to require more an three (3) references.
Na	ame :
	ddress and Telephone:
Co	ontact Person:
	escription of Project:
Da	ates of commencement and completion of Project:
Co	ontract Amount:
Aı	rchitect:
	rchitect's Address and Telephone:
D	SA or public agency inspector:
A	ddress and Telephone:
Na	ame :
A	ddress and Telephone:
Co	ontact Person:
	escription of Project:

Contrac	t Amount:
	et:
Archite	et's Address and Telephone:
DSA or	public agency inspector:
	and Telephone:
Name :	
Address	and Telephone:
Contact	Person:
	tion of Project:
	Commencement and completion of Project:
Contrac	t Amount:
	et:
	et's Address and Telephone:
DSA or	public agency inspector:
	and Telephone:

	1 1	rjury under the laws of the State of California that the Required of Bidder are true and correct.
		Signature
		Print Name
		Title
		Date
Note:	DISTRICT may wish to expand the include additional questions.	e scope of the "Information Required of Bidder" form and

BID BOND

KNOV	V ALL	PERSONS	BY TH	IESE	PRESE	NT, t	hat w	e		
			as Principa	al, and						as
Surety, a Cali	fornia ad	mitted surety	insurer, a	are hel	d and f	irmly b	ound u	nto the	Irvine Un	nified
School DISTR	CICT, her	einafter calle	d the DIST	ΓRICT	, in the	sum of	ten	_PERC	ENT (<u>10</u>	_%)
OF THE HYP	OTHETI	CAL BID AN	10UNT fo	or the w	ork des	cribed l	oelow f	for the pa	ayment of v	vhich
sum in lawful	money o	f the United S	States, wel	l and to	ruly to b	e made	e, we jo	intly an	d severally	bind
ourselves, our	heirs, ex	ecutors, adm	inistrators	, succe	ssors a	nd assig	ns.			
The condition	n of this	obligation is	s such tha	at whe	reas the	e Princ	ipal ha	ıs subm	itted the	
accompanyin	g bid da	ited		, 20	, for					

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of the same, or, if no period be specified, within sixty (60) days after said opening; and if the Principal is awarded the contract, and shall within the period specified therefore, or, if no period be specified, within **five (5)** working days after the notice of award of the contract, or as otherwise requested in writing by the DISTRICT, enter into a written contract with the DISTRICT, in accordance with the bid as accepted and give bonds with good and sufficient surety or sureties, as may be required for the faithful performance and proper fulfillment of such contract and for the payment for labor and materials used for the performance of the contract, furnish certificates and endorsements evidencing the required insurance is in effect and furnish and deliver to the DISTRICT the Workers' Compensation Certificate, Drug-Free Work Place Certification, the Criminal Records Check Certification, Contractor's Certificate Regarding Non-Asbestos Containing Materials, and the Disabled Veteran Business Enterprises Certification, if applicable, then the above obligation shall be void and of no effect, otherwise the bond amount shall be forfeited to the DISTRICT.

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

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

(Corporate Seal of Principal, if Principal (Proper Name of Bidder) Corporation) By: _ Signature Print Name Title (Corporate Seal Surety of Surety) (Attach Attorney-in-Fact Certificate and Required Acknowledgements) Signature Print Name Title Address Telephone No. Facsimile No.

IN WITNESS HEREOF, the parties have executed this bond under their several seals this

day of _____, 20 , the name and corporate seal of each corporate party being hereto affixed and duly

signed by its undersigned authorized representative.

PROPOSAL FORM

Name of Bidder:	
To: <u>Irvine Unified School District</u> , acting by an	nd through its Governing Board, herein called
the "DISTRICT."	
documents including but not limited to the Notice Form, Bid Security, Designation of Subcontractor prequalification forms pursuant to Public Contract Affidavit, Workers' Compensation Certificate, I Agreement, Escrow Agreement, Drug-Free Work Certification, Change Order Forms, Shop Drawing Guarantee forms, Contractor's Certificate Regardiantee forms, Contractor's Certificate Regardiantee Supplemental Conditions, if any, Special Condition modifications, addenda and amendments, if any conditions affecting the performance of the work a work is to be done, hereby proposes and agrees to be Project Documents and agrees to perform, within the component parts, and everything required to be performed and transportation services necessary to perform the manner all of the work required in accordance with other legal requirements governing the work, in contractors.	rs Form, Information Required of Bidder, all to Code Section 20111.5, if any, Noncollusion Faithful Performance Bond, Payment Bond, place Certification, Criminal Records Check Transmittal Form, all insurance requirements, arding Non-Asbestos Containing Materials, tion, if applicable, General Conditions and ons, if any, drawings, specifications, and all to (hereinafter Project Documents), the local and the cost of the work at the place where the performed by all the terms and conditions of the netime stipulated, the work, including all of its formed, and to provide and furnish and pay for the place work and complete in a good workmanlike in laws, codes, regulations, ordinances and any mection with the following:
RFQ/RFP No. 16/17-01MO, Clear Retrofit Services at Nine District Sites	n Energy Jobs Act Proposition 39 Lighting
Retiont Services at Nine District Sites	
all in strict conformity with the Project Documents, DISTRICT, below, insert costs from attachment C – Summary Page:	
Subtotal Material and Labor for ALL SITE	S:
Title 24 Certification/Testing Cost:	
Bond and Liability Insurance Cost:	
Overhead/Profit Cost:	<u> </u>
Allowance (Amount per RFP): Base Bid Total (insert below):	\$ 200,000.00
for the sum of	
	_ Dollars (\$).

Each individual bid term shall be determined from visiting the work site, reviewing the drawings and specifications and all portions of the Project Documents, and shall include all items necessary to complete the work, including the assumption of all obligations, duties, and responsibilities necessary to the successful completion of the Project, and the furnishing of all materials and equipment required to be incorporated in and form a permanent part of the work,

and the furnishing of tools, equipment, supplies, transportation, facilities, labor, superintendence, and services required to perform and complete the work, all as per the requirements of the Project Documents, whether or not expressly listed or designated.

- 2. It is understood that the DISTRICT reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process. Bidder agrees that this bid shall remain open and not be withdrawn for the period specified in the Information for Bidders.
 - 3. The required bid security is attached.
- 4. The required list(s) of proposed subcontractors is attached hereto, and the undersigned represents and warrants that such list(s) is complete and in compliance with the Subletting and Subcontracting Fair Practices Act. Public Contract Code Sections 4100, et seq.
- 5. It is understood and agreed that if written notice of the award of a contract is mailed, faxed, or delivered to the bidder, the bidder will execute and deliver to the DISTRICT the Agreement and will also furnish and deliver to the DISTRICT the Faithful Performance Bond and a separate Payment Bond as specified, and certificates and endorsements of insurance, the Workers' Compensation Certificate, Drug-Free Work Place Certification, the Criminal Records Check Certification, Contractor's Certificate Regarding Non-Asbestos Containing Materials, and the Disabled Veteran Business Enterprises Certification, if applicable, within <u>Five</u> (<u>5</u>) working days of the notice of award of the contract, or as otherwise requested in writing by the DISTRICT. It is understood that should bidder fail or refuse to return these documents as required by the DISTRICT, the bid security shall be forfeited to the DISTRICT. The bidder further agrees that the work shall be commenced by the bidder, if awarded the contract, on or before the <u>Three</u> (<u>3</u>) day after receiving the DISTRICT's Notice to Proceed, and shall be completed by the bidder in the time specified by the DISTRICT.
- 6. Communications conveying notice of award of the contract, requests for additional information or other correspondence should be addressed to the bidder at the address stated below.

7.	The name(s) of all persons interested in the bid as principals are as follows:

- 8. In submitting this bid, the bidder offers and agrees that if the bid is accepted, it will assign to DISTRICT 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 (Business & Professions Code Section 16700, et seq.) arising from purchases of goods, materials, or services by the bidder for sale to the DISTRICT pursuant to the bid. Such assignment shall be made and become effective at the time the DISTRICT tenders final payment under the contract. (Public Contract Code Section 7103.5; Government Code Section 4450, 4451 and 4552).
- 9. The undersigned hereby warrants that the bidder has an appropriate license, License No. _______, Class _____, at the time of the bid opening, that such license entitles bidder to provide the work, that such license will be in full force and effect throughout the duration

of performance of this Project. Bidder shall be nonresponsive if the Bidder is not licensed as required by the DISTRICT at the time of the bid opening. Any and all subcontractors to be employed by the undersigned shall have appropriate licenses at the time of the bid opening.

- 10. The bidder hereby certifies that it is, and at all times during the performance of work hereunder shall be, in full compliance with the provisions of the Immigration Reform and Control Act of 1986 ("IRCA") in the hiring of its employees, and the bidder shall indemnify, hold harmless and defend the DISTRICT against any and all actions, proceedings, penalties or claims arising out of the bidder's failure to comply strictly with the IRCA.
- 11. It is understood and agreed that if requested by the DISTRICT, the bidder shall furnish a notarized financial statement, references, and other information required by the DISTRICT sufficiently comprehensive to permit an appraisal of bidder's ability to perform the Project.
- 12. The undersigned hereby warrants that all work shall be completed within the specified time from the date specified in the Notice to Proceed issued by the District. Time is of the essence. The undersigned agrees that failure to complete the work within the time set forth herein will result in the imposition of liquidated damages for each consecutive calendar day of delay in the amount of _Five hundred Dollars (\$500.00). (Government Code Section 53069.85)
- 13. The required noncollusion affidavit properly notarized is attached as required by Public Contract Code Section 7106. Bidder understands and agrees that failure to submit a completed and signed affidavit will render the bidder automatically nonresponsive.
- 14. It is understood and agreed that all change order requests must be submitted in the form set forth in the Project Documents and pursuant to Article 59 of the General Conditions. The amount of allowable charges submitted pursuant to a change order shall be limited to the charges allowed under Article 59 of the General Conditions. Indirect, consequential and incidental costs, project management costs, extended home office and field office overhead, administrative costs and profit and other charges not specifically authorized under Article 59 of the General Conditions will not be allowed.
- 15. The Information Required of Bidder form has been fully completed and is attached hereto.

The undersigned hereby declares that all of the representations of this bid are made under penalty of perjury under the laws of the State of California.

<u>Individual</u>	Name:				
	Signed by:				
	Print Name:	Print Name:			
	Date:				
	Business Addres	s:			
	Telephone:				
*****	********	****************			
<u>Partnership</u>	Name:				
	Signed by:				
	Print Name:				
	Date:	Date:			
	Business Addres	Business Address:			
	Telephone:				
******	*********	****************			
<u>Corporation</u>	Name:	Corporation ¹)			
		s:Corporation)			
	Telephone:				
	Signed by:	, President, Date:			
	Print Name:	, President			
		, Secretary, Date:			
	-	, Secretary [Seal]			

 $^{^{1}}$ A corporation awarded the contract shall furnish evidence of its corporate existence and evidence that the officer signing the Agreement and bonds is duly authorized to do so.

Joint Venturer	Name:			
	Signed by:		, Joint	Venturer
	Print Name:			
	Date:			
	Business Address:			
	Telephone:			
Other Parties to Joint Venture:	If an individual:	(Name)		
	Signed by:	` '		
	Print Name:			
	Date:			
	Doing Business as:			;
	Business Address:			
	Telephone:			
	If a Partnership:			
	Signed by:	(Name)		_, Partner
	Signed by:			
	Print Name:			
	Date:Business Address:			
	Telephone:			
	If a Corporation:		Corporation)	
	Signed By:		Date:	
	Print Name:			
	Title:			
	Date:			
	Business Address:			
	Telephone:			

FAITHFUL PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENT:

WHEREAS, the <u>Irvine Unified School</u> District of Orange County, Califor	nia (hereinafter
referred to as "DISTRICT"), awarded to	, (hereinafter
referred to as the "Contractor/Principal") the contract for the work described as RFQ/	RFP No. 16/17-
01MO, Clean Energy Jobs Act Proposition 39 Lighting Retrofit Services at Nine I	District Sites;

WHEREAS, said Contractor/Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contract which contract is incorporated herein by reference;

NOW, THEREFORE, we the undersigned Contractor, as Principal, and Surety, a California admitted surety insurer are held and firmly bound to the DISTRICT for one hundred percent (100%) of the total amount payable by the DISTRICT under the terms of the contract awarded by the DISTRICT to the Contractor/Principal, lawful money of the United States of America, for payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the hereby bonded Contractor/Principal, its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by and well and truly keep and perform all the undertakings, terms, covenants, conditions, and agreements in the said contract which is attached hereto and incorporated herein by reference and any alteration and/or amendments thereof, made as therein provided, including, but not limited to, the provisions regarding contract duration and liquidated damages, all within the time and in the manner therein designated in all respects according to their true intent and meaning, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the contract, the above obligation shall hold good for a period of **One (1)** years after the acceptance of the work by DISTRICT, during which time if Contractor/Principal shall fail to make full, complete, and satisfactory repair and replacements and totally protect the DISTRICT from loss or damage made evident during the period of **One** (1) years from the date of completion of the work, and resulting from or caused by defective materials or faulty workmanship, the above obligation in penal sum thereof shall remain in full force and effect. The obligation of Surety hereunder shall continue so long as any obligation of Contractor remains.

Whenever Contractor/Principal shall be, and is declared by the DISTRICT to be, in default under the contract, the DISTRICT having performed the DISTRICT's obligations thereunder, the Surety shall promptly remedy the default, or shall promptly:

> 1. Complete the contract in accordance with its terms and conditions; or

2. Obtain a bid or bids for completing the contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a contract between such bidder and the DISTRICT, and make available as work progresses sufficient funds to pay the cost of completion less the balance of the contract price, but not exceeding, including other costs and damages for which Surety may be liable hereunder, the amount set forth above The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor/Principal by the DISTRICT under the contract and any modifications thereto, less the amount previously properly paid by the DISTRICT to the Contractor/Principal.

Surety expressly agrees that the DISTRICT may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal. Surety shall not utilize Contractor/Principal in completing the contract nor shall Surety accept a bid from Contractor/Principal for completion of the work if the DISTRICT, when declaring the Contractor/Principal in default, notifies Surety of the DISTRICT's objection to Contractor's/Principal's further participation in the completion of the work.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the DISTRICT named herein or the successors or assigns of the DISTRICT. Any suit under this bond must be instituted within the applicable statute of limitations period.

FURTHER, the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or modification of the Project documents, or of the work to be performed thereunder, shall in any way affect its obligations on this bond; and it does hereby waive notice of any change, extension of time, alteration or modification of the Project documents or of work to be performed thereunder.

Contractor/Principal and Surety agree that if the DISTRICT is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay DISTRICT's reasonable attorney's fees and costs incurred, with or without suit, in addition to the above amount.

CORPORATE SEAL, IF		
APPLICABLE, AND NOTARIAL	Contractor/Principal	
ACKNOWLEDGEMENT OF	D	
CONTRACTOR	By:Signature	
	Print Name and Title	
SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY		
	Surety	
	By:	
	Signature	
(Mailing Address, Telephone		
No. and Facsimile No. of Surety)	Print Name and Title	

PAYMENT BOND

WHEREAS, the Irvine Unified School District of Orange County, California ("hereinafter

KNOW ALL PERSONS BY THESE PRESENT:

referred to as DISTRICT"), has awarded to	_ (hereinafter
referred to as the "Contractor/Principal") a contract for the work described as RFQ/RF	P No. 16/17-
01MO, Clean Energy Jobs Act Proposition 39 Lighting Retrofit Services at Nine Distri	ict Sites from
through;	
WHEREAS, said Contractor/Principal is required by Division 3, Part IV, Title X (commencing at Section 3247) of the California Civil Code to furnish a bond in connec contract;	-
NOW, THEREFORE, we, the Contractor/Principal and	, as

NOW, THEREFORE, we, the Contractor/Principal and _________, as Surety, a California admitted surety insurer, are held firmly bound unto the DISTRICT for one hundred percent (100%) of the total amount payable by the DISTRICT under the terms of the contract awarded by the DISTRICT to the Contractor/Principal lawful money of the United States of America for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Contractor/Principal, his/her or its heirs, executors, administrators, successors, or assigns, or a subcontractor, shall fail to pay any person or persons named in Civil Code Section 3181 or fail to pay for any materials, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind, or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Section 13020 of the Unemployment Insurance Code with respect to work and labor thereon of any kind, then said Surety will pay for the same, in or to an amount not exceeding the amount hereinabove set forth, and also will pay in case suit is brought upon this bond, such reasonable attorney's fees as shall be fixed by the court, awarded and taxed as provided in Division 3, Part IV, Title XV, Chapter 7 (commencing at Section 3247) of the California Civil Code.

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

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement hereinabove described or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or

work of improvement hereinabove described, nor by any rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the DISTRICT and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 3110 and 3112 of the California Civil Code, and has not been paid the full amount of his/her or its claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

Any claims under this bond may be addressed to:	
	(Name and address of Surety)
	(Name and address of agent or representative in California, if different from above)
	(Telephone and facsimile number of Surety or agent or representative in California)

IN WITNESS HEREOF, we have, 20	here to set our hands and seals on this day o
CORPORATE SEAL, IF APPLICABLE, AND NOTARIAL ACKNOWLEDGEMENT OF	Contractor/Principal
CONTRACTOR	By:Signature
	Print Name and Title
SEAL AND NOTARIAL ACKNOWLEDGEMENT OF SURETY	
	Surety
	By: Signature
(Mailing Address, Telephone and Facsimile No. of Surety)	Print Name and Title
	_
(Attach Attorney-in-Fact Certificate and Required Acknowledgement)	

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100 et. seq.) and any amendments thereof, each bidder shall set forth below: (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 bidder (prime contractor) in or about the construction of the work or improvement to be performed under this contract or a subcontractor licensed by the State of California who, under subcontract to the bidder (prime contractor), specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications in an amount in excess of one-half of one percent of the bidder's (prime contractor's) total bid and (b) the portion of the work which will be done by each subcontractor. The bidder (prime contractor) shall list only one subcontractor for each such portion as is defined by the bidder (prime contractor) in this bid.

If a bidder (prime contractor) fails to specify a subcontractor or if a bidder (prime contractor) specifies more than one subcontractor for the same portion of work to be performed under the contract in excess of one-half of one percent of the bidder's (prime contractor's) total bid, bidder shall be deemed to have agreed that bidder is fully qualified to perform that portion, and that bidder alone shall perform that portion. Violation of this requirement (including the procurement of a subcontractor for the Project if no subcontractor is specified) can result in the DISTRICT invoking the remedies of Public Contract Code Sections 4110 and 4111.

No bidder (prime contractor) whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow it to be performed by any one other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the bidder's (prime contractor's) total bid as to which the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act. Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the bidder's (prime contractor's) total bid as to which no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, only after a finding reduced to writing as a public record of the DISTRICT awarding this contract setting forth the facts constituting the emergency or necessity.

Type of trade, Schools Legal Service of O.C. May 2002 labor, or service	Name & License # of Subcontractor License Expiration Date (Indicate if a Disabled Veteran Business Enterprise)	Complete Address (Name of City Not Sufficient) and Telephone No.
DISTRICT with the license num	n twenty-four (24) hours of the bid openber (if applicable), expiration date of a subcontractor if such information is referenced.	icense, complete address and
	Name of Bidder	
	By:	re of Bidder)
	Address:	
	Telephone:	

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID (Public Contract Code section 7106)

The undersigned do	eclares:		
I am thebid.	of	, the party making the for	regoing
association, organizhas not directly or ibidder has not directly or ibidder has not directly or indirectly or indirectly price of the bidder price, or of that of a directly or indirect thereof, or divulged association, organizor sham bid, and has Any person executiventure, limited liab that he or she has for	zation, or corporation. The bid is ndirectly induced or solicited an ectly or indirectly colluded, consin a sham bid, or to refrain from y, sought by agreement, communor any other bidder, or to fix a any other bidder. All statements of the submitted his or her bid pred information or data relative the zation, bid depository, or to any nas not paid, and will not pay, any ling this declaration on behalf of bility company, limited liability pull power to execute, and does en	any undisclosed person, partnership, considered and not collusive or sham. The sy other bidder to put in a false or sham be spired, connived, or agreed with any bid in bidding. The bidder has not in any relication, or conference with anyone to fix my overhead, profit, or cost element of contained in the bid are true. The bidder according to any corporation, partnership, contained or agent thereof, to effectuate a contained or entity for such purpose. The bidder has not in any relication, or conference with anyone to fix any overhead, profit, or cost element of contained in the bid are true. The bidder has not in any relication, partnership, contained in the bid are true. The bidder has a corporation, partnership, contained in the corporation, partnership artnership, or any other entity, hereby represented, this declaration on behalf of the other state of California that the foregoing	e bidder id. The dder or manner, the bid the bid has not, ontents mpany, ollusive ip, joint presents bidder.
and correct and tha		[date], at	
		Signature	
		Print Name	

WORKERS' COMPENSATION CERTIFICATE

Labor Code Section 3700.

"Every employer except the state shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer or as one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.
- (c) For any county, city, city and county, municipal corporation, public district, public agency or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702."

I am aware of the provisions of Labor Code Section 3700 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.

Name of the Contractor
By:
Signature
Print Name
Title
Date.

(In accordance with Article 5 [commencing at Section 1860], Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and filed with the awarding body prior to performing any work under the contract.)

GUARANTEE

·		·	ship, which we have
installed in	from	through	, has been
done in accordance with the Project	Documents and the	nat the work as insta	lled will fulfill the
requirements included in the Project D	Ocuments. The unc	lersigned agrees to rep	pair or replace any or
all of such work, together with any oth	ner adjacent work w	hich may be displaced	l in connection with
such repair or replacement, that may			
period of years from the date of o	•	<u>=</u>	
abuse or neglect excepted.		- · J · · · · · · · · · · · · · · · · ·	
In the event of the undersigne	ed's or undersigned	surety's failure to cor	nmence and pursue
with diligence said repairs or replace	•	•	
writing by the DISTRICT, the undersign			_
repaired or replaced and made good at	_	-	
to pay the costs and charges therefore i		<u> </u>	
to pay the costs and charges therefore i	mmediatery upon de	manu. (General Cond	nuons Arucie 40(u))
	Non	ne of Contractor	
	Ivan	ie of Contractor	
	P.v.		
	By:	Signature of Contr	ractor
		Signature of Conti	ractor
	Drin	t Name	
	ГШ	t maine	
	Title		
	1100	5	

Contractor shall provide copy of this Guarantee to Contractor's surety.

<u>Guarantee</u> (continued)

	Name of Subcontractor	
	(if work performed by subcontractor)	
	subcontractor)	
	By: Signature of Subcontractor	
	Signature of Subcontractor	
	Print Name	
	Time realite	
	Title	
	Titte	
D	1.6	
Representatives to be	ed for service:	
Name:		
Address:		
Telephone Number:		



Irvine Unified School District Insurance Requirements

All insurers must be duly licensed and admitted by the State of California

Mandatory Requirements (unless District reduces or excludes coverage requirements)

- 1. Commercial General Liability insurance for bodily injury and property damage, including accidental death in the combined single limit of not less than \$1,000,000 per occurrence (\$2,000,000 aggregate) and \$3,000,000 Excess/Umbrella Liability.
- 2. Sexual Abuse/Molestation coverage must be included under General Liability or obtained in separate policies in an amount of not less than \$1,000,000 per occurrence (\$2,000,000 aggregate) and \$3,000,000 excess/umbrella coverage.

Minimum Limits (if required by District)

- 1. Automobile Liability insurance for bodily injury and property damage in an amount of not less than \$1,000,000 per occurrence with no annual aggregate limit.
- 2. Workers' Compensation and Employer's Liability insurance in the amount of not less than \$1,000,000 per occurrence.
- 3. Professional Liability insurance in an amount of not less than \$1,000,000 per occurrence (\$2,000,000 aggregate). If Professional Liability policy is made on a claims-made basis, the vendor/consultant must purchase and maintain an extending reporting period (tail coverage) for one year.

Additional Insured Endorsement Language

"Irvine Unified School District, its Board of Trustees, officers, agents, employees, and volunteers are named as additionally insured on this policy pursuant to written contract, agreement, or memorandum of understanding. Such insurance as is afforded by this policy shall be primary, and any insurance carried by District shall be excess and noncontributory."

Additional Insured Endorsements <u>are required</u> to accompany Certificates of Insurance. Certificate of Insurance shall provide thirty (30) day prior written notice of cancellation.

See sample certificate on the Irvine Unified School District website at www.iusd.org.

Additional Required Documents

Certificates of Insurance must be accompanied by a list of all excluded coverages under the general liability and excess/umbrella liability policies. The exclusion policy document section may be emailed or faxed to Risk Management & Insurance. The general liability and excess/umbrella liability documents must list the corresponding policy numbers referenced on the Certificate of Insurance.

Questions may be directed to Risk Management & Insurance at lnsurance@iusd.org.

Email: lnsurance@iusd.org
Fax: (949) 936-5019

Revised: September 2016

SAMPLE

ACORD CERTIFICATE OF LIABILIT	Y INSURANCE	DATE (MM/DD/YYYY) INSERT DATE
NAME & ADDRESS OF INSURANCE COMPANY	THIS CERTIFICATE IS ISSUED AS A MATTE ONLY AND CONFERS NO RIGHTS UPON HOLDER. THIS CERTIFICATE DOES NOT A ALTER THE COVERAGE AFFORDED BY THE F	THE CERTIFICATE
	INSURERS AFFORDING COVERAGE	NAIC #
INSURED	INSURER A: Name of Insurance Company	
	INSURER B: Name of Insurance Company	
NAME & ADDRESS OF COMPANY/ORGANIZATION	INSURER C: Name of Insurance Company	
	INSURER D: Name of Insurance Company	
	INSURER E: Name of Insurance Company	
COVERAGES		

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

AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.						
INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
		GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO- POLICY LOC	MANDATORY REQUIREMENTS	Insert Date	Insert Date	EACH OCCURRENCE \$ 1,000,000
		AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS	REQUIRED IF APPLICABLE TO SERVICE	Insert Date	Insert Date	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
		GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN
		EXCESS/UMBRELLA LIABILITY X OCCUR CLAIMS MADE DEDUCTIBLE RETENTION \$	REQUIRED UNLESS REDUCED/EXCLUDED	Insert Date	Insert Date	EACH OCCURRENCE \$ 3,000,000 AGGREGATE \$ \$ \$ \$
	ANY F OFFIC If yes,	KERS COMPENSATION AND OYERS' LIABILITY PROPRIETOR/PARTNER/EXECUTIVE DEER/MEMBER EXCLUDED? describe under HAL PROVISIONS below	REQUIRED UNLESS REDUCED/EXCLUDED	Insert Date	Insert Date	X WC STATU- TORY LIMITS OTH- ER \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
	Pro Sex	re fessional Liability and/or cual Abuse/Molestation	MAY BE REQUIRED	Insert Date	Insert Date	\$ 1,000,000 per occurrence \$ 2,000,000 aggregate

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

Irvine Unified School District, its Board of Trustees, officers, agents, employees, and volunteers are named as additionally insured on this policy pursuant to written contract, agreement, or memorandum of understanding. Such insurance as is afforded by this policy shall be primary, and any insurance carried by District shall be excess and noncontributory. Sexual Abuse/Molestation is not excluded from coverage under the general liability and excess/umbrella liability policies. (Provide brief description of services/dates).

CERTIFICATE HOLDER

Irvine Unified School District 5050 Barranca Parkway Irvine, California 92604 Attention: Risk Management

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

SIGNATURE REQUIRED

Page 1 of 1

ENDORSEMENT

ADDITIONAL COVERED PARTY

COVERED PARTY

COVERAGE DOCUMENT

ADMINISTRATOR

(INSERT INSURED NAME)

(INSERT POLICY NUMBER)

(INSERT NAME OF ADMINISTRATOR)

Subject to all terms, conditions, exclusions, and endorsements, such additional covered party as is afforded by the coverage document shall also apply to the following entity but only as respects to liability arising from the actions and activities of the covered party described below.

Additional Covered Party:

Irvine Unified School District 5050 Barranca Parkway Irvine, California 92604

Description of Activities:

Irvine Unified School District, its Board of Trustees, officers, agents, employees, and volunteers are named as additionally insured on this policy pursuant to written contract, agreement, or memorandum of understanding. Such insurance as is afforded by this policy shall be primary, and any insurance carried by District shall be excess and noncontributory.

Authorized Representative Signature
MUST APPEAR ON THE ENDORSEMENT PAGE

SAMPLE

CONTRACTOR'S CERTIFICATE REGARDING NON-ASBESTOS CONTAINING MATERIALS

Per Article 69 of the General Conditions.

Certifica	tion for	from	
	Containing Materials shall be use	. We hereby certify that no Asbestos, or d in this Project or in any tools, devices, clothing, or which we have installed in the Irvine Unified School	
(a)		s that he/she has instructed his/her employees with tandards, hazards, risks and liabilities.	
(b)	Asbestos and/or asbestos contain	ning material shall be defined as all items containing corcidolite, amosite, anthopyllite, tremolite and	
(c)	Any or all material containing a shall be defined as asbestos containing and a shall be defined as asbestos containing a shall be defined as asbestos containing a shall be defined as asbestos.	greater than one-tenth of one percent (.1%) asbestos aining material.	
(d)	Any disputes involving the question of whether or not material contains asbestos shall be settled by electron microscopy. The costs of any such tests shall be paid by the Contractor if the material is found to contain asbestos.		
(e)	All work or materials found to	contain asbestos or work or material installed with will be immediately rejected and this work will be	
	Doto	Name of Contractor	
	Date		
		By:Signature	
		Print Name	
		Title	

DRUG-FREE WORKPLACE CERTIFICATION

This Drug-Free Workplace Certification is required pursuant to Government Code Sections 8350, et seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract for the procurement of any property or services from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract awarded by a State agency may be subject to suspension of payments or termination of the contract, and the contractor may be subject to debarment from future contracting, if the state agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

- a) publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in the person's or organization's workplace and specifying actions which will be taken against employees for violations of the prohibition;
- b) establishing 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) the availability of drug counseling, rehabilitation and employee-assistance programs;
 - 4) the penalties that may be imposed upon employees for drug abuse violations;
- c) requiring that each employee engaged in the performance of the contract be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract, the employee agrees to abide by the terms of the statement.
- I, the undersigned, agree to fulfill the terms and requirements of Government Code Section 8355 listed above and will publish a statement notifying employees concerning (a) the prohibition of controlled substance at the workplace, (b) establishing a drug-free awareness program, and (c) requiring that each employee engaged in the performance of the contract be given a copy of the statement required by Section 8355(a) and requiring that the employee agree to abide by the terms of that statement.

I also understand that if the DISTRICT determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of Section 8355, that the contract awarded herein is subject to suspension of payments, termination, or both. I further

understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Section 8350, et seq.

I acknowledge that I am aware of the provisions of Government Code Section 8350, et seq. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

NAME OF CONTRACTOR	
Signature	
Print Name	
Title	
Date	



MAINTENANCE & OPERATIONS

Irvine Unified School District

(949) 936-5300 fax (949) 936-5309

100 Nightmist, Irvine, CA 92618

DISTRICT RULES AND REGULATIONS

The following rules and regulations must be followed by every contractor doing business with Irvine Unified School District. Failure to comply may result in the removal of you and/or members of your crew from the job, and possible back charges for our direct costs.

- 1. This a tobacco free school district, **no tobacco products** may be used on district property.
- 2. All of the City of Irvine's laws relating to hours and noise of construction work must be followed. If you want to work other than, 7:00 am 6:00pm or dusk (whichever is earlier) Monday through Friday, or 9:00am 5:00pm Saturday, you must get a waiver from the City.
- 3. No pets are allowed on district property.
- 4. Anyone not directly involved in the scope of work shall not be on the job site.
- 5. No music, i.e. radios, cassettes, CD's, or headphones, etc., etc.
- 6. No district equipment shall be used by any contractor unless specifically allowed in writing prior to the start of work. (phone, vacuum, ladders, trash cans or bins, microwave, etc.)
- 7. Any contractor working on a site where students are present must supply the District with certification that all employees on the project have been finger printed and approved per state law.
- 8. Fraternization or other contact with students is strictly forbidden.
- 9. The contractor shall supply prior to the start of work the following:
 - a. Proof of Workman's Compensation Insurance.
 - b. Liability Insurance in an amount not less than one million dollars each occurrence; two million dollars aggregate. A Certificate of Insurance listing Irvine Unified School District as the Certificate Holder. Also, a separate page for the Additional Insured Endorsement listing Irvine Unified School District as additional insured.

- 10. The contractor must clean up all debris from the course of work daily. This includes sweeping, vacuuming, hosing down and other appropriate measures. Any and all damage to the district's property caused by the contractor's equipment or materials shall be repaired to the district's satisfaction.
- 11. All employees and subcontractors shall act in a professional manner and wear a shirt or uniform with the company name and logo plainly visible. All other clothing shall be free from holes and any inappropriate logos or patches.
- 12. Any contractor that loses site keys may be billed for the full cost of rekeying the site.
- 13. The contractor will only make changes at the request of the Construction or Maintenance Departments Director, Supervisor, Foreman, or Inspector.
- 14. The contractor is responsible for locating any and all utilities and other appurtenances that may be affected by this project. Any and all damage is the contractor's responsibility to repair to the District's satisfaction. The District will make available any as-built documents in its possession to the contractor for review at his request. The District does not guarantee the accuracy of the documents and it is the contractor's responsibility to verify the actual location of utilities and appurtenances.
- 15. Contractor is responsible for security of the entire project area, including fencing if necessary to protect the District and contractor from liability relative to the project. Any contractor that leaves a building unsecured will be liable for any loss incurred or the direct cost to the district to secure the building. The district's labor agreement requires a four hour minimum payment for after hour call outs.
- 16. Any items issued to the contractor (keys, badges, alarm cards, etc.) shall be returned prior to final payment.
- 17. Any project over \$1,000.00 is a prevailing wage project. Labor Code Section 1770-1771. (www.dir.ca.gov). SB854 requires contractor to be registered with the Department of Industrial Relations.
- 18. Firearms or weapons of any type are strictly prohibited on school district property.
- 19. Contractor to provide payment bond for projects over \$25,000.
- 20. Contractor to provide performance bond for projects over \$25,000.
- 21. Contractor will be required to provide certified payroll records on all projects.

Please read both pages of this document.	Your signature indicates you	have read, understand,
and agree to this document.		

		Page 2
Signature	Date	Rev. 2/15

NOTICE TO CONTRACTORS REGARDING CRIMINAL RECORDS CHECK (EDUCATION CODE SECTION 45125.1)

Education Code Section 45125.1 provides that if the employees of any entity that has a contract with a school district may have any contact with pupils, those employees shall submit or have submitted their fingerprints in a manner authorized by the Department of Justice together with a fee determined by the Department of Justice to be sufficient to reimburse the Department for its costs incurred in processing the application.

The Department of Justice shall ascertain whether the individual whose fingerprints were submitted to it has been arrested or convicted of any crime insofar as that fact can be ascertained from information available to the Department. When the Department of Justice ascertains that an individual whose fingerprints were submitted to it has a pending criminal proceeding for a violent felony listed in Penal Code Section 1192.7(c), or has been convicted of such a felony, the Department shall notify the employer designated by the individual of the criminal information pertaining to the individual. The notification shall be delivered by telephone and shall be confirmed in writing and delivered to the employer by first-class mail.

The contractor shall not permit an employee to come in contact with pupils until the Department of Justice has ascertained that the employee has not been convicted of a violent or serious felony. The contractor shall certify in writing to the governing board of the school district that none of its employees who may come in contact with pupils have been convicted of a violent or serious felony.

Penal Code Section 667.5(c) lists the following "violent" felonies: murder; voluntary manslaughter; mayhem; rape; sodomy by force; oral copulation by force; lewd acts on a child under the age of 14 years; any felony punishable by death or imprisonment in the state prison for life; any felony in which the defendant inflicts great bodily injury on another; any robbery perpetrated in an inhabited dwelling; arson; penetration of a person's genital or anal openings by foreign or unknown objects against the victim's will; attempted murder; explosion or attempt to explode or ignite a destructive device or explosive with the intent to commit murder; kidnapping; continuous sexual abuse of a child; and carjacking.

Penal Code Section 1192.7 lists the following "serious" felonies: murder; voluntary manslaughter; mayhem; rape; sodomy by force; oral copulation by force; a lewd or lascivious act on a child under the age of 14 years; any felony punishable by death or imprisonment in the state prison for life; any felony in which the defendant personally inflicts great bodily injury on another, or in which the defendant personally uses a firearm; attempted murder; assault with intent to commit rape or robbery; assault with a deadly weapon on a peace officer; assault by a life prisoner on a noninmate; assault with a deadly weapon by an inmate; arson; exploding a destructive device with intent to injure or to murder, or explosion causing great bodily injury or mayhem; burglary of an inhabited dwelling; robbery or bank robbery; kidnapping; holding of a hostage by a person confined in a state prison; attempt to commit a felony punishable by death or imprisonment in the state prison for life; any felony in which the defendant personally uses a dangerous or deadly weapon; selling or furnishing specified controlled substances to a minor; penetration of genital or anal openings by foreign objects against the victim's will; grand theft involving a firearm; carjacking; and a conspiracy to commit specified controlled substances offenses.

CERTIFICATION BY CONTRACTOR CRIMINAL RECORDS CHECK AB 1610, 1612 and 2102

To the	Governing Board of <u>Irvine Unified</u> School District:	
I,	Name of Contractor	
1.	I have carefully read and understand the Notice to Contractors Regarding Criminal Record Checks (Education Code Section 45125.1) required by the passage of AB 1610, 1612 and 2102.	
2.	Due to the nature of the work I will be performing for the District, my employees may have contact with students of the District.	
3.	None of the employees who will be performing the work have been convicted of a violent or serious felony as defined in the Notice and in Penal Code Section 1192.7 and this determination was made by a fingerprint check through the Department of Justice.	
I decla	are under penalty of perjury that the foregoing is true and correct.	
Execu	ted at, California on Date	
	Signature	
	Typed or printed name	
	Title	
	Address	

Telephone

SHOP DRAWING TRANSMITTAL

The procedure governing shop drawing submittals is contained in the General Conditions. In addition, all Supplemental Conditions, Special Conditions and Specifications must be followed by the CONTRACTOR.

Failure to comply with all requirements will constitute grounds for return of the shop drawing for proper resubmittal. CONTRACTOR shall sequentially number each submittal.

Date:		Submittal No.	.:	
From:		To:		
Project Nan	ne:			
		This is a(n):	Original Submittal 2nd Submittal [] Submittal	
Subject of S	Submittal:	Equipment Designation:	Specification Section(s):	
Complete e	ither (a) or (b)			Check One:
(a) We have verified that the material or equipment contained in this submittal meets all the requirements specified or shown (no exceptions).				
(b)	contained in this sub	that the material or emittal meets all the requirements for the following of tached sheet).	uirements	
		(continued on next page	ge)	

The CONTRACTOR has reviewed and approved not only the field dimensions but the construct criteria and has also made written notation regarding any information in the shop drawings that do not conform to the Project Documents. This shop drawing has been coordinated with all other sh drawings received to date by CONTRACTOR and this duty of coordination has not been delegated to subcontractors, material suppliers, the ARCHITECT, or the engineers on this Project.	
	Signature of Contractor or Supplier

AGREEMENT

THIS AGREEMENT, dated the __ day of ______, 2017, in the County of Orange, State of

California, is by and between	Irvine Unified School District, (hereinafter referred to as
"DISTRICT"), and	, (hereinafter referred to as "CONTRACTOR").
The DISTRICT and the C	CONTRACTOR, for the consideration stated herein, agree as
follows:	
 CONTRACTOR ag 	grees to complete the Project known as RFQ/RFP No. 16/17-
01MO, Clean Energy Jobs Act	Proposition 39 Lighting Retrofit Services at Nine District
Sites fromthroug	th according to all the terms and conditions set
forth in the Project Documents,	including but not limited to the Notice Calling For Bids,
Information for Bidders, Bid Forr	m, Bid Security, Designation of Subcontractors, Information
Required of Bidder, all prequalifica	ation forms submitted pursuant to Public Contract Code Section
20111.5, if any, Noncollusion Affic	davit, Workers' Compensation Certificate, Faithful Performance
Bond, Payment Bond, Escrow A	greement, if applicable, Drug-Free Workplace Certification,
Criminal Records Check Certifica	ation, Change Orders, Shop Drawing Transmittals, Insurance
Certificates and Endorsements, G	Guarantees, Contractor's Certificate Regarding Non-Asbestos
Containing Materials, Disabled Ve	eteran Business Enterprises Certification, if applicable, General
Conditions, Supplemental Condition	ons, if any, Special Conditions, if any, Drawings, Specifications,
and all modifications, addenda and	amendments thereto by this reference incorporated herein. The
	ntary, and what is called for by any one shall be as binding as if
called for by all.	

- CONTRACTOR shall perform within the time set forth in Paragraph 4 of this Agreement everything required to be performed, and shall provide, furnish and pay for all the labor, materials, necessary tools, expendable equipment, and all taxes, utility and transportation services required for construction of the Project. All of said work shall be performed and completed in a good workmanlike manner in strict accordance with the drawings, specifications and all provisions of this Agreement as hereinabove defined and in accordance with applicable laws, codes, regulations, ordinances and any other legal requirements governing the Project. The CONTRACTOR shall be liable to the DISTRICT for any damages arising as a result of a failure to fully comply with this obligation, and the CONTRACTOR shall not be excused with respect to any failure to so comply by any act or omission of the Architect, Engineer, Inspector, Division of State Architect, or representative of any of them, unless such act or omission actually prevents the CONTRACTOR from fully complying with the requirements of the Project Documents, and unless the CONTRACTOR protests at the time of such alleged prevention that the act or omission is preventing the CONTRACTOR from fully complying with the Project Documents. Such protest shall not be effective unless reduced to writing and filed with the DISTRICT within three (3) working days of the date of occurrence of the act or omission preventing the CONTRACTOR from fully complying with the Project Documents.
- 3. DISTRICT shall pay to the CONTRACTOR, as full consideration for the faithful performance of this Agreement, subject to any additions or deductions as provided in the Project

Documents, the sum <u>NOT TO EXCEED</u> , <u>purchase orders to be processed as work is scheduled throughout the year with each requiring bonding and insurance per the contract.</u>

- 4. The work shall be commenced as specified.
- 5. **Time is of the essence**. If the work is not completed in accordance with Paragraph 4 above, it is understood that the DISTRICT will suffer damage. It being impractical and infeasible to determine the amount of actual damage, in accordance with Government Code Section 53069.85, it is agreed that CONTRACTOR shall pay to DISTRICT as fixed and liquidated damages, and not as a penalty, the sum of **Five hundred Dollars (\$ 500.00)** for each calendar day of delay until work is completed and accepted. Time extensions may be granted by the DISTRICT as provided in Article 63 of the General Conditions. Liquidated damages shall be imposed as set forth in Article 63 of the General Conditions.
- 6. Termination for Cause or Nonappropriation. In the event CONTRACTOR defaults in the performance of the Agreement as set forth in General Conditions Article 13(a) or if there is a nonappropriation of funds or insufficient funds as set forth in General Conditions Article 13(d), then this Agreement shall terminate or be suspended as set forth in General Conditions Article 13.

Termination for Convenience. DISTRICT has discretion to terminate this Agreement at any time and require CONTRACTOR to cease all work on the Project by providing CONTRACTOR written notice of termination specifying the desired date of termination. Upon receipt of written notice from DISTRICT of such termination for DISTRICT's convenience, CONTRACTOR shall:

- (i) Cease operations as directed by DISTRICT in the notice;
- (ii) Take any actions necessary, or that DISTRICT may direct, for the protection and preservation of the work; and
- (iii) Not terminate any insurance provisions required by the Project Documents.

In case of such termination for DISTRICT's convenience, CONTRACTOR shall be entitled to receive payment from DISTRICT for work satisfactorily executed and for proven loss with respect to materials, equipment, and tools, including overhead and profit for that portion of the work completed. In the case of Termination for Convenience, DISTRICT shall have the right to accept assignment of subcontractors. The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the DISTRICT.

7. Hold Harmless and Indemnification. To the fullest extent permitted by law, the CONTRACTOR, at the CONTRACTOR's sole cost and expense, agrees to fully defend, indemnify and hold harmless, the DISTRICT, including but not limited to any of its governing board members, officers, employees and agents, from and against any and all claims, actions, demands, costs, judgments, liens, penalties, liabilities, damages, losses, anticipated losses of

revenues, and expenses, including any fees of accountants, attorneys or other professionals, arising out of, in connection with, resulting from or related to, or claimed to be arising out of, in connection with, resulting from or related to any act or omission by the CONTRACTOR or any of its officers, agents, employees, subcontractors, sub-subcontractors, any person performing any of the work pursuant to a direct or indirect contract with the CONTRACTOR or individual entities comprising the CONTRACTOR, in connection with or relating to, or claimed to be in connection with or relating to the work, this Agreement, or the Project, including but not limited to any costs or liabilities arising out of or in connection with:

- (a) failure to comply with any applicable law, statute, code, ordinance, regulation, permit or orders;
- (b) any misrepresentation, misstatement or omission with respect to any statement made in the Project Documents or any document furnished by the CONTRACTOR in connection therewith;
- (c) any breach of duty, obligation or requirement under the Project Documents;
- (d) any failure to coordinate the work of other contractors;
- (e) any failure to provide notice to any party as required under the Project Documents;
- (f) any failure to act in such a manner as to protect the DISTRICT and the Project from loss, cost, expense or liability; or
- (g) any failure to protect the property of any utility company or property owner.

This indemnity shall survive termination of the contract or final payment thereunder. This indemnity is in addition to any other rights or remedies which the DISTRICT may have under the law or under the Project Documents. In the event of any claim or demand made against any party which is entitled to be indemnified hereunder, the DISTRICT may in its sole discretion reserve, retain or apply any monies due to the CONTRACTOR under the Project Documents for the purpose of resolving such claims; provided, however, that the DISTRICT may release such funds if the CONTRACTOR provides the DISTRICT with reasonable assurance of protection of the DISTRICT's interests. The DISTRICT shall in its sole discretion determine whether such assurances are reasonable.

8. CONTRACTOR shall take out, prior to commencing the work, and maintain, during the life of this Agreement, and shall require all subcontractors, if any, whether primary or secondary, to take out and maintain the insurance coverages set forth below and in Articles 16, 17, 18 and 19 of the General Conditions. CONTRACTOR agrees to provide all evidences of coverage required by DISTRICT including certificates of insurance and endorsements.

Public Liability Insurance for injuries including accidental death, to any one person in an amount not less than

\$1,000,000

and

Subject to the same limit for each person on account of one accident,

in an amount not less than \$1,000,000

Property Damage Insurance

in an amount not less than \$1,000,000

Course of Construction Insurance without exclusion or limitation in an amount not less than

\$1,000,000

Aggregate \$2,000,000

This policy shall be endorsed to name DISTRICT and DISTRICT's Board of Trustees, officers, agents and employees as additional insured.

Insurance Covering Special Hazards: The following special hazards shall be covered by rider or riders to above-mentioned public liability insurance or property damage insurance policy or policies of insurance, or by special policies of insurance in amounts as follows:

Automotive and truck where operated in amounts as above

Material hoist where used in amounts as above

9. Public Contract Code Section 22300 permits the substitution of securities for any retention monies withheld by the DISTRICT to ensure performance under this Agreement. At the request and expense of the CONTRACTOR, securities equivalent to the monies withheld shall be deposited with the DISTRICT, or with a state or federally chartered bank in California as the escrow agent, who shall then pay such monies to the CONTRACTOR. The DISTRICT retains the sole discretion to approve the bank selected by the CONTRACTOR to serve as escrow agent. Upon satisfactory completion of the Agreement, the securities shall be returned to the CONTRACTOR. Securities eligible for investment shall include those listed in Government Code Section 16430 or 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.

In the alternative, under Section 22300, the CONTRACTOR may request DISTRICT to make payment of earned retention monies directly to the escrow agent at the expense of the CONTRACTOR. Also at the CONTRACTOR's expense, the CONTRACTOR may direct investment of the payments into securities, and the CONTRACTOR shall receive interest earned on such investment upon the same conditions as provided for securities deposited by CONTRACTOR. Upon satisfactory completion of the Agreement, CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by escrow agent from DISTRICT pursuant to the terms of Section 22300.

warrants that the corporation is duly inco	a corporation, the undersigned hereby represents and orporated and in good standing in the State of California, hose title is, is authorized to
Agreement shall be deemed to be inserte though it were included herein, and if	of law and clause required by law to be inserted in this d herein and the Agreement shall be read and enforced as through mistake or otherwise any such provision is not en upon application of either party the Agreement shall e such insertion or correction.
agreements, oral or written, pertaining t This Agreement can be modified only be	tutes the entire agreement of the parties. No other to the work to be performed, exists between the parties. By an amendment in writing, signed by both parties and ard of the District. This Agreement shall be governed by
IN WITNESS WHEREOF, the p	arties hereto have caused this Agreement to be executed.
DISTRICT	CONTRACTOR
By:Signature	By: Signature
Print Name	Print Name
Title	Title
	Contractor's License No.

Tax ID/Social Security No.

if corporation)

(CORPORATE SEAL OF CONTRACTOR,

GENERAL CONDITIONS

ARTICLE 1. DEFINITIONS

- (a) Action of the Governing Board is a vote of a majority of the members in a lawful meeting.
- (b) <u>Addenda</u> are the changes in plans, specifications, drawings, and/or Project Documents which have been authorized in writing by the DISTRICT or ARCHITECT, and which alter, explain, or clarify the Project Documents prior to the bid deadline.
- (c) <u>Approval</u> means written authorization by ARCHITECT or DISTRICT.
- (d) Agreement includes collectively all Project Documents.
- (e) <u>Project Documents</u> includes collectively, to wit: Notice Calling for Bids, Information for Bidders, Bid Form, Bid Security, Designation of Subcontractor form, Information Required of Bidder, all prequalification forms submitted pursuant to Public Contract Code Section 20111.5, if any, Noncollusion Affidavit, Workers' Compensation Certificate, Faithful Performance Bond, Payment Bond, Agreement, Escrow Agreement, Drug-Free Workplace Certification, Criminal Records Check Certification, Change Order forms, Shop Drawing Transmittals form, Insurance Certificates and Endorsements, Guarantee form, Contractor's Certificate Regarding Non-Asbestos Containing Materials, Disabled Veteran Business Enterprises Certification, if applicable, General Conditions, Supplemental Conditions, if any, Special Conditions, if any, Drawings, Specifications, and all modifications, addenda and amendments thereto. The Project Documents are complementary, and what is called for by any one shall be as binding as if called for by all.
- (f) <u>CONTRACTOR or DISTRICT</u> are those mentioned as such in the Agreement. They are treated throughout the Project Documents as if they are of singular number and neuter gender.
- (g) <u>DISTRICT</u> is the Governing Board or its duly authorized representative.
- (h) <u>Locality in which the work is performed</u> means the county and city in which the work is done.
- (i) <u>Project</u> is the planned undertaking as provided for in the Project Documents by DISTRICT and CONTRACTOR.
- (j) Provide shall include "provide complete in place," that is, "furnish and install."
- (k) <u>Safety Orders</u> are those issued by the Division of Industrial Safety and OSHA safety and health standards for construction.
- (l) <u>Standards, Rules, and Regulations</u> referred to are recognized printed standards and shall be considered as one and a part of these specifications within limits specified.

- (m) <u>Subcontractor</u>, as used herein, includes those having a direct contractual relationship with CONTRACTOR and one who furnishes material worked to a special design according to plans, drawings, and specifications, but does not include one who merely furnishes material not so worked.
- (n) <u>Surety</u> is the person, firm, or corporation that executes as a California admitted surety insurer, the CONTRACTOR's Bid Security, faithful performance bond and payment bond.
- (o) <u>Work</u> of the CONTRACTOR or subcontractor includes labor or materials (including, without limitation, equipment and appliances) or both, incorporated in, or to be incorporated in the Project.
- (p) <u>Workers</u> includes laborer, worker, or mechanic.

ARTICLE 2. STATUS OF CONTRACTOR

- (a) CONTRACTOR is and shall at all times be deemed to be an independent contractor and shall be wholly responsible for the manner in which it performs the services required of it by the terms of the Project Documents. Nothing herein contained shall be construed as creating the relationship of employer and employee, or principal and agent, between the DISTRICT and CONTRACTOR or any of CONTRACTOR's agents or employees. CONTRACTOR assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. CONTRACTOR, its agents and employees shall not be entitled to any rights or privileges of DISTRICT employees and shall not be considered in any manner to be DISTRICT employees. DISTRICT shall be permitted to monitor the activities of the CONTRACTOR to determine compliance with the terms of the Project Documents.
- (b) Contractors are required by law to be licensed and regulated by the Contractors' State License Board. Any CONTRACTOR not so licensed is subject to penalties under the law, and the contract will be considered void pursuant to Section 7028.7 of the Business and Professions Code. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, 9821 Business Park Drive, P. O. Box 26000, Sacramento, CA 95826.

ARTICLE 3. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Before CONTRACTOR makes any change in the name or legal nature of the CONTRACTOR's entity, CONTRACTOR shall first notify the DISTRICT in writing and cooperate with DISTRICT in making such changes as the DISTRICT may request in the Project Documents.

ARTICLE 4. CONTRACTOR'S SUPERVISION, PROSECUTION AND PROGRESS

- (a) During progress of the work, CONTRACTOR shall keep on the work site a competent superintendent satisfactory to DISTRICT. Before commencing the work herein, CONTRACTOR shall give written notice to DISTRICT and ARCHITECT of the name, qualifications and experience of such superintendent. If Superintendent is found unsatisfactory by DISTRICT, CONTRACTOR shall replace the Superintendent with one acceptable to the DISTRICT. Superintendent shall not be changed except with written consent of DISTRICT, unless a superintendent proves to be unsatisfactory to CONTRACTOR and ceases to be in its employ, in which case, CONTRACTOR shall notify DISTRICT and ARCHITECT in writing and replace said Superintendent with one acceptable to the DISTRICT. Superintendent shall represent CONTRACTOR and all directions given to Superintendent shall be as binding as if given to CONTRACTOR.
- (b) CONTRACTOR shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills as may be necessary to perform the work in accordance with the Project Documents. CONTRACTOR shall carefully study and compare all plans, drawings, specifications, and other instructions and shall at once report to ARCHITECT any error, inconsistency or omission which CONTRACTOR or its employees may discover. The CONTRACTOR represents itself to DISTRICT as a skilled, knowledgeable, and experienced CONTRACTOR. The CONTRACTOR shall carefully study and compare the Project Documents with each other, and shall at once report to the ARCHITECT any errors, inconsistencies, or omissions discovered. The CONTRACTOR shall be liable to the DISTRICT for damage resulting from errors, inconsistencies, or omissions in the Project Documents that the CONTRACTOR recognized and which CONTRACTOR knowingly failed to report and which a similarly skilled, knowledgeable, and experienced contractor would have discovered.
- (c) The CONTRACTOR shall verify all indicated dimensions before ordering materials or equipment, or before performing work. The CONTRACTOR shall take field measurements, verify field conditions, and shall carefully compare such field measurements and conditions and other information known to the CONTRACTOR with the Project Documents before commencing work. Errors, inconsistencies or omissions discovered shall be reported to the DISTRICT at once. Upon commencement of any item of work, the CONTRACTOR shall be responsible for dimensions related to such item of work and shall make any corrections necessary to make work properly fit at no additional cost to DISTRICT. This responsibility for verification of dimensions is a non-delegable duty and may not be delegated to subcontractors or agents.
- (d) Omissions from the plans, drawings or specifications, or the misdescription of details of work which are manifestly necessary to carry out the intent of the plans, drawings and specifications, or which are customarily performed, shall not relieve the CONTRACTOR from performing such omitted or misdescribed work, but they shall be performed as if fully and correctly set forth and described in the plans, drawings and specifications.

(e) The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The CONTRACTOR shall be responsible to see that the finished work complies accurately with the Project Documents.

ARTICLE 5. SUBCONTRACTORS

- (a) CONTRACTOR agrees to bind every subcontractor by terms of the Project Documents as far as such terms are applicable to subcontractor's work. If CONTRACTOR shall subcontract any part of the work, CONTRACTOR shall be as fully responsible to DISTRICT for acts and omissions of any subcontractor and of persons either directly or indirectly employed by any subcontractor, as it is for acts and omissions of persons directly employed by CONTRACTOR. Nothing contained in Project Documents shall create any contractual relation between any subcontractor and DISTRICT, nor shall the contract documents be construed to be for the benefit of any subcontractor.
- (b) DISTRICT's consent to any subcontractor shall not in any way relieve CONTRACTOR of any obligations under the Project Documents and no such consent shall be deemed to waive any provision of any Project Document.
- (c) CONTRACTOR must submit with its bid, a Designation of Subcontractors pursuant to the Subletting and Subcontracting Fair Practices Act. If CONTRACTOR specifies more than one subcontractor for the same portion of work or fails to specify a subcontractor, and such portion of the work exceeds one-half of one percent of the total bid, CONTRACTOR agrees that it is fully qualified to perform and shall perform such work itself, unless CONTRACTOR provides for substitution or addition of subcontractors. Substitution or addition of subcontractors shall be permitted only as authorized under the Subletting and Subcontracting Fair Practices Act, Public Contract Code Section 4100, et. seq.
- (d) In accordance with Business and Professions Code Section 7059, if CONTRACTOR is designated as a "specialty contractor" (as defined in Section 7058 of the Public Contract Code), all of the work to be performed outside of the CONTRACTOR's license specialty shall be performed by a licensed subcontractor in compliance with the Subletting and Subcontracting Fair Practices Act, Public Contract Code Section 4100, et seq.
- (e) A copy of each subcontract, if in writing, or, if not in writing, then a written statement signed by the CONTRACTOR giving the name of the subcontractor and the terms and conditions of such subcontract, shall be filed with the DISTRICT before the subcontractor begins work. Each subcontract shall contain a reference to the Agreement between the DISTRICT and the CONTRACTOR and the terms of that Agreement and all parts of the Project Documents shall be made a part of such subcontract insofar as applicable to the work covered thereby. Each subcontract will provide for termination in accordance with Article 13 of these General Conditions. Each subcontract shall provide for its annulment by the CONTRACTOR at the order of the ARCHITECT if in the ARCHITECT'S opinion the subcontractor fails to comply with the requirements of the Project Documents insofar as the same may be applicable to this work. Nothing herein contained shall relieve the CONTRACTOR of any liability or obligation hereunder.

ARTICLE 6. PROHIBITED INTERESTS

No official of DISTRICT who is authorized in such capacity and on behalf of DISTRICT to negotiate, make, accept, or approve, or to take part in negotiating, making, accepting or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the Project, shall become directly or indirectly interested financially in this Project or in any part thereof. No officer, employee, architect, attorney, engineer or inspector of or for DISTRICT who is authorized in such capacity and on behalf of DISTRICT to exercise any executive, supervisory or other similar functions in connection with construction of Project shall become directly or indirectly interested financially in this Project or in any part thereof. CONTRACTOR shall receive no compensation and shall repay DISTRICT for any compensation received by CONTRACTOR hereunder, should CONTRACTOR aid, abet or knowingly participate in violation of this Article 6.

ARTICLE 7. DISTRICT'S INSPECTOR

- (a) One or more Inspector(s), including special inspectors, as required, will be employed by DISTRICT and will be assigned to the Project.
- (b) No work shall be performed by the CONTRACTOR solely upon the instructions or comments by the Inspector. The Inspector has no authority to interpret the Project Documents or order extra work and any extra work performed without the written instruction of the DISTRICT shall be at CONTRACTOR□s sole cost and expense and there will be no delay damages incurred by DISTRICT for such work.
- (c) No work shall be carried on except with the knowledge and under the inspection of said Inspector(s). He/she shall have free access to any or all parts of work at any time. CONTRACTOR shall furnish Inspector reasonable opportunities for obtaining such information as may be necessary to keep Inspector fully informed respecting progress and manner of work and character of materials. Inspection of work shall not relieve CONTRACTOR from any obligation to fulfill the Project Documents. Inspector or ARCHITECT shall have authority to stop work whenever provisions of Project Documents are not being complied with and such noncompliance is discovered. CONTRACTOR shall instruct its employees accordingly.
- (d) CONTRACTOR understands and agrees that the Inspector for the Project may also serve concurrently as inspector for other DISTRICT projects and may not therefore be available on site during the entire work day. It shall be the responsibility of CONTRACTOR to notify the Inspector not less than twenty-four (24) hours in advance of materials and equipment deliveries and required inspections.

ARTICLE 8. ARCHITECT'S STATUS

- (a) The ARCHITECT shall be the DISTRICT's representative during construction and shall observe the progress and quality of the work on behalf of the DISTRICT. ARCHITECT shall have the authority to act on behalf of DISTRICT only to the extent expressly provided in the Project Documents. ARCHITECT shall have authority to stop work whenever such stoppage may be necessary in ARCHITECT'S reasonable opinion to ensure the proper execution of the Project Documents.
- (b) The ARCHITECT shall be, in the first instance, the judge of the performance of the work. ARCHITECT shall exercise authority under the Project Documents to enforce CONTRACTOR's faithful performance.
- (c) The ARCHITECT shall have all authority and responsibility established by law. The ARCHITECT has the authority to enforce compliance with the Project Documents and the CONTRACTOR shall promptly comply with instructions from the ARCHITECT or an authorized representative of the ARCHITECT.
- (d) On all questions related to the quantities, the acceptability of material, equipment or workmanship, the execution, progress or sequence of work, the interpretation of plans, specifications or drawings, and the acceptable performance of the CONTRACTOR pursuant to the decision of the ARCHITECT shall govern and shall be precedent to any payment unless otherwise ordered by the Governing Board. The progress and completion of the work shall not be impaired or delayed by virtue of any question or dispute arising out of or related to the foregoing matters and the instructions of the ARCHITECT relating thereto.
- (e) General supervision and direction of the work by the ARCHITECT shall in no way imply that the ARCHITECT or his or her representatives are in any way responsible for the safety of the CONTRACTOR or its employees or that the ARCHITECT or his or her representatives will maintain supervision over the CONTRACTOR's construction methods or personnel other than to ensure that the quality of the finished work is in accordance with the Project Documents.

ARTICLE 9. NOTICE OF TAXABLE POSSESSORY INTEREST

The terms of the Agreement may result in the creation of a possessory interest. If such a possessory interest is vested in a private party to the Agreement, the private party may be subjected to the payment of property taxes levied on such interest.

ARTICLE 10. ASSIGNMENT OF ANTITRUST ACTIONS

Public Contract Code Section 7103.5 provides:

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 (DISTRICT) 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 awarding body tenders final payment to the contractor, without further acknowledgment by the parties.

CONTRACTOR, for itself and all subcontractors, agrees to assign to DISTRICT all rights, title, and interest in and to all such causes of action CONTRACTOR and all subcontractors may have under the Agreement. This assignment shall become effective at the time DISTRICT tenders final payment to the CONTRACTOR, and CONTRACTOR shall require assignments from all subcontractors to comply herewith.

ARTICLE 11. OTHER CONTRACTS

- (a) DISTRICT reserves the right to let other contracts in connection with this work. CONTRACTOR shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly connect and coordinate its work with such other contractors.
- (b) If any part of CONTRACTOR's work depends for proper execution or results upon work of any other contractor, the CONTRACTOR shall inspect and promptly report to ARCHITECT in writing any defects in such work that render it unsuitable for such proper execution and results. CONTRACTOR will be held accountable for damages to DISTRICT for that work which it failed to inspect or should have inspected. CONTRACTOR's failure to inspect and report shall constitute its acceptance of other contractor's work as fit and proper for reception of its work, except as to defects which may develop in other contractors' work after execution of CONTRACTOR's work.
- (c) To ensure proper execution of its subsequent work, CONTRACTOR shall measure and inspect work already in place and shall at once report to the ARCHITECT in writing any discrepancy between executed work and Project Documents.
- (d) CONTRACTOR shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by DISTRICT in prosecution of the Project to the end that CONTRACTOR may perform this Agreement in the light of such other contracts, if any.
- (e) Nothing herein contained shall be interpreted as granting to CONTRACTOR exclusive occupancy at site of Project. CONTRACTOR shall not cause any unnecessary hindrance or delay to any other contractor working on Project. If simultaneous execution of any contract for Project is likely to cause interference with performance of some other contract or contracts, DISTRICT shall decide which contractor shall cease work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously.

(f) DISTRICT shall not be responsible for any damages suffered or extra costs incurred by CONTRACTOR resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts on Project, or caused by any decision or omission of DISTRICT respecting the order of precedence in performance of contracts.

ARTICLE 12. OCCUPANCY

DISTRICT reserves the right to occupy buildings and/or portions of the site at any time before completion, and such occupancy shall not constitute final acceptance of any part of work covered by this Agreement, nor shall such occupancy extend the date specified for completion of the work. Beneficial occupancy of building(s) does <u>not</u> commence any warranty period nor shall it entitle CONTRACTOR to any additional compensation due to such occupancy.

ARTICLE 13. DISTRICT'S RIGHT TO TERMINATE AGREEMENT

- Termination for Cause. If the CONTRACTOR refuses or fails to complete the work or any separable part thereof with such diligence as will insure its completion within the time specified or any extension thereof, or fails to complete said work within such time, or if the CONTRACTOR should file a petition for relief as a debtor, or should relief be ordered against CONTRACTOR as a debtor under Title 11 of the United States Code, or if CONTRACTOR should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if it should refuse or should fail to supply enough properly skilled workers or proper equipment, tools, and materials in the necessary quantity and quality to complete the work in the time specified, or if CONTRACTOR should fail to make prompt payment to subcontractors for materials or labor, or disregard laws or ordinances or instructions of DISTRICT, or if CONTRACTOR or its subcontractors should otherwise be guilty of a violation of any provision of this Agreement, then CONTRACTOR shall be deemed to be in default of the Agreement and DISTRICT may, without prejudice to any other right or remedy, serve written notice upon CONTRACTOR and its surety of DISTRICT's intention to terminate this Agreement, such notice to contain the reasons for such intention to terminate, and unless within ten (10) calendar days after the service of such notice such condition shall cease or such violation shall cease, or arrangements satisfactory to DISTRICT for the correction thereof be made and corrective action commenced in a diligent and workmanlike manner and pursued to satisfactory completion, this Agreement shall upon the expiration of said ten (10) calendar days, cease and terminate. In such case, CONTRACTOR shall be excluded from the worksite and not be entitled to receive any further payment until work is finished to DISTRICT's satisfaction.
- (b) In the event of any such termination, surety shall have the right to take over and perform this Agreement, provided, however, that if surety within five (5) calendar days after service upon it of said notice of termination does not give DISTRICT written notice of its intention to take over and perform this Agreement or does not commence performance thereof within ten (10) calendar days after date of serving such notice of termination by DISTRICT on surety, DISTRICT may take over the work and prosecute same to completion by any means determined by DISTRICT including hiring another

contractor for the account and at the expense of CONTRACTOR, and CONTRACTOR and its surety shall be liable to DISTRICT for any excess cost or other damages occasioned by the DISTRICT thereby. Time is of the essence in this Agreement. If the DISTRICT takes over the work as hereinabove provided, the DISTRICT may, without liability for so doing, take possession of and utilize in completing the work such materials, supplies, equipment and other property belonging to the CONTRACTOR as may be on the site of the work and necessary therefore.

- (c) The expense of finishing the work, including compensation for additional architectural, managerial, and administrative services, shall be a charge against CONTRACTOR and CONTRACTOR agrees that the charge may be deducted from any money due or becoming due to CONTRACTOR from DISTRICT or CONTRACTOR shall pay the charge to the DISTRICT. Expense incurred by DISTRICT as herein provided, and damage incurred through CONTRACTOR's default, shall be certified to DISTRICT by ARCHITECT. The surety shall become liable for payment should CONTRACTOR fail to pay in full any cost incurred by the DISTRICT.
- (d) Nonappropriation of Funds/Insufficient Funds. In the event that sufficient funds are not appropriated to complete the Project or the DISTRICT determines that sufficient funds are not available to complete the Project, DISTRICT may terminate or suspend the completion of the Project at any time by giving written notice to the CONTRACTOR. In the event that the DISTRICT exercises this option, the DISTRICT shall pay for any and all work and materials completed or delivered onto the site, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials paid for shall include a factor of fifteen percent (15%) for the CONTRACTOR's overhead and profit and there shall be no other costs or expenses paid to CONTRACTOR. All work, materials and orders paid for pursuant to this provision shall become the property of the DISTRICT. DISTRICT may, without cause, order CONTRACTOR in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as DISTRICT may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.
- (e) The foregoing provisions are in addition to and not a limitation of any other rights or remedies available to the DISTRICT.

ARTICLE 14. BONDS

Unless otherwise specified in Special Conditions, CONTRACTOR shall furnish a surety bond in an amount equal to one hundred percent (100%) of contract price as security for faithful performance of this Agreement and shall furnish a separate bond in an amount of one hundred percent (100%) of the contract price as security for payment to persons performing labor and furnishing materials in connection with this Project. Bonds shall be in the form set forth in these Project Documents.

ARTICLE 15. SUBSTITUTION OF SECURITIES

- (a) Pursuant to the requirements of Public Contract Code Section 22300, upon CONTRACTOR's request, DISTRICT will make payment to CONTRACTOR of any earned retention funds withheld from payments under this Agreement if CONTRACTOR deposits with the DISTRICT or in escrow with a California or federally chartered bank acceptable to DISTRICT, securities eligible for the investment pursuant to Government Code Section 16430 or bank or savings and loan certificates of deposit, upon the following conditions:
 - (1) CONTRACTOR shall be the beneficial owner of any securities substituted for retention funds withheld and shall receive any interest thereon.
 - (2) All expenses relating to the substitution of securities under said Section 22300 and under this Article 15, including, but not limited to DISTRICT's overhead and administrative expenses, and expenses of escrow agent shall be the responsibility of the CONTRACTOR.
 - (3) If CONTRACTOR shall choose to enter into an escrow agreement, such agreement shall be in the form as set forth in Public Contract Code section 22300(f) attached hereto as part of the Project Documents and which shall allow for the conversion to cash to provide funds to meet defaults by the CONTRACTOR including, but not limited to, termination of the CONTRACTOR's control over the work, stop notices filed pursuant to law, assessment of liquidated damages or amount to be kept or retained under the provisions of the Project Documents.
 - (4) Securities, if any, shall be returned to CONTRACTOR only upon satisfactory completion of the Agreement.
- (b) To minimize the expense caused by such substitution of securities, CONTRACTOR shall, prior to or at the time CONTRACTOR requests to substitute security, deposit sufficient security to cover the entire amount to be then withheld and to be withheld under the General Conditions of this Agreement. Should the value of such substituted security at any time fall below the amount for which it was substituted, or any other amount which the DISTRICT determines to withhold, CONTRACTOR shall immediately, and at CONTRACTOR's expense, deposit additional security qualifying under said Section 22300 until the total security deposited is no less than equivalent to the amount subject to withholding under the Agreement.
- (c) In the alternative, under Section 22300, CONTRACTOR, at its own expense, may request DISTRICT to make payment of earned retention funds directly to the escrow agent. Also at the expense of CONTRACTOR, CONTRACTOR may direct investment of the payments into securities, and CONTRACTOR shall receive the interest earned on the investment upon the same conditions as shown in paragraph (a) for securities deposited by CONTRACTOR. Upon satisfactory completion of the Agreement, CONTRACTOR shall receive from the escrow agent all securities, interest and payments received by the escrow agent from DISTRICT, pursuant to the terms of Section 22300.

(d) If any provision of this Article 15 shall be found to be illegal or unenforceable, then, notwithstanding, this Article 15 shall remain in full force and effect, and such provision shall be deemed stricken.

ARTICLE 16. FIRE INSURANCE

CONTRACTOR will procure at CONTRACTOR's own expense, and before commencement of any work under this Agreement, fire insurance on the Project. Amount of fire insurance shall be sufficient to protect against loss or damage in full until work is accepted by DISTRICT. CONTRACTOR shall submit proof of insurance and shall provide endorsements on forms provided by the DISTRICT or on forms approved by the DISTRICT.

ARTICLE 17. PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

- (a) CONTRACTOR shall take out and maintain during the life of this Agreement such public liability and property damage insurance as shall protect CONTRACTOR and DISTRICT from all claims for personal injury, including accidental death, to any person (including, as to DISTRICT, injury or death to CONTRACTOR's or subcontractor's employees), as well as from all claims for property damage arising from operations under this Agreement, in amounts as set forth in the Agreement.
- (b) CONTRACTOR shall require its subcontractors, if any, to take out and maintain similar public liability and property damage insurance in like amounts or insure the activities of its subcontractors in CONTRACTOR's own policy.
- (c) CONTRACTOR, during the progress of the work and until final acceptance of the work by DISTRICT upon completion of the entire Agreement, shall maintain Builder's Risk/ "All Risk," course-of-construction insurance in an amount not less than as set forth in the Agreement. Coverage is to provide extended coverage and insurance against vandalism, malicious mischief, perils of fire, sprinkler leakage, civil authority, sonic boom, earthquake, collapse, flood, wind, lightning, smoke, riot, debris removal (including demolition), and reasonable compensation for ARCHITECT's services and expenses required as a result of such insured loss upon the entire work which is the subject of the Project Documents, including completed work and work in progress to the full insurable amount thereof. The risk of damage to the work due to the perils covered by the Builder's Risk/"All Risk" Insurance, as well as any other hazards which might result in damage to the work, is that of CONTRACTOR and the surety, and no claims for such loss or damage shall be recognized by DISTRICT nor will such loss or damage excuse the complete and satisfactory performance of the Agreement by CONTRACTOR.
- (d) CONTRACTOR shall submit proof of insurance and shall provide endorsements on the forms provided by the DISTRICT or on forms approved by the DISTRICT. Such insurance shall be issued by admitted surety insurers under the same conditions as required for bonds on the Project.

ARTICLE 18. WORKERS' COMPENSATION INSURANCE

- (a) In accordance with the provisions of Section 3700 of the Labor Code, the CONTRACTOR and every subcontractor shall be required to secure the payment of compensation to its employees.
- The CONTRACTOR shall provide, during the life of the Agreement, workers' (b) compensation insurance for all of its employees engaged in work under this Agreement, on or at the site of the Project, and, in case any of its work is sublet, the CONTRACTOR shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the CONTRACTOR's insurance. In case any class of employees engaged in work under this Agreement, on or at the site of the Project, is not protected under the workers' compensation statute, the CONTRACTOR shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected before subcontractor commences work. The CONTRACTOR shall file with the DISTRICT certificates of its insurance protecting workers and a thirty (30) day notice shall be provided to DISTRICT before the cancellation or reduction of any policy of CONTRACTOR or subcontractor. CONTRACTOR shall submit proof of insurance and shall provide endorsements on the forms provided by the DISTRICT or on forms approved by the DISTRICT. Such endorsements shall be submitted concurrently with the Project Documents.

ARTICLE 19. PROOF OF CARRIAGE OF INSURANCE

- (a) CONTRACTOR shall not commence work nor shall it allow any subcontractor to commence work under this Agreement until all required insurance certificates and endorsements from admitted surety insurers have been obtained and delivered in duplicate to and approved by DISTRICT. Such insurance shall be issued by admitted surety insurers under the same conditions as required for bonds on the Project. CONTRACTOR shall provide proof of insurance on DISTRICT approved forms without revisions.
- (b) Certificates and insurance policies shall include the following:
 - (1) A clause stating:

"This policy shall not be canceled or reduced in required limits of liability or amount of insurance until notice has been mailed to DISTRICT stating date of cancellation or reduction. Date of cancellation or reduction may not be less than thirty (30) days after date of mailing notice."

- (2) Language stating in particular those insured, extent of insurance, location and operation to which insurance applies, expiration date, to whom cancellation and reduction notice will be sent, and length of notice period.
- (3) Statement that the DISTRICT is an additional insured under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by the DISTRICT.

(c) In case of CONTRACTOR's failure to provide insurance as required by the Agreement, the DISTRICT may, at DISTRICT's option, take out and maintain at the expense of the CONTRACTOR, such insurance in the name of CONTRACTOR, or subcontractor, as the DISTRICT may deem proper and may deduct the cost of taking out and maintaining such insurance from any sums which are due or to become due to the CONTRACTOR under this Agreement.

ARTICLE 20. DRAWINGS AND SPECIFICATIONS

- (a) Drawings and Specifications are intended to delineate and describe the Project and its component parts to such a degree as will enable skilled and competent contractors to intelligently bid upon the work, and to carry said work to a successful conclusion.
- (b) Drawings and Specifications are intended to comply with all laws, ordinances, rules and regulations of constituted authorities having jurisdiction, and where referred to in the Project Documents, said laws, ordinances, rules and regulations shall be considered as a part of the Agreement within the limits specified. The CONTRACTOR shall bear all expenses of correcting work done contrary to said laws, ordinances, rules and regulations and if the CONTRACTOR performed same (1) without first consulting the ARCHITECT for further instructions regarding said work, or (2) disregarded the ARCHITECT'S instructions regarding said work.
- Questions regarding interpretation of drawings and specifications shall be clarified (c) by the ARCHITECT. Before commencing any portion of the work, CONTRACTOR shall carefully examine all drawings and specifications and other information given to CONTRACTOR shall immediately notify ARCHITECT and CONTRACTOR. DISTRICT in writing of any perceived or alleged error, inconsistency, ambiguity, or lack of detail or explanation in the drawings and specifications. If CONTRACTOR or its subcontractors, material or equipment suppliers, or any of their officers, agents, and employees performs, permits, or causes the performance of any work under the Project Documents, which it knows or should have known to be in error, inconsistent, or ambiguous, or not sufficiently detailed or explained, CONTRACTOR shall bear any and all costs arising therefrom including, without limitation, the cost of correction thereof. In the event ARCHITECT determines that CONTRACTOR's requests for clarification or interpretation are not justified or do not reflect adequate competent supervision or knowledge by the CONTRACTOR or his/her subcontractors, CONTRACTOR shall be required to pay ARCHITECT's reasonable and customary fees in processing and responding to such requests. Should the CONTRACTOR commence work or any part thereof without seeking clarification, CONTRACTOR waives any claim for extra work or damages as a result of any ambiguity, conflict or lack of information.
- (d) Figured dimensions on drawings shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Large scale drawings shall take precedence over smaller scale drawings as to shape and details of construction. Specifications shall govern as to materials, workmanship, and installation procedures. Drawings and specifications are intended to be fully cooperative and to agree. If CONTRACTOR observes that drawings and specifications are in conflict, CONTRACTOR shall promptly notify the ARCHITECT

in writing, and any necessary changes shall be adjusted as provided in the Article entitled "Changes and Extra Work;" provided, however, that the specification calling for the higher quality material or workmanship shall prevail without additional cost to DISTRICT.

- (e) Materials or work described in words which so applied has a well known technical or trade meaning shall be deemed to refer to such recognized standards.
- (f) It is not the intention of the Agreement to go into detailed descriptions of any materials and/or methods commonly known to the trade under "trade name" or "trade term." The mere mention or notation of such "trade name" or "trade term" shall be considered a sufficient notice to CONTRACTOR that it will be required to complete the work so named with all its incidental and accessory items according to the best practices of the trade.
- (g) The naming of any material and/or equipment shall mean furnishing and installing of same, including all incidental and accessory items thereto and/or labor necessary to achieve full and complete functioning of the material and/or equipment as per best practices of the trade(s) involved, unless specifically noted otherwise.
- (h) ARCHITECT will furnish to CONTRACTOR one (1) complete set of blue-line prints for posting of changes. Additional blue-line prints shall be provided by ARCHITECT upon payment by CONTRACTOR. During the construction period, CONTRACTOR shall maintain the set of blue-line prints in a satisfactory record condition, and shall thoroughly and neatly post, as they occur, all additions, deletions, corrections and/or revisions in the actual construction of the Project. The record drawings must be posted monthly and be current prior to each submission of each certificate of payment.

ARTICLE 21. OWNERSHIP OF DRAWINGS

All plans, drawings, designs, specifications, and other incidental architectural and engineering work or materials and other Project Documents and copies thereof furnished by DISTRICT are DISTRICT'S property. They are not to be used in other work and are to be returned to DISTRICT on request at completion of work, and may be used by DISTRICT as it may require, without any additional costs to DISTRICT.

ARTICLE 22. DETAIL DRAWINGS AND INSTRUCTIONS

- (a) In case of ambiguity, conflict, or lack of information, ARCHITECT shall furnish additional instructions by means of drawings or otherwise, necessary for proper execution of work. All such drawings and instructions shall be consistent with Project Documents, true developments thereof, and reasonably inferable therefrom. Such additional instructions shall be furnished with reasonable promptness, provided that CONTRACTOR informs the ARCHITECT of the relationship of the request to the critical path of construction.
- (b) Work shall be executed in conformity therewith and CONTRACTOR shall do no work without proper drawings and instructions.

- (c) The ARCHITECT will furnish necessary additional details to more fully explain the work, which details shall be considered as part of the Project Documents.
- (d) Should any details be more elaborate, in the opinion of the CONTRACTOR, than scale drawings and specifications warrant, CONTRACTOR shall give written notice thereof to the ARCHITECT within five (5) days of the receipt of same. In case no notice is given to the ARCHITECT within five (5) days, it will be assumed the details are reasonable development of the scale drawings. In case notice is given, then it will be considered, and if found justified, the ARCHITECT will either modify the drawings or shall recommend to DISTRICT a change order for the extra work involved.
- (e) All parts of the described and shown construction shall be of the best quality of their respective kinds and the CONTRACTOR is hereby advised to use all diligence to become fully involved as to the required construction and finish, and in no case to proceed with the different parts of the work without obtaining first from the ARCHITECT such directions and/or drawings as may be necessary for the proper performance of the work.
- (f) If it is found at any time, before or after completion of the work, that the CONTRACTOR has varied from the drawings and/or specifications, in materials, quality, form or finish, or in the amount or value of the materials and labor used, the ARCHITECT shall make a recommendation: (1) that all such improper work should be removed, remade and replaced, and all work disturbed by these changes be made good at the CONTRACTOR's expense; or (2) that the DISTRICT deduct from any amount due CONTRACTOR, the sum of money equivalent to the difference in value between the work performed and that called for by the drawings and specifications. ARCHITECT shall determine such difference in value. The DISTRICT, at its option, may pursue either recommendation made by the ARCHITECT.

ARTICLE 23. SHOP DRAWINGS

(b) All submittals of shop drawings, catalog cuts, data sheets, schedules and material lists shall be complete and shall conform to contract drawings and specifications.

- (c) The term "shop drawing" as used herein shall be understood to include, but not be limited to, detail design calculations, fabrication and installation drawings, lists, graphs and operating instructions.
- (d) Shop drawings shall be submitted at a time sufficiently early to allow review of same by the Division of State Architect (DSA) if required, and the ARCHITECT, and to accommodate the rate of construction progress required under the Project Documents. CONTRACTOR will be required to pay ARCHITECT's reasonable and customary fees in order to expedite review of shop drawings which are not submitted in a timely fashion.
- (e) All shop drawing submittals shall be accompanied by an accurately completed transmittal form using the format bound herein. Any shop drawing submittal not accompanied by such a form, or where all applicable items on the form are not completed, will be returned for resubmittal. The CONTRACTOR may authorize a material or equipment supplier to deal directly with the ARCHITECT with regard to shop drawings, however, ultimate responsibility for the accuracy and completeness of the information contained in the submittal shall remain with the CONTRACTOR.
- (f) Normally, a separate transmittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Transmittal of shop drawings on various items using a single transmittal form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. At its option, the CONTRACTOR or Supplier may obtain from the ARCHITECT quantities of the shop drawing transmittal form at reproduction cost.
- (g) CONTRACTOR's review and approval of shop drawings shall include the following stamp:

"The CONTRACTOR has reviewed and approved not only the field dimensions but the construction criteria and has also made written notation regarding any information in the shop drawings that does not conform to the Project Documents. This shop drawing has been coordinated with all other shop drawings received to date by CONTRACTOR and this duty of coordination has not been delegated to subcontractors, material suppliers, the ARCHITECT, or the engineers on this project.

Signature of CONTRACTOR"

(h) Within _____(__) calendar days after receipt of shop drawings, the ARCHITECT will return one or more prints of each drawing to CONTRACTOR with his or her comments noted thereon. The CONTRACTOR shall make a complete and acceptable submittal to the ARCHITECT by the second submission of drawings. The DISTRICT shall withhold funds due the CONTRACTOR to cover additional costs of the

ARCHITECT'S review beyond the second submission and any other costs incurred by DISTRICT.

- (i) If prints of the shop drawing are returned to the CONTRACTOR marked "NO EXCEPTIONS TAKEN," formal revision of said drawing will not be required. If prints of the drawing are returned to the CONTRACTOR marked "MAKE CORRECTIONS NOTED," formal resubmittal of said drawings will not be required. If prints of the drawing are returned to the CONTRACTOR marked "REVISE AND RESUBMIT," the CONTRACTOR shall revise said drawing and shall resubmit six (6) copies of the revised drawing to the ARCHITECT. If prints of the drawing are returned to the CONTRACTOR marked "REJECTED RESUBMIT," the CONTRACTOR shall resubmit six (6) new copies of the drawing to the ARCHITECT.
- (j) Fabrication of an item shall not be commenced before the ARCHITECT has reviewed the pertinent shop drawings and returned copies to the CONTRACTOR marked with "NO EXCEPTIONS TAKEN," or "MAKE CORRECTIONS NOTED." Revisions indicated on shop drawings shall be considered as changes necessary to meet the requirements of the Project Documents and shall not be taken as the basis of claims for extra work. The review of such drawings by the ARCHITECT will be limited to checking for general agreement with the Project Documents, and shall in no way relieve the CONTRACTOR of responsibility for errors or omissions contained therein, nor shall such review operate to waive or modify any provision contained in the Project Documents. Fabricating dimensions, quantities of material, applicable code requirements, and other contract requirements shall be the CONTRACTOR's responsibility.
- (k) No work represented by required shop drawings shall be purchased or commenced until the applicable submittal has been approved. The work shall conform to the approved shop drawings and all other requirements of the Project Documents. The CONTRACTOR shall not proceed with any related work which may be affected by the work covered under shop drawings until the applicable shop drawings have been approved, particularly where piping, machinery, and equipment and the required arrangements and clearances are involved.
- (l) Except where the preparation of a shop drawing is dependent upon the approval of a prior shop drawing, all shop drawings pertaining to the same class or portion of the work shall be submitted simultaneously.
- (m) Calculations of a structural nature must be approved by the Division of State Architect.
- (n) THE CONTRACTOR SHALL HAVE NO CLAIM FOR DAMAGES OR EXTENSION OF TIME DUE TO ANY DELAY RESULTING FROM THE CONTRACTOR HAVING TO MAKE THE REQUIRED REVISIONS TO SHOP DRAWINGS UNLESS REVIEW BY THE ARCHITECT OF SAID DRAWINGS IS DELAYED BEYOND THE TIME PROVIDED HEREINBEFORE AND THE CONTRACTOR CAN ESTABLISH THAT THE ARCHITECT□S DELAY IN REVIEW ACTUALLY RESULTED IN A DELAY IN THE CONTRACTOR CONSTRUCTION

SCHEDULE. CONTRACTOR SHALL NOT BE ENTITLED TO ANY CLAIM FOR DAMAGES RESULTING FROM DSA REVIEW EXTENDING BEYOND FIFTEEN (15) CALENDAR DAYS AFTER SUBMITTAL. HOWEVER, DISTRICT MAY CONSIDER AN EXTENSION OF TIME DUE TO ANY DELAY CAUSED BY DSA REVIEW.

ARTICLE 24. LAYOUT AND FIELD ENGINEERING

All field engineering required for laying out of this work and establishing grades for earthwork operations shall be furnished by CONTRACTOR at its expense. Such work shall be done by a qualified civil engineer approved by the ARCHITECT. Any required "Record" drawings of site development shall be prepared by the approved civil engineer.

ARTICLE 25. SOILS INVESTIGATION REPORT

(a) When a soils investigation report has been obtained from test holes at the site, such report is available for the CONTRACTOR's use in preparing its bid and work under this Agreement. Such report shall not be part of the Agreement. Any information obtained from such report or any information given on drawings as to surface and subsurface soil condition or to elevations of existing grades or elevations of underlying rock is approximate only, is not guaranteed and does not form a part of the Agreement. CONTRACTOR is required to make a visual examination of site and must make whatever test CONTRACTOR deems appropriate to determine surface and subsurface soil conditions. If, during the course of work under this Agreement, CONTRACTOR encounters subsurface or latent conditions which differ materially from those indicated in the soils investigation report, then CONTRACTOR shall notify the DISTRICT within five (5) working days of discovery of the condition.

WARNING: DISTRICT DOES NOT WARRANT THE SOILS AT THE PROJECT SITE NOR ANY INFORMATION CONTAINED IN ANY SOILS REPORT. SOILS INVESTIGATION REPORT IS PROVIDED FOR CONTRACTOR'S INFORMATION ONLY. CONTRACTOR HAS CONDUCTED AN INDEPENDENT INVESTIGATION OF THE PROJECT SITE AND THE SOILS CONDITIONS OF THE SITE. DISTRICT DOES NOT WARRANT THE SOILS CONDITIONS OF THE SITE AND CONTRACTOR IS FULLY RESPONSIBLE TO ASCERTAIN SITE CONDITIONS FOR THE PURPOSES OF DETERMINING CONSTRUCTION MEANS AND METHODS PRIOR TO COMMENCING CONSTRUCTION.

(b) CONTRACTOR agrees that no claim against DISTRICT will be made by CONTRACTOR for damages and hereby waives any rights to damages in the event that during progress of work CONTRACTOR encounters subsurface or latent conditions at the worksite materially different from those shown on drawings or indicated in specifications.

ARTICLE 26. TESTS AND INSPECTIONS

- (a) Tests and inspections will comply with California Code of Regulations and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction over the Project.
- (b) If the Agreement, DISTRICT is instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, CONTRACTOR shall give notice in accordance with such authority of its readiness for observation or inspection at least two (2) working days prior to being tested or covered up. If inspection is by authority other than DISTRICT, CONTRACTOR shall inform the DISTRICT Is Inspector of the date fixed for such inspection. Required certificates of inspection shall be secured by CONTRACTOR. Observations by DISTRICT Is Inspector shall be promptly made, and where practicable, at source of supply. If any work should be covered up without approval or consent of DISTRICT's Inspector, it must be uncovered for examination and satisfactorily reconstructured at CONTRACTOR is expense in compliance with the Agreement. Costs of tests, inspections and any materials found to be not in compliance with the Agreement shall be paid for by CONTRACTOR. Other costs for test and inspection shall be paid by the DISTRICT.

ARTICLE 27. TRENCHES

- (a) CONTRACTOR shall provide adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in trenches and open excavation which conform to applicable safety standards.
- If this Agreement involves the excavation of any trench or trenches five (5) feet or more in depth, and the Project cost is in excess of \$25,000, the CONTRACTOR shall, in advance of excavation, submit to the DISTRICT for acceptance or to whomever DISTRICT designates which may include a registered civil or structural engineer employed by the DISTRICT to whom authority to accept has been delegated, 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 of 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 therefore shall be included in the price named in the Agreement for completion of the work as set forth in the Project Documents. In no case shall such plan be less effective than that required by the Construction Safety Orders. No excavation of such trench or trenches shall be commenced until said plan has been accepted by CAL-OSHA and a CAL-OSHA permit for such plan delivered to the DISTRICT. Labor Code Section 6500 and 6705; Health and Safety Code Section 17922.5)
- (c) If this Agreement involves the digging of trenches or excavations that extend deeper than four feet below the surface, the following shall apply pursuant to Public Contract Code section 7104:

- (1) The CONTRACTOR shall promptly, and before the following conditions are disturbed, notify the DISTRICT, in writing, of any:
 - (i) Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
 - (ii) Subsurface or latent physical conditions at the site different from those indicated.
 - (iii) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
- (2) The DISTRICT shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR scott of, or the time required for, performance of any part of the work shall issue a change order under the procedures described in the Project Documents.
- (3) In the event a dispute arises between the DISTRICT and the CONTRACTOR, whether the conditions materially differ or involve hazardous waste, or cause a decrease or increase in the CONTRACTOR scost 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 by the Project Documents, but shall proceed with all the work to be performed under the Project Documents. 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 contracting parties.

ARTICLE 28. DOCUMENTS ON WORK

CONTRACTOR shall keep on the job site at all times one legible copy of all Project Documents, including addenda and change orders, and all approved drawings, plans, schedules and specifications. Said Documents shall be kept in good order and available to ARCHITECT, ARCHITECT s representatives, and all authorities having jurisdiction. CONTRACTOR shall be acquainted with and comply with all California Code of Regulations provisions relating to conditions on this Project.

ARTICLE 29. STATE AUDIT

Pursuant to and in accordance with the provisions of Government Code Section 8546.7, or any amendments thereto, all books, records and files of the DISTRICT, the CONTRACTOR, or any subcontractor connected with the performance of this Agreement involving the expenditure of public funds in excess of Ten Thousand Dollars (\$10,000.00), including, but not limited to, the costs of administration of the Agreement, shall be subject

to the examination and audit of the State Auditor at the request of the DISTRICT or as part of any audit of the DISTRICT for a period of three (3) years after final payment is made under this Agreement .

ARTICLE 30. SUBSTITUTIONS

- (a) Prior to Bid Opening. Should the bidder wish to request prior to bid opening, any substitution for the materials, process, service or equipment specified, the bidder shall submit a written request at least ten (10) working days before the bid opening date and hour. If the substituted item is acceptable, the DISTRICT will approve it in an Addendum issued to all bidders of record. Requests received less than ten (10) working days prior to bid opening will not be considered. DISTRICT shall only consider substitution requests from the bidder submitting the bid for the project.
- (b) After Bid Opening and Prior to Award of Contract. If the bidder clearly indicates in its bid that it is proposing to use an "equal" product, the brand name or trade name, if any, of a proposed substitute item shall be inserted in the space provided in the bid or shall be otherwise clearly identified in the bid. If the bidder fails to indicate an "equal" product, its bid shall be considered as offering the material, process, service or equipment referred to by the brand name or trade name specified. It is expressly understood and agreed to by the bidder that the DISTRICT reserves the right to reject any such proposed substituted item. It is further expressly understood and agreed by bidder that in the event the DISTRICT rejects a proposed "equal" item, the bidder will then supply the material, process, service or equipment designated by brand name or trade name or a substitute therefore which meets with the approval of the DISTRICT.

With respect to all proposed substitutions of "equal" items, the bidder shall submit all pertinent and appropriate data substantiating its request for substitutions within (_) days prior to the award of the contract. DISTRICT shall only consider substitution requests from the bidder submitting the bid for the Project. The DISTRICT is not responsible for locating or securing any information which is not included in such substantiating data. The burden of proof as to the quality or suitability of proposed substituted items shall be borne by the bidder. The DISTRICT shall be the sole judge as to the quality and suitability of proposed substituted items, and decisions of the DISTRICT shall be final and conclusive. Unless extended by the mutual agreement of the parties, the DISTRICT shall notify the successful bidder of the decision concerning the proposed substitution of "equal" items prior to the award of the contract. Also such decisions by the DISTRICT shall be in writing, and no proposed substituted item shall be deemed approved unless the DISTRICT has so indicated in writing. These time limitations shall be complied with strictly, and in no case will an extension of time for completion be granted because of the bidder's failure to request the substitution of an item at the times and in the manner set forth herein.

(c) Whenever in specifications any materials, process, service or equipment is indicated or specified by brand name, trade name, proprietary name or by name of manufacturer, such specification shall be deemed to be used for the purpose of facilitating description of material, process, service or equipment desired and shall be deemed to be followed by the words "or equal," and CONTRACTOR may, unless otherwise stated, offer

any material, process, service, or equipment which shall be substantially equal or better in every respect to that so indicated or specified subject to DISTRICT or ARCHITECT approval.

- (d) If material, process, service, or equipment offered by CONTRACTOR is not, in opinion of ARCHITECT, or DISTRICT, substantially equal or better in every respect to that specified, then CONTRACTOR shall furnish the material, process, service, or equipment specified. Burden of proof as to equality of any material, process, service, or equipment shall rest with CONTRACTOR. Provision authorizing submission of "or equal" substantiating data shall not in any way authorize an extension of time for performance of this Agreement nor shall DISTRICT or ARCHITECT authorize the submission of or equal substantiating data within ____ () days of the filing of the Notice of Completion on the Project.
- (e) In the event CONTRACTOR furnishes material, process, service or equipment other than what was specified by the DISTRICT and which has been accepted by the DISTRICT and which later is defective, then CONTRACTOR at its sole cost and expense shall furnish the DISTRICT specified material, process, service or equipment or fully replace with new the defective material process, service or equipment at DISTRICT's discretion.
- (f) In the event CONTRACTOR furnishes material, process service, or equipment more expensive than that specified, difference in cost of such material, process, service, or equipment so furnished shall be borne by CONTRACTOR. Any engineering, design fees, or approval agencies' fees required to make adjustments in material or work of all trades directly or indirectly affected by the approved substituted items shall be borne entirely by CONTRACTOR. Any difference in cost between an approved substitution which is lower in cost than the originally specified item shall be refunded or credited by CONTRACTOR to DISTRICT.
- (g) Price, fitness and quality being equal with regard to supplies, the District may prefer supplies grown, manufactured, or produced in California and next prefer supplies partially manufactured grown, or produced in California provided the bids of said suppliers or the prices quoted by them do not exceed by more than 5% of the lowest bids/prices quoted by out of state suppliers, the major portion of the manufacture of the supplies is not done outside of California and the public good will be served thereby. (Government Code section 4330-4334).

ARTICLE 31. SAMPLES

(a) CONTRACTOR shall furnish for approval, within thirty-five (35) calendar days following award of contract, all samples as required in specifications together with catalogs and supporting data required by ARCHITECT. This provision shall not authorize any extension of time for performance of the work. ARCHITECT shall review such samples, as to conformance with design concept of work and for compliance with information given in Project Documents and approve or disapprove same within ten (10) working days from receipt of same.

- (b) Unless specified otherwise, sampling, preparation of samples and tests shall be in accordance with the latest standards of the American Society for Testing and Materials.
- (c) Samples shall, upon demand of ARCHITECT or DISTRICT, be submitted for tests or examinations and considered before incorporation of same into the work. CONTRACTOR shall be solely responsible for delays due to samples not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples which are of value after testing will remain the property of the CONTRACTOR.

ARTICLE 32. PROGRESS SCHEDULE

- (a) Within five (5) calendar days after being awarded the contract, CONTRACTOR shall submit a progress schedule for DISTRICT's approval. The schedule shall indicate the beginning and completion dates of all phases of construction and shall use the "critical path method" (commonly called CPM) or equivalent scheduling methodology for the value reporting, planning and scheduling, of all work required under the Project Documents. The schedule will separately identify those milestones or events that must be completed before other portions of the work can be accomplished.
- (b) The scheduling is necessary for the DISTRICT's adequate monitoring of the progress of the work and shall be prepared in accordance with the time frame described in Article 4 of the Agreement. The DISTRICT may disapprove such a schedule and require modification to it if, in the opinion of the ARCHITECT or DISTRICT, adherence to the progress schedule will cause the work not to be completed in accordance with the Agreement. CONTRACTOR shall adhere to any such modifications required by the DISTRICT.
- (c) CONTRACTOR will exchange scheduling information with subcontractors and suppliers. CONTRACTOR will order work, equipment and materials with sufficient lead time to avoid interruption of the work.
- (d) The CONTRACTOR shall submit to DISTRICT a monthly schedule to reflect the actual sequence of the work which shall be totally separate and apart from the original progress schedule.
- (e) The CONTRACTOR shall also, if requested by the ARCHITECT or DISTRICT, provide revised schedules within ten (10) calendar days if, at any time, the ARCHITECT or DISTRICT, consider the completion date to be in jeopardy. The revised schedule shall be designed to show how the CONTRACTOR intends to accomplish the work to meet the original completion date. The form and method employed by the CONTRACTOR shall be the same as for the original progress schedule. The CONTRACTOR shall modify any portions of the schedule that become infeasible because of "activities behind schedule" or for any other valid reason. CONTRACTOR will provide documents and justification for any schedule changes. An activity that cannot be completed by its original completion date shall be deemed to be behind schedule.

- (f) CONTRACTOR shall submit a revised schedule within ten (10) consecutive calendar days of CONTRACTOR's request for any extension of time. Failure to submit such schedule will result in CONTRACTOR waiving his/her right to obtain any extension of time.
- (g) IT IS AGREED THAT THE DISTRICT OWNS THE "FLOAT" ON THIS PROJECT. IF CONTRACTOR SUBMITS A REVISED SCHEDULE SHOWING AN EARLIER COMPLETION DATE FOR THE PROJECT, DISTRICT S ACCEPTANCE OF THIS REVISED SCHEDULE SHALL NOT ENTITLE CONTRACTOR TO ANY DELAY CLAIM OR DISRUPTION DAMAGES OR ANY OTHER DAMAGES DUE TO ANY SUCH REVISED SCHEDULE. NOTHING PROVIDED HEREIN SHALL BE CONSTRUED AS A DIRECT, INDIRECT OR IMPLICIT ACCELERATION ORDER TO THE CONTRACTOR.
- (h) CONTRACTOR agrees that failure to timely submit the progress schedule, the monthly schedule or any revised progress schedule requested by the ARCHITECT or the DISTRICT may result in delay in payment to CONTRACTOR.

ARTICLE 33. MATERIALS AND WORK

- (a) Except as otherwise specifically stated in this Agreement, CONTRACTOR shall provide and pay for all materials, supplies, tools, equipment, labor transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete the Project within specified time.
- (b) Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted or specified, and workmanship shall be of good quality.
- (c) Materials shall be furnished in ample quantities and at such times as to insure uninterrupted progress of work and shall be stored properly and protected as required. DISTRICT has no obligation to pay for any prefabricated material stored offsite until delivered and installed to the jobsite and inspected and approved by the inspector of record.
- (d) CONTRACTOR shall, after issuance of the Notice to Proceed by DISTRICT, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the work. CONTRACTOR shall, upon demand from the ARCHITECT, furnish to the ARCHITECT documentary evidence showing that orders have been placed.
- (e) DISTRICT reserves the right, for any neglect in not complying with the above instructions, to place orders for such materials and/or equipment as it may deem advisable in order that the work may be completed at the date specified in the Agreement, and all expenses incidental to the procuring of said materials and/or equipment shall be paid for by the CONTRACTOR.

- (f) No materials, supplies, or equipment for work under this Agreement shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by seller or supplier. CONTRACTOR warrants good title to all material, supplies, and equipment installed or incorporated in work and agrees upon completion of all work to deliver premises, together with all improvements and appurtenances constructed or placed thereon by it, to DISTRICT free from any claims, liens, or charges. CONTRACTOR further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any work covered by this Agreement shall have any right to lien upon premises or any improvement or appurtenance thereon, except that CONTRACTOR may install metering devices or other equipment of utility companies or of political subdivisions, title to which is commonly retained by utility company or political subdivision. In the event of installation of any such metering device or equipment, CONTRACTOR shall advise DISTRICT as to owner thereof.
- (g) Nothing contained in this Article 33, however, shall defeat or impair the rights of persons furnishing material or labor under any bond given by CONTRACTOR for their protection or any rights under any law permitting such persons to look to funds due CONTRACTOR in hand of DISTRICT, and this provision shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials or labor when no formal contract is entered into for such materials or labor.
- (h) The title to new materials and/or equipment and attendant liability for its protection and safety, shall remain in the CONTRACTOR until incorporated in the work and accepted by the DISTRICT; no part of said materials and/or equipment shall be removed from its place of onsite/offsite storage except for immediate installation in the work; and CONTRACTOR shall keep an accurate inventory of all said materials and/or equipment in a manner satisfactory to the DISTRICT or its authorized representative.

ARTICLE 34. INTEGRATION OF WORK

- (a) CONTRACTOR shall do all cutting, fitting, patching, and preparation of work as required to make its several parts come together properly, and fit it to receive or be received by work of other contractors or existing conditions showing upon, or reasonably implied by, the drawings and specifications, and shall follow all directions given by the Architect.
- (b) All costs caused by defective or ill-timed work shall be borne by CONTRACTOR.
- (c) CONTRACTOR shall not endanger any work by cutting, excavating, or otherwise altering work and shall not cut or alter work of any other contractor without the written consent of the ARCHITECT. CONTRACTOR shall be solely responsible for protecting existing work on adjacent properties and shall obtain all required permits for shoring and excavations near property lines.
- (d) When modifying existing work or installing new work adjacent to existing work, CONTRACTOR shall match, as closely as conditions of site and materials will allow, the

finishes, textures, and colors of the original work, refinishing existing work as required, at no additional cost to DISTRICT.

(e) CONTRACTOR is aware that this Project may be split into several phases. If the Project is split into phases then CONTRACTOR has made allowances for any delays or damages which may arise from coordination with contractors for other phases. If any delays should arise from a contractor working on a different phase, CONTRACTOR's sole remedy for damages, including delay damages, shall be against the contractor who caused such damage and not the DISTRICT. CONTRACTOR shall provide access to contractors for other phases as necessary to prevent delays and damages to contractors working on other phases of construction.

ARTICLE 35. OBTAINING OF PERMITS, LICENSES AND EASEMENTS

- (a) Permits, licenses, and certificates necessary for prosecution of work, shall be secured and paid for by CONTRACTOR, unless otherwise specified. All such permits, licenses, and certificates shall be delivered to the ARCHITECT before demand is made for the certificate of final payment. CONTRACTOR shall, and shall require subcontractors to, maintain contractors' licenses in effect as required by law.
- (b) Easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by DISTRICT, unless otherwise specified.
- (c) Permits and charges for installation, and inspection thereof, of utility services by serving utilities shall be secured and paid for by DISTRICT.

ARTICLE 36. SURVEYS

Surveys to determine location of property lines and corners will be supplied by DISTRICT. Surveys to determine locations of construction, grading, and site work, shall be provided by CONTRACTOR.

ARTICLE 37. EXISTING UTILITY LINES; REMOVAL, RESTORATION

- (a) Pursuant to Government Code Section 4215, the DISTRICT assumes the responsibility for removal, relocation, and protection of utilities located on the construction site at the time of commencement of construction under this Agreement with respect to any such utility facilities which are not identified in the plans and specifications. The CONTRACTOR shall not be assessed for liquidated damages for delay in completion of the Project caused by failure of the DISTRICT to provide for removal or relocation of such utility facilities. If the CONTRACTOR, while performing work under this Agreement, discovers utility facilities not identified by the DISTRICT in the plans or specifications, CONTRACTOR shall immediately notify the DISTRICT and the utility in writing. CONTRACTOR shall be compensated according to the provisions governing changes in the work.
- (b) This Article 37 shall not be construed to preclude assessment against the CONTRACTOR for any other delays in completion of the work. Nothing in this Article

shall be deemed to require the DISTRICT to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the construction site can be inferred from the presence of other visible facilities, such as buildings, meter junction boxes, on or adjacent to the site of the construction.

(c) As part of the work to be performed, CONTRACTOR shall provide the notices and proceed in accordance with Government Code Sections 4216.2, 4216.3 and 4216.4, and pay all fees charged pursuant to Government Code Section 4216, et seq.

ARTICLE 38. WORK TO COMPLY WITH APPLICABLE LAWS AND REGULATIONS

- (a) CONTRACTOR shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work as indicated and specified.
- (b) If CONTRACTOR observes that drawings or specifications are at variance therewith, CONTRACTOR shall promptly notify ARCHITECT in writing and any changes deemed necessary by the ARCHITECT shall be adjusted as provided for changes in work. If CONTRACTOR performs any work which it knew, or through exercise of reasonable care should have known, to be contrary to such laws, ordinances, rules or regulations, and without such notice to ARCHITECT, CONTRACTOR shall bear all costs arising therefrom. Where plans, drawings or specifications state that materials, processes, or procedures must be approved by the Division of State Architect, State Fire Marshall, or other body or agency, CONTRACTOR shall be responsible for satisfying requirements of such bodies or agencies.

ARTICLE 39. ACCESS TO WORK

DISTRICT and its representatives shall at all times have access to work wherever it is in preparation or progress. CONTRACTOR shall provide safe and proper facilities for such access so that DISTRICT's representatives may perform their functions.

ARTICLE 40. PAYMENTS BY CONTRACTOR

CONTRACTOR shall pay:

- (1) For all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered;
- (2) For all materials, tools, and other expendable equipment to the extent of ninety percent (90%) of cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools, and equipment are delivered at site of Project and balance of cost thereof not later than the 30th day following completion of that part of work in or on which such materials, tools, and equipment are incorporated or used; and
- (3) To each of its subcontractors, not later than the 5th day following each payment to CONTRACTOR the respective amounts allowed CONTRACTOR on

account of work performed by respective subcontractor to the extent of such subcontractor's interest therein.

(4) Within seven (7) days from the time that all or any portion of the retentions are received by CONTRACTOR from DISTRICT, to each of its subcontractors from whom retention has been withheld, each subcontractor's share of the retention received. However, if a retention payment received by CONTRACTOR is specifically designated for a particular subcontractor, payment of the retention shall be made to the designated subcontractor, if the payment is consistent with the terms of the subcontract. CONTRACTOR may withhold from a subcontractor its portion of the retentions if a bona fide dispute exists between the subcontractor and the CONTRACTOR. The amount withheld from the retention shall not exceed one hundred fifty percent (150%) of the estimated value of the disputed amount.

ARTICLE 41. INSPECTOR'S FIELD OFFICE

CONTRACTOR shall provide for the exclusive use of Inspector a temporary field office to be located as directed by Inspector and to be maintained until removal is authorized by DISTRICT. Office shall be of substantial waterproof construction with adequate natural light and ventilation by means of stock design windows. Door shall have a key-type lock or padlock hasp. A table satisfactory for study of plans and two chairs shall be provided by CONTRACTOR. CONTRACTOR shall provide and pay for adequate electric lights, telephone service (not a pay phone), and adequate heat for the field office until authorized removal.

ARTICLE 42. UTILITIES

- (a) All utilities, including but not limited to electricity, water, gas, and telephone used on work shall be furnished and paid for by CONTRACTOR. CONTRACTOR shall furnish and install necessary temporary distribution systems, including meters, if necessary, from distribution points to points on site where utility is necessary to carry on the work. When it is necessary to interrupt any existing utility service to make connections, a minimum of forty-eight (48) hours advance notice shall be given to the DISTRICT and ARCHITECT. Interruptions in utility services shall be of the shortest possible duration for the work at hand and shall be approved by the DISTRICT and the ARCHITECT. In the event any utility service is interrupted without the required forty-eight (48) hours notice, then CONTRACTOR shall be liable for all damage suffered by DISTRICT due to the interruption. Upon completion of work, CONTRACTOR shall remove all temporary distribution systems.
- (b) CONTRACTOR may, with written permission of DISTRICT, use DISTRICT's existing utilities by making prearranged payments to DISTRICT for utilities used by CONTRACTOR for the Project.

ARTICLE 43. SANITARY FACILITIES

The CONTRACTOR shall provide sanitary temporary toilet facilities in no fewer numbers than required by law and such additional facilities as may be directed by the Inspector for the use of all workers. The toilet facilities shall be maintained in a sanitary condition at all times and shall be left at the site until removal is directed by the Inspector. Use of toilet facilities in the work under construction shall not be permitted.

ARTICLE 44. CLEANING UP

CONTRACTOR at all times shall keep work site free from debris such as waste, rubbish, and excess materials and equipment caused by this work. CONTRACTOR shall not leave debris under, in, or about the work site, but shall promptly remove same. Upon completion of work, CONTRACTOR shall clean interior and exterior of building, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected. CONTRACTOR shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and remove temporary fencing, barricades, planking, sanitary facilities and similar temporary facilities from site. If CONTRACTOR fails to clean up, the DISTRICT shall do so and the cost thereof shall be charged to the CONTRACTOR and deducted from any progress payment due.

ARTICLE 45. PATENTS, ROYALTIES, AND INDEMNITIES

The CONTRACTOR shall hold and save the DISTRICT and its governing board, officers, agents, and employees harmless from liability of any nature or kind, including cost and expense, for or on account of any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of this Agreement, including its use by the DISTRICT, unless otherwise specifically provided in the Project Documents, and unless such liability arises from the sole negligence, or active negligence, or willful misconduct of the DISTRICT.

ARTICLE 46. GUARANTEE

- (a) CONTRACTOR warrants that the work (which includes any equipment furnished by CONTRACTOR as part of the materials) shall: (a) be free from defects in workmanship and material; (b) be free from defects in any design performed by CONTRACTOR; (c) be new, and conform and perform to the requirements stated in the specifications and where detail requirements are not so stated, shall conform to applicable industry standards; and (d) be suitable for the use stated in the specifications.
- (b) The warranty period for discovery of defective work shall commence on the date stamped on the Notice of Completion verifying County recordation and continue for the period set forth in the specifications or for one year if not so specified. If, during the warranty period, the work is not available for use due to defective work, such time of unavailability shall not be counted as part of the warranty period. The warranty period for corrected defective work shall continue for a duration equivalent to the original warranty period.
- (c) District shall give CONTRACTOR prompt written notice after discovery of any defective work. CONTRACTOR shall correct any such defective work, as well as any damage to any other part of the work resulting from such defective work, and provide

repair, replacement, or reimbursement, at its sole expense, in a manner approved by the DISTRICT and with due diligence and dispatch as required to make the work ready for use by DISTRICT, ordinary wear and tear, unusual abuse or neglect excepted. Such corrections shall include, but not be limited to, any necessary adjustments, modifications, changes of design (unless of DISTRICT's design), removal, repair, replacement or reinstallation, and shall include all necessary parts, materials, tools, equipment, transportation charges and labor as may be necessary, and cost of removal and replacement of work shall be performed at a time and in such a manner so as to minimize the disruption to DISTRICT's use of the work.

- (d) In the event of failure of CONTRACTOR or Surety to commence and pursue with diligence said repairs or replacements within ten (10) calendar days after being notified in writing, DISTRICT is hereby authorized to proceed to have defects repaired or replaced and made good at expense of CONTRACTOR and Surety who hereby agree to pay costs and charges therefore immediately on demand.
- (e) If, in the opinion of the DISTRICT, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the DISTRICT or to prevent interruption of operations of the DISTRICT, the DISTRICT will attempt to give the written notice required by this Article. If the CONTRACTOR or Surety cannot be contacted or neither complies with the DISTRICT's requirements for correction within a reasonable time as determined by the DISTRICT, the DISTRICT may, notwithstanding the provisions of this Article, proceed to make such correction or provide such attention and the costs of such correction or attention shall be charged against the CONTRACTOR and Surety. Such action by the DISTRICT will not relieve the CONTRACTOR and Surety of the guarantees provided in this Article or elsewhere in the Project Documents.
- (f) This Article does not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. CONTRACTOR shall furnish to DISTRICT all appropriate guarantee or warranty certificates upon completion of the Project or upon request by DISTRICT.
- (g) All guarantees required under this Article shall be in writing on the Guarantee form included in the Project Documents.
- (h) CONTRACTOR shall provide to DISTRICT instruction manuals for all items which require same.
- (i) Nothing herein shall limit any other rights or remedies available to DISTRICT.
- (j) The DISTRICT may collect its reasonable costs and attorneys' fees in any action to enforce this Article.

ARTICLE 47. DUTY TO PROVIDE FIT WORKERS

(a) CONTRACTOR and subcontractors shall at all times enforce strict discipline and good order among their employees and shall not employ on work any unfit person or

anyone not skilled in work assigned to such person. It shall be the responsibility of CONTRACTOR to ensure compliance with this Article.

(b) Any person in the employ of the CONTRACTOR or subcontractors whom DISTRICT or ARCHITECT may deem incompetent, unfit, troublesome or otherwise undesirable shall be excluded from the work site and shall not again be employed on it except with written consent of DISTRICT.

ARTICLE 48. WAGE RATES, TRAVEL AND SUBSISTENCE

- Pursuant to the provisions of Article 2 (commencing at Section 1770), Chapter 1, Part 7, Division 2 of the Labor Code, the governing board of DISTRICT has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public work is to be performed for each craft, classification or type of worker needed for this Project from the Director of the Department of Industrial Relations ("Director.") These rates are on file with the Clerk of the DISTRICT's governing board and copies will be made available to any interested party on request. CONTRACTOR shall post a copy of such wage rates at the work site. Labor Code Section 1773.2. The rates are available on the Internet at www.dir.ca.gov "Statistics & Research."
- (b) Holiday and overtime work, when permitted by law, shall be paid for at a rate of at least one and one-half times the above specified rate of per diem wages, unless otherwise specified. Holidays shall be defined in the Collective Bargaining Agreement applicable to each particular craft, classification or type of worker employed.
- (c) CONTRACTOR shall pay and shall cause to be paid each worker engaged in work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the CONTRACTOR or any subcontractor and such workers.
- (d) CONTRACTOR shall pay and shall cause to be paid to each worker needed to execute the work on the Project travel and subsistence payments, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed with the Department of Industrial Relations in accordance with Labor Code Section 1773.8.
- (e) If during the period this bid is required to remain open, the Director of Industrial Relations determines that there has been a change in any prevailing rate of per diem wages in the locality in which this public work is to be performed, such change shall not alter the wage rates in the Notice Calling for Bids or the contract subsequently awarded.
- (f) Pursuant to Labor Code Section 1775, CONTRACTOR shall as a penalty to the DISTRICT, forfeit fifty dollars (\$50) for each calendar day, or portion thereof, for each worker paid less than the prevailing rate of per diem wages, determined by the Director, for such craft or classification in which such worker is employed for any public work done under the Agreement by CONTRACTOR or by any subcontractor under it. The amount of the penalty shall be determined by the Labor Commission and shall be based on

consideration of the CONTRACTOR's mistake, inadvertence or neglect in failing to pay the correct prevailing rate of per diem wage, or the previous record of the CONTRACTOR in meeting his or her prevailing rate of per diem wage obligations, or the CONTRACTOR's willful failure to pay the correct prevailing rate of per diem wages. A mistake, inadvertence or neglect in failing to pay the correct prevailing rate of per diem wage is not excusable if the CONTRACTOR had knowledge of his or her obligations under this part. The difference between such prevailing rate of per diem wage and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing rate of per diem wage shall be paid to each worker by the CONTRACTOR.

- (g) Any worker employed to perform work on the Project, which work is not covered by any craft or classification listed in the general prevailing rate of per diem wages determined by the Director shall be paid not less than the minimum rate of wages specified therein for the craft or classification which most nearly corresponds to work to be performed by them, and such minimum wage rate shall be retroactive to time of initial employment of such person in such craft or classification.
- (h) Pursuant to Labor Code Section 1773.1, per diem wages are deemed to include employer payments for health and welfare, pension, vacation, travel time, and subsistence pay as provided for in Labor Code Section 1773.8.
- (i) CONTRACTOR shall post at appropriate conspicuous points on the site of the Project, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned.

ARTICLE 49. HOURS OF WORK

- (a) As provided in Article 3, (commencing at Section 1810), Chapter 1, Part 7, Division 2 of the Labor Code, eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the CONTRACTOR or by any subcontractor on any subcontract under this Agreement upon the work or upon any part of the work contemplated by this Agreement shall be limited and restricted by the Agreement to eight (8) hours per day, and forty (40) hours during any one week, except as hereinafter provided. Notwithstanding the provisions hereinabove set forth, work performed by employees of CONTRACTOR in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.
- (b) The CONTRACTOR shall keep and shall cause each subcontractor to keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by CONTRACTOR in connection with the work or any part of the work contemplated by this Agreement. The record shall be kept open at all reasonable hours to the inspection of the DISTRICT and to the Division of Labor Standards Enforcement, Department of Industrial Relations.
- (c) Pursuant to Labor Code Section 1813, the CONTRACTOR shall pay to the DISTRICT a penalty of Twenty-Five Dollars (\$25) for each worker employed in the execution of this Contract by the CONTRACTOR or by any subcontractor for each

calendar day during which such worker is required or permitted to work more than eight (8) hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing at Section 1810), Chapter 1, Part 7, Division 2 of the Labor Code.

(d) Any work necessary to be performed after regular working hours, or on Sundays or other holidays shall be performed without additional expense to DISTRICT.

ARTICLE 50. PAYROLL RECORDS

- (a) Pursuant to the provisions of Labor Code Section 1776, the CONTRACTOR shall keep and shall cause each subcontractor performing any portion of the work under this Agreement to keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by CONTRACTOR in connection with the work.
- (b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the CONTRACTOR on the following basis:
 - (1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
 - (2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the DISTRICT, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations.
 - (3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection upon request by the public or copies thereof made; provided, however, that a request by the public shall be made through either the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the CONTRACTOR, subcontractors, 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.

(4)	The form of certification shall be as follows:	
in bus	I,(Name-print), the undersigned, am usiness) with the authority to act for and on behalf of	(position
(Name of business and/or CONTRACTOR), certify under penalty of perjury that the records or copies thereof		
submi	nitted and consisting of	

(description, number of pages) are the originals or true, full and correct copies of the originals which depict the payroll record(s) of the actual disbursements by way of cash, check, or whatever form to the individual or individuals named.

Dated:	Signature:	

- (c) Contractor shall file a certified copy of the payroll records enumerated in subdivision (a) with the entity that requested the records within ten (10) days after receipt of a written request. In the event that the CONTRACTOR fails to comply within the 10-day period, the CONTRACTOR shall, as a penalty to the DISTRICT, forfeit Twenty-Five Dollars (\$25) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.
- (d) Any copy of payroll records made available for inspection as copies and furnished upon request to the public by the DISTRICT, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the CONTRACTOR shall not be marked or obliterated.
- (e) The CONTRACTOR shall inform the DISTRICT of the location of the payroll records enumerated under subdivision (a), including the street address, city and county, and shall, within five (5) working days, provide a written notice of a change of location and address.
- (f) It shall be the responsibility of the CONTRACTOR to ensure compliance with the provisions of this Article 50 and the provisions of Labor Code Section 1776.

ARTICLE 51. APPRENTICES

- (a) The CONTRACTOR acknowledges and agrees that, if this Agreement involves a dollar amount greater than or a number of working days greater than that specified in Labor Code Section 1777.5, this Agreement is governed by the provisions of Labor Code Section 1777.5. It shall be the responsibility of the CONTRACTOR to ensure compliance with this Article 51 and with Labor Code Section 1777.5 for all apprenticing occupations.
- (b) Apprentices of any crafts or trades may be employed and, when required by Labor Code Section 1777.5, shall be employed provided they are properly registered in full compliance with the provisions of the Labor Code.
- (c) Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered.
- (d) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards and written apprentice agreements under Chapter 4 (commencing at Section 3070), Division 3 of the Labor Code, are eligible to be employed on public

works. The employment and training of each apprenticeship shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he or she is training.

- (e) Pursuant to Labor Code Section 1777.5, the CONTRACTOR and any subcontractors employing workers in any apprenticeship craft or trade in performing any work under this Agreement shall employ apprentices in at least the ratio set forth in Section 1777.5 and apply to the applicable joint apprenticeship committee for a certificate approving the CONTRACTOR or subcontractor under the applicable apprenticeship standards for the employment and training of apprentices.
- (f) Every contractor and subcontractor shall submit contract award information to the applicable joint apprenticeship committee which shall include an estimate of journeyman hours to be performed under the Agreement, the number of apprentices to be employed and the approximate dates the apprentices will be employed.
- (g) If the CONTRACTOR or subcontractor willfully fails to comply with Labor Code Section 1777.5, then, upon a determination of noncompliance by the Chief of the Division of Apprenticeship Standards, the CONTRACTOR or subcontractor shall be subject to the penalties imposed under Labor Code Section 1777.7. Interpretation and enforcement of these provisions shall be in accordance with the rules and procedures of the California Apprenticeship Council.
- (h) The CONTRACTOR and all subcontractors shall comply with Labor Code Section 1777.6, which section forbids certain discriminatory practices in the employment of apprentices.
- (i) CONTRACTOR shall become fully acquainted with the law regarding apprentices prior to commencement of the work. Special attention is directed to Sections 1777.5, 1777.6, and 1777.7 of the Labor Code, and Title 8, California Code of Regulations, Section 200, et seq. Questions may be directed to the State Division of Apprenticeship Standards, 455 Golden Gate Avenue, 8th Floor, San Francisco, California 94102, (415) 703-4920.

ARTICLE 52. LABOR - FIRST AID

The CONTRACTOR shall maintain emergency first aid treatment for CONTRACTOR's workers on the Project which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C.A., Sec. 651, et seq.).

ARTICLE 53. PROTECTION OF PERSONS AND PROPERTY

(a) The CONTRACTOR shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Agreement and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the DISTRICT. CONTRACTOR shall provide such heat, covering, and enclosures as are necessary to protect all work, materials, equipment, appliances, and tools against damage by weather conditions. All work shall be solely at the CONTRACTOR's

risk with the exception of damage to the work caused by "acts of God" as defined in Public Contract Code Section 7105.

- (b) CONTRACTOR shall take, and require subcontractors to take, all necessary precautions for safety of workers and shall comply with all applicable federal, state, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to the work site and to provide a safe and healthful place of employment. CONTRACTOR shall furnish, erect and properly maintain at all times, as directed by DISTRICT or ARCHITECT or required by conditions and progress of work, all necessary safety devices, safeguards, construction canopies, signs audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public and shall post danger signs warning against hazards created by such features in the course of construction. CONTRACTOR shall designate a responsible employee, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. Name and position of person so designated shall be reported in writing to DISTRICT by CONTRACTOR. CONTRACTOR shall correct any violations of safety laws, standards, orders, rules, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected immediately by the CONTRACTOR at CONTRACTOR's expense.
- (c) In an emergency affecting safety of person or of work or of adjoining property, CONTRACTOR, without special instruction or authorization from ARCHITECT or DISTRICT, is hereby permitted to act, at its discretion, to prevent such threatened loss or injury; and CONTRACTOR shall so act if so authorized or instructed by Architect or DISTRICT. Any compensation claimed by CONTRACTOR on account of emergency work shall be determined by written agreement with the DISTRICT.
- (d) CONTRACTOR shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations.
- (e) CONTRACTOR shall (unless waived by the DISTRICT in writing):
 - (1) When performing new construction on existing sites, become informed and take into specific account the maturity of the students on the site; perform work which may interfere with school routine before or after school hours; enclose working area with a substantial barricade; not allow any unauthorized individuals on the site; require all workers on the Project to be conspicuously identified either by a firm logo on their clothing or prominent identification badge and arrange work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities.
 - (2) Provide substantial barricades around any shrubs or trees indicated to be preserved.

- (3) Deliver materials to building area over route designated by ARCHITECT.
- (4) When directed by DISTRICT, take preventive measures to eliminate objectionable dust.
- (5) Enforce all instructions of DISTRICT and ARCHITECT regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on construction site.
- (6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved civil engineer at no cost to the DISTRICT.

ARTICLE 54. NON-DISCRIMINATION

In the performance of the terms of this Agreement, CONTRACTOR agrees that it will not engage in nor permit such subcontractor as it may employ to engage in unlawful discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, age or sex of such persons.

ARTICLE 55. SCHEDULE OF VALUES AND PERIODICAL ESTIMATES

- (a) CONTRACTOR shall furnish on form(s) approved by DISTRICT:
 - (1) Within ten (10) calendar days of award of contract a detailed schedule of values giving complete breakdown of contract price for each component of the Project or site which shall include all subcontractor/supplier agreements showing dollar amounts of these agreements to justify the schedule of values; and
 - (2) A periodical itemized estimate of work done for purpose of making partial payments thereon. Change order work shall be clearly identified on a separate schedule of values.
 - (3) Within ten (10) calendar days of request of DISTRICT, a schedule of estimated monthly payments which shall be due CONTRACTOR under the Agreement.
- (b) Values employed in making up any of these schedules are subject to the ARCHITECT's written approval and will be used only for determining basis of partial payments and will not be considered as fixing a basis for additions to or deductions from contract price.

ARTICLE 56. CONTRACTOR CLAIMS

If the CONTRACTOR shall claim compensation for any damage sustained by reason of the acts of the DISTRICT or its agents, CONTRACTOR shall, within five (5) calendar days after sustaining of such damage, make to the ARCHITECT a written statement of the damage sustained. On or before the 15th day of the month succeeding that in which such damage shall have been sustained the CONTRACTOR shall file with the DISTRICT an itemized statement of the details and amount of such damage, and unless such statement shall be made as thus required, CONTRACTOR's claims for compensation shall be forfeited and invalidated and it shall not be entitled to consideration for payment on account of any such damage.

ARTICLE 57. DISPUTES - ARCHITECT'S DECISIONS

- (a) The ARCHITECT shall, within a reasonable time, make decisions on all matters relating to the CONTRACTOR's execution and progress of the work. The decisions of the ARCHITECT shall not be binding, but shall be advisory only on the CONTRACTOR for the purpose of CONTRACTOR's obligation to proceed with the work.
- (b) Except for tort claims, all claims by the CONTRACTOR for a time extension, payment of money or damages arising from work done by, or on behalf of, the CONTRACTOR pursuant to the Agreement and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or as to the amount of payment which is disputed by the DISTRICT of Three Hundred Seventy Five Thousand Dollars (\$375,000) or less shall be subject to the settlement procedures set forth in Public Contract Code Section 20104, et seq. which provisions are incorporated herein by reference.
- (c) In the event of a dispute between the parties as to performance of the work, the interpretation of this Agreement or payment or nonpayment for work performed or not performed, the parties shall attempt to resolve the dispute. Pending resolution of the dispute, CONTRACTOR agrees to continue the work diligently to completion. If the dispute is not resolved, CONTRACTOR agrees it will neither rescind the Agreement nor stop the progress of the work, but CONTRACTOR's sole remedy shall be to submit such controversy to determination by a court of the State of California, in Orange County, having competent jurisdiction of the dispute, after the Project has been completed, and not before.

ARTICLE 58. PAYMENTS

(a) Unless otherwise specified in writing, each month within thirty (30) days after receipt by the DISTRICT of the monthly progress schedule and an undisputed, properly submitted payment request from CONTRACTOR which has been certified for payment by the Architect, there shall be paid to CONTRACTOR a sum equal to ninety-five percent (95%) of value of work performed and of materials delivered to the jobsite and inspected and approved by the inspector of record and subject to or under the control of the DISTRICT and unused up to the last day of the previous month, less aggregate previous payments. Public Contract Code Section 20104.50 Monthly payments shall be made only on the basis of monthly estimates which shall be prepared by CONTRACTOR on a form approved by DISTRICT and filed before the fifth day of the month during which payment is to be made. Work completed as estimated shall be an estimate only and no inaccuracy or error in said estimate shall operate to release CONTRACTOR or Surety from any

damages arising from such work or from enforcing each and every provision of this Agreement, and DISTRICT shall have the right subsequently to correct any error made in any estimate for payment. CONTRACTOR SHALL NOT BE ENTITLED TO HAVE ANY PAYMENT ESTIMATES PROCESSED OR BE ENTITLED TO HAVE ANY PAYMENT FOR WORK PERFORMED SO LONG AS ANY LAWFUL OR PROPER DIRECTION CONCERNING WORK, OR ANY PORTION THEREOF, GIVEN BY THE DISTRICT OR ARCHITECT SHALL REMAIN UNCOMPLIED WITH BY THE CONTRACTOR. CONTRACTOR AGREES TO THE FIVE PERCENT (5%) RETENTION ON ALL PROGRESS PAYMENTS. Public Contract Code Section 9203.

- (b) DISTRICT has discretion to require from the CONTRACTOR any of the following information with the application for payment: (i) certified payroll covering the period of the prior application for payment; (ii) unconditional waivers and releases from all subcontractors/suppliers for which payment was requested under the prior application for payment; and/or (iii) receipts or bills of sale for any items. CONTRACTOR agrees that payment may be contingent upon District receiving any one or more of these documents.
- (c) Before payment is made hereunder, a certificate in writing shall be obtained from the ARCHITECT stating that the work for which the payment is demanded has been performed in accordance with the terms of the Project Documents and that the amount stated in the certificate is due under the terms of the Project Documents, which certificate shall be attached to and made a part of the claim made and filed with the DISTRICT, provided that if the ARCHITECT shall, within three (3) days after written demand therefore, fail to deliver such certificate to the DISTRICT, the CONTRACTOR may file its claim with the DISTRICT without said certificate, but together with such claim shall be filed a statement that demand was made for such certificate and that the same was refused. Thereupon, the DISTRICT will either allow said claim as presented or shall, by an order entered on the minutes of said DISTRICT state the reasons for refusing to allow said claim. It is understood, moreover, that the certificate of the ARCHITECT shall not be conclusive upon the DISTRICT, but advisory only.
- (d) Upon receipt of CONTRACTOR's payment request, DISTRICT shall review the payment request as soon as practicable after receipt for the purpose of determining that the payment request is proper. Any payment request determined not to be proper shall be returned to the CONTRACTOR as soon as practicable but not later than seven (7) days after receipt and shall be accompanied by a document setting forth in writing the reasons(s) why the payment request was not proper. Public Contract Code Section 20104.50
- (e) NO PAYMENT BY DISTRICT HEREUNDER SHALL BE INTERPRETED SO AS TO IMPLY THAT DISTRICT HAS INSPECTED, APPROVED, OR ACCEPTED ANY PART OF THE WORK.
- (f) Unless otherwise provided, on or before making request for final payment of the undisputed amount due under the Agreement, CONTRACTOR shall submit to DISTRICT, in writing a summary of all claims for compensation under or arising out of this Agreement which were timely filed. The acceptance by CONTRACTOR of the payment of the final amount shall constitute a waiver of all claims against DISTRICT under or arising out of this Agreement, except those previously made, in a timely manner and in writing, and

identified by CONTRACTOR as unsettled at the time of CONTRACTOR's final request for payment.

- (g) CONTRACTOR shall pay each of its subcontractors from whom retention has been withheld each subcontractor's share of the retention received within seven (7) days from the time that all or any portion of the retention are received by the CONTRACTOR subject to any limitations set forth in Public Contract Code Section 7107(e).
- (h) The final payment of the five percent (5%) retention of the value of the work done under this Agreement, if unencumbered, shall be made thirty-five (35) days after recording by the DISTRICT of the Notice of Completion at the County Recorder's Office. APPROVAL OF COMPLETION OF THE PROJECT WILL BE MADE ONLY BY ACTION OF THE GOVERNING BOARD OF DISTRICT. Public Contract Code Section 7107.

ARTICLE 59. CHANGES AND EXTRA WORK

- (a) DISTRICT may, as provided by law and without affecting the validity of this Agreement, order changes, modifications, deletions and extra work by issuance of written change orders from time to time during the progress of the Project, contract sum being adjusted accordingly. All such work shall be executed under conditions of the original Agreement except that any extension of time caused thereby shall be adjusted at time of ordering such change. DISTRICT has discretion to order changes on a "time and material" basis with adjustments to time made after CONTRACTOR has justified through documentation the impact on the critical path of the Project.
- (b) Notwithstanding any other provision in the Project Documents, the adjustment in the contract sum, if any, and the adjustment in the contract time, if any, set out in a change order shall constitute the entire compensation and/or adjustment in the contract time due CONTRACTOR arising out of the change in the work covered by the change order unless otherwise provided in the change order. The amount of the compensation due CONTRACTOR shall be calculated pursuant to subparagraph (e) of this Article 59. The entire compensation shall <u>not</u> include any additional charges not set forth in subparagraph (e) and shall not include delay damages (due to processing of a change order, refusal to sign a change order) indirect, consequential, and incidental costs including any project management costs, extended home office and field office overhead, administrative costs and profit other than those amounts authorized under subparagraph (e) of this Article 59.
- (c) In giving instructions, ARCHITECT shall have authority to make minor changes in work, not involving change in cost, and not inconsistent with purposes of the Project. The DISTRICT's Assistant Superintendent of Business Services may authorize changes in work involving a change in cost that does not exceed Fifteen Thousand Dollars \$15,000. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from DISTRICT, authorized by action of the governing board, and no claim for addition to contract sum shall be valid unless so ordered.

- If the ARCHITECT determines that work required to be done constitutes extra (d) work outside the scope of the Agreement, the ARCHITECT shall send a request for a detailed proposal to the CONTRACTOR. CONTRACTOR will respond with a detailed proposal within five (5) calendar days of receipt of the Request for Proposal which shall include a complete itemized cost breakdown of all labor and materials showing actual quantities, hours, unit prices, and the wage rates required for the change. If the change order involves a change in construction time, a request for the time change shall accompany the change order cost breakdown. All such requests for time shall be specified by CONTRACTOR as either "work days" or "calendar days." Any request for time received with only the designation of "days" shall be considered calendar days. The term "work days" as used in this paragraph shall mean Monday through Friday, excluding Saturdays, Sundays and federal/State of California observed holidays. If the work is to be performed by a subcontractor, CONTRACTOR must include a bid from the subcontractor containing the same detailed information as required for CONTRACTOR. No extensions of time will be granted for change orders that, in the opinion of the ARCHITECT, do not affect the critical path of the Project.
- (e) Value of any such extra work, change, or deduction shall be determined at the discretion of DISTRICT in one or more of the following ways:
 - (1) By mutual written acceptance of a lump sum proposal from CONTRACTOR properly itemized and supported by sufficient substantiating data to permit evaluation by DISTRICT and ARCHITECT.
 - (2) By unit prices contained in CONTRACTOR's original bid and incorporated in the Project Documents or fixed by subsequent agreement between DISTRICT and CONTRACTOR.
 - (3) By cost of material and labor and percentage for overhead and profit ("time and material"). If the value is determined by this method the following requirements shall apply:
 - (A) Daily Reports by Contractor.
 - (i) General. At the close of each working day, the CONTRACTOR shall submit a daily report to the ARCHITECT and the Inspector, on forms approved by the DISTRICT, together with applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and for other services and expenditures when authorized concerning extra work items. An attempt shall be made to reconcile the report daily, and it shall be signed by the ARCHITECT and the CONTRACTOR. In the event of disagreement, pertinent notes shall be entered by each party to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by Subcontractors or others shall be submitted through the CONTRACTOR.

- (ii) Labor. The report shall show names of workers, classifications, and hours worked and hourly rate. Project Superintendent expenses are not allowed.
- (iii) Materials. The report shall describe and list quantities of materials used and unit cost.
- (iv) Equipment. The report shall show type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable, and hourly/daily cost.
- (v) Other Services and Expenditures. Other services and expenditures shall be described in such detail as the DISTRICT may require.

(B) Basis for Establishing Costs

- (i) Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft classification or type of workers at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from federal, state or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. The use of labor classification which would increase the extra work cost will not be permitted unless the CONTRACTOR establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
- (ii) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the work site in the quantifies involved, plus sales tax, freight and delivery. The DISTRICT reserves the right to approve materials and sources of supply, or to supply materials to the CONTRACTOR if necessary for the progress of the work. No markup shall be applied to any material provided by the DISTRICT.
- (iii) Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$100 or less or where an invoice is not provided.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental source, or distributors, at the time the work is performed. The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Necessary loading and transportation costs for equipment used on the extra work shall be included.

If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the DISTRICT than holding it at the work site, it shall be returned, unless the CONTRACTOR elects to keep it at the work site at no expense to the DISTRICT.

All equipment shall be acceptable to the ARCHITECT, in good working condition, and suitable for the purpose for which it is to be used. Manufacturer's ratings and manufacturer's approved modifications shall be used to classify equipment and it shall be powered by a unit of at least the minimum rating recommended by the manufacturer.

- (iv) Other Items. The DISTRICT may authorize other items which may be required on the extra work. Such items include labor, services, material and equipment which are different in their nature from those required by the work and which are of a type not ordinarily available from the CONTRACTOR or any of the subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.
- (v) Invoices. Vendors' invoices for material, equipment rental, and other expenditures, shall be submitted with the request for payment. If the request for payment is not substantiated by invoices or other documentation, the DISTRICT may establish the cost of the item involved at the lowest price which was current at the time of the report.
- (C) The following form shall be used as applicable by the DISTRICT and CONTRACTOR to communicate proposed additions and deductions to the Agreement.

115100	ment.	EXTRA	<u>CREDIT</u>
i.	Material/Equipment (attach itemized quantity and unit cost plus sales tax)		
	ii. Labor (attach itemized hours and rates)		
	iii. Subtotal		
	iv. If subcontractor performed work, add Subcontractor's overhead and profit to portions performed by it, not to exceed 15% of Item iii. above		
	v. Subtotal		

vi. General Contractor's Overhead and Profit, not to exceed 15% of

Item v if Contractor performed the work. If subcontractor performed the work, not to exceed 5% of Item v. Of portions performed by Contractor and subcontractors, portions performed by Contractor shall not exceed 15% of Item V, and portions performed by Subcontractor shall not exceed 5% of Item v. vii. Subtotal viii. Bond and Liability Insurance Premium, if in fact additional bonds or insurance were actually purchased, not to exceed 1% of Item vii. ix. Total

- IT IS EXPRESSLY UNDERSTOOD THAT THE VALUE OF SUCH (4) EXTRA WORK OR CHANGES, AS DETERMINED BY ANY OF THE AFOREMENTIONED METHODS, EXPRESSLY INCLUDES ANY AND ALL OF CONTRACTOR'S COSTS AND EXPENSES, BOTH DIRECT AND INDIRECT, RESULTING FROM ADDITIONAL TIME REQUIRED ON THE PROJECT, OR RESULTING FROM DELAYS TO THE PROJECT. ANY COSTS OR EXPENSES NOT INCLUDED ARE DEEMED WAIVED. FOR PURPOSES OF DETERMINING THE COST, IF ANY, OF ANY EXTRA WORK, CHANGE, ADDITION OR OMISSION HEREUNDER, ALL TRADE DISCOUNTS, REBATES, REFUNDS, AND ALL RETURNS FROM THE SALE OF SURPLUS MATERIALS AND EQUIPMENT SHALL ACCRUE AND BE CREDITED TO CONTRACTOR, AND CONTRACTOR SHALL ENSURE THAT SUCH DISCOUNTS, REBATES, REFUNDS, AND RETURNS MAY BE SECURED. AND THE AMOUNT THEREOF SHALL BE ALLOWED AS A REDUCTION OF CONTRACTOR'S COST IN DETERMINING THE ACTUAL COST OF CONSTRUCTION FOR PURPOSES OF ANY EXTRA WORK, CHANGE, ADDITION OR OMISSIONS IN THE WORK AS PROVIDED HEREIN.
- (f) If the CONTRACTOR should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligates the DISTRICT to pay additional compensation to CONTRACTOR or to grant an extension of time, or constitutes a waiver of any provision in the Agreement, CONTRACTOR shall notify the DISTRICT, in writing, of such claim within five (5) calendar days from the date CONTRACTOR has actual or constructive notice of the factual basis supporting the claim. The notice shall state the factual bases for the claim and cite in detail the Project Documents (including plans and specifications) upon which the claim is based. The CONTRACTOR's failure to notify the DISTRICT within such five (5) day period shall be deemed a waiver

and relinquishment of such a claim. If such notice be given within the specified time, the procedure for its consideration shall be as stated above in these General Conditions.

(g) <u>"PROHIBITED USAGE OF CONTRACTOR QUALIFYING LANGUAGE STAMPS ON DISTRICT DRAWINGS OR CONTRACT FORMS."</u> Contractor shall not countersign or endorse any form, drawing, change order, contract or other documents with any conditions not mutually agreed to in advance by the DISTRICT and the CONTRACTOR. Endorsement of a contract, change order, specification, drawing or form with the following: "This change order is being executed without waiver of the right to seek additional compensation for such services," shall be of no legal force or effect.

ARTICLE 60. COMPLETION

- (a) The DISTRICT shall accept completion of the Project and have the Notice of Completion recorded within ten (10) days of acceptance of completion of the Project when the entire work including punch list items shall have been completed to the satisfaction of the DISTRICT. Civil Code Section 3093. The work may only be accepted as complete by action of the DISTRICT so Governing Board.
- (b) However, the DISTRICT, at its sole option, may accept completion of the Project and have the Notice of Completion recorded when the entire work including individual portions of the work shall have been completed to the satisfaction of the DISTRICT, except for minor corrective items, as distinguished from incomplete items.
- (c) A final walk through of the Project to determine completion and to record the Notice of Completion shall occur only upon a valid claim by CONTRACTOR that the Project is complete except for minor corrective items. Any erroneous claims of completion by CONTRACTOR resulting in a premature walk through shall be at CONTRACTOR□s sole cost and expense and DISTRICT shall make adjustments to the contract price by reducing the amount thereof to pay for any costs incurred by the DISTRICT due to the erroneous claims by the CONTRACTOR that the Project is complete. Minor corrective items shall be identified in the final walk through of the Project.
- (d) If the CONTRACTOR fails to complete the minor corrective items prior to the expiration of the thirty-five (35) day period immediately following recording of the Notice of Completion, the DISTRICT shall withhold from the final payment an amount equal to one hundred fifty percent (150%), as determined by the DISTRICT, of the amount of each item until such time as the item is completed. Public Contract Code Section 7107. At the end of such 35-day period, if there are items remaining to be corrected, the DISTRICT may elect to proceed as provided in Article 61(b) entitled "Adjustments to Contract Price."

ARTICLE 61. ADJUSTMENTS TO CONTRACT PRICE

(a) If CONTRACTOR defaults or neglects to carry out the work in accordance with the Project Documents or fails to perform any provision thereof, DISTRICT may, after ten (10) days written notice to the CONTRACTOR and without prejudice to any other remedy it may have, make good such deficiencies.

(b) The DISTRICT shall adjust the total contract price by reducing the amount thereof by the cost of making good such deficiencies. If DISTRICT deems it inexpedient to correct work not done in accordance with the Project Documents, an equitable reduction in the contract price shall be made therefore.

ARTICLE 62. CORRECTION OF WORK

- (a) CONTRACTOR shall promptly remove all work identified by DISTRICT as failing to conform to the Project Documents, whether incorporated or not. CONTRACTOR shall promptly replace and re-execute its own work to comply with Project Documents without additional expense to DISTRICT and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.
- (b) If CONTRACTOR does not remove such work within a reasonable time, fixed by written notice, DISTRICT may remove it and may store the material at CONTRACTOR's expense. If CONTRACTOR does not pay expenses of such removal within ten (10) days' time thereafter, DISTRICT may, upon ten (10) days written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by CONTRACTOR.

ARTICLE 63. EXTENSION OF TIME - LIQUIDATED DAMAGES

- (a) The CONTRACTOR and DISTRICT hereby agree that the exact amount of damages for failure to complete the work within the time specified is extremely difficult or impossible to determine. CONTRACTOR shall be assessed liquidated damages for each and every day the work required under the Project Documents remains unfinished past the time for completion, as set forth in the Agreement, and any extensions of time granted by the DISTRICT to the CONTRACTOR under the terms of the Project Documents. The CONTRACTOR will pay to the DISTRICT or DISTRICT may retain from amounts otherwise payable to the CONTRACTOR, said amount for each day after failure to meet the requirements of the contract completion as scheduled in the Agreement. Government Code Section 53069.85 For purposes of this article, the work shall be considered "complete" in accordance with the provisions of Article 60, "COMPLETION", except that the work may be considered complete without formal acceptance by the DISTRICT Governing Board so long as the Governing Board, at its next regularly scheduled meeting, accepts the work.
- (b) CONTRACTOR shall not be charged for liquidated damages, as set forth above, because of any delays in completion of work which are not the fault or negligence of CONTRACTOR, including but not restricted to acts of God. CONTRACTOR shall within ten (10) days of beginning of any such delay, notify DISTRICT in writing of causes of delay. CONTRACTOR shall provide documentation and justification to substantiate the delay and its relation to the Project's critical path. DISTRICT shall ascertain the facts and extent of delay and grant extension of time for completing work when, in its judgment, the findings of fact justify such an extension. The DISTRICT's finding of fact thereon shall be final and conclusive on the parties hereto. Extension of time shall apply only to that

portion of work affected by the delay, and shall not apply to other portions of work not so affected.

ARTICLE 64. PAYMENTS WITHHELD

- (a) In addition to amount which DISTRICT may retain under Article entitled "COMPLETION" and Article entitled "PAYMENTS," DISTRICT may withhold a sufficient amount or amounts of any payment or payments otherwise due to CONTRACTOR, as in its judgment may be necessary to cover:
 - (1) Payments which may be past due and payable for just claims against CONTRACTOR or any subcontractors, or against and about the performance of work on the Project, including, without limitation, payments made pursuant to the Article entitled "PAYMENTS BY CONTRACTOR."
 - (2) The cost of defective work which CONTRACTOR has not remedied.
 - (3) Liquidated damages assessed against CONTRACTOR.
 - (4) Penalties for violation of labor laws.
 - (5) The cost of materials ordered by the DISTRICT pursuant to Article 33 entitled "MATERIALS AND WORK."
 - (6) The cost of completion of this Agreement if there exists a reasonable doubt that this Agreement can be completed for the balance then unpaid to CONTRACTOR.
 - (7) Damage to DISTRICT, another contractor, or subcontractor.
 - (8) Site clean-up as provided in Article 44 entitled "CLEANING UP."
 - (9) Payments to indemnify, defend, or hold harmless the DISTRICT.
 - (10) Any payments due to the District including but not limited to payments for failed tests, utilities or imperfections.
 - (11) Extra services for ARCHITECT.
 - (12) Extra services for the INSPECTOR including but not limited to reinspection required due to CONTRACTOR\(\sigma\) s failed tests or installation of unapproved or defective materials and CONTRACTOR's requests for inspection and CONTRACTOR's failure to attend the inspection.
 - (13) Failure of CONTRACTOR to submit on a timely basis, proper and sufficient documentation required by the Project Documents, including without limitation, monthly progress schedules, shop drawings, submittal schedules,

schedule of values, product data and samples, proposed product lists, executed change orders and verified reports.

- (14) Any other obligation(s) of the DISTRICT which the DISTRICT is authorized and/or compelled by law to perform.
- (b) If the above grounds are in the opinion of the DISTRICT removed by or at the expense of CONTRACTOR, payment shall be made for amounts withheld because of them.
- (c) DISTRICT may apply such withheld amount or amounts to payment of such claims or obligations at its discretion. In so doing, DISTRICT shall make such payments on behalf of CONTRACTOR. If any payment is so made by DISTRICT, then such amount shall be considered as a payment made under contract by DISTRICT to CONTRACTOR and DISTRICT shall not be liable to CONTRACTOR for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligations. DISTRICT will render CONTRACTOR an accounting of such funds disbursed on behalf of CONTRACTOR.
- (d) As an alternative to payment of such claims or obligations, DISTRICT, in its sole discretion, may reduce the total contract price as provided in Article 61 entitled "ADJUSTMENTS TO CONTRACT PRICE."

ARTICLE 65. TAXES

- (a) CONTRACTOR will pay all applicable federal, state and local taxes on all materials, labor, or services furnished by it, and all taxes arising out of its operations under the Project Documents.
- (b) If under federal excise tax law any transaction hereunder constitutes a sale on which a federal excise tax is imposed and the sale is exempt from such excise tax because it is a sale to a state or local government for its exclusive use, the DISTRICT, upon request, will execute documents necessary to show (1) that the DISTRICT is a political subdivision of the State for the purposes of such exemption and (2) that the sale is for the exclusive use of the DISTRICT. No excise tax for such materials shall be included in any bid price.

ARTICLE 66. NO ASSIGNMENT

The CONTRACTOR shall not assign, transfer, convey, sublet or otherwise dispose of this Agreement or of its rights, title or interest in or to the same or any part thereof. If the CONTRACTOR shall assign, transfer, convey, sublet or otherwise dispose of the Agreement or its right, title or interest therein, or any part thereof, such attempted or purported assignment, transfer, conveyance, sublease or other disposition shall be null, void and of no legal effect whatsoever; and the Agreement may, at the option of the DISTRICT, be terminated, revoked and annulled, and the DISTRICT shall thereupon be relieved and discharged from any and all liability and obligations growing out of the same to the CONTRACTOR, and to its purported assignee or transferee.

ARTICLE 67. NOTICE

Any notice from one party to the other or otherwise under the Agreement shall be in writing and shall be dated and signed by party giving such notice or by a duly authorized representative of such party. Any such notice shall not be effective for any purpose whatsoever unless served in one of the following manners:

- (1) If notice is given to DISTRICT, by personal delivery thereof to DISTRICT, or by depositing same in United States mail, enclosed in a sealed envelope addressed to DISTRICT, and sent by registered or certified mail with postage prepaid;
- (2) If notice is given to CONTRACTOR, by personal delivery thereof to said CONTRACTOR, or to CONTRACTOR's superintendent at site of Project, or by depositing same in United States mail, enclosed in a sealed envelope addressed to said CONTRACTOR at its regular place of business or at such address as may have been established for the conduct of work under this Agreement, and sent by registered or certified mail with postage prepaid;
- (3) If notice is given to surety or other persons, by personal delivery to such surety or other person, or by depositing same in United States mail, enclosed in a sealed envelope, addressed to such surety or person at the address of such surety or person last communicated by surety or other person to party giving notice, and sent by registered or certified mail with postage prepaid.

ARTICLE 68. NO WAIVER

The failure of the DISTRICT in any one or more instances to insist upon strict performance of any of the terms of this Agreement or to exercise any option herein conferred shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon any such terms or option on any future occasion.

ARTICLE 69. NON-UTILIZATION OF ASBESTOS MATERIAL

- (a) The CONTRACTOR will be required to execute and submit the Certificate Regarding Non-Asbestos Containing Materials.
- (b) Should asbestos containing materials be installed by the CONTRACTOR in violation of this certification, or if removal of asbestos containing materials is part of the Project, decontaminations and removals will meet the following criteria:
 - (1) Decontamination and removal of work found to contain asbestos or work installed with asbestos containing equipment shall be done only under the supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency (EPA).
 - (2) The asbestos removal contractor shall be an EPA accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the

asbestos consultant who shall have sole discretion and final determination in this matter.

- (3) The asbestos consultant shall be chosen and approved by the DISTRICT who shall have sole discretion and final determination in this matter.
- (4) The work will not be accepted until asbestos contamination is reduced to levels deemed acceptable by the asbestos consultant.
- (c) Cost of all asbestos removal, including, but not necessarily limited to the cost of the asbestos removal contractor, the cost of the asbestos consultant, analytical and laboratory fees, time delays and additional costs as may be incurred by the DISTRICT shall be borne entirely by the CONTRACTOR.
- (d) Hold Harmless: Interface of work for the Project with work containing asbestos shall be executed by the CONTRACTOR at his/her risk and at his/her discretion with full knowledge of the currently accepted standards, hazards, risks and liabilities associated with asbestos work and asbestos containing products. By execution of the Agreement, the CONTRACTOR acknowledges the above and agrees to hold harmless the DISTRICT, its Governing Board, employees, agents, and ARCHITECT and assigns for all asbestos liability which may be associated with this work. The CONTRACTOR further agrees to instruct his/her employees with respect to the above mentioned standards, hazards, risks and liabilities.

ARTICLE 70. LEAD

Pursuant to the Lead-Safe Schools Protection Act (Education Code Sections 32240, et seq.) and other applicable law, the CONTRACTOR shall not use lead-based paint, lead plumbing and solders, or other potential sources of lead contamination in the construction of any new school facility or the modernization or renovation of any existing school facility.

ARTICLE 71. CRIMINAL RECORDS CHECK

Education Code Section 45125.1 provides that if the employees of any entity that has a contract with a school district may have any contact with pupils, those employees shall submit or have submitted their fingerprints in a manner authorized by the Department of Justice together with a fee determined by the Department of Justice to be sufficient to reimburse the Department for its costs incurred in processing the application. The CONTRACTOR shall not permit an employee to come in contact with DISTRICT pupils until the Department of Justice has ascertained that the employee has not been convicted of a violent or serious felony. The CONTRACTOR shall certify in writing to the Governing Board of the DISTRICT that none of its employees who may come in contact with pupils have been convicted of a violent or serious felony. Criminal Records Check Certification by CONTRACTOR is included in the Project Documents.

ARTICLE 72. DISABLED VETERAN BUSINESS ENTERPRISES

Each bidder must meet goals and requirements relating to three percent (3%) participation by Disabled Veteran Business Enterprises, established by the DISTRICT and the State Allocation Board (SAB), or make a good faith effort with respect thereto, in accordance with the DISTRICT's policies and procedures. CONTRACTOR may obtain information from the Office of Small Business Certification and Resources (OSBCR) at http://www.dgs.ca.gov/osbcr or (916) 323-5478. The CONTRACTOR shall be required to submit to the DISTRICT the DVBE Certification which is included in the Project Documents. Prior to, and as a condition precedent for final payment on the Project, the CONTRACTOR shall provide appropriate documentation to the DISTRICT so that the DISTRICT can assess its success at meeting the DVBE participation goal.

ARTICLE 73. TOBACCO FREE POLICY

CONTRACTOR has been advised and is aware that DISTRICT has adopted a Board Policy which prohibits the use of tobacco products, including smokeless tobacco, anywhere on DISTRICT property. CONTRACTOR shall be responsible for the enforcement of DISTRICT's tobacco-free policy among all CONTRACTOR's employees and subcontractors while on DISTRICT property. CONTRACTOR understands and agrees that should any employee or subcontractor of CONTRACTOR violate the DISTRICT's Board Policy after having already been warned once for violating DISTRICT's tobacco-free policy, CONTRACTOR shall remove the individual for the duration of the Project. CONTRACTOR shall not be entitled to any additional compensation and/or time in completing the Project for such removal.

ARTICLE 74. GOVERNING LAW

The laws of the State of California shall govern the Project and the Agreement.

NEW PUBLIC WORKS CONTRACTOR REGISTRATION LAW [SB 854] FACT SHEET

SB 854, a budget trailer bill that was signed into law on June 20, 2014, and became effective immediately, made several significant changes to laws pertaining to the administration and enforcement of prevailing wage requirements by the Department of Industrial Relations (DIR). Among other things, SB 854 established a new public works contractor registration program to replace prior Compliance Monitoring Unit (CMU) and Labor Compliance Program (LCP) requirements for bond-funded and other specified public works projects. The fees collected through this new program will be used to fund all of DIR's public works activities, including compliance monitoring and enforcement, the determination of prevailing wage rates, public works coverage determinations, and hearing enforcement appeals.

Essentials of public works contractor registration program:

- Contractors will be subject to a registration and annual renewal fee that has been set initially at \$300. The fee is non-refundable and applies to all contractors and subcontractors who intend to bid or perform work on public works projects (as defined under the Labor Code).
- Contractors will apply and pay the fee online and must meet minimum qualifications to be registered as eligible to bid and work on public works projects:
 - Must have workers' compensation coverage for any employees and only use subcontractors who are registered public works contractors.
 - o Must have Contractors State License Board license if applicable to trade.
 - Must have no delinquent unpaid wage or penalty assessments owed to any employee or enforcement agency.
 - Must not be under federal or state debarment.
 - Must not be in prior violation of this registration requirement once it becomes effective. However, for the first violation in a 12 month period, a contractor may still qualify for registration by paying an additional penalty.
- The registration fee is not related to any project. It is more like a license that enables the registrant to bid on and perform public works.

- DIR will post a list of registered contractors and subcontractors on its website so
 that awarding bodies and contractors will be able to comply with requirements to
 only use registered contractors and subcontractors.
- Various protections are built in so that
 - A contractor won't be in violation for working on a private job that is later determined to be public work;
 - The inadvertent listing of an unregistered subcontractor on a bid won't necessarily invalidate that bid;
 - A contract with an unregistered contractor or subcontractor is subject to cancellation but is not void as to past work;
 - An unregistered contractor or subcontractor can be replaced with one who is registered;
 - A contractor whose registration lapses will have a 90 day grace period within which to pay a late fee and renew.
- Registrations will begin after July 1, 2014, once the registration system is ready to go online. The preferred method of payment will be by credit card.
- The requirement to list only registered contractors and subcontractors on bids becomes effective on March 1, 2015. The requirement to only use registered contractors and subcontractors on public works projects applies to all projects awarded on or after April 1, 2015.

Essentials of Public Works Enforcement Fund:

All contractor registration fees will go into the State Public Works Enforcement Fund and be used to fund the following items --

- · administration of contractor registration requirement
- all DIR costs for administering and enforcing public works laws
- Labor Commissioner's enforcement of other Labor Code violations on monitored public works projects.

DIR will no longer charge awarding bodies for prevailing wage compliance monitoring and enforcement by the CMU. (*Note: DIR will continue to bill and collect fees from awarding agencies for CMU services provided through June 20, 2014.*)

Related changes in DIR's administration and enforcement of public works requirements:

- Requirements to use CMU or specified alternative (labor compliance program or project labor agreement) for state bond-funded and other specified projects have been eliminated and replaced by requirements that apply to all public works projects (as defined under the Labor Code).
- Awarding bodies are now required to submit PWC-100 (contract award notice) for all public works projects. (This requirement previously applied to about 90% of all projects.)
- Contractors and subcontractors on all public works projects will be required to submit certified payroll records (CPRs) to the Labor Commissioner unless excused from this requirement.
 - O This requirement will be phased in as follows:
 - Applies immediately to public works projects that have already been under CMU monitoring, i.e. contractors on ongoing projects that have been submitting CPRs to the CMU will continue doing so
 - Will apply to any new projects awarded on or after April 1, 2015
 - May apply to other projects as determined by Labor Commissioner
 - Will apply to all public works projects, new or ongoing, on and after January 1, 2016
 - O The Labor Commissioner may make exception to this requirement for
 - Projects covered by qualifying project labor agreement
 - Projects undertaken by one of four remaining awarding bodies with legacy LCPs (Caltrans, City of Los Angeles, County of Sacramento, and Los Angeles Unified School District), so long as those LCPs remain approved by DIR
 - O CPRs will be furnished online (as is done currently for CMU). DIR intends to continue making improvements to this process, including creating a means for general contractors to have online access to the CPRs submitted by their subcontractors.
- Requirements for awarding bodies to adopt and enforce a DIR-approved LCP are now limited to: (1) public works projects awarded prior to January 1, 2012 that were under a preexisting LCP requirement; and (2) projects funded in whole or in part by Proposition 84.

Attachment "C"

DETAILED LIGHTING AUDITS

(Download Document separately)

Attachment "D"

LIGHTING SPECIFICATIONS

SECTION 26 51 00 - INTERIOR LIGHTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 16 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. LED retrofit kits.
 - 2. LED lamp (replacement only)
 - 3. Emergency lighting units.
 - 4. Lighting fixture supports.

1.3 DEFINITIONS

- A. CRI: Color-rendering index.
- B. CU: Coefficient of utilization.
- C. HID: High-intensity discharge.
- D. LER: Luminaire efficacy rating.
- E. Luminaire: Complete lighting fixture, including ballast housing if provided.
- F. RCR: Room cavity ratio.

1.4 SUBMITTALS

- A. Product Data: For each type of lighting fixture, arranged in order of fixture designation. Include data on features, accessories, finishes, and the following:
 - 1. Physical description of lighting fixture including dimensions.
 - 2. Emergency lighting units including battery and charger.
 - 3. Ballast. For LED Lamp replacements, provide verification of existing ballast compatibility with replacement LED Lamp; provide product data for ballast replacement product for incompatible ballast-lamp configurations for all areas in scope of work.
 - 4. Energy-efficiency data.
 - 5. Life, output, and energy-efficiency data for lamps.

- 6. Photometric data, in IESNA format, based on laboratory tests of each lighting fixture type, outfitted with lamps, ballasts, and accessories identical to those indicated for the lighting fixture as applied in this Project. The following are acceptable:
 - a. For indicated fixtures, photometric data shall be certified by a qualified independent testing agency. Photometric data for remaining fixtures shall be certified by the manufacturer.
 - b. Photometric data shall be certified by a manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program (NVLAP) for Energy Efficient Lighting Products.
- B. Shop Drawings: Show details of nonstandard or custom lighting fixtures. Indicate dimensions, weights, methods of field assembly, components, features, and accessories.
 - 1. Wiring Diagrams: Lighting and control wiring.
- C. Coordination Drawings: Reflected ceiling plan(s) and other details, drawn to scale, on which the following items are shown and coordinated with each other, based on input from installers of the items involved:
 - 1. Lighting fixtures.
 - 2. Suspended ceiling components.
 - 3. Structural members to which suspension systems for lighting fixtures will be attached.
 - 4. Other items in finished ceiling including the following:
 - a. Air outlets and inlets.
 - b. Speakers.
 - c. Sprinklers.
 - d. Smoke and fire detectors.
 - e. Occupancy sensors.
 - f. Access panels.
 - 5. Perimeter moldings.
- D. Samples for Verification: Each sample shall include the following:
 - 1. Lamps: Specified units installed.
- E. Qualification Data: For agencies providing photometric data for lighting fixtures.
- F. Field quality-control test reports.
- G. Operation and Maintenance Data: For lighting equipment and fixtures to include in emergency, operation, and maintenance manuals.
- H. Warranties: As specified in this Section.

1.5 QUALITY ASSURANCE

- A. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NFPA 70 and CEC for the current year 2015.
- D. FMG Compliance: Lighting fixtures for hazardous locations shall be listed and labeled for indicated class and division of hazard by FMG.

Mockup lighting fixtures are often part of a typical room or module mockup used to evaluate and demonstrate an overall interior concept, not just lighting. Delete paragraph and subparagraphs below if not required. If retaining, indicate location, type, and other details of mockups on Drawings. Revise wording if only one mockup is required.

- E. Mockups: Provide interior lighting fixtures or lamp replacement room mockups, complete with power and control connections. <u>Mockups to be provided for minimum one (1) room or area per site.</u>
 - 1. Obtain Owner or Engineer's approval of fixtures for mockups before starting installations.
 - 2. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.

Retain subparagraph below if mockups are erected as part of building rather than separately and the intention is to make an exception to the default requirement in Division 1 Section "Quality Requirements" for demolishing and removing mockups when directed, unless otherwise indicated.

- 3. Approved fixtures in mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- F. All lighting fixtures shall be UL approved.

1.6 COORDINATION

Retain this Article if Coordination Drawings are required.

A. Coordinate layout and installation of lighting fixtures and suspension system with other construction that penetrates ceilings or is supported by them, including HVAC equipment, fire-suppression system, and partition assemblies.

1.7 WARRANTY

A. Warranty Period for LED Retrofit Kit:

- 1. Warranty Period: Five years from date of Substantial Completion. Full warranty shall apply to all components of the retrofit kit, including LED board, lamp, and nonelectrical components.
- B. Warranty for T8 LED Lamps (replacement only): Manufacturer's standard form, made out to Owner and signed by lamp manufacturer agreeing to replace lamps that fail in materials or workmanship, f.o.b. the nearest shipping point to Project site, within specified warranty period indicated below.
 - 1. Warranty Period: Five years from date of Substantial Completion.

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Lamps: 2 for every 100 of each type and rating installed. Furnish at least one of each type.
 - 2. Battery and Charger Data: 1 for each emergency lighting unit.
 - 3. Globes and Guards: 1 for every 20 of each type and rating installed. Furnish at least one of each type.

PART 2 - PRODUCTS

2.1 LED RETROFIT KITS

A. Kit Type.

- 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Philips Evokit.
 - b. Megalight.
 - c. Sylvania Lighting.
 - d. CREE Lighting
 - e. Maxlite
 - f. Or District approved equal.
- 2. Construction: Galvanized steel and powder coated after fabrication.
- 3. Color: White.
- 4. Minimum depth: 3 inches.
- 5. CRI: >80.
- 6. Light bar: Single.
- 7. Lamp: LED T8.
- 8. Driver: International.
- 9. Size: 2 feet x 4 feet, 2 feet x 2 feet, 1 feet x 4 feet
- 10. Color temperature (K): 4,000k.

2.2 LED WRAP AROUND FIXTURES

- A. Wrap Around Fixture Type.
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Deco.
 - b. Hubbell.
 - c. Sylvania.
 - d. CREE Lighting
 - e. Maxlite
 - f. Or District approved equal.
 - 2. Construction: Galvanized steel and powder coated after fabrication.
 - 3. Color: White.
 - 4. Minimum depth: 3 inches.
 - 5. CRI: >80.
 - 6. Light bar: Multiple.
 - 7. Lamp: Integral LED.
 - 8. Driver: International, dimmable
 - 9. Size: 2 feet x 4 feet, 2 feet x 2 feet, and 1 feet x 4 feet
 - 10. Color temperature (K): 4,000k.

2.3 LED LAMPS (REPLACMENT ONLY)

- A. Lamp Type: T8 LED
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Espen Retroflex.
 - b. GreenCreative.
 - c. Maxlite.
 - d. Philips.
 - e. Or District approved equal.
 - 2. Driver: Internal.
 - 3. Length: 48 inches.
 - 4. Lamp Shape: T8.
 - 5. Grade: Commercial.
 - 6. Voltage: 120 277.
 - 7. Initial Lumens: 1600.
 - 8. CRI: > 80.
 - 9. Color temperature (K): 4,000k.

2.4 LED LAMPS (REPLACMENT ONLY)

A. Lamp Type: A19-A21

- 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Philips
 - b. GreenCreative
 - c. Sylvania
 - d. Cree
 - e. Or District approved equal.
- 2. Driver: Internal.
- 3. Length: 6inches
- 4. Lamp Shape: A19; A21
- 5. Grade: Commercial Full Dimmable
- 6. Voltage: 120v.
- 7. Initial Lumens: 800.
- 8. CRI: > 80.

2.5 COLOR TEMPERATURE (K): 4,000K.

2.6 EMERGENCY LIGHTING UNITS

- A. Description: Self-contained units complying with UL 924.
 - 1. Battery: Sealed, maintenance-free, lead-acid type.
 - 2. Charger: Fully automatic, solid-state type with sealed transfer relay.
 - 3. Operation: Relay automatically turns lamp on when power supply circuit voltage drops to 80 percent of nominal voltage or below. Lamp automatically disconnects from battery when voltage approaches deep-discharge level. When normal voltage is restored, relay disconnects lamps from battery, and battery is automatically recharged and floated on charger.
 - 4. Test Push Button: Push-to-test type, in unit housing, simulates loss of normal power and demonstrates unit operability.
 - 5. LED Indicator Light: Indicates normal power on. Normal glow indicates trickle charge; bright glow indicates charging at end of discharge cycle.

Feature in subparagraph below is optional. Coordinate with Drawings.

6. Wire Guard: Heavy-chrome-plated wire guard protects lamp heads or fixtures.

Retain subparagraph below for time-delay option if units are indicated for areas normally lighted by HID fixtures that will not relight for a period after power is restored due to lengthy arc restrike delays.

7. Integral Time-Delay Relay: Holds unit on for fixed interval of 10 minutes when power is restored after an outage.

Retain subparagraph below to permit periodic test required by codes for emergency equipment to be performed using a hand-held remote device to trigger simulation of loss of normal power in the tested unit.

8. Remote Test: Switch in hand-held remote device aimed in direction of tested unit initiates coded infrared signal. Signal reception by factory-installed infrared receiver in tested unit triggers simulation of loss of its normal power supply, providing visual confirmation of either proper or failed emergency response.

Retain subparagraph below to eliminate necessity to manually perform periodic test required by codes for emergency equipment. Verify requirements of authorities having jurisdiction.

9. Integral Self-Test: Factory-installed electronic device automatically initiates coderequired test of unit emergency operation at required intervals. Test failure is annunciated by an integral audible alarm and flashing red LED.

2.7 LIGHTING FIXTURE SUPPORT COMPONENTS

Coordinate this Article with Drawings. See Editing Instruction No. 2 in the Evaluations for discussion of seismic considerations.

- A. Single-Stem Hangers: 1/2-inch steel tubing with swivel ball fittings and ceiling canopy. Finish same as fixture.
- B. Twin-Stem Hangers: Two, 1/2-inch steel tubes with single canopy designed to mount a single fixture. Finish same as fixture.
- C. Wires: ASTM A 641/A 641M, Class 3, soft temper, zinc-coated steel, 12 gage.

Coordinate first paragraph below with Drawings to identify humid spaces.

- D. Wires for Humid Spaces: ASTM A 580/A 580M, Composition 302 or 304, annealed stainless steel, 12 gage.
- E. Rod Hangers: 3/16-inch minimum diameter, cadmium-plated, threaded steel rod.
- F. Hook Hangers: Integrated assembly matched to fixture and line voltage and equipped with threaded attachment, cord, and locking-type plug.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Lighting fixtures: Set level, plumb, and square with ceilings and walls. Install lamps in each fixture.

NFPA 70 requires minimum support for fixtures. Retain first paragraph and subparagraphs below for more specific support requirements and for requirements exceeding code minimums. Units in seismic areas may require additional supports and restraining devices beyond those specified here. See Editing Instruction No. 2 in the Evaluations.

B. Support for Lighting Fixtures in or on Grid-Type Suspended Ceilings: Use grid as a support element.

- 1. Install a minimum of four ceiling support system rods or wires for each fixture. Locate not more than 6 inches from lighting fixture corners.
- 2. Support Clips: Fasten to lighting fixtures and to ceiling grid members at or near each fixture corner with clips that are UL listed for the application.
- 3. Fixtures of Sizes Less Than Ceiling Grid: Install as indicated on reflected ceiling plans or center in acoustical panel, and support fixtures independently with at least two 3/4-inch metal channels spanning and secured to ceiling tees.

Retain subparagraph below if Project is in a seismic area.

- 4. Install at least one independent support rod or wire from structure to a tab on lighting fixture. Wire or rod shall have breaking strength of the weight of fixture at a safety factor of 3.
- 5. Install at least one seismic wire support (at 45 degrees) for each light fixture.
- C. Suspended Lighting Fixture Support:
 - 1. Pendants and Rods: Where longer than 48 inches, brace to limit swinging.
 - 2. Stem-Mounted, Single-Unit Fixtures: Suspend with twin-stem hangers.
 - 3. Continuous Rows: Use tubing or stem for wiring at one point and tubing or rod for suspension for each unit length of fixture chassis, including one at each end.
- D. Adjust aimable lighting fixtures to provide required light intensities.

3.2 FIELD QUALITY CONTROL

- A. Test for Emergency Lighting: Interrupt power supply to demonstrate proper operation. Verify transfer from normal power to battery and retransfer to normal.
- B. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

END OF SECTION 26 51 00

SECTION 26 56 00 - EXTERIOR LIGHTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Exterior luminaires with lamps and ballasts.

1.3 DEFINITIONS

- A. CRI: Color-rendering index.
- B. HID: High-intensity discharge.
- C. Luminaire: Complete lighting fixture, including ballast housing if provided.

1.4 SUBMITTALS

- A. Product Data: For each luminaire and support component, arranged in order of lighting unit designation. Include data on features, accessories, finishes, and the following:
 - 1. Physical description of luminaire, including materials, dimensions, effective projected area, and verification of indicated parameters.
 - 2. Details of attaching luminaires and accessories.
 - 3. Details of installation and construction.
 - 4. Luminaire materials.
 - 5. Photometric data based on laboratory tests of each luminaire type, complete with indicated lamps, ballasts, and accessories.
 - a. For indicated luminaires, photometric data shall be certified by a qualified independent testing agency. Photometric data for remaining luminaires shall be certified by manufacturer.
 - b. Photometric data shall be certified by manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products.
 - 6. Photoelectric relays.
 - 7. Ballasts, including energy-efficiency data.
 - 8. Lamps, including life, output, and energy-efficiency data.

- 9. Means of attaching luminaires to supports, and indication that attachment is suitable for components involved.
- B. Samples for Verification: For products designated for sample submission in Exterior Lighting Device Schedule. Each sample shall include lamps and ballasts.
- C. Qualification Data: For agencies providing photometric data for lighting fixtures.
- D. Field quality-control test reports.
- E. Operation and Maintenance Data: For luminaires to include in emergency, operation, and maintenance manuals.
- F. Warranty: As specified in this Section.

1.5 QUALITY ASSURANCE

- A. Luminaire Photometric Data Testing Laboratory Qualifications. The following are acceptable:
 - 1. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by manufacturers' laboratories that are accredited under the National Volunteer Laboratory Accreditation Program for Energy Efficient Lighting Products.
 - 2. Luminaire Photometric Data Testing Laboratory Qualifications: Provided by an independent agency, with the experience and capability to conduct the testing indicated, that is an NRTL as defined by OSHA in 29 CFR 1910.7.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with IEEE C2, "National Electrical Safety Code."
- D. Comply with NFPA 70.

1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace products that fail in materials or workmanship; that corrode; or that fade, stain, perforate, erode, or chalk due to effects of weather or solar radiation within specified warranty period. Manufacturer may exclude lightning damage, hail damage, vandalism, abuse, or unauthorized repairs or alterations from special warranty coverage.
 - 1. Warranty Period for Luminaires: Five years from date of Substantial Completion.

1.7 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Lamps: 2 for every 100 of each type and rating installed. Furnish at least one of each type.

- 2. Glass and Plastic Lenses, Covers, and Other Optical Parts: 3 for every 100 of each type and rating installed. Furnish at least one of each type.
- 3. Globes and Guards: 1 for every 20 of each type and rating installed. Furnish at least one of each type.

PART 2 - PRODUCTS

2.1 REQUIREMENTS FOR INDIVIDUAL EXTERIOR LIGHTING DEVICES

- A. Exterior Lighting Device Type Wall Mount:
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Deco Digital.
 - b. Hubbell.
 - c. Philips.
 - d. Lithonia.
 - e. Trace Lighting
 - f. Maxlite.
 - g. Or District approved equal.
 - 2. Voltage: 120 / 277 -V ac; Contractor to field verify.
 - 3. Lamps: LED.
 - 4. Ballast Types and Features: Driver.
 - 5. Photoelectric Control: Integrally mounted.
 - 6. Color Temperature (K): 5,000.
 - 7. Finish: To be determined by Owner.
 - 8. Optics: Coordinate with Owner and per As-built conditions.
- B. Exterior Lighting Device Type 16 inch Area Light:
 - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Deco Digital.
 - b. Hubbell.
 - c. Philips.
 - d. Lithonia.
 - e. Trace Lighting
 - f. Maxlite.
 - g. Or District approved equal.
 - 2. Voltage: 120 / 277 -V ac; Contractor to field verify.
 - 3. Lamps: LED.
 - 4. Ballast Types and Features: Driver.
 - 5. Photoelectric Control: Integrally mounted.

- 6. Color Temperature (K): 5,000.
- 7. Finish: To be determined by Owner.
- 8. Optics: Coordinate with Owner and per As-built conditions.

C. Exterior Lighting Device Type 6 inch Downlight:

- 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Deco Digital.
 - b. Hubbell.
 - c. Philips.
 - d. Lithonia.
 - e. Trace Lighting
 - f. Maxlite.
 - g. Or District approved equal.
- 2. Voltage: 120 -V ac. Contractor to field verify.
- 3. Lamps: LED.
- 4. Ballast Types and Features: Driver.
- 5. Photoelectric Control: Integrally mounted.
- 6. Color Temperature (K): 5,000.

D. Exterior Lighting Device Type Area Flood:

- 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Deco Digital.
 - b. Hubbell.
 - c. Philips.
 - d. Lithonia.
 - e. Trace Lighting
 - f. Maxlite.
 - g. Or District approved equal.
- 2. Voltage: 120 / 277 -V ac; Contractor to field verify.
- 3. Lamps: LED.
- 4. Ballast Types and Features: Driver.
- 5. Photoelectric Control: Integrally mounted.
- 6. Color Temperature (K): 5,000.
- 7. Finish: To be determined by Owner.
- 8. Optics: Coordinate with Owner and per As-built conditions.

PART 3 - EXECUTION

3.1 LUMINAIRE INSTALLATION

- A. Install lamps in each luminaire.
- B. Fasten luminaire to indicate structural supports.
 - 1. Use fastening methods and materials selected to resist seismic forces defined for the application and approved by manufacturer.
- C. Adjust luminaires that require field adjustment or aiming. Include adjustment of photoelectric device to prevent false operation of relay by artificial light sources.

3.2 FIELD QUALITY CONTROL

- A. Inspect each installed fixture for damage. Replace damaged fixtures and components.
- B. Illumination Observations: Verify normal operation of lighting units after installing luminaires and energizing circuits with normal power source.
 - 1. Verify operation of photoelectric controls.

C. Illumination Tests:

- 1. Measure light intensities at night. Use photometers with calibration referenced to NIST standards. Comply with the following IESNA testing guide(s):
 - a. IESNA LM-5, "Photometric Measurements of Area and Sports Lighting."
 - b. IESNA LM-50, "Photometric Measurements of Roadway Lighting Installations."
 - c. IESNA LM-64, "Photometric Measurements of Parking Areas."
 - d. IESNA LM-72, "Directional Positioning of Photometric Data."
- D. Prepare a written report of tests, inspections, observations, and verifications indicating and interpreting results. If adjustments are made to lighting system, retest to demonstrate compliance with standards.

3.3 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain luminaire lowering devices.

END OF SECTION 26 56 00

SECTION 26 09 23 - LIGHTING CONTROL DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following lighting control devices:
 - 1. Time clocks (for exterior lighting fixtures only).
 - 2. Indoor photoelectric switches.
 - 3. Indoor occupancy sensors.
 - 4. Lighting contactors.
 - 5. Emergency shunt relays.

1.3 DEFINITIONS

- A. LED: Light-emitting diode.
- B. PIR: Passive infrared.

1.4 SUBMITTALS

- A. Product Data: For each type of product used.
- B. Shop Drawings: Show installation details for occupancy and light-level sensors.
 - 1. Interconnection diagrams showing field-installed wiring.
- C. Field quality-control test reports.
- D. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals.

1.5 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.6 COORDINATION

A. Coordinate layout and installation of ceiling-mounted devices with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, smoke detectors, fire-suppression system, and partition assemblies.

PART 2 - PRODUCTS

2.1 TIME CLOCKS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- C. Basis-of-Design Product: Subject to compliance with requirements, provide a comparable product by one of the following:
 - 1. Area Lighting Research, Inc.; Tyco Electronics.
 - 2. Grasslin Controls Corporation; a GE Industrial Systems Company.
 - 3. Intermatic, Inc.
 - 4. Leviton Mfg. Company Inc.
 - 5. Lightolier Controls; a Genlyte Company.
 - 6. Lithonia Lighting; Acuity Lighting Group, Inc.
 - 7. Paragon Electric Co.; Invensys Climate Controls.
 - 8. Square D; Schneider Electric.
 - 9. Enlighted.
 - 10. Touch-Plate, Inc.
 - 11. Watt Stopper (The).
 - 12. Lutron:
- D. Electronic Time Clocks: The time switch shall be of the 24-hour electronic type, capable of permitting up to 28 setpoints or events. The time switch shall provide a minimum ON or OFF time of 1 minute. The time switch to be powered by 120/277 VAC (field verified by Contractor), 60 Hz power supply. The time switch mechanism shall be a snap-in design to provide ease of mechanism removal for mounting the enclosure. The time switch enclosure shall be a Type 3R plastic lockable enclosure, which shall be painted with an electrostatic process to eliminate the potential for corrosion. The time switch shall provide clear terminal identification on a non-curling terminal insulator. Terminal connections shall be made using teeter-type terminal screws to provide secure connections for wire sizes up to #10 AWG.
 - 1. Contact Configuration: SPST, DPST, DPDT.
 - 2. Contact Rating: 20-A ballast load, 120/240-V ac.
 - 3. Astronomic Time: Selected channels.
 - 4. Battery Backup: For schedules and time clock.
- E. BAS Interface: Provide hardware interface to enable the BAS to monitor and control lighting contactors.

- 1. Monitoring: On-off status.
- 2. Control: On-off operation.

2.2 OUTDOOR PHOTOELECTRIC SWITCHES

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Area Lighting Research, Inc.; Tyco Electronics.
 - 2. Grasslin Controls Corporation; a GE Industrial Systems Company.
 - 3. Intermatic, Inc.
 - 4. Lithonia Lighting; Acuity Lighting Group, Inc.
 - 5. Novitas, Inc.
 - 6. Paragon Electric Co.; Invensys Climate Controls.
 - 7. Square D; Schneider Electric.
 - 8. Enlighted.
 - 9. Touch-Plate, Inc.
 - 10. Watt Stopper (The).
 - 11. Lutron.
 - 12. Or approved equal.
- B. Description: Solid state, with SPST dry contacts rated for 1800-VA tungsten or 1000-VA inductive, to operate connected relay, contactor coils, or microprocessor input; complying with UL 773A.
 - 1. Light-Level Monitoring Range: 1.5 to 10 fc (16.14 to 108 lx), with an adjustment for turn-on and turn-off levels within that range, and a directional lens in front of photocell to prevent fixed light sources from causing turn-off.
 - 2. Time Delay: 15-second minimum, to prevent false operation.
 - 3. Surge Protection: Metal-oxide varistor, complying with IEEE C62.41.1, IEEE C62.41.2, and IEEE 62.45 for Category A1 locations.
 - 4. Mounting: Twist lock complying with IEEE C136.10, with base-and-stem mounting or stem-and-swivel mounting accessories as required to direct sensor to the north sky exposure.
- C. Description: Solid state, with SPST and DPST dry contacts rated for 1800 VA to operate connected load, relay, or contactor coils; complying with UL 773.
 - 1. Light-Level Monitoring Range: 1.5 to 10 fc (16.14 to 108 lx), with an adjustment for turn-on and turn-off levels within that range.
 - 2. Time Delay: 30-second minimum, to prevent false operation.
 - 3. Lightning Arrester: Air-gap type.
 - 4. Mounting: Twist lock complying with IEEE C136.10, with base.

2.3 INDOOR PHOTOELECTRIC SWITCHES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

- 1. Allen-Bradley/Rockwell Automation.
- 2. Area Lighting Research, Inc.; Tyco Electronics.
- 3. Eaton Electrical Inc; Cutler-Hammer Products.
- 4. Grasslin Controls Corporation; a GE Industrial Systems Company.
- 5. Intermatic, Inc.
- 6. Lithonia Lighting; Acuity Lighting Group, Inc.
- 7. MicroLite Lighting Control Systems.
- 8. Novitas, Inc.
- 9. Paragon Electric Co.; Invensys Climate Controls.
- 10. Square D; Schneider Electric.
- 11. Enlighted.
- 12. Touch-Plate, Inc.
- 13. Watt Stopper (The).
- 14. Lutron.
- 15. Or approved equal.
- B. Ceiling-Mounted Photoelectric Switch: Solid-state, light-level sensor unit, with separate relay unit mounted on luminaire, to detect changes in lighting levels that are perceived by the eye. Cadmium sulfide photoresistors are not acceptable.
 - 1. Sensor Output: Contacts rated to operate the associated relay, complying with UL 773A. Sensor shall be powered from the relay unit.
 - 2. Relay Unit: Dry contacts rated for 20-A ballast load at 120- and 277-V ac, for 13-A tungsten at 120-V ac, and for 1 hp at 120-V ac. Power supply to sensor shall be 24-V dc, 150-mA, Class 2 power source as defined by NFPA 70.
 - 3. Light-Level Monitoring Range: 10 to 200 fc (108 to 2152 lx, with an adjustment for turn-on and turn-off levels within that range.
 - 4. Time Delay: Adjustable from 5 to 300 seconds to prevent cycling, with deadband adjustment.
 - 5. Indicator: Two LEDs to indicate the beginning of on-off cycles.

2.4 INDOOR OCCUPANCY SENSORS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Hubbell Lighting.
 - 2. Leviton Mfg. Company Inc.
 - 3. Lithonia Lighting; Acuity Lighting Group, Inc.
 - 4. Novitas, Inc.
 - 5. RAB Lighting, Inc.
 - 6. Sensor Switch, Inc.
 - 7. Enlighted.
 - 8. Watt Stopper (The).
 - 9. Lutron.
 - 10. Or approved equal.
- B. General Description: Wall- or ceiling-mounting, solid-state units with a separate relay unit.

- 1. Operation: Unless otherwise indicated, turn lights on when covered area is occupied and off when unoccupied; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
- 2. Sensor Output: Contacts rated to operate the connected relay, complying with UL 773A. Sensor shall be powered from the relay unit.
- 3. Relay Unit: Dry contacts rated for 20-A ballast load at 120- and 277-V ac, for 13-A tungsten at 120-V ac, and for 1 hp at 120-V ac. Power supply to sensor shall be 24-V dc, 150-mA, Class 2 power source as defined by NFPA 70.
- 4. Mounting:
 - a. Sensor: Suitable for mounting in any position on a standard outlet box.
 - b. Relay: Externally mounted through a 1/2-inch knockout in a standard electrical enclosure.
 - c. Time-Delay and Sensitivity Adjustments: Recessed and concealed behind hinged door.
 - d. 30 minute minimum occupancy setting
- 5. Indicator: LED, to show when motion is being detected during testing and normal operation of the sensor.
- 6. Bypass Switch: Override the on function in case of sensor failure.
- 7. Automatic Light-Level Sensor: Adjustable from 2 to 200 fc (21.5 to 2152 lx); keep lighting off when selected lighting level is present.
- C. PIR Type: Ceiling mounting; detect occupancy by sensing a combination of heat and movement in area of coverage.
 - 1. Detector Sensitivity: Detect occurrences of 6-inch- minimum movement of any portion of a human body that presents a target of not less than 36 sq. in..
 - 2. Detection Coverage (Room): Detect occupancy anywhere in a circular area of 1000 sq. ft. when mounted on a 96-inch- high ceiling.
 - 3. Detection Coverage (Corridor): Detect occupancy within 90 feet when mounted on a 10-foot- high ceiling.
 - 4. 30 minute minimum occupancy setting
- D. Ultrasonic Type: Ceiling mounting; detect occupancy by sensing a change in pattern of reflected ultrasonic energy in area of coverage.
 - 1. Detector Sensitivity: Detect a person of average size and weight moving not less than 12 inches in either a horizontal or a vertical manner at an approximate speed of 12 inches/s.
 - 2. Detection Coverage (Small Room): Detect occupancy anywhere within a circular area of 300 sq. ft. when mounted on a 96-inch- high ceiling.
 - 3. Detection Coverage (Standard Room): Detect occupancy anywhere within a circular area of 600 sq. ft. when mounted on a 96-inch- high ceiling.
 - 4. Detection Coverage (Large Room): Detect occupancy anywhere within a circular area of 1000 sq. ft. when mounted on a 96-inch- high ceiling.
 - 5. Detection Coverage (Corridor): Detect occupancy anywhere within 90 feet when mounted on a 10-foot- high ceiling in a corridor not wider than 14 feet.
 - 6. 30 minute minimum occupancy setting
- E. Dual-Technology Type: Ceiling mounting; detect occupancy by using a combination of PIR and ultrasonic detection methods in area of coverage. Particular technology or combination of

technologies that controls on-off functions shall be selectable in the field by operating controls on unit.

- 1. Sensitivity Adjustment: Separate for each sensing technology.
- 2. Detector Sensitivity: Detect occurrences of 6-inch- minimum movement of any portion of a human body that presents a target of not less than 36 sq. in., and detect a person of average size and weight moving not less than 12 inches in either a horizontal or a vertical manner at an approximate speed of 12 inches/s.
- 3. Detection Coverage (Standard Room): Detect occupancy anywhere within a circular area of 1000 sq. ft. when mounted on a 96-inch- high ceiling.

2.5 OUTDOOR MOTION SENSORS (PIR)

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Bryant Electric; a Hubbell Company.
 - 2. Hubbell Lighting.
 - 3. Lithonia Lighting; Acuity Lighting Group, Inc.
 - 4. Paragon Electric Co.; Invensys Climate Controls.
 - 5. RAB Lighting, Inc.
 - 6. Enlighted.
 - 7. Watt Stopper (The).
 - 8. Lutron.
 - 9. Or approved equal.
- B. Performance Requirements: Suitable for operation in ambient temperatures ranging from minus 40 to plus 130 deg F (minus 40 to plus 54 deg C), rated as raintight according to UL 773A.
 - 1. Operation: Turn lights on when sensing infrared energy changes between background and moving body in area of coverage; with a time delay for turning lights off, adjustable over a minimum range of 1 to 15 minutes.
 - 2. Mounting:
 - a. Sensor: Suitable for mounting in any position on a standard outdoor junction box.
 - b. Relay: Internally mounted in a standard weatherproof electrical enclosure.
 - c. Time-Delay and Sensitivity Adjustments: Recessed and concealed behind hinged door.
 - 3. Bypass Switch: Override the on function in case of sensor failure.
 - 4. Automatic Light-Level Sensor: Adjustable from 1 to 20 fc (11 to 215 lx); keep lighting off during daylight hours.
- C. Detector Sensitivity: Detect occurrences of 6-inch- minimum movement of any portion of a human body that presents a target of not less than 36 sq. in..
- D. Detection Coverage: Up to 35 feet, with a field of view of 90 degrees.
- E. Lighting Fixture Mounted Sensor: Suitable for switching 300 W of tungsten load at 120- or 277- V ac.

- F. Individually Mounted Sensor: Contacts rated to operate the connected relay, complying with UL 773A. Sensor shall be powered from the relay unit.
 - 1. Relay Unit: Dry contacts rated for 20-A ballast load at 120- and 277-V ac, for 13-A tungsten at 120-V ac, and for 1 hp at 120-V ac. Power supply to sensor shall be 24-V dc, 150-mA, Class 2 power source as defined by NFPA 70.
 - 2. Indicator: LED, to show when motion is being detected during testing and normal operation of the sensor.

2.6 LIGHTING CONTACTORS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Allen-Bradley/Rockwell Automation.
 - 2. ASCO Power Technologies, LP; a division of Emerson Electric Co.
 - 3. Eaton Electrical Inc.; Cutler-Hammer Products.
 - 4. GE Industrial Systems; Total Lighting Control.
 - 5. Grasslin Controls Corporation; a GE Industrial Systems Company.
 - 6. Hubbell Lighting.
 - 7. Lithonia Lighting; Acuity Lighting Group, Inc.
 - 8. MicroLite Lighting Control Systems.
 - 9. Square D; Schneider Electric.
 - 10. TORK.
 - 11. Touch-Plate, Inc.
 - 12. Watt Stopper (The).
 - 13. Lutron.
 - 14. Or approved equal.
- B. Description: Electrically operated and electrically held, combination type with fusible switch, complying with NEMA ICS 2 and UL 508.
 - 1. Current Rating for Switching: Listing or rating consistent with type of load served, including tungsten filament, inductive, and high-inrush ballast (ballast with 15 percent or less total harmonic distortion of normal load current).
 - 2. Fault Current Withstand Rating: Equal to or exceeding the available fault current at the point of installation.
 - 3. Enclosure: Comply with NEMA 250.
 - 4. Provide with control and pilot devices as indicated on Drawings, matching the NEMA type specified for the enclosure.

2.7 EMERGENCY SHUNT RELAY

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Lighting Control and Design, Inc.
 - 2. Watt Stopper (The).
 - 3. Lutron.

- 4. Or approved equal.
- B. Description: Normally closed, electrically held relay, arranged for wiring in parallel with manual or automatic switching contacts; complying with UL 924.
 - 1. Coil Rating: 120V.

2.8 CONDUCTORS AND CABLES

- A. Power Wiring to Supply Side of Remote-Control Power Sources: Not smaller than No. 12 AWG. Comply with requirements in Division 16 Section "Conductors and Cables."
- B. Classes 2 and 3 Control Cable: Multiconductor cable with stranded-copper conductors not smaller than No. 18 AWG. Comply with requirements in Division 16 Section "Conductors and Cables."
- C. Class 1 Control Cable: Multiconductor cable with stranded-copper conductors not smaller than No. 18 AWG. Comply with requirements in Division 16 Section "Conductors and Cables."

PART 3 - EXECUTION

3.1 SENSOR INSTALLATION

A. Install and aim sensors in locations to achieve not less than 90 percent coverage of areas indicated. Do not exceed coverage limits specified in manufacturer's written instructions.

3.2 CONTACTOR INSTALLATION

A. Mount electrically held lighting contactors with elastomeric isolator pads, to eliminate structure-borne vibration, unless contactors are installed in an enclosure with factory-installed vibration isolators.

3.3 WIRING INSTALLATION

- A. Wiring Method: Comply with Division 16 Section "Conductors and Cables." Minimum conduit size shall be 1/2 inch.
- B. Wiring within Enclosures: Comply with NECA 1. Separate power-limited and nonpower-limited conductors according to conductor manufacturer's written instructions.
- C. Size conductors according to lighting control device manufacturer's written instructions, unless otherwise indicated.
- D. Splices, Taps, and Terminations: Make connections only on numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures.

3.4 IDENTIFICATION

- A. Identify components and power and control wiring according to Division 16 Section "Electrical Identification."
 - 1. Identify controlled circuits in lighting contactors.
 - 2. Identify circuits or luminaries controlled by photoelectric and occupancy sensors at each sensor.
- B. Label time switches and contactors with a unique designation.

3.5 FIELD QUALITY CONTROL

- A. Perform the following field tests and inspections and prepare test reports:
 - 1. After installing time switches and sensors, and after electrical circuitry has been energized, adjust and test for compliance with requirements.
 - 2. Operational Test: Verify operation of each lighting control device, and adjust time delays.
- B. Lighting control devices that fail tests and inspections are defective work.

3.6 ADJUSTING

A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting sensors to suit occupied conditions. Provide up to two visits to Project during other-than-normal occupancy hours for this purpose.

3.7 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain lighting control devices.

END OF SECTION 26 09 23

SECTION 26 06 00 - BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 - GENERAL

1.1

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 16 Specification Sections, apply to this Section.

1.3 SUMMARY

- A. This Section includes the following:
 - 1. Building wire and connectors.
 - 2. Supporting devices for electrical components.
 - 3. Electrical identification.
 - 4. Electrical demolition.
 - 5. Cutting and patching for electrical construction.
 - 6. Touchup painting.

1.4 DEFINITIONS

- A. EMT: Electrical metallic tubing.
- B. FMC: Flexible metal conduit.
- C. IMC: Intermediate metal conduit.
- D. LFMC: Liquidtight flexible metal conduit.
- E. RNC: Rigid nonmetallic conduit.

1.5 SUBMITTALS

- A. Shop Drawings: Dimensioned plans and sections or elevation layouts
- B. Field Test Reports: Indicate and interpret test results for compliance with performance requirements.

1.6 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NFPA 70.

1.7 COORDINATION

- A. Coordinate chases, slots, inserts, sleeves, and openings with general construction work and arrange in building structure during progress of construction to facilitate the electrical installations that follow.
 - 1. Set inserts and sleeves in poured-in-place concrete, masonry work, and other structural components as they are constructed.
- B. Sequence, coordinate, and integrate installing electrical materials and equipment for efficient flow of the Work. Coordinate installing large equipment requiring positioning before closing in the building.
- C. Coordinate electrical service connections to components furnished by utility companies.
 - 1. Coordinate installation and connection of exterior underground and overhead utilities and services, including provision for electricity-metering components.
 - 2. Comply with requirements of authorities having jurisdiction and of utility company providing electrical power and other services.
- D. Coordinate location of access panels and doors for electrical items that are concealed by finished surfaces.
- E. Where electrical identification devices are applied to field-finished surfaces, coordinate installation of identification devices with completion of finished surface.
- F. Where electrical identification markings and devices will be concealed by acoustical ceilings and similar finishes, coordinate installation of these items before ceiling installation.

PART 2 - PRODUCTS

2.1

2.2 CONDUCTORS

- A. Conductors, No. 10 AWG and Smaller: Solid or stranded copper.
- B. Conductors, Larger Than No. 10 AWG: Stranded copper.
- C. Insulation: Thermoplastic, rated at 75 deg C minimum.

D. Wire Connectors and Splices: Units of size, ampacity rating, material, type, and class suitable for service indicated.

2.3 SUPPORTING DEVICES

- A. Material: Cold-formed steel, with corrosion-resistant coating acceptable to authorities having jurisdiction.
- B. Metal Items for Use Outdoors or in Damp Locations: Hot-dip galvanized steel.
- A. Slotted-Steel Channel Supports: Flange edges turned toward web, and 9/16-inch- diameter slotted holes at a maximum of 2 inches o.c., in webs.
- B. Nonmetallic Channel and Angle Systems: Structural-grade, factory-formed, glass-fiber-resin channels and angles with 9/16-inch-diameter holes at a maximum of 8 inches o.c., in at least one surface.
 - 1. Fittings and Accessories: Products of the same manufacturer as channels and angles.
 - 2. Fittings and Accessory Materials: Same as channels and angles, except metal items may be stainless steel.
- C. Raceway and Cable Supports: Manufactured clevis hangers, riser clamps, straps, threaded C-clamps with retainers, ceiling trapeze hangers, wall brackets, and spring-steel clamps or click-type hangers.
- D. Pipe Sleeves: ASTM A 53, Type E, Grade A, Schedule 40, galvanized steel, plain ends.
- E. Cable Supports for Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug for nonarmored electrical cables in riser conduits. Plugs have number and size of conductor gripping holes as required to suit individual risers. Body constructed of malleable-iron casting with hot-dip galvanized finish.
- F. Expansion Anchors: Carbon-steel wedge or sleeve type.
- G. Toggle Bolts: All-steel springhead type.
- H. Powder-Driven Threaded Studs: Heat-treated steel.

2.4 ELECTRICAL IDENTIFICATION

- A. Identification Devices: A single type of identification product for each application category. Use colors prescribed by ANSI A13.1, NFPA 70, and these Specifications.
- B. Raceway and Cable Labels: Comply with ANSI A13.1, Table 3, for minimum size of letters for legend and minimum length of color field for each raceway and cable size.
 - 1. Type: Pretensioned, wraparound plastic sleeves. Flexible, preprinted, color-coded, acrylic band sized to suit the diameter of the item it identifies.

- 2. Type: Preprinted, flexible, self-adhesive, vinyl. Legend is overlaminated with a clear, weather- and chemical-resistant coating.
- 3. Color: Black letters on orange background.
- 4. Legend: Indicates voltage.
- C. Colored Adhesive Marking Tape for Raceways, Wires, and Cables: Self-adhesive vinyl tape, not less than 1 inch wide by 3 mils thick.
- D. Underground Warning Tape: Permanent, bright-colored, continuous-printed, vinyl tape with the following features:
 - 1. Not less than 6 inches wide by 4 mils thick.
 - 2. Compounded for permanent direct-burial service.
 - 3. Embedded continuous metallic strip or core.
 - 4. Printed legend that indicates type of underground line.
- E. Tape Markers for Wire: Vinyl or vinyl-cloth, self-adhesive, wraparound type with preprinted numbers and letters.

2.5 TOUCHUP PAINT

- A. For Equipment: Equipment manufacturer's paint selected to match installed equipment finish.
- B. Galvanized Surfaces: Zinc-rich paint recommended by item manufacturer.

PART 3 - EXECUTION

3.1

3.2 ELECTRICAL EQUIPMENT INSTALLATION

- A. Headroom Maintenance: If mounting heights or other location criteria are not indicated, arrange and install components and equipment to provide the maximum possible headroom.
- B. Materials and Components: Install level, plumb, and parallel and perpendicular to other building systems and components, unless otherwise indicated.
- C. Equipment: Install to facilitate service, maintenance, and repair or replacement of components. Connect for ease of disconnecting, with minimum interference with other installations.
- D. Right of Way: Give to raceways and piping systems installed at a required slope.

3.3 WIRING METHODS FOR POWER, LIGHTING, AND CONTROL CIRCUITS

- A. Feeders: Type THHN/THWN insulated conductors in raceway.
- B. Underground Feeders and Branch Circuits: Type THWN or single-wire, Type UF insulated conductors in raceway.
- C. Branch Circuits: Type THHN/THWN insulated conductors in raceway.
- D. Remote-Control Signaling and Power-Limited Circuits: Type THHN/THWN insulated conductors in raceway for Classes 1, 2, and 3, unless otherwise indicated.

3.4 WIRING INSTALLATION

- A. Install splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- B. Install wiring at outlets with at least 12 inches of slack conductor at each outlet.
- C. Connect outlet and component connections to wiring systems and to ground. Tighten electrical connectors and terminals, according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A.

3.5 ELECTRICAL SUPPORTING DEVICE APPLICATION

- A. Damp Locations and Outdoors: Hot-dip galvanized materials or nonmetallic, U-channel system components.
- B. Dry Locations: Steel materials.
- C. Support Clamps for PVC Raceways: Click-type clamp system.
- D. Selection of Supports: Comply with manufacturer's written instructions.
- E. Strength of Supports: Adequate to carry present and future loads, times a safety factor of at least four; minimum of 200-lb (90-kg) design load.

3.6 SUPPORT INSTALLATION

- A. Install support devices to securely and permanently fasten and support electrical components.
- B. Install individual and multiple raceway hangers and riser clamps to support raceways. Provide U-bolts, clamps, attachments, and other hardware necessary for hanger assemblies and for securing hanger rods and conduits.
- C. Support parallel runs of horizontal raceways together on trapeze- or bracket-type hangers.

- D. Size supports for multiple raceway installations so capacity can be increased by a 25 percent minimum in the future.
- E. Support individual horizontal raceways with separate, malleable-iron pipe hangers or clamps.
- F. Install 1/4-inch- diameter or larger threaded steel hanger rods, unless otherwise indicated.
- G. Spring-steel fasteners specifically designed for supporting single conduits or tubing may be used instead of malleable-iron hangers for 1-1/2-inch and smaller raceways serving lighting and receptacle branch circuits above suspended ceilings and for fastening raceways to slotted channel and angle supports.
- H. Arrange supports in vertical runs so the weight of raceways and enclosed conductors is carried entirely by raceway supports, with no weight load on raceway terminals.
- I. Simultaneously install vertical conductor supports with conductors.
- J. Separately support cast boxes that are threaded to raceways and used for fixture support. Support sheet-metal boxes directly from the building structure or by bar hangers. If bar hangers are used, attach bar to raceways on opposite sides of the box and support the raceway with an approved fastener not more than 24 inches from the box.
- K. Install metal channel racks for mounting cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices unless components are mounted directly to structural elements of adequate strength.
- L. Install sleeves for cable and raceway penetrations of concrete slabs and walls unless coredrilled holes are used. Install sleeves for cable and raceway penetrations of masonry and fire-rated gypsum walls and of all other fire-rated floor and wall assemblies. Install sleeves during erection of concrete and masonry walls.
- M. Securely fasten electrical items and their supports to the building structure, unless otherwise indicated. Perform fastening according to the following unless other fastening methods are indicated:
 - 1. Wood: Fasten with wood screws or screw-type nails.
 - 2. Masonry: Toggle bolts on hollow masonry units and expansion bolts on solid masonry units.
 - 3. New Concrete: Concrete inserts with machine screws and bolts.
 - 4. Existing Concrete: Expansion bolts.
 - 5. Instead of expansion bolts, threaded studs driven by a powder charge and provided with lock washers may be used in existing concrete.
 - 6. Steel: Welded threaded studs or spring-tension clamps on steel.
 - a. Field Welding: Comply with AWS D1.1.
 - 7. Welding to steel structure may be used only for threaded studs, not for conduits, pipe straps, or other items.
 - 8. Light Steel: Sheet-metal screws.

9. Fasteners: Select so the load applied to each fastener does not exceed 25 percent of its proof-test load.

3.7 IDENTIFICATION MATERIALS AND DEVICES

- A. Install at locations for most convenient viewing without interference with operation and maintenance of equipment.
- B. Coordinate names, abbreviations, colors, and other designations used for electrical identification with corresponding designations indicated in the Contract Documents or required by codes and standards. Use consistent designations throughout Project.
- C. Self-Adhesive Identification Products: Clean surfaces before applying.
- D. Identify raceways and cables with color banding as follows:
 - 1. Bands: Pretensioned, snap-around, colored plastic sleeves or colored adhesive marking tape. Make each color band 2 inches wide, completely encircling conduit, and place adjacent bands of two-color markings in contact, side by side.
 - 2. Band Locations: At changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
 - 3. Colors: As follows:
 - a. Fire Alarm System: Red.
 - b. Security System: Blue and yellow.
 - c. Telecommunication System: Green and yellow.
- E. Tag and label circuits designated to be extended in the future. Identify source and circuit numbers in each cabinet, pull and junction box, and outlet box. Color-coding may be used for voltage and phase identification.
- F. Install continuous underground plastic markers during trench backfilling, for exterior underground power, control, signal, and communication lines located directly above power and communication lines. Locate 6 to 8 inches below finished grade. If width of multiple lines installed in a common trench or concrete envelope does not exceed 16 inches, overall, use a single line marker.
- G. Color-code 208/120-V system secondary service, feeder, and branch-circuit conductors throughout the secondary electrical system as follows:
 - 1. Phase A: Black.
 - 2. Phase B: Red.
 - 3. Phase C: Blue.
- H. Color-code 480/277-V system secondary service, feeder, and branch-circuit conductors throughout the secondary electrical system as follows:
 - 1. Phase A: Yellow.
 - 2. Phase B: Brown.

- 3. Phase C: Orange.
- I. Install warning, caution, and instruction signs where required to comply with 29 CFR, Chapter XVII, Part 1910.145, and where needed to ensure safe operation and maintenance of electrical systems and of items to which they connect. Install engraved plastic-laminated instruction signs with approved legend where instructions are needed for system or equipment operation. Install metal-backed butyrate signs for outdoor items.
- J. Install engraved-laminated emergency-operating signs with white letters on red background with minimum 3/8-inch- high lettering for emergency instructions on power transfer, load shedding, and other emergency operations.

3.8 DEMOLITION

- A. Protect existing electrical equipment and installations indicated to remain. If damaged or disturbed in the course of the Work, remove damaged portions and install new products of equal capacity, quality, and functionality.
- B. Accessible Work: Remove exposed electrical equipment and installations, indicated to be demolished, in their entirety.
- C. Abandoned Work: Cut and remove buried raceway and wiring, indicated to be abandoned in place, 2 inches below the surface of adjacent construction. Cap raceways and patch surface to match existing finish.
- D. Remove demolished material from Project site.
- E. Remove, store, clean, reinstall, reconnect, and make operational components indicated for relocation.

3.9 CUTTING AND PATCHING

- A. Cut, channel, chase, and drill floors, walls, partitions, ceilings, and other surfaces required to permit electrical installations. Perform cutting by skilled mechanics of trades involved.
- B. Repair and refinish disturbed finish materials and other surfaces to match adjacent undisturbed surfaces. Install new fireproofing where existing firestopping has been disturbed. Repair and refinish materials and other surfaces by skilled mechanics of trades involved.

3.10 FIELD QUALITY CONTROL

- A. Inspect installed components for damage and faulty work, including the following:
 - 1. Raceways.
 - 2. Building wire and connectors.
 - 3. Supporting devices for electrical components.
 - 4. Electrical identification.
 - 5. Electricity-metering components.

- 6. Concrete bases.
- 7. Electrical demolition.
- 8. Cutting and patching for electrical construction.
- 9. Touchup painting.

3.11 REFINISHING AND TOUCHUP PAINTING

- A. Refinish and touch up paint.
 - 1. Clean damaged and disturbed areas and apply primer, intermediate, and finish coats to suit the degree of damage at each location.
 - 2. Follow paint manufacturer's written instructions for surface preparation and for timing and application of successive coats.
 - 3. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
 - 4. Repair damage to PVC or paint finishes with matching touchup coating recommended by manufacturer.

3.12 CLEANING AND PROTECTION

- A. On completion of installation, including outlets, fittings, and devices, inspect exposed finish. Remove burrs, dirt, paint spots, and construction debris.
- B. Protect equipment and installations and maintain conditions to ensure that coatings, finishes, and cabinets are without damage or deterioration at time of Substantial Completion.

END OF SECTION 26 06 00

SECTION 26 05 13 - CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Building wires and cables rated 600 V and less.
 - 2. Connectors, splices, and terminations rated 600 V and less.
 - 3. Sleeves and sleeve seals for cables.

1.3 DEFINITIONS

- A. EPDM: Ethylene-propylene-diene terpolymer rubber.
- B. NBR: Acrylonitrile-butadiene rubber.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Qualification Data: For testing agency.
- C. Field quality-control test reports.

1.5 QUALITY ASSURANCE

- A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the International Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.
 - 1. Testing Agency's Field Supervisor: Person currently certified by the International Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Comply with NFPA 70.

1.6 COORDINATION

A. Set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Alcan Products Corporation; Alcan Cable Division.
 - 2. American Insulated Wire Corp.; a Leviton Company.
 - 3. General Cable Corporation.
 - 4. Senator Wire & Cable Company.
 - 5. Southwire Company.
 - 6. Or by district approved equal.
- B. Copper Conductors: Comply with NEMA WC 70.
- C. Conductor Insulation: Comply with NEMA WC 70 for Types THW and THHN-THWN.

2.2 CONNECTORS AND SPLICES

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. AFC Cable Systems, Inc.
 - 2. Hubbell Power Systems, Inc.
 - 3. O-Z/Gedney; EGS Electrical Group LLC.
 - 4. 3M; Electrical Products Division.
 - 5. Tyco Electronics Corp.
 - 6. Or approved equal.
- B. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

- A. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.
- B. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway.
- C. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.
- D. Branch Circuits Installed below Raised Flooring: Type THHN-THWN, single conductors in raceway.
- E. Branch Circuits in Cable Tray: Type THHN-THWN, single conductors in raceway.
- F. Class 1 Control Circuits: Type THHN-THWN, in raceway.
- G. Class 2 Control Circuits: Type THHN-THWN, in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

- A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.
- B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.
- C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.
- E. Support cables according to Division 16 Section "Electrical Supports and Seismic Restraints."
- F. Identify and color-code conductors and cables according to Division 16 Section "Electrical Identification."

3.4 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

- B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
 - 1. Use oxide inhibitor in each splice and tap conductor for aluminum conductors.

3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections and prepare test reports.
- B. Perform tests and inspections and prepare test reports.
- C. Tests and Inspections:
 - 1. After installing conductors and cables and before electrical circuitry has been energized, test all light fixtures for compliance with requirements.
 - 2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
- D. Test Reports: Prepare a written report to record the following:
 - 1. Test procedures used.
 - 2. Test results that comply with requirements.
 - 3. Test results that do not comply with requirements and corrective action taken to achieve compliance with requirements.
- E. Remove and replace malfunctioning units and retest as specified above.

END OF SECTION 26 05 13