
REQUEST FOR QUALIFICATIONS/PROPOSALS DESIGN-BUILD OF SOLAR PHOTOVOLTAIC SYSTEM

Proposal No. 1819-09



DECEMBER 5, 2018

FULLERTON JOINT UNION HIGH SCHOOL DISTRICT
1051 W. Bastanchury Rd, Fullerton, California 92833

SECTION 1: OVERVIEW

NOTICE IS HEREBY GIVEN that the Fullerton Joint Union High School District (“District”) is issuing this Request for Qualifications and Proposals (“RFQ/P”) for the Design-Build of Solar Photovoltaic (PV) Systems on several of its school sites (“Project”). Responses from interested, independent, established and experienced “Design-Builder” firms (“Contractor”) must be received no later than:

January 4th, 2019

1.1 Background

The District is committed to creating a more energy efficient, modern and sustainable community. The District is interested in generating electric power with solar systems on eight (8) school sites (“Sites”), currently serviced by Southern California Edison (SCE), more fully described in **Attachment 1** (Site Overview), and listed below. Additional existing plans, Net Metering Agreements initiated prior to 12/31/2017, and documentation for the Sites are included in **Attachment 4** (Supporting Documents).

School Site	Address
Buena Park High School	8833 Academy Dr, Buena Park, CA 90621
District Learning Center	1051 W Bastanchury Rd, Fullerton, CA 92833
Fullerton High School	201 E Chapman Ave, Fullerton, CA 92832
La Habra High School	801 Highlander Ave, La Habra, CA 90631
La Sierra/La Vista High School	951 N State College Blvd, Fullerton, CA 92831
Sonora High School	401 S Palm St, La Habra, CA 90631
Sunny Hills High School	1801 Warburton Way, Fullerton, CA 92833
Troy High School	2200 Dorothy Ln, Fullerton, CA 92831

Table 1-Project Sites

The District is authorized to solicit proposals from qualified persons and to award a contract to a Contractor on a finding that the anticipated cost of the contract is less than the anticipated savings from the contract. To provide the best value to the District, the District is seeking to enter into a power purchase agreement (“PPA”) with the Contractor, whereby the District expends no funds (or very few funds) to design or construct the solar facilities, but pays the Contractor for power from Contractor-owned solar facilities located on the above District Sites.

Responses to this RFQ/P (“Response(s)” or “Proposal(s)”) must be concise and address the District’s goals and be formatted as outlined in Section 2. Innovative and creative solutions are encouraged. All costs for proposals and design are entirely the responsibility of the proposing firm and shall not be charged to the District.

1.2 Procurement Timetable

The District reserves the right to change these dates and times:

Milestone Task	Anticipated Dates
Issuance of RFQ/P	Dec 5 th , 2018
<u>Mandatory</u> Pre-Proposal Meeting and Site Walks (All Sites) Meet at District Learning Center, 1051 West Bastanchury Road, Fullerton, CA 92833	Dec 11 th , 2018, 9:00AM
RFIs Due	Dec 17 th , 2018, 5:00PM
Prequalification Questionnaire Deadline	Dec 17 th , 2018
RFI Responses Issued	Dec 21 st , 2018
RFQ/P Proposal Due Date	Jan 4 th , 2019, 3:00PM
Evaluations and Short List Issued	Jan 16 th , 2019
Interviews of Short-Listed Firms	Week of Jan 21 st , 2019
Final Evaluations	Week of Feb 4 th , 2019
Board Approval/NTP	Feb 19 th , 2019

Table 2- Procurement Timetable

1.3 Approximate Project Schedule

The project is planned to commence construction in June 2018, with various milestones occurring during construction that include phased completion dates for occupancy.

1.4 General Information

General Services. The District invites qualified Contractors to submit a Response related to its ability to provide the Services, as more fully indicated herein. Contractors must have extensive experience with the California Building Standards Code (California Code of Regulations, Title 24) and the incorporated and/or applicable provisions of the Uniform Building Code and the International Building Code, the Americans with Disabilities Act, and the Division of the State Architect (“DSA”). Contractors must have extensive experience in the construction of public school facilities, working with public school district representatives, working with school facility related consultants, and establishing project scope, project budgets, and bidding procedures under both the Public Contract Code’s formal bidding process and under alternative construction delivery methods.

Power Purchase Agreement. The selected Contractor will fund the Project and any agreement reached will conform to the framework for a PPA pursuant to the terms enclosed in the Contract for Design and Construction as indicated in Attachment 2 (“Contract”) attached hereto.

Scope of Work. The selected Contractor for the Project must be willing and able to, in good faith, propose to design, construct, operate and maintain the Project as described in the Contract, including the “Scope of Work” in Exhibit A to the Contract.

Attachments to this RFQ/P:

- Attachment 1 (Site Overview, with preliminary / proposed system locations)
- Attachment 2 (Contract)
- Attachment 3 (Cost Proposal)
- Attachment 4 (Supporting Documents, including NEM Agreements)

SECTION 2: SUBMITTAL PROCESS AND FORMAT

2.1 Prequalification

Prior to submitting a Response to this RFQ/P, each Contractor must prequalify with the District by completing the Prequalification Questionnaire available on the District’s website at <https://www.fjuhsd.org> by the date indicated in the Procurement Timetable above. The District highly recommends all Contractors complete the Prequalification Questionnaire as soon as possible to expedite the District’s pre-qualification.

2.2 Submittal Process

Responses to the RFQ/P must be submitted in writing and signed by an authorized officer of the Contractor. The District reserves the right to reject any Response as non-responsive, and not to contract with any Contractor for the Services described herein. The District also reserves the right to request clarification and/or additional information from any Contractor. The District makes no representation that participation in the RFQ/P process will lead to an award of contract or any consideration whatsoever. The District shall in no event be responsible for the cost of preparing any Proposal. The District reserves and may exercise one or more of the following rights and options in its sole discretion with respect to this RFQ/P to:

- Supplement, amend or otherwise modify this RFQ/P;
- Cancel this RFQ/P with or without the substitution of another RFQ/P;
- Issue additional or subsequent RFQ/Ps;
- Conduct investigations with respect to the qualifications of any Contractor;
- Change any time for performance set forth in this RFQ/P;
- Waive any non-material deviation from this RFQ/P; and
- Negotiate bid pricing and conditions

Contractors must provide two (2) hard copies of their proposal submission and one (1) digital copy on a flash drive. Responses must be delivered by mail or by hand to the following location:

ATTN: Maria Rafael; Fullerton Joint Union High School District; 1051 W Bastanchury Rd.; Fullerton, CA 92833

Mandatory Pre-Proposal Meeting and Site Walks will be convened on the date specified in the Procurement Timetable. Contractors must attend the Site Walks in order to submit a proposal.

Requests for Information (RFI(s)) regarding this RFQ/P must be delivered in writing to mrafael@fjuhsd.org no later than date and time stated in the Procurement Timetable. Any questions received after that date will be answered at the District's discretion. The District shall not be responsible for failure of any Contractors to receive RFQ/P addenda. All addenda the District issues shall become part of this RFQ/P. Each Contractor shall be responsible for ascertaining, prior to submitting a Proposal, that they have received all issued addenda. Responses to the questions received, along with all addenda to this RFQ/P will be posted to the District's website at www.fjuhsd.org. It is the sole responsibility of each proposing Contractor to access the addenda and any responses to questions from the District's website. If you are unable to access the website, please contact Maria Rafael at the e-mail addresses listed herein.

Communication Restriction. Beginning with the date of issuance of this RFQ/P and concluding on the date of execution of the Agreements contemplated herein, no person or entity submitting a response to this RFQ/P, nor any person, officer, employee, consultant, agent, or representative of the same shall through any means contact any employee of the District, any Board of Education member, any consultant for the District, or any member of a District-appointed committee to engage in any discussion regarding (1) this RFQ/P, (2) the selection process or (3) award of this contract. **Any such contact shall be grounds for the immediate disqualification of the submitting entity without consideration of its statement of qualifications.**

Conflict of Interest. As part of its Proposal, the proposing entity must affirmatively state that there is no known conflict of interest or must disclose any potential conflict of interest involving any District employee, consultant, or member of the Board of Education. Subsequent discovery of an undisclosed actual conflict of interest shall be adequate grounds for the District to terminate the agreement for cause. By submitting a proposal, the submitting entity consents to termination for cause if an undisclosed actual conflict of interest is discovered. **Failure to include this statement shall be grounds for immediate disqualification of the submitting entity without consideration of its proposal.**

2.3 Response Format

Responses should be brief and concise but provide sufficient information for the District's evaluation. Response shall not exceed fifty (50) pages, **including** exhibits, etc. Each hard copy of the response must be bound individually, double-sided, tabbed, and organized in order and include all sections identified in this section. Contractors are encouraged to avoid standardized or boilerplate information and should include the following information:

- A. Cover Letter and Executive Summary
- B. Firm Information and Project Team
- C. Relevant Project Experience (Including Required Past Projects)
- D. Project Design
- E. Project Schedule
- F. Performance and Production Guarantee
- G. Educational Component
- H. Added Value Options

- I. Exceptions to RFQ/P Documents
- J. Proposed Pricing and Terms
- K. Contractor Proposal Checklist

Failure to address all these requirements could result in a Response being considered non-responsive and therefore disqualified from consideration.

A. Cover Letter and Executive Summary

1. Cover letter/Letter of Transmittal. Include a transmittal letter signed by a party authorized to sign binding agreements for the project clearly indicating that the Contractor has carefully read all the provisions in the RFQ/P.
2. Executive Summary (two-page maximum). The Executive Summary includes the following components:
 - a. Summarize main points of the Proposal, including proposed design, equipment, and pricing; and any value-added components.
 - b. Highlight any omissions, additions, or alternates contained in the Proposal.
 - c. Indicate that the Contractor has carefully read all the provisions in the RFQ/P.
 - d. Verify that financing for the proposed PPA terms will be secured before contract execution.
 - e. Identify a team leader for the entire Proposal, including full contact information.
 - f. Provide full contact information for each business entity or firm involved in the Proposal and their role in the project (i.e., design, installation, permitting, equipment supply by component, operations and maintenance, monitoring and verification).
 - g. Include a list of all sub-contractors that will be used on the project.

B. Firm Information and Project Team

1. **Firm Information**
 - a. Size, number of employees;
 - b. Contractor, architectural and professional engineering licenses and/or certifications held by your company or its full-time employees;
 - c. Financial performance. If public, provide a website link to your audited annual investment reports. If private, attach audited financial statements for the past two (2) years;
 - d. Legal. Has your firm or have any of the executive officers of your firm been a party to a lawsuit involving the performance of any equipment it has installed? If so, please include a summary of the issues and the status of any lawsuit.
2. **Project Team.** Describe the specific experience of all identified key personnel with respect

to projects the size, scope and complexity of the project described in this RFQ/P.

3. **Insurance and Bonding.** Submit a certificate of insurance with your firm's proposal. Additionally, please provide the following information on the insurance your firm carries:

- a. Commercial General Liability Limits (per occurrence and aggregate)
- b. Commercial Automobile Liability Limits (per occurrence and aggregate)
- c. Professional Liability Limits (per occurrence and aggregate)
- d. Employer's Liability Limits (per occurrence and aggregate)
- e. Employment Practices Liability Limits (per occurrence and aggregate)
- f. Product insured for damage during installation/Builders' Risk Limits
- g. Company's bonding capacity

All of Contractor's insurance shall be with insurance companies with an A.M. Best rating of no less than XI. Contractor's surety that will be on its performance and payment bonds must be a surety admitted to provide bonds in California.

4. **Certification of nondiscrimination.** Each Contractor must certify that it does not discriminate in its employment with regard to race, color, religion, sex, or national origin; that it is in compliance with all Federal, State, and local directives and executive orders regarding nondiscrimination in employment; and that it agrees to demonstrate positively and aggressively the principle of equal opportunity in employment.

5. **For Contractors teaming with subcontractors:**

- a. Each responding Contractor shall select their proposed subcontractors based on their own criteria. Contractors shall identify all major subcontractors or methods for identification and selection of proposed subcontractors as part of their proposal submission.
- b. The District reserves the right to require that specific subcontractor(s) that intend to perform under certain license classification(s) and intend to bid as first-tier subcontractors to the Contractor be required to prequalify with the District by completing the District's prequalification questionnaire.
- c. The District reserves the right to approve subcontractors proposed for any projects that may be awarded. Subcontractors do not need to complete all the Attachments in this RFQ/P.

6. **Conflict of interest statement:** See requirements of "Submittal Process" above.

C. Relevant Project Experience

Provide a list of **ALL** solar projects performed by the Contractor completed within the past five (5) years. Include all the currently operating nonresidential grid-connected PV systems that your company installed and operates in California within the past five (5) years. Indicate if the customer/owner was a California public school district or community college. If so, describe your experience with the DSA in gaining the necessary DSA approvals. Limit response to no more than the twenty (20) **MOST RECENT** projects. Include the following information for each project:

1. Project Description and location
2. Total kW installed/system size (kWp rating)
3. Date operational
4. District/owner name with contact person's name, email, address, phone number
5. Indicate the type of system (rooftop, ground mount, carport; fixed, tracking, etc.)
6. Name of PPA Provider (if applicable)
7. Utility Company/Territory

Required Past Projects. To be responsive, the 20 projects listed above must include the following minimum requirements:

- At least two (2) of the projects must have each totaled at least 1.0 MW and be in current commercial operation;
- At least two (2) of the projects must each have been for a California K-12 public school district and be solar PV installations of 1.0 MW or larger; and
- At least two (2) of the projects must each have been carport PV installations.

D. Project Design

1. System
 - a. Provide a detailed description of the solar PV system proposed for the Sites, including preliminary site plan.
 - b. Indicate the specific location, dimensions, and "footprint" of the proposed system.
 - c. Provide drawings, renderings, or pictures that clearly show how the structures will appear.
 - d. Indicate system size in both kWp (DC) and kW (AC) terms, based on applicable California Energy Commission conventions.
 - e. Indicate the key design and construction features of the system to optimize performance and aesthetics on each of the Sites.
 - f. Indicate if any of the products or mounting strategies unique or proprietary to the Contractor.
 - g. Describe any identified issues or challenges and how you would address and/or resolve them. Attention should be paid to wind issues common to the region where the Sites are located.
 - h. Describe how your firm will protect the system from exposure to high winds and dust. Explain how high winds and dust may affect the system.
2. PV Modules
 - a. Indicate the number of PV modules
 - b. Indicate the PV module description and brand and model number

- c. Indicate the PV module efficiency %; PV cell efficiency
 - d. Provide manufacturing data sheets for the proposed PV modules
 - e. Indicate the PTC ratings for the proposed PV modules
- 3. Inverters
 - a. Indicate the number and size
 - b. Indicate the inverter brand(s), model(s), and efficiency (in %)
 - c. Provide manufacturing data sheets for the proposed inverters
- 4. Design
 - a. Provide an artist's drawing, sample photo, or other visual material that will allow the District to discern the aesthetic features of the proposed design.
 - b. The proposed structures shall comply with DSA requirements.
 - c. Carport/shade structure canopy lighting shall be LED and be able to be controlled wirelessly to connect to existing controls at the facilities.

E. Project Schedule

- 1. Submit an implementation schedule for the proposed system for all Sites, indicating expected milestones, tasks, durations, and logic ties.
- 2. Schedule shall minimally indicate, but not be limited to the following phases:
 - a. Program Design
 - b. DSA Submission
 - c. DSA Approved Drawing
 - d. Commencement of construction
 - e. Completion
 - f. Permission to operate from the Utility
 - g. Project Close-out

F. Performance and Production Guarantee

The District's requirements for a Performance and Production Guarantee ("PeGu") are outlined in Exhibit G to the Contract. All Contractors must include in their Response to the Cost Proposal (**Attachment 3**) the pricing for the District's proposed system performance and production guarantee. The District requires that each interconnected system be evaluated individually for the purpose of this guarantee. Since each project is metered individually, overproduction at one site will not be considered to make up a shortfall in production at any other site. Contractors are required to complete production target and degradation rate information in *Cost Proposal (Attachment 3 – Cost Proposal)* by specifying the following for each interconnected PV system:

- 1. Specify a year-1 target production in kWh

2. Specify a degradation rate for the system production (not to exceed 0.8%/year)

Additionally, the District will not pay for any unneeded or unused production over 100% of the first-year target production level, evaluated over a similar relevant period.

G. Educational Component

Please provide a narrative description of how your firm will work with District to integrate the District's solar power project into District's educational experience. This narrative should address learning opportunities for students in grades 7-12; describe strategies for integrating the solar power project into a new or existing education curriculum or classes; and outline how your firm has worked with other school districts to make a solar power project a meaningful learning experience.

H. Added Value Options.

Please provide any options your firm may provide to the District to enhance or add value to the project. Options could include a cost-benefit analysis of the following as applicable:

1. Rate analysis (SCE sites)
2. Battery storage programs
3. Electric Vehicle (EV) charging stations
4. Aesthetic Value options
5. Solar workspace/ picnic area for student device charging on District campuses

I. Exceptions to RFQ/P Documents

1. Describe any exceptions to the RFQ/P content, general expectations, specific requirements. For each exception, propose acceptable alternative language and/or provide rationale to support the exception. Exceptions that are contrary to District's best interests, do not meet the needs of our staff and students, or conflict with regulations related to public contracts and procurement will not be accepted by District and may be cause for rejection of the Proposal.
2. If a Contractor has any comments or objections to the Contract attached hereto as **Attachment 2** to this RFQ/P, including any comments or objections to the PeGu or other exhibits attached to the Contract, it shall provide those comments or objections in its Proposal or the District may deem Contractor's Proposal to be non-responsive. **PLEASE NOTE: The District will not consider any changes to the Contract if they are not submitted at or before the time the Proposal is due.**

J. Proposed Pricing and Terms

The terms, conditions, and pricing provided in submitted Proposals will be considered and Contractor's failure to honor Proposal terms, conditions, or pricing in any forthcoming agreement with the District may result in cancellation or the termination of Contractor's award.

1. Contractors are required to submit pricing on the **Cost Proposal (Attachment 3)**. Cost Proposal must be filled out as part of the RFQ/P. Contractors are requested to propose pricing based on a power purchase option (the "PPA Pricing") in addition to the other pricing information.

Pricing Inclusions:

- a. Power Purchase Agreement specifications, as described in the Contract, but not limited to:
 - 1) Terms: 25 years
 - 2) Annual PPA % escalator (under the discretion of the Contractor to obtain the best financial benefit to the District)
 - 3) Pricing must include an annual performance and production guarantee that meets or exceeds the requirements of the PeGu, with a reasonable degradation factor that matches the term of the offered PPA.
 - 4) Includes option to purchase at various intervals, per Site.
 - b. Value-Add Options:
 - 1) Contractor shall state if it will include battery storage as a value-added option or if it is with the proposed PPA rate.
3. **Solar Production Data.** Contractors shall submit the 8760 or 15-min. interval production data (in kW) for each system in a separate tabbed Excel spreadsheet in the format as shown in the Cost Proposal (**Attachment 3**). Additional 8760 data shall be submitted for system options utilizing solar and energy storage systems.
 4. **Other Project Inclusions and Assumptions:**
 - a. Prevailing wage rates
 - 1) Work hours: All pricing should be based on standard work hours of Monday – Friday 6:00 AM to 7:00 PM.
 - b. For shade structures, concrete support extending up the structure post a minimum of 30"
 - c. Carports must be designed and installed with a minimum height clearance of 14'
 - d. For shade structures, assume foundation depth of 10', foundation diameter of 24"
 - e. Assume Class D soils, ground water at or below 25' until a geotechnical investigation is required.
 - f. Provide LED Lighting on carport/shade structures with adequate luminance levels in compliance with industry-standard recommendations and will conform to current Title 24 standards. Include Lighting controls compatible to operating with

District EMS system if applicable.

- g. Existing light post bases will be demolished and patched to match existing. Lighting will reuse existing circuits where available
- h. Project must not impact power quality at any of the sites. All costs associated with system upgrades necessary to avoid power quality issues are the responsibility of the PPA provider and not the District.
- i. All costs associated with required distribution or service upgrades are the responsibility of the PPA provider and not the District.
- j. The District requires security measures to be installed to limit the potential for theft and vandalism during and after construction of the systems. Costs associated with implementing and maintaining security measures will be borne by the PPA provider.
- k. Array areas shown in **Attachment 1** (Site Overview) and Information are representative and not exact panel layouts.
- l. The District intends to include Allowance amount in the Contract (See Ex. D to the form of Contract of Attachment 2) which the District intends to utilize for, without limitation, unforeseen conditions, ADA work outside the direct impact of the project area, and other items that the District reasonably agrees are not within the Contractor's pricing under the PPA, but which the District will intend the Contractor to perform. The Contractor need not include in its pricing an amount for these types of scopes of work.

2.4 Confidential Information

All Proposals will become the property of the District and subject to the California Public Records Act, Government Code sections 6250, et seq. Those elements in a Proposal 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 a Court. A Contractor that indiscriminately identifies all or most of its Proposal 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 Proposal marked "Confidential," "Proprietary," or "Trade Secret," the Contractor agrees, by submission of its Proposal, 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.

SECTION 3: SELECTION CRITERIA

3.1 Proposal Evaluation Criteria

The District has designated the following items as selection criteria for the successful Contractor to be reviewed by the Selection Committee.

Essential Criteria. The Contractor must satisfy these requirements or its Proposal will not be considered:

- **License.** Contractor must hold a Class B Contractors License, which is current, valid, and in good standing with the California Contractor's State License Board. Contractors or its subcontractor(s) must hold a C-10 and/or a C-46 Contractors License and be approved by the PV manufacturer to install the system.
- **Insurance.** Contractor must be insured with the coverages and limits indicated in the Contract attached hereto as **Attachment 2** to this RFQ/P.
- **Bonds.** Contractor have bonding ability and capacity to provide a 100% payment bond and a 100% performance bond for the construction value of the Contract, as agreed to by the District.
- **Prequalification.** Contractor must prequalify through the District's prequalification process.
- **Required Past Projects.** Contractor must have completed the "Required Past Projects" identified in the RFQ/P under "Relevant Project Experience"

Scored Criteria. The Contractor should satisfy these requirements as thoroughly and as highly as possible:

- **Proposal Completeness.** The degree to which the Contractor has included all the information requested in this RFQ/P in a clear and concise manner.
- **Contractor's Financial Information, Background, and Experience.** Information indicating the Contractor's financial strength in terms of capital and liquid assets sufficient to successfully complete the Project described in this RFQ/P, and the stability of the Contractor in terms of number of years in existence, professional capabilities and photovoltaic systems construction experience. Contractor's relevant solar PV project experience as listed herein above.
- **All subcontractors must hold appropriate licenses.**
- **Approach (Recommended Technical Solution and Ability to Meet Project Schedule).** The ability of the Contractor to provide complete and quality technical documentation for the proposed system including preliminary module layouts and electrical diagrams. Systems should account for available space and site deficiencies and the Contractor's ability to overcome these deficiencies while providing efficient electricity production. Proposals should include proposed orientation and tilt, site specific construction conditions, module and inverter types with proven track record. A monitoring system and plan should provide an interface to verify accurate billing and system performance.

The ability of the Contractor to complete the Project in accordance with the District's Project Schedule. Project plan and schedule should account for RFQ/P submittal requirements, complexity of Project and demonstrate methodology for management of multiple projects simultaneously. Please provide schedule or Gantt chart outlining a tentative schedule.

- **Production Model, Pricing and Economic Evaluation.** Information provided by the Contractor detailing the estimated kWh generated by the proposed (solar production 8760 or 15-min interval data to be submitted by Contractor in **Attachment 3 (Cost Proposal)**) PV systems in this RFQ/P to include necessary assumptions (sunlight availability, dark time, maintenance down time, mean time between failures, efficiency of the systems proposed, efficiency losses, net metering, etc.). The Contractor shall provide the best possible PPA Rate for each of the Sites and the best possible cost

for each of the Sites. This information will be used by the District to determine the greatest financial net benefit, or general fund savings to the District for 25 years. The Contractor does not need to provide estimated financial benefits. Please note: NEM applications for (5) District Sites were filed prior 12/31/2017 to be eligible for SCE legacy TOU periods or until 2027 per decision 17-01-006. Pricing should reflect appropriate rates.

- **Proposed Education Program.** Plan for the Contractor to provide general training to District staff and provide an educational kiosk at each solar PV system. Contractor shall outline what the training and kiosk will provide to the Site occupants as a learning interface to renewable energy.
- **Value Added Options.** Options your firm may provide to the District to enhance or add value to the Project, which may include energy (battery) storage, EV charging stations, solar workspaces/ picnic areas for student use and phone/ device charging, and other technology or services offered by Contractor.

RFQ Selection Criteria	Evaluation Weight
Proposal Completeness	5%
Contractors Background, Financial Information, References (from past projects) and Experience	10%
Approach (Includes Recommended Technical Solution and Ability to Meet Project Schedule)	10%
Production Model, Pricing and Economic Evaluation	60%
Proposed Education Program	5%
Value-Added Option (Energy Storage or other)	10%
Total	100%

Table 3 - Evaluation Weights

A team of individuals will evaluate all qualifying Responses. The evaluation of each Response will be based on the best value to the District, technical criteria and qualifications listed in this RFQ/P, reference checks of the past projects, and other information that will be independently gathered. Contractors may then be invited to appear for an interview, at the discretion of the District.

3.2 Interview

At the discretion of the District, one or some Contractor(s) may be interviewed, the format of which will be determined by the District.

ATTACHMENT 1

Site Overview

Buena Park High School

Site Address	8833 Academy Dr, Buena Park, CA 90621
Electricity Provider	SCE
Current Rate Tariff	TOU-8-S
Service Account Number	1397905 (main)
Meter Number	35150-001280 (main)
Annual Baseline Energy Use (kWh/Year)	1,136,611 (main; estimated post energy efficiency measure installation baseline 1,059,184)
Maximum Site Demand (kW)	698
PV Type	Shade carport structure
Target Load Offset (%)	90 (~660kW-DC)
POC Location	See arrow in plan below.
Site Limitations	

Notes: Interconnection application was filed for this school prior to 12/31/17 (See Attachment 4). Contractor is expected to continue with the application process. Approximately 77,427kWh/yr of Prop 39 will be implemented for exterior lighting.



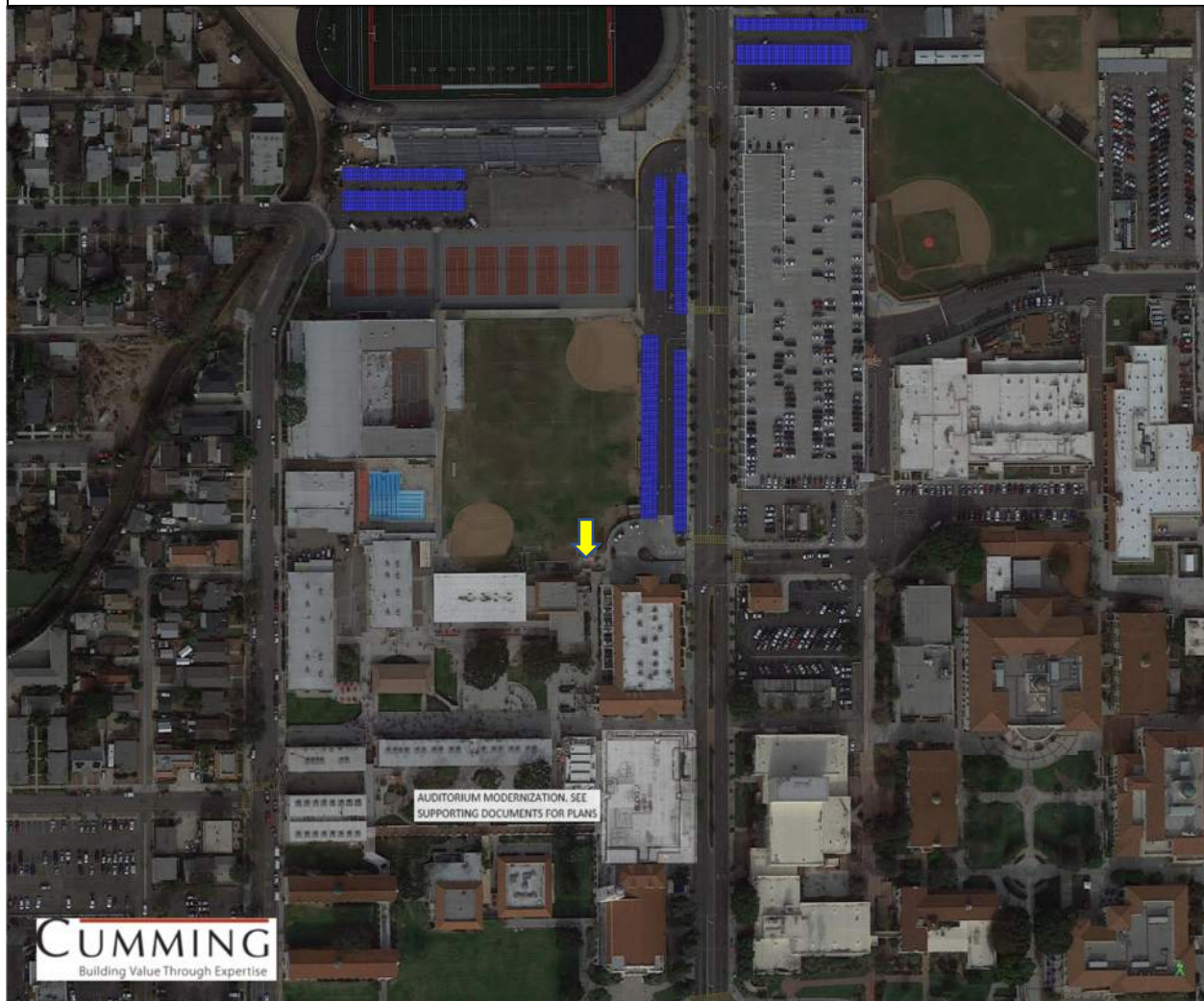
District Learning Center

Site Address	1051 W Bastanchury Rd, Fullerton, CA 92833
Electricity Provider	SCE
Current Rate Tariff	TOU-GS2B and (TOU-GS1B)
Account Number	12781825, 12781826
Meter Number	259000-036652 (main), 256000-024582
Annual Baseline Energy Use (kWh/Year)	398,197 (main; estimated post energy efficiency measure installation baseline 374,897); 20,690
Maximum Site Demand (kW)	141, 5
PV Type	Shade carport structure
Target Load Offset (%)	64+ (~210+ kW-DC)
POC Location	See arrow in plan below.
Site Limitations	
Notes: Approximately 23,300 kWh/yr of Prop 39 will be implemented for exterior lighting.	



Fullerton High School

Site Address	201 E Chapman Ave, Fullerton, CA 92832
Electricity Provider	SCE
Current Rate Tariff	TOU-8-B
Service Account Number	5118003 (main)
Meter Number	V345N-001186 (main)
Annual Baseline Energy Use (kWh/Year)	2,850,708 (main; estimated post energy efficiency measure installation baseline 2,719,208)
Maximum Site Demand (kW)	1,018 (main)
PV Type	Shade carport structure
Target Load Offset (%)	34+ (~530kW-DC)
POC Location	See arrow in plan below.
Site Limitations	
Notes: Approximately 131,500 kWh/yr of Prop 39 will be implemented for exterior lighting.	



La Habra High School

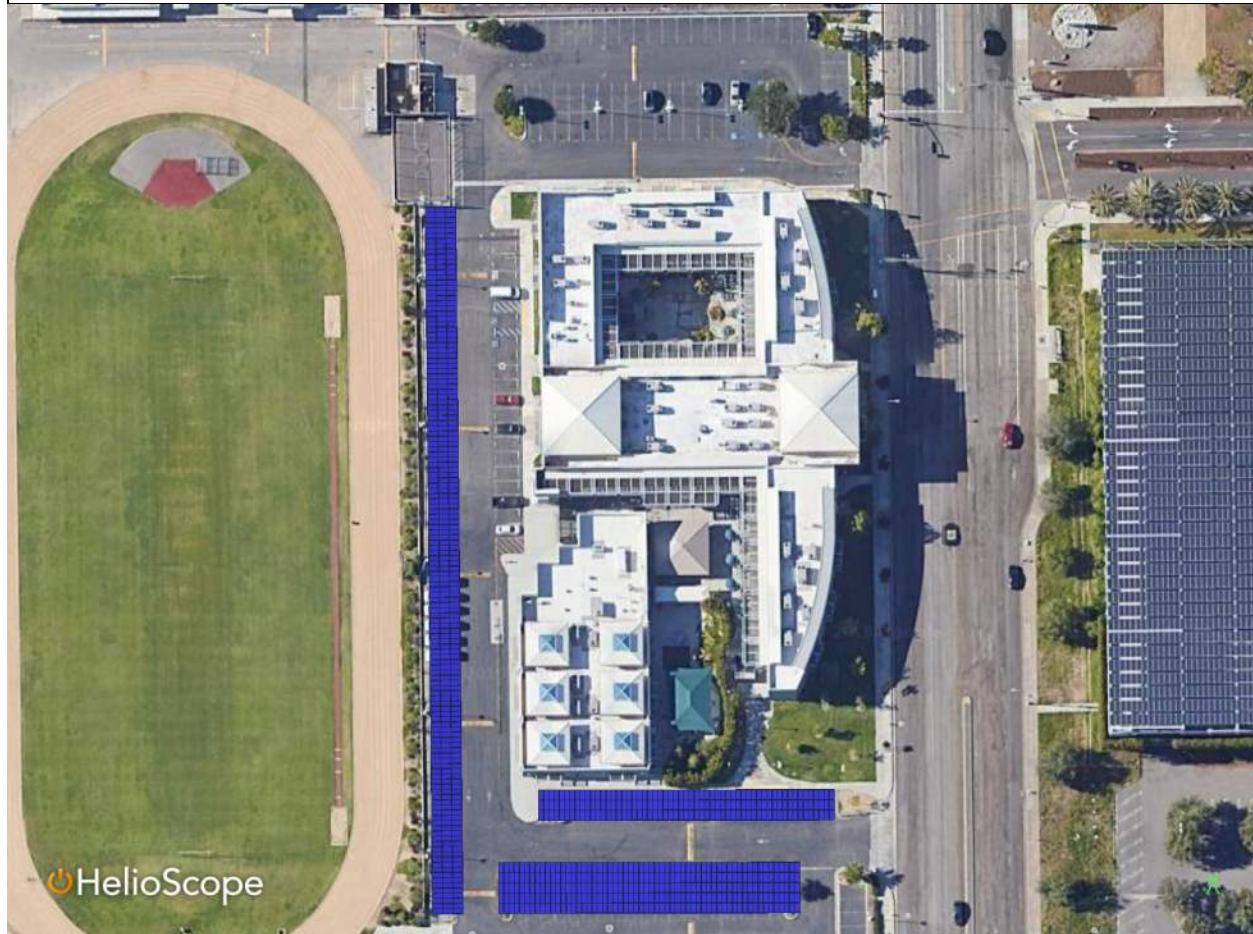
Site Address	801 Highlander Ave, La Habra, CA 90631
Electricity Provider	SCE
Current Rate Tariff	TOU-8-S (main), TOU-GS2B
Service Account Number	1397904 (main), 347967
Meter Number	V349N-015239 (main), 259000-015904
Annual Baseline Energy Use (kWh/Year)	817,713 (main; estimated post energy efficiency measure installation and co-gen decommission baseline 1,342,513), 57,826
Maximum Site Demand (kW)	673 (main), 26
PV Type	Shade carport structure
Target Load Offset (%)	90 (~740kW-DC)
POC Location	See arrow in plan below.
Site Limitations	

Notes: Interconnection application was filed for this site prior to 12/31/17. Contractor is expected to continue with the application process. Changes will have to be made to the NEM Agreement to include a larger system. Currently, LA Habra uses a 100kW co-gen system that produces approximately 627,000 kWh/year. This system will be decommissioned, and Solar will be used to offset the load instead. A total of 102,200kWh of Prop 39 will be implemented for exterior lighting.



La Sierra/La Vista High School

Site Address	951 N State College Blvd, Fullerton, CA 92831
Electricity Provider	SCE
Current Rate Tariff	TGS-3-CPP (main), TOU-GS2-A
Service Account Number	35068132 (main), 28173196
Meter Number	V349N-009157 (main)
Annual Baseline Energy Use (kWh/Year)	797,653 (main; estimated post energy efficiency measure installation baseline 747,353), 56,343
Maximum Site Demand (kW)	354 (main), 46
PV Type	Shade carport structure
Target Load Offset (%)	50+ (~260+ kW-DC)
POC Location	To be determined at site job walk.
Site Limitations	
Notes: Approximately 50,300 kWh/yr of Prop 39 will be implemented for exterior lighting.	



Sonora High School

Site Address	401 S Palm St, La Habra, CA 90631
Electricity Provider	SCE
Current Rate Tariff	TOU -8B
Service Account Number	66424 (main)
Meter Number	V349N-007690 (main)
Annual Baseline Energy Use (kWh/Year)	1,810,696 (main; estimated post energy efficiency measure installation baseline 1,765,296)
Maximum Site Demand (kW)	816 (main)
PV Type	Shade carport structure
Target Load Offset (%)	90 (~996kW-DC)
POC Location	See arrow in plan below.
Site Limitations	

Notes: Interconnection application was filed for this site prior to 12/31/17. Contractor is expected to continue with the application process. Approximately 45,400 kWh/yr of Prop 39 will be implemented for exterior lighting.



Sunny Hills High School

Site Address	1801 Warburton Way, Fullerton, CA 92833
Electricity Provider	SCE
Current Rate Tariff	TOU-8-S and (TOU-GS2B)
Service Account Number	1397903 (main)
Meter Number	V349N-015348 (main)
Annual Baseline Energy Use (kWh/Year)	1,334,280 (main; estimated post energy efficiency measure installation baseline 1,251,880)
Maximum Site Demand (kW)	780 (main)
PV Type	Shade carport structure
Target Load Offset (%)	90 (~720 kW-DC)
POC Location	See arrow in plan below.
Site Limitations	

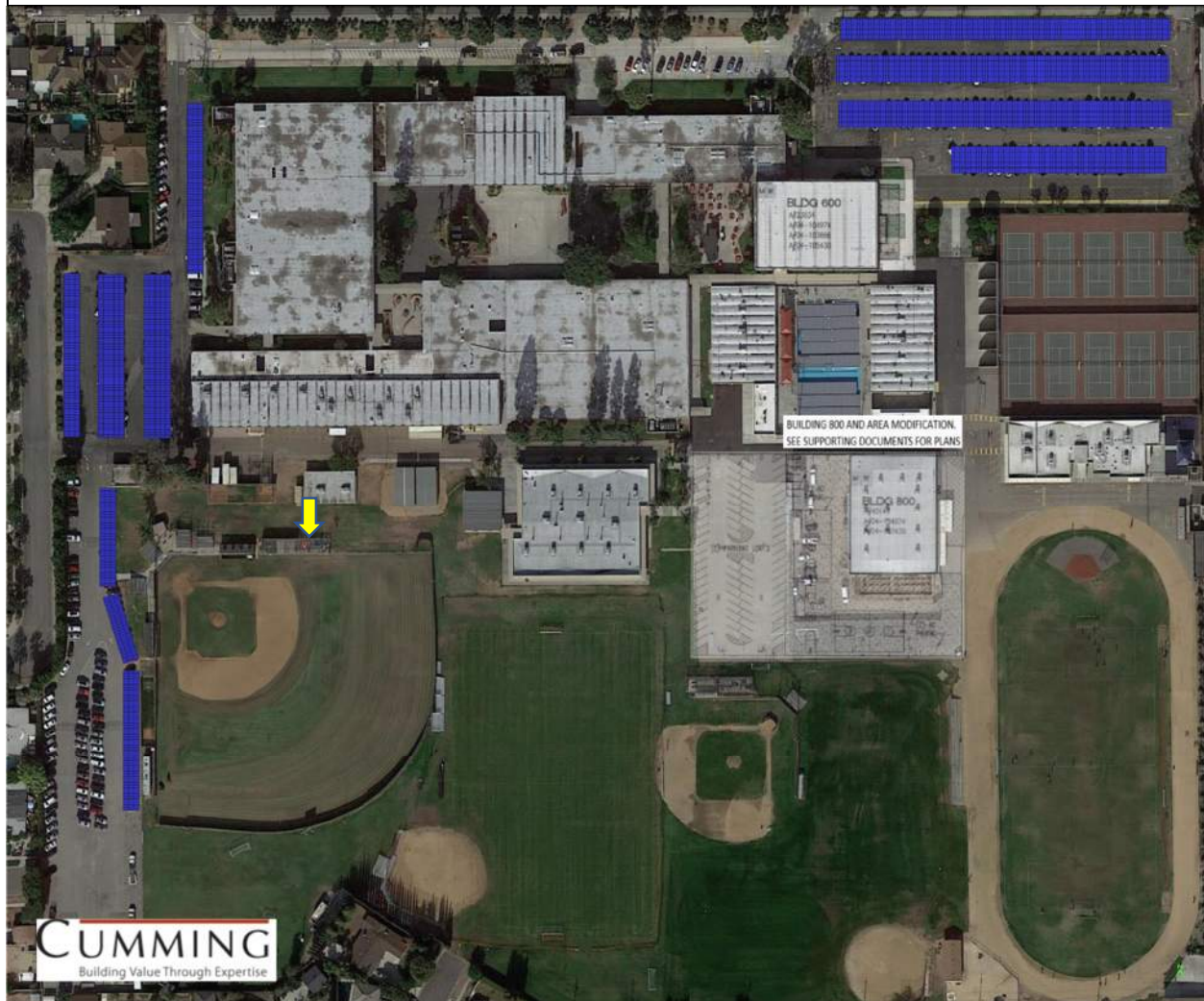
Notes: Interconnection application was filed for this site prior to 12/31/17 Contractor is expected to continue with the application process. Approximately 82,400 kWh/yr of Prop 39 will be implemented for exterior lighting.



Troy High School

Site Address	2200 Dorothy Ln, Fullerton, CA 92831
Electricity Provider	SCE
Current Rate Tariff	TOU-8-B and (TOU-GS1A)
Service Account Number	1397906 (main)
Meter Number	V349N-001355 (main)
Annual Baseline Energy Use (kWh/Year)	2,154,578 (estimated post energy efficiency measure installation baseline 2,081,478)
Maximum Site Demand (kW)	902 (main)
PV Type	Shade carport structure
Target Load Offset (%)	77 (~1,022 kW-DC))
POC Location	See arrow in plan below.
Site Limitations	

Notes: : Interconnection application was filed for this site prior to 12/31/17. Contractor is expected to continue with the application process. Approximately 73,100 kWh/yr of Prop 39 will be implemented for exterior lighting.



ATTACHMENT 2

Contract

**POWER PURCHASE AGREEMENT
FOR SOLAR FACILITIES
(IN THE FORM OF A CONTRACT FOR DESIGN AND CONSTRUCTION)
(GOVERNMENT CODE § 4217.10 ET SEQ.)**

This Power Purchase Agreement for Solar Facilities in the Form of a Contract for Design and Construction is entered into and effective _____, 20____ (“**Contract**”), by and between _____, Inc. (“**Designer/Builder**”) and Fullerton Joint Union High School District (“**District**” or “**Customer**”) (individually, a “**Party**”, and collectively, the “**Parties**”).

RECITALS

WHEREAS, District owns and/or operates certain public facilities specifically described as:

	School Site Name	Address
1	Buena Park High School	8833 Academy Dr., Buena Park, CA 90621
2	District Learning Center	1051 W. Bastanchury Road, Fullerton, CA 92833
3	Fullerton High School	201 E. Chapman Ave., Fullerton, CA 92832
4	La Habra High School	801 Highlander Ave., La Habra, CA 90631
5	La Sierra/La Vista High School	951 N. State College Blvd., Fullerton, CA 92831
6	Sonora High School	401 S. Palm St., La Habra, CA 90631
7	Sunny Hills High School	1801 Warburton Way, Fullerton, CA 92833
8	Troy High School	2200 Dorothy Ln., Fullerton, CA 92831

(“**Facilities**” or “**School Site(s)**” or “**Premises**”) and District wants to reduce its Facilities’ energy costs and improve the Facilities’ energy quality/reliability by contracting to procure and to implement certain new Solar Photovoltaic (PV) systems and related equipment and materials; and

WHEREAS, Designer/Builder is a full-service energy services company with the technical capabilities to provide Solar Photovoltaic services to the District including, but not limited to, energy and energy system auditing, engineering, design, procurement, construction management, installation, construction, financing, training, monitoring and verification, maintenance, operation, and repair; and

WHEREAS, District desires that Designer/Builder design, install, construct, maintain and operate, and Designer/Builder desires to design, install, construct, maintain and operate, solar systems to be located on the School Sites;

WITNESSETH, that for and in consideration of the mutual covenants herein contained, the Parties hereto agree as follows:

CONTRACT

1. Scope of Contract.

- a. The Designer/Builder shall furnish the Services or Work (“**Services**” or “**Work**”) described in **Exhibit A** to the District and Designer/Builder will be compensated after installation of the PV System, pursuant to the Pricing Items and Payment Provisions attached hereto as **Exhibit D** (“**Contract Price**”), which provides additional terms for the payment of the Work and potential future purchase and sale of solar generated electric energy from the solar panel system described in **Exhibit F** (the “**System(s)**”) installed at the School Sites. The Design, Installation, and Construction of the System at the School Site(s) is the “**Project**.”
- b. The Project is generally described as follows:

- i. The assessment, engineering, design, permitting, procurement, construction management, installation, construction, training, monitoring, verification, maintenance, operation, and repair, of PV systems with Expected Energy Production of _____ Million kilowatt-hours (_____ kWh) of energy in year one of system operation, produced through the following systems:

Site	System Size (kW-DC)	System Type (e.g., Parking, Shade, etc.)	Expected 1 st year PV Output (kWh) ("Expected Energy")
1. Buena Park High School	_____	_____	_____
2. District Learning Center	_____	_____	_____
3. Fullerton High School	_____	_____	_____
4. La Habra High School	_____	_____	_____
5. La Sierra/La Vista High School	_____	_____	_____
6. Sonora High School	_____	_____	_____
7. Sunny Hills High School	_____	_____	_____
8. Troy High School	_____	_____	_____
TOTAL	_____	_____	_____

- ii. A data acquisition system with monitoring capability with password-protected internet access via _____.
2. Work shall be completed within the time specified in **Exhibit C** ("Contract Time") from the date specified in the District's Notice(s) to Proceed, as indicated in the Schedule in **Exhibit C**, attached hereto and incorporated herein by this reference.
3. **Liquidated Damages for Non-Production.** Designer/Builder agrees that if the Work is not completed within the Contract Time and/or pursuant to the Project schedule, construction schedule, or project milestones developed pursuant to provisions of the Contract, including the Schedule in **Exhibit C**, it is understood, acknowledged, and agreed that the District will suffer damage related to non-production of energy that is not capable of being calculated. Pursuant to Government Code section 53069.85, Designer/Builder shall forfeit to the District, as fixed and liquidated damages for these incalculable damages, the sum of **One Thousand Dollars (\$1,000.00)** per MW-DC per day for each and every calendar day of delay beyond the date of the "Designer/Builder Requests Permission to Operate Letter From Utility" specified in **Exhibit C** for each Site, provided that Designer/Builder's submission of a Request for Permission to Operate Letter From Utility shall not be effective under this paragraph unless the Project or portion thereof is presently in the condition reasonably necessary to obtain the Permission to Operate Letter From Utility. *(For example, if Designer/Builder requests "Permission to operate letter(s)" for all but the _____ Site and the _____ Site, the total liquidated damages amount during that time that these two (2) sites are not operating shall be \$_____ per calendar day (\$_____ + \$_____).* These liquidated damages apply only to the Construction portion of this Contract and not to the Operations & Maintenance Contract, as described in **Exhibit B**, or the Contract for Performance Guarantee, as described in **Exhibit G**. These liquidated damages shall be the District's sole remedy for a delay in the production of energy from the Generating Facilities pursuant to this subsection.
4. **Actual Damages.** Notwithstanding the provisions herein, and in addition to the liquidated damages that the Designer/Builder forfeits pursuant to the above provision, the District may recover all of its actual damages incurred if the Work is not completed within the Contract Time and/or pursuant to the Project schedule, construction schedule, or project milestones developed pursuant to provisions of the Contract, including the Schedule in **Exhibit C**.
5. Designer/Builder shall prepare a detailed schedule of values for all of the Work that must include quantities and prices of items by site aggregating the Contract Price and must subdivide the Work into component parts

in sufficient detail to serve as the basis for progress payments during construction. This schedule of values must be approved by the District prior to it being used as a basis for payment.

6. The Designer/Builder shall not commence the Work under this Contract until the Designer/Builder has submitted and the District has approved the endorsement(s) of insurance required under the Terms and Conditions and the District has issued a Notice(s) to Proceed. The Designer/Builder shall not commence the procurement, installation, and construction portions of the Work under this Contract until the Designer/Builder has submitted and the District has approved the performance bond and the payment (labor and material) bond(s).
7. The District is performing its compliance with the California Environmental Quality Act ("CEQA"). The Parties acknowledge that construction of the Project shall not commence until the District's Board of Education has approved the Project as satisfying the requirements under CEQA. Therefore, the District reserves its right to suspend and/or terminate the Project as allowable herein if the District's Board of Education does not approve the Project under CEQA and/or exempts the Project from CEQA. The District's issuance of Notice(s) to Proceed shall be conditioned upon satisfaction of this aforementioned condition precedent. See **Exhibit C** for information regarding the Project's Schedule and the intended timing of the District's issuance of a Notice(s) to Proceed.
8. This Contract incorporates by this reference the Terms and Conditions attached hereto. The Designer/Builder, by executing this Contract, agrees to comply with all the Terms and Conditions.
9. The Contract includes only the following documents ("Contract Documents"), as indicated:

<u> X </u> Terms and Conditions to Contract	<u> X </u> Exhibit A (Scope of Work)
<u> X </u> Noncollusion Declaration	<u> X </u> Exhibit B (Operations & Maintenance Contract)
<u> X </u> Prevailing Wage Certification	<u> X </u> Exhibit C (Detailed Construction Schedule or Project Schedule for Each Site)
<u> X </u> Workers' Compensation Certification	<u> X </u> Exhibit D (Pricing Items and Payment Provisions)
<u> X </u> Criminal Background Investigation Certification	<u> X </u> Exhibit E (Schedule of Values)
<u> X </u> Drug-Free Workplace / Tobacco-Free Environment Certification	<u> X </u> Exhibit F (Initial Layout and Staging Documents and List of Plans and Specifications)
<u> X </u> Asbestos & Other Hazardous Materials Certification	<u> X </u> Exhibit G (Performance Guarantee Parameters and Energy Output Data)
<u> X </u> Lead-Product(s) Certification	<u> X </u> Exhibit H (Warranties)
<u> X </u> Insurance Certificates and Endorsements	<u> X </u> Exhibit I (Additional Contract Documents)
<u> X </u> Performance Bond (District's Form)	
<u> X </u> Payment Bond (District's Form)	

- a. **Interpretation of Contract Documents:** Questions concerning the intent, precedence, or meaning of the Contract Documents, including the Plans, Specifications and Drawings, shall be resolved by giving precedence in the following order:
 1. District-approved modifications, beginning with the most recent (if any);
 2. This base Contract's provisions;
 3. The Exhibits;
 4. Figured dimensions;
 5. Large-scale drawings;

6. Small-scale drawings.

10. Purchase and Sale of Electricity.

- a. District shall purchase from Designer/Builder, and Designer/Builder shall sell to District, all of the electric energy generated by the System during the Term. Electric energy generated by the System will be delivered to District at the delivery point identified on **Exhibit F** (the “**Delivery Point**”).
- b. As part of each portion of the System and as part of its Services, Designer/Builder shall install one or more meter(s) for the portion of the System at each Site, at or immediately before the Delivery Point(s) at each Site to measure the output of the System (“**Meter(s)**”). Those meter(s) shall meet all the specifications of this Contract which must, at a minimum, meet the general commercial standards of the solar photovoltaic industry or the required standard of the Utility. Designer/Builder shall maintain the meter(s) as part of the System.
- c. District shall take title to the electric energy generated by the System at the Delivery Point, and risk of loss will pass from Designer/Builder to District at the Delivery Point. District may purchase electric energy for the Site(s) from other sources if the District’s electric requirements at the Site(s) exceed the output of the System.
- d. Any purchase, sale and/or delivery of electric energy generated by the System prior to the Commercial Operation Date shall be at no charge to the District and will be considered test energy only and shall not indicate that the System has been put in commercial operation by the purchase, sale and/or delivery of that test energy. The “Commercial Operation Date” for each portion of the System at each Site is the date that the Utility issues a Permission to Operate Letter for that Site.

11. Billing and Payment.

- a. **Monthly Charges.** District shall pay Designer/Builder monthly for the electric energy generated by the System and delivered to the Delivery Point at the \$/kWh rate shown in **Exhibit D**. The monthly payment for such energy will be equal to the applicable \$/kWh rate multiplied by the number of kWh of energy generated during the applicable month, as measured by the System Meter(s).
- b. **Monthly Invoices.** Designer/Builder shall invoice District monthly, either manually or through _____. Such monthly invoices shall state:
 - i. the amount of electric energy produced by the System and delivered to the Delivery Point,
 - ii. the rates applicable to, and charges incurred by, District under this Agreement and
 - iii. the total amount due from District.
- c. **Taxes.** District shall either pay or reimburse Designer/Builder for any and all taxes assessed on the generation, sale, delivery or consumption of electric energy produced by the System or the interconnection of the System to the Utility’s electric distribution system, including property taxes on the System; provided, however, District will not be required to pay or reimburse Designer/Builder for any taxes during periods when Designer/Builder fails to deliver electric energy to District due to the action or omission of Designer/Builder. For purposes of this Section 4(c), “Taxes” means any federal, state and local ad valorem, property, occupation, generation, privilege, sales, use, consumption, excise, transaction, and other taxes, regulatory fees, surcharges or other similar charges, but shall not include any income taxes or similar taxes imposed on Designer/Builder’s revenues due to the sale of energy under this Agreement, which shall be Designer/Builder’s responsibility.
- d. **Payment Terms.** District shall pay all undisputed amounts of each Monthly Energy Payment within sixty (60) days from receipt by the District. Any undisputed portion of the invoice amount not paid

within this sixty (60) day period shall accrue interest at the annual rate equal to one percent (1.0%) over the then current prime rate, as published in the Wall Street Journal, but in no case shall this interest rate exceed the maximum rate permitted by law. Any disputes related to the Monthly Energy Payment shall be resolved pursuant to the dispute provisions of this Agreement. Under no circumstances will a dispute over an invoice amount be considered a default under this Agreement.

12. Term of Agreement and Related Items

- a. **Initial Term.** The initial term (“**Initial Term**”) of this Agreement shall be for twenty-five (25) years, commencing on the date when:
 - i. The Utility issues the Permission to Operate Letter or similar document for the all portions of the System of the Project;
 - ii. All Systems at each Site are under an approved and executed Utility Interconnection Agreement or similar document with the Utility; and
 - iii. All other portions of the Project including landscape, paint, hardscape, commissioning, and training are complete.
- b. Any power generated by the System prior to the commencement of the Initial Term shall be at no cost to the District.
- c. **Additional Terms.** If District has not exercised its option to purchase the System by the end of the Initial Term as provided in Section 3(a) herein, the District may, at its sole discretion, extend this Agreement by providing the Designer/Builder written notice of the District’s desire to extend this Agreement on the terms and conditions set forth herein for an additional period of five (5) years.
 - i. There shall be no more than two (2) additional periods (“**Additional Term(s)**”; collectively, with the Initial Term, the “**Term**”).
 - ii. The District’s notice shall be given, if at all, not less than ninety (90) days before the last day of the Initial Term or the then current Additional Term, as applicable.
- d. The Initial Term or any Additional Term may be terminated as indicated herein. In addition, this Contract terminates upon the District’s exercise of its option to purchase the System as indicated herein.

13. District Grants a License to the Premises to the Designer/Builder

- a. District grants to Designer/Builder and to Designer/Builder’s agents, employees, contractors and assignees, including the Designer/Builder, a non-exclusive license running with the Premises (the “**License**”) for access to, on, over, under and across the Premises for the purposes of:
 - i. Installing, constructing, operating, owning, maintaining, accessing, removing and replacing the System;
 - ii. Performing all of Designer/Builder’s obligations and enforcing all of Designer/Builder’s rights set forth in this Agreement, including the operations and maintenance services during the term of the O&M Agreement; and
 - iii. Installing, using and maintaining electric lines and equipment, including inverters and meters necessary to interconnect the System to District’s electric system at the Sites, to the Utility’s electric distribution system, if any, or for any other purpose that may from time to time be useful

or necessary in connection with the construction, installation, operation, maintenance or repair of the System.

14. Designer/Builder hereby acknowledges that the Division of the State Architect (“**DSA**”) and the District’s DSA Project Inspector(s) (“**Inspector**” or “**IOR**”) have authority to approve and/or stop Work if the Designer/Builder’s Work does not comply with the requirements of the Contract, Title 24 of the California Code of Regulations, and all applicable laws. The Designer/Builder shall be liable for any delay caused and extra work required by its non-compliant Work. Designer/Builder shall not be liable for delay caused solely by the District.
15. Inspection and acceptance of the Work shall be performed by the District’s Project Inspector with whom the District will contract and the District’s staff or construction manager.
16. Designer/Builder recognizes that the District has obtained the services of a construction manager for this Project. The construction manager is authorized to give Designer/Builder Services authorizations, and issue written approvals and notices on behalf of District. The District reserves the right to designate a different construction manager at any time. Any task, including, but not limited to, reviews or approvals that the District may perform pursuant to this Contract may be performed by the construction manager, unless that task indicates it shall be performed by the governing board of the District.
17. Unless otherwise indicated herein for a longer period of time, the Designer/Builder shall guarantee all labor and material used in the performance of this Contract for a period of one year from the date of the District’s written approval of the Work.
18. Designer/Builder shall perform all Work related to its design to the standard of care of professionals performing similar work for California school districts in or around the same geographic area of the District, and all Work related to its installation and construction to the standard of care of contractors performing similar work for California school districts in or around the same geographic area of the District.
19. By signing this Contract, Designer/Builder certifies, under penalty of perjury, that all the information provided in the Contract is true, complete, and correct, to the best of its knowledge.
20. Information regarding Designer/Builder:

Type of Business Entity:
____ Individual
____ Sole Proprietorship
____ Partnership
____ Limited Partnership
____ Corporation
____ Limited Liability Company
____ Other: _____

Fed. ID (FEIN) #: _____
Employer Identification and/or Social Security Number
NOTE: United States Code, title 26, sections 6041 and 6109 require non-corporate recipients of \$600 or more to furnish their taxpayer identification number to the payer. The United States Code also provides that a penalty may be imposed for failure to furnish the taxpayer identification number. In order to comply with these rules, the District requires your federal tax identification number or Social Security number, whichever is applicable.

ACCEPTED AND AGREED on the date indicated below:

Dated: _____, 20__

Fullerton Joint Union High School District

Signature: _____

Print Name: _____

Print Title: _____

Address: _____

Telephone: _____

E-Mail: _____

Dated: _____, 20__

_____, **[Designer/Builder]**

Signature: _____

Print Name: _____

Print Title: _____

Cal. Contractor License No.: _____

Civil Engineer License: _____

Architect License: _____

Address: _____

Telephone: _____

E-Mail: _____

Notice. Any notice required or permitted to be given under this Contract shall be deemed to have been given, served, and received if given in writing and either personally delivered or sent by overnight delivery service addressed to the above individuals. Any notice personally given shall be effective upon receipt. Any notice sent by overnight delivery service shall be effective the business day next following delivery thereof to the overnight delivery service.

TERMS AND CONDITIONS TO CONTRACT

1. **NOTICE(S) TO PROCEED:** District shall provide Notice(s) to Proceed to Designer/Builder pursuant to the Contract at which time Designer/Builder shall proceed with the Work. The District reserves the right to issue multiple Notices to Proceed related to the Project, either by scope and/or by Site.
2. **SITE EXAMINATION:**
 - 2.1. The District will provide all information available to it to the extent the information relates to Designer/Builder's scope of work. This information includes:
 - 2.1.1. Physical characteristics;
 - 2.1.2. Legal limitations and utility locations for the Project site(s);
 - 2.1.3. Written legal description(s) of the Project site(s);
 - 2.1.4. Grades and lines of streets, alleys, pavements, and adjoining property and structures;
 - 2.1.5. Adjacent drainage;
 - 2.1.6. Rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, and boundaries and contours of the Project site(s);
 - 2.1.7. Locations, dimensions and necessary data with respect to existing buildings, other improvements and trees;
 - 2.1.8. Information concerning available utility services and lines, mechanical and other services, both public and private, above and below grade, including inverts and depths;
 - 2.1.9. Surveys, reports, as-built drawings;
 - 2.1.10. Subsoil data, chemical data, and other data logs of borings;
 - 2.1.11. DSA Numbers for all buildings, as necessary to obtain DSA approval of plans to be submitted by Designer/Builder under the contracted scope of work.
 - 2.1.12. The location and physical characteristics of existing utility lines, telephone, water, sewage, storm drains and other lines on or around or relating to the Project.
 - 2.2. Designer/Builder has Visually Verified the existence of the conditions identified by this information to the extent determinable by the documents provided by the District ("Site Examination"). Designer/Builder has relied on its Site Examination in defining its scope of Work or Services.
 - 2.3. **"Visually Verified"** (or **"Verify"**) means confirmed by diligent physical inspection without any destructive or invasive action.
 - 2.4. If there are any variations to the scope of Work or Services resulting from conditions not determinable from Visually Verified information, the Designer/Builder shall submit to the District a proposed change order ("**PCO**") based on those conditions, with a detailed explanation based on the current Scope of Work and how it requires a revision based on Designer/Builder's Visual Verification and Site Examination.
 - 2.5. No claim for allowance of time or money will be allowed as to any other undiscovered condition on the Site that could and should have been discovered through these site examination activities. Notwithstanding the aforementioned, should the Designer/Builder discover any latent or unknown conditions, which will materially affect the performance of the Work hereunder, Designer/Builder shall immediately inform the District of that fact in writing and shall not proceed until written instructions are received from the District. This written notice may take the form of a PCO.
3. **EQUIPMENT AND LABOR:** The Designer/Builder shall furnish all tools, equipment, apparatus, facilities, transportation, labor, and material necessary to furnish the Services herein described, the Services to be

performed at times and places as directed by and subject to the approval of the authorized District representative indicated in the Work specifications attached hereto.

4. **SUBCONTRACTORS:** Subcontractors, if any, engaged by the Designer/Builder for any Service or Work under this Contract shall be subject to the approval of the District, which shall not be unreasonably withheld. Designer/Builder agrees to bind every subcontractor by the terms of the Contract as far as those terms are applicable to subcontractor's work, including, without limitation, all indemnification, insurance, bond, and warranty requirements. If Designer/Builder shall subcontract any part of this Contract, Designer/Builder shall be fully responsible to the District for acts and omissions of its subcontractor and of persons either directly or indirectly employed by itself. Nothing contained in the Contract shall create any contractual relations between any subcontractor and the District.

5. **OWNERSHIP; OPTION TO PURCHASE.**

- 5.1. **Ownership of System.** Throughout the Term and subject to assignment as permitted herein, Designer/Builder shall be the legal and beneficial owner of the System at all times, including all Environmental Attributes (unless otherwise specified herein), and the System shall remain the personal property of Designer/Builder and shall not attach to or be deemed a part of, or fixture to, the Sites or the Premises.
- 5.1.1. The Designer/Builder and the District each agree that the Designer/Builder (or the designated assignee of Designer/Builder as permitted herein) is the tax owner of the System and all tax filings and reports will be filed in a manner consistent with this Contract. The System shall at all times retain the legal status of personal property as defined under Article 9 of the Uniform Commercial Code.
- 5.1.2. District will use commercially reasonable efforts to place all parties having an interest in or a mortgage, pledge, lien, charge, security interest, encumbrance or other claim of any nature on the Sites or the Premises on notice of the ownership of the System and the legal status or classification of the System as personal property. If there is any mortgage or fixture filing against the Premises that could reasonably be construed as prospectively attaching to the System as a fixture of the Premises, District shall provide a disclaimer or release from such lienholder.
- 5.1.3. As the fee owner of the Premises, District consents to the Designer/Builder's filing of a disclaimer of the System as a fixture of the Premises in the office where real estate records are customarily filed in the jurisdiction where the Site(s) are located.
- 5.2. **Option to Purchase.** At the end of the sixth (6th) and tenth (10th) years of the Initial Term and at the end of the Initial Term and each Additional Term, District may purchase the System or any individual Site back from Designer/Builder for a purchase price equal to the Fair Market Value of the System or the Site. District must provide a notification to Designer/Builder of its intent to purchase the System at least ninety (90) days prior to the date the District identifies as the purchase date.
- 5.2.1. Any such purchase shall be on an as-is, where-is basis, and Designer/Builder shall not provide any warranty or other guarantee regarding the performance of the System, provided, however, that Designer/Builder shall assign to District any manufacturers warranties that are in effect as of the purchase, and which are assignable pursuant to their terms.
- 5.2.2. If District is in default of the Contract as that term is defined herein, District may still exercise its right to purchase the System if District cures its default.
- 5.2.3. **Determination of Fair Market Value.** The fair market value of the System means the price that would be negotiated in an arm's-length, free market transaction, for cash, between an informed, willing seller and an informed, willing buyer (other than the user currently in possession), neither of whom is under compulsion to complete the transaction, for the purchase of the System as removed from the Sites on which they are located at the date of determination, de-installed, packed, crated and ready for shipment to such buyer (the "Fair

Market Value”). The Fair Market Value for the System at all Sites shall be the value determined by the mutual agreement of District and Designer/Builder within sixty (60) days after District’s notification to Designer/Builder of its intent to purchase the System. If District and Designer/Builder cannot mutually agree to a Fair Market Value, then District and Designer/Builder shall select a nationally recognized independent appraiser with experience and expertise in the solar photovoltaic industry to value the System. That appraiser shall act reasonably and in good faith to determine the Fair Market Value and shall set forth such determination in a written opinion delivered to Designer/Builder and District. The valuation made by the appraiser shall be binding on District and Designer/Builder in the absence of fraud or manifest error. The costs of the appraisal shall be borne by District and Designer/Builder equally. If District and Designer/Builder are unable to agree on the selection of an appraiser, a third appraiser shall be selected by two appraiser firms proposed by each Party. The appraiser shall be given one hundred and twenty (120) days to complete the appraisal and, unless the District determines not to purchase the System, the purchase shall be finalized within thirty (30) days of date of the appraisal.

- 5.2.4. Upon the exercise of the foregoing purchase option with respect to the System at all Sites plus receipt of the then Fair Market Value and all other amounts then owing by District to Designer/Builder with respect to the System at all Sites, Designer/Builder shall execute all bills of sale and other instruments necessary (including any documents in recordable form that are required to terminate the easements and other rights granted under the Grant of Easement) to cause title to the System to pass to District as-is, where-is, free and clear of any liens or other encumbrances placed on the System by Designer/Builder.
- 5.2.5. The Parties shall act in good faith to extend or shorten these time requirements to efficiently and reasonably complete the purchase.
- 5.2.6. Upon purchase of the System, District will assume complete responsibility for the operation and maintenance of the System and liability for the performance of the System, and Designer/Builder shall have no further liabilities or obligations hereunder.

6. ENVIRONMENTAL ATTRIBUTES AND ENVIRONMENTAL INCENTIVES.

- 6.1. Unless otherwise indicated herein, Designer/Builder is the owner of all Environmental Attributes and Environmental Incentives and is entitled to the benefit of all Tax Credits, and District’s purchase of electricity under this Contract does not include Environmental Attributes, Environmental Incentives or the right to Tax Credits or any other attributes of ownership and operation of the System, all of which shall be retained by Designer/Builder.
- 6.2. District shall cooperate with Designer/Builder in obtaining, securing and transferring all Environmental Attributes and Environmental Incentives and the benefit of all Tax Credits, including by using reasonable efforts to use the electric energy generated by the System in a manner necessary to qualify for such available Environmental Attributes, Environmental Incentives and Tax Credits. District shall not be obligated to incur any out-of-pocket costs or expenses in connection with such actions unless reimbursed by Designer/Builder. If any Environmental Incentives are paid directly to District, District shall immediately pay such amounts over to Designer/Builder.
- 6.3. **“Environmental Attributes”** means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the System, the production of electrical energy from the System and its displacement of conventional energy generation, including (a) any avoided emissions of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (b) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere; and (c) the reporting rights related to these

avoided emissions, such as Green Tag Reporting Rights and Renewable Energy Credits. Green Tag Reporting Rights are the right of a party to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party, and include Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Environmental Attributes do not include Environmental Incentives and Tax Credits. Without limiting the generality of the foregoing, Environmental Attributes include carbon trading credits, renewable energy credits or certificates, emissions reduction credits, emissions allowances, green tags tradable renewable credits and Green-e® products.

- 6.4. **“Environmental Incentives”** means any and all credits, rebates, subsidies, payments or other incentives that relate to self-generation of electricity, the use of technology incorporated into the System, environmental benefits of using the System, or other similar programs available from the Utility, any other regulated entity, the manufacturer of any part of the System or any Governmental Authority.
- 6.5. **“Governmental Authority”** means any national, state or local government (whether domestic or foreign), any political subdivision thereof or any other governmental, quasi-governmental, judicial, public or statutory instrumentality, authority, body, agency, bureau or entity (including the Federal Energy Regulatory Commission or the California Public Utilities Commission), or any arbitrator with authority to bind a party at law.
- 6.6. **“Tax Credits”** means any and all (a) investment tax credits, (b) production tax credits and (c) similar tax credits or grants under federal, state or local law relating to the construction, ownership or production of energy from the System.

7. DESIGNER/BUILDER’S RIGHTS AND OBLIGATIONS.

- 7.1. **Permits and Approvals.** Except for the Designer/Builder’s obligations to obtain and maintain licenses, permits, and related authorizations as indicated in **Exhibit A**, Designer/Builder shall use commercially reasonable efforts to obtain, at its sole cost and expense, the following agreements, permits and approvals. District shall cooperate with Designer/Builder’s reasonable requests to assist Designer/Builder in obtaining these agreements, permits and approvals:
 - 7.1.1. Any zoning, land use and building permits required to construct, install and operate the System; and
 - 7.1.2. Any agreements and approvals from the Utility necessary in order to interconnect the System to the Premises electrical system and/or the Utility’s electric distribution system.
- 7.2. **Standard System Repair and Maintenance.** Designer/Builder shall construct and install the System at the Facility. During the Term, Designer/Builder will operate and perform all routine and emergency repairs to, and maintenance of, the System at its sole cost and expense, except for any repairs or maintenance resulting from District’s negligence, willful misconduct or breach of this Contract. Designer/Builder shall (A) have the appropriate experience and ability to operate and maintain photovoltaic solar systems and the financial capability to do same (an “Operator”); or (B) enter into a contract with an Operator, pursuant to which (1) such Operator shall be responsible for System operation and maintenance under this Contract and (2) Operator shall administer all rights (including access rights to the Facility) and obligations of Designer/Builder on behalf of Designer/Builder under this Contract. Designer/Builder shall not be responsible for any work done by others on any part of the System unless Designer/Builder authorizes that work in advance in writing or if it is performed by any Operator. Designer/Builder shall not be responsible for any loss, damage, cost or expense arising out of or resulting from improper environmental controls or improper operation or maintenance of the System by anyone other than Designer/Builder or Designer/Builder’s contractors, including any Operator. If the System requires repairs for which District is responsible, District shall either perform the repairs to the Designer/Builder’s reasonable satisfaction or pay Designer/Builder for diagnosing and correcting the problem at Designer/Builder or Designer/Builder’s contractors’ then current

standard rates. Designer/Builder shall provide District with written, forty-eight (48) hour notice prior to entering the Site for any reason. In the case of an emergency or an imminent danger that could cause damage or harm to persons or property, Designer/Builder can enter the Premises immediately to address the emergency and mitigate the potential damage or harm.

- 7.3. **Non-Standard System Repair and Maintenance.** If Designer/Builder incurs incremental costs to maintain the System due to conditions at the Facility or due to the inaccuracy of any information provided by District and relied upon by Designer/Builder, the pricing, schedule and other terms of this Contract will be equitably adjusted to compensate for any work in excess of normally expected work required to be performed by Designer/Builder.
- 7.4. **Breakdown Notice.** Designer/Builder shall notify District within twenty-four (24) hours following Designer/Builder's discovery of (i) any material malfunction in the operation of the System or (ii) an interruption in the supply of electrical energy from the System. District and Designer/Builder shall each designate personnel and establish procedures such that each Party may provide notice of such conditions requiring Designer/Builder's repair or alteration at all times, twenty-four (24) hours per day, including weekends and holidays. District shall notify Designer/Builder immediately upon the discovery of an emergency condition affecting the System.
- 7.5. **Suspension.** Notwithstanding anything to the contrary herein, Designer/Builder shall be entitled to suspend delivery of electricity from the System to the Delivery Point for the purpose of maintaining and repairing the System and such suspension of service shall not constitute a breach of this Contract; provided, however, that Designer/Builder shall not be entitled, without prior notice, to suspend delivery of electricity from the System to the Delivery Point for a period in excess of forty-eight (48) day light hours as defined by the United States National Weather Service in the area where the System is located. Designer/Builder shall use diligent efforts to minimize any interruption in service to the District.
- 7.6. **Liens and Payment of Contractors and Suppliers.** Designer/Builder shall pay when due all valid charges from all contractors, subcontractors and suppliers supplying goods or services to Designer/Builder under this Contract and shall keep the Facility free and clear of any liens related to such charges, except for those liens which Designer/Builder is permitted by law to place on the Facility following non-payment by District of amounts due under this Contract. Designer/Builder shall indemnify District for all claims, losses, damages, liabilities and expenses resulting from any liens filed against the Facility or the Premises in connection with such charges; provided, however, that Designer/Builder shall have the right to contest any such lien, so long as it provides a statutory bond or other reasonable assurances of payment that either remove such lien from title to the Facility and the Premises or that assure that any adverse judgment with respect to such lien will be paid without affecting title to the Facility and the Premises. Notwithstanding any provision to the contrary, Designer/Builder shall remove any liens on any portion of the Site if upon the District's thirty (30) day notification to Designer/Builder that the lien is negatively impacting the District's need to utilize the Site for collateral, justification, or any other demonstrated need to have the lien removed.

8. DISTRICT'S RIGHTS AND OBLIGATIONS.

- 8.1. **Facility Access Rights.** District grants to Designer/Builder and to Designer/Builder's agents, employees and contractors an irrevocable non-exclusive license running with the Premises (the "License") for access to, on, over, under and across the Premises for the purposes of (a) installing, constructing, operating, owning, maintaining, accessing, removing and replacing the System; (b) performing all of Designer/Builder's obligations and enforcing all of Designer/Builder's rights set forth in this Contract; and (c) installing, using and maintaining electric lines and equipment, including inverters and meters, necessary to interconnect the System to District's electric system at the Facility and/or to the utility's electric distribution system or that otherwise may from time to time be useful or necessary in connection with the construction, installation, operation, maintenance or repair of the System. Designer/Builder shall notify District prior to entering the Facility except in situations where there is imminent risk of damage to persons or property. The term of the License shall continue until the date

that is one hundred and twenty (120) days following the date of expiration or termination of this Contract (the "License Term"). During the License Term, District shall ensure that Designer/Builder's rights under the License and Designer/Builder's access to the Premises are preserved and protected and shall not interfere with or permit any third parties to interfere with such rights or access. The grant of the License shall survive termination of this Contract by either Party. District agrees that Designer/Builder, upon request to District, may record a memorandum of license in the land records respecting the License in form and substance reasonably acceptable to the Parties.

- 8.2. **OSHA Compliance.** Designer/Builder and, to the extent applicable, District shall ensure that all Occupational Safety and Health Act (OSHA) requirements and other similar applicable safety laws or codes are adhered to in their performance under this Contract.
- 8.3. **Maintenance of Facility.** District shall, at its sole cost and expense, maintain the Facility in good condition and repair. District will ensure that the Facility remains interconnected to the local Utility grid at all times and will not permit cessation of electric service to the Facility from the local Utility. District is fully responsible for the maintenance and repair of the Facility's electrical system and of all of District's equipment that utilizes the System's outputs. District shall properly maintain in full working order all of District's electric supply or generation equipment that District may shut down while utilizing the System. District shall promptly notify Designer/Builder of any matters of which it is aware pertaining to any damage to or loss of use of the System or that could reasonably be expected to adversely affect the System.
- 8.4. **No Alteration of Facility.** District shall not make any alterations or repairs to the Facility which may adversely affect the operation and maintenance of the System without Designer/Builder's prior written consent. If District wishes to make such alterations or repairs, District shall give prior written notice to Designer/Builder, setting forth the work to be undertaken (except for emergency repairs, for which notice may be given by telephone), and give Designer/Builder the opportunity to advise District in making such alterations or repairs in a manner that avoids damage to the System, but, notwithstanding any such advice, District shall be responsible for all damage to the System caused by District or its contractors. To the extent that temporary disconnection or removal of the System is necessary to perform such alterations or repairs, such work and any replacement of the System after completion of District's alterations and repairs shall be done by Designer/Builder or its contractors at District's cost. All of District's alterations and repairs will be done in a good and workmanlike manner and in compliance with all applicable laws, codes and permits.
- 8.5. **Outages.**
 - 8.5.1. District shall be permitted to be off line for a total of forty-eight (48) day light hours as defined by the United States National Weather Service in the area where the System is located (each, a "Scheduled Outage") per calendar year during the Term, during which time District shall not be obligated to accept or pay for electricity from the System; provided, however, that District must notify Designer/Builder in writing of each such Scheduled Outage at least forty-eight (48) hours in advance of the commencement of a Scheduled Outage.
 - 8.5.2. In the event that Scheduled Outages exceed a total of forty-eight (48) day light hours as defined by the United States National Weather Service in the area where the System is located per calendar year or there are unscheduled outages, in each case for a reason other than a Force Majeure event, Designer/Builder shall reasonably estimate the amount of electricity that would have been delivered to District during such excess Scheduled Outages or unscheduled outages and shall invoice District for such amount ("Estimated Payment.") and any associated lost or recaptured Environmental Incentives and lost sales (and penalties payments associated with the same) of associated Environmental Attributes in accordance with Section 6. For avoidance of doubt, the forty-eight (48) hour period shall include all Scheduled Outage hours allowed under any of the terms of this Contract, including those undertaken pursuant to Section 8(d). For this Contract, determination of the Estimated Payment shall be based, during the first Contract Year, on the estimated levels of production

and, after the first Contract Year, based on actual operation of the System in the same period in the previous Contract Year, unless Designer/Builder and District mutually agree to an alternative methodology.

- 8.5.3. Notwithstanding the foregoing, if at any time during the Term, the District's Facility requires upgrades, modernization, construction, alteration or significant repairs that require the District to schedule a temporary shutdown of the System greater than a Scheduled Outage (each, an "Extended Outage"), then the Parties shall negotiate in good faith to reach mutually agreeable terms to accommodate such Extended Outage, with the standard accommodation being Designer/Builder shall equitably adjust the Contract Price for the remainder of the Term, subject to reasonable and objectively justifiable bases for adjusting this standard accommodation. The District reserves the right to instead pay the Estimated Payment for each Extended Outage.
- 8.6. **Liens.** District shall not directly or indirectly cause, create, incur, assume or allow to exist any mortgage, pledge, lien, charge, security interest, encumbrance or other claim of any nature on or with respect to the System or any interest therein. District shall immediately notify Designer/Builder in writing of the existence of any such mortgage, pledge, lien, charge, security interest, encumbrance or other claim, shall promptly cause the same to be discharged and released of record without cost to Designer/Builder, and shall indemnify Designer/Builder against all costs and expenses (including reasonable attorneys' fees) incurred in discharging and releasing any such mortgage, pledge, lien, charge, security interest, encumbrance or other claim.
- 8.7. **Security.** District shall be responsible for using commercially reasonable efforts to maintain the physical security of the Facility and the System against known risks and risks that reasonably should have been known by District. District will not conduct activities on, in or about the Premises or the Facility that have a reasonable likelihood of causing damage, impairment or otherwise adversely affecting the System.
- 8.8. **Insolation.** District understands that unobstructed access to sunlight ("Insolation") is essential to Designer/Builder's performance of its obligations and a material term of this Contract. District shall not in any way cause and, where possible, shall not in any way permit any interference with the System's Insolation. If District becomes aware of any activity or condition that could diminish the Insolation of the System, District shall notify Designer/Builder immediately and shall cooperate with Designer/Builder in preserving the System's existing Insolation levels. The Parties agree that reducing Insolation would irreparably injure Designer/Builder, that such injury may not be adequately compensated by an award of money damages, and that Designer/Builder is entitled to seek specific enforcement of this Section against District.
- 8.9. **Breakdown Notice.** District shall promptly notify Designer/Builder following the discovery by District of anything adversely affecting the System, including a material malfunction, interruption in the supply of electrical energy or discovery of an emergency condition of which District should reasonably be aware.

9. RELOCATION OF SYSTEM.

- 9.1. If (i) District ceases to conduct business operations at and/or vacates the Facility or (ii) Designer/Builder is prevented from operating the System at the Facility (through no fault of Designer/Builder) or (iii) the System is otherwise prevented from delivering electricity (through no fault of Designer/Builder), in each case prior to the expiration of the Term, District shall have the option to provide Designer/Builder with a mutually agreeable substitute premises located within the same Utility district as the terminated System or in a location with similar utility rates and Insolation ("Substitution"). District shall provide written notice at least sixty (60) days prior to the date that it wants to make this Substitution.
- 9.2. In connection with such Substitution, District and Designer/Builder shall in good faith negotiate and execute an amended agreement that shall have all of the same terms as this Contract except for the (i) Effective Date; (ii) License, which will be amended to grant rights in the real property(ies) where the

System is relocated to; and (iii) Term, which will be the remainder of the Term of this Contract and such amended agreement shall be deemed to be a continuation of this Contract without termination. District shall also provide any new District, owner, lessor or mortgagee consents or releases required by Designer/Builder or Designer/Builder's Financing Parties in connection with the substitute facility(ies).

- 9.3. In connection with such Substitution, District shall pay all reasonable costs associated with relocation of the System, including all costs and expenses incurred by or on behalf of Designer/Builder in connection with removal of the System from the Facility and installation and testing of the System at the substitute facility(ies) and all applicable interconnection fees and expenses at the substitute facility(ies), as well as costs of new title search and other out-of-pocket expenses connected to preserving and refinancing the security interests of Designer/Builder's Financing Parties in the System.
- 9.4. Designer/Builder shall calculate the Estimated Payment the amount of electricity that would have been delivered to District during the period of time the System is not in operation due to the relocation ("Relocation Period") and shall invoice District for such amount and any associated lost or recaptured Environmental Incentives and lost sales (and penalties payments associated with the same) of associated Environmental Attributes in accordance with Section 6. Alternatively, at the District's request, the Parties shall negotiate in good faith to reach mutually agreeable terms to accommodate such Relocation Period whereby the Designer/Builder shall equitably adjust the Contract Price for the remainder of the Term, subject to reasonable and objectively justifiable bases for adjusting this standard accommodation. Designer/Builder shall remove the System from the vacated Facility prior to the termination of District's ownership, lease or other rights to use such Facility. At the District's request and reasonable expense, Designer/Builder shall restore the Facility to its prior condition except for normal wear and tear.
- 9.5. If the Substitution has inferior Insulation as compared to the original Facility, Designer/Builder shall have the right to make an adjustment to Exhibit D such that District's payments to Designer/Builder are the same as if the System were located at the original Facility. If District is unable to provide such substitute facility(ies) and to relocate the System as provided, any early termination will be treated as a default by District.

10. REMOVAL OF SYSTEM AT EXPIRATION. Upon the expiration or earlier termination of this Contract (provided District does not exercise its purchase option(s), Designer/Builder shall, at its expense, remove all of its tangible property comprising the System from the Facility on a mutually convenient date, but in no event later than ninety (90) days after the expiration of the Term; or earlier termination of this Contract (provided District does not exercise its purchase option). Excluding ordinary wear and tear, the Facility shall be returned to its original condition including the removal of System mounting pads or other support structures. Designer/Builder shall leave the Facility in neat and clean order. If Designer/Builder fails to remove or commence substantial efforts to remove the System by such agreed upon date, District shall have the right, at its option, to remove the System to a public warehouse and restore the Facility to its original condition (other than ordinary wear and tear) at Designer/Builder's cost. District shall provide sufficient space for the temporary storage and staging of tools, materials and equipment and for the parking of construction crew vehicles and temporary construction trailers and facilities reasonably necessary during such removal.

11. MEASUREMENT. Electricity delivered to the Facility shall be measured by a District-approved monitoring system installed and maintained by Designer/Builder as part of the System. Electricity produced by the System shall be measured by the District-approved monitoring system installed and maintained by Designer/Builder as part of the System. All delivery and production information shall be shared with District at District's request.

12. DEFAULT, REMEDIES AND DAMAGES.

- 12.1. **Default.** Any Party that fails to perform its responsibilities as listed below or experiences any of the circumstances listed below shall be deemed a "Defaulting Party", the other Party shall be the "Non-Defaulting Party" and each event of default shall be a "Default Event":

- 12.1.1. failure of a Party to pay any amount due and payable under this Contract, other than an amount that is subject to a good faith dispute, within thirty (30) days following receipt of written notice from the Non-Defaulting Party of such failure to pay ("Payment Default");
- 12.1.2. failure of a Party to substantially perform any other material obligation under this Contract within thirty (30) days following receipt of written notice from the Non-Defaulting Party demanding such cure; provided, that such thirty (30) day cure period shall be extended (but not beyond ninety (90) days) if and to the extent reasonably necessary to cure the Default Event, if (i) the Defaulting Party initiates such cure within the thirty (30) day period and continues such cure to completion and (ii) there is no material adverse effect on the Non-Defaulting Party resulting from the failure to cure the Default Event;
- 12.1.3. if any representation or warranty of a Party proves at any time to have been incorrect in any material respect when made and is material to the transactions contemplated hereby, if the effect of such incorrectness is not cured within thirty (30) days following receipt of written notice from the Non-Defaulting Party demanding such cure;
- 12.1.4. District loses its rights to occupy and enjoy the Premises;
- 12.1.5. a Party, or its guarantor (if any) becomes insolvent or is a party to a bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors, or any general assignment for the benefit of creditors or other similar arrangement or any event occurs or proceedings are taken in any jurisdiction with respect to the Party which has a similar effect (or, if any such actions are initiated by a third party, such action(s) is(are) not dismissed within ninety (90) days); or

12.2. Remedies.

- 12.2.1. Remedies for Payment Default. If a Payment Default occurs, the Non-Defaulting Party may suspend performance of its obligations under this Contract. Further, the Non-Defaulting Party may pursue any remedy under this Contract, at law or in equity, including an action for damages and termination of this Contract, upon thirty (30) days prior written notice to the Defaulting Party following the Payment Default.
- 12.2.2. Remedies for Other Defaults. On the occurrence of a Default Event other than a Payment Default, the Non-Defaulting Party may pursue any remedy under this Contract, at law or in equity, including an action for damages and termination of this Contract, upon thirty (30) days prior written notice to the Defaulting Party following the occurrence of the Default Event. Nothing herein shall limit either Party's right to collect damages upon the occurrence of a breach or a default by the other Party that does not become a Default Event. Notwithstanding anything in this Contract to the contrary, if District terminates this Contract without cause prior to commencement of System installation, then District shall owe Designer/Builder a \$5,000 design cancellation fee, in addition to actual material procurement costs incurred by Designer/Builder that were approved by District; provided, however, that District shall not also be liable for the Termination Payment.
- 12.2.3. Damages Upon Termination by Default. Upon a termination of this Contract by the Non-Defaulting Party as a result of a Default Event by the Defaulting Party, the Defaulting Party shall pay a Termination Payment to the Non-Defaulting Party determined as follows (the "Termination Payment"):
- 12.2.4. District.
 - If District is the Defaulting Party and Designer/Builder terminates this Contract after commencement of System installation but prior to the Commercial Operation Date, the Termination Payment to Designer/Builder shall be equal to the sum of:
 - 12.2.4.1. Documented costs incurred by District towards the installation of the System

plus ten percent (10%) of such costs,

- 12.2.4.2. Documented financing costs associated with the costs incurred by District towards the installation of the System up until the date such System is removed, but excluding any anticipated profit, return on investment, or expected income to Designer/Builder's Financing Parties;
- 12.2.4.3. Documented removal costs as indicated in the "Relocation of System" and "Removal of System at Expiration" Sections herein; and
- 12.2.4.4. Any and all other documented amounts previously accrued under this Contract and then owed by District to Designer/Builder.

If District is the Defaulting Party and Designer/Builder terminates this Contract after the Commercial Operation Date, the Termination Payment shall be equal to the sum of: (i) the termination value set forth in Exhibit D (the "Termination Value") for such Contract Year, (ii) removal costs as provided in the "Relocation of System" and "Removal of System at Expiration" Sections herein; and (iii) all other amounts previously accrued under this Contract and then owed by District to Designer/Builder. The Parties agree that actual damages to Designer/Builder in the event this Contract terminates prior to the expiration of the Term as the result of a Default Event by District would be difficult to ascertain, and the applicable Termination Value set forth in Exhibit D and as otherwise outlined above is a reasonable approximation of the damages suffered by Designer/Builder as a result of early termination of this Contract. The Termination Payment shall not be less than zero (0).

- 12.2.5. Designer/Builder. If Designer/Builder is the Defaulting Party and District terminates this Contract, the Termination Payment to District shall be equal to the sum of (i) the present value (using a discount rate of 7%) of the excess, if any, of the reasonably expected cost of electric energy from the utility over the Contract Price for the reasonably expected production of the System for the remainder of the Initial Term or the then current Additional Term, as applicable; (ii) all costs reasonably incurred by District in re-converting its electric supply to service from the utility; (iii) any removal costs incurred by District; and (iv) any and all other amounts previously accrued under this Contract and then owed by Designer/Builder to District. The Termination Payment shall not be less than zero.
- 12.2.6. Obligations Following Termination. If a Non-Defaulting Party terminates this Contract pursuant to this "Default, Remedies and Damages" section, then following such termination, Designer/Builder shall, at the sole cost and expense of the Defaulting Party, remove the equipment constituting the System. The Non-Defaulting Party shall take all commercially reasonable efforts to mitigate its damages as the result of a Default Event.

13. SYSTEM DAMAGE AND INSURANCE.

- 13.1. **System Damage**. If the System is damaged or destroyed other than by District's negligence, willful misconduct or breach of this Contract, Designer/Builder shall promptly repair and restore the System to its pre-existing condition; provided, however, that if more than fifty percent (50%) of the System is destroyed during the last two (2) years of the Initial Term or during any Additional Term, Designer/Builder shall not be required to restore the System, but may instead terminate this Contract without liability, unless District agrees to pay for the cost of restoration of the System or purchase the System in its "AS-IS" condition at a price that is no greater than the Fair Market Value of the System in its then damaged or destroyed condition.
- 13.2. **Insurance Coverage**. At all times during the Term, Designer/Builder and District shall maintain the following insurance:
 - 13.2.1. Designer/Builder's Insurance. Designer/Builder shall maintain (i) property insurance on the System for the replacement cost thereof, (ii) commercial general liability insurance with coverage of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate, (ii)

professional liability insurance on a claims-made form with coverage of at least \$1,000,000 per claim and \$2,000,000 annual aggregate, (iii) employer's liability insurance with coverage of at least \$1,000,000 and (iv) workers' compensation insurance as required by law.

13.2.2. **District's Insurance.** District shall maintain commercial general liability insurance with coverage of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate.

13.3. **Policy Provisions.** All insurance policies provided hereunder shall (i) contain a provision whereby the insurer agrees to give the party not providing the insurance thirty (30) days written notice before the insurance is cancelled, or terminated, (ii) be written on an occurrence basis, (iii) be maintained with companies either rated no less than A-VII as to Policy Holder's Rating in the current edition of A.M. Best's Insurance Guide or otherwise reasonably acceptable to the other party.

13.4. **Certificates/Endorsements.** Upon the other Party's request each Party shall deliver to the other Party certificates of insurance evidencing the above required coverage and/or policy endorsements. A Party's receipt, review or acceptance of such certificate shall in no way limit or relieve the other Party of the duties and responsibilities to maintain insurance as set forth in this Contract.

13.5. **Deductibles.** Unless and to the extent that a claim is covered by an indemnity set forth in this Contract, each Party shall be responsible for the payment of its own deductibles.

14. SAFETY AND SECURITY: Designer/Builder is responsible for maintaining safety in the performance of this Contract. Designer/Builder shall be responsible to ascertain from the District the rules and regulations pertaining to safety, security, and driving on school grounds, particularly when children are present, as per **Exhibit I**. In the event that the aforementioned rules conflict with the terms of this Contract, the terms of this Contract shall prevail.

15. CHANGE IN SCOPE OF WORK:

15.1. **Change Orders.** A change order ("**Change Order**") is a written instrument prepared and issued by the District and signed by the District (as authorized by the District's governing board) and the Designer/Builder, and approved by the Project Inspector (if necessary) and DSA (if necessary), stating their agreement regarding all of the following:

15.1.1. A description of a change in the Work or Services;

15.1.2. The amount of the adjustment in the Contract Price, if any; and

15.1.3. The extent of the adjustment in the Contract Time, if any.

15.2. There shall be no change whatsoever in the Services or Work, or any architectural enhancements, without an executed Change Order or Construction Change Directive as herein provided. District shall not be liable for the cost of any extra work or any substitutions, changes, additions, omissions, or deviations from the Services or Work except pursuant to a Change Order or Construction Change Directive. Except as provided elsewhere in this Contract, no extension of time for performance of the Work shall be allowed hereunder unless duly adjusted in writing in the Change Order. The provisions of the Contract Documents shall apply to all such changes, additions, and omissions with the same effect as if originally embodied in the Work or Services.

15.3. Designer/Builder shall perform all Work that has been authorized by a fully executed Change Order in the timeframe set forth therein.

15.4. Should any Change Order result in an increase in the Contract Price, the cost of that Change Order shall be agreed to in the Change Order. Except as provided elsewhere in this Contract, if Designer/Builder proceeds with any change in Work without a Change Order, Designer/Builder waives any claim of additional compensation or time for that additional work.

15.5. Designer/Builder understands, acknowledges, and agrees that the reason for District authorization is so that District may have an opportunity to analyze the Work and decide whether the District shall proceed with the Change Order or alter the Project so that a change in Work becomes unnecessary.

15.6. **Price Request.** A price request is a written request prepared by the District requesting the

Designer/Builder to submit to the District an estimate of the effect of a proposed change in the Work on the Contract Price and the Contract Time. A price request shall contain adequate information, including any necessary Work or Services, to enable Designer/Builder to provide the cost breakdowns required herein.

- 15.7. **Proposed Change Order.** A proposed change order (“PCO”) is a written request prepared by the Designer/Builder requesting that the District issue a Change Order based upon a proposed change to the Work or Services. A PCO shall include breakdowns pursuant to the revisions herein to validate any change in Contract Price.

15.7.1. **Changes in Time.** A PCO shall also include any changes in time required to complete the Project. Any additional time requested shall not be the number of days to make the proposed change, but must be based upon the impact to the Project Schedule as defined in the Contract Documents. If Designer/Builder fails to request a time extension in a PCO, then the Designer/Builder is thereafter precluded from requesting time and/or claiming a delay, except as otherwise provided in this Contract.

15.7.2. **Unknown and/or Unforeseen Conditions.** If Designer/Builder submits a PCO requesting an increase in Contract Price and/or Contract Time that is based at least partially on Designer/Builder’s assertion that Designer/Builder has encountered condition(s) on the Project that it could not have discovered in performing its “Site Examination” duties herein, then Designer/Builder shall base the PCO on visually verifiable information that demonstrates that the hitherto unknown and/or unforeseen condition(s) actually exist. If not, the District may deny the PCO and the Designer/Builder shall complete the Project without any increase in Contract Price and/or Contract Time based on that PCO.

- 15.8. **Format for Proposed Change Order.** The following format shall be used as applicable by the District and the Designer/Builder (e.g. Change Orders, PCO’s) to communicate proposed additions and deductions to the Contract, supported by attached documentation.

	<u>SUBCONTRACTOR PERFORMED WORK</u>	ADD	DEDUCT
(a)	<u>Material</u> (attach itemized quantity and unit cost plus sales tax)		
(b)	<u>Add Labor</u> (attach itemized hours and rates, fully encumbered)		
(c)	<u>Add Equipment</u> (attach suppliers’ invoice)		
(d)	<u>SUBTOTAL</u>		
(e)	<u>Add Subcontractor’s overhead and profit</u> , not to exceed ten percent (10%) of item (d)		
(f)	<u>SUBTOTAL</u>		
(g)	<u>Add Designer/Builder’s fee, overhead, profit & general conditions</u> , not to exceed five percent (5.0%) of the sum of item (f)		
(h)	<u>SUBTOTAL</u>		
(i)	<u>Add Bond and Insurance</u> , not to exceed one and one half percent (1.5%) of Item (h)		
(j)	<u>TOTAL</u>		
(k)	<u>Time</u>	<u> </u> Days	

	<u>DESIGNER/BUILDER PERFORMED WORK</u>	ADD	DEDUCT
(a)	<u>Material</u> (attach itemized quantity and unit cost plus sales tax)		
(b)	<u>Add Labor</u> (attach itemized hours and rates, fully encumbered)		
(c)	<u>Add Equipment</u> (attach suppliers’ invoice)		
(d)	<u>SUBTOTAL</u>		
(e)	<u>Add Designer/Builder’s fee, overhead, profit & general</u>		

	<u>conditions</u> , not to exceed ten percent (10.0%) of the sum of item (d)		
(f)	<u>SUBTOTAL</u>		
(i)	<u>Add Bond and Insurance</u> , not to exceed one and one half percent (1.5%) of item (f)		
(j)	<u>TOTAL</u>		
(k)	<u>Time</u>		<u>Days</u>

- 15.9. **Change Order Certification.** All Change Orders and PCOs must include the following certification by the Designer/Builder: *The undersigned Designer/Builder approves the foregoing as to the changes, if any, and the Contract Price specified for each item and as to the extension of time allowed, if any, for Project Completion, and agrees to furnish all labor, materials, and service, and perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of sums which have no basis in fact or which Designer/Builder knows are false are at the sole risk of Designer/Builder and may be a violation of the False Claims Act set forth under Government Code section 12650 et seq. It is understood that the changes herein to the Contract shall only be effective when approved by District staff with delegated authority, and will be ratified by the governing board of the District. It is expressly understood that the value of the extra Work or changes expressly includes any and all of the Designer/Builder's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included are deemed waived.*
- 15.10. **Determination of Change Order Cost.** The amount of the increase or decrease in the Contract Price from a Change Order, if any, shall be determined in one or more of the following ways as applicable to a specific situation and at the District's discretion:
- 15.10.1. District acceptance of a PCO;
- 15.10.2. By amounts contained in Designer/Builder's schedule of values, if applicable;
- 15.10.3. By agreement between District and Designer/Builder.
- 15.11. **Construction Change Directives / Unilateral Change Orders.** A Construction Change Directive (or Unilateral Change Order) is a written order prepared and issued by the District and signed by the District, directing a change in the Work. The District may as provided by law, by Construction Change Directive and without invalidating the Contract, order changes in the Work consisting of additions, deletions, or other revisions. The District may only issue a Construction Change Directive in the absence of agreement on the terms of a Change Order, and the Designer/Builder shall track its time and material costs that it may use as the basis for dispute or a claim pursuant to the "Disputes" provisions herein.
- 15.12. **Payment of Change Orders.** Once approved, the Change Order will be paid either by an increase in the PPA rate or by separate payment(s) by the District, at the District's discretion.
- 16. ALLOWANCES.** For any allowances identified herein, Designer/Builder shall be permitted to charge its time, materials, and other items in the identical structure as a Change Order. Designer/Builder shall invoice only for components of the Work encompassed by the allowance description. Any unused allowance or unused portion thereof shall be deducted from the Contract Price. However, if Designer/Builder's costs exceed the allowance, the District shall reimburse Designer/Builder for such excess if approved in advance in a Change Order.
- 17. TRENCH SHORING:** If this Contract is in excess of Twenty Five Thousand Dollars (\$25,000) and is for the excavation of any trench deeper than five (5) feet, Designer/Builder must submit and obtain District acceptance and approval, in advance of excavation, of 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 the plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

- 18. EXCAVATIONS OVER FOUR FEET:** If this Contract includes excavations over four (4) feet, Designer/Builder shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any: (1) Material that the Designer/Builder 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; (2) Subsurface or latent physical conditions at the site differing from those indicated; or (3) 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. 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 Designer/Builder's cost of, and/or the time required for, performance of any part of the Work shall issue a change order under the procedures described in the Contract. In the event that a dispute arises between the District and the Designer/Builder whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Designer/Builder's cost of, or time required for, performance of any part of the work, the Designer/Builder shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all Work to be performed under the contract. The Designer/Builder shall retain any and all rights provided either by Contract or by law which pertain to the resolution of disputes and protests between the Parties.
- 19. LEAD-BASED PAINT:** Pursuant to the Lead-Safe Schools Protection Act (Education Code Section 32240 et seq.) and other applicable law, no lead-based paint, lead plumbing and solders, or other potential sources of lead contamination shall be utilized on this Project, and only trained and state-certified contractors, inspectors and workers shall undertake any action to abate existing risk factors for lead. Designer/Builder must execute the Lead-Based Paint Certification, if applicable.
- 20. WORKERS:** Designer/Builder shall at all times enforce strict discipline and good order among its employees and the employees of its subcontractors and shall not employ or work any unfit person or anyone not skilled in work assigned to him or her. Any person in the employ of the Designer/Builder or a subcontractor whom the District may deem incompetent or unfit shall be dismissed from the Site and shall not again be employed at Site without written consent from the District.
- 21. CORRECTION OF ERRORS:** Designer/Builder shall perform, at its own cost and expense and without reimbursement from the District, any work necessary to correct errors or omissions which are caused by the Designer/Builder's failure to comply with the Contract requirements and the standard of care required herein.
- 22. SUBSTITUTIONS:** No substitutions of material from those specified in the approved final design shall be made without the prior written approval of the District, which the District shall complete as diligently as possible and which the District shall not unreasonably withhold. Notwithstanding the above, all requests for substitution shall be deemed granted if not objected to within fourteen (14) calendar days.
- 23. DESIGNER/BUILDER SUPERVISION:** Designer/Builder shall provide competent supervision of personnel employed on the job Site, use of equipment, and quality of workmanship.
- 24. CLEAN UP:** Debris shall be removed from the Premises by the Designer/Builder. The Site shall be in order at all times when work is not actually being performed and shall be maintained in a reasonably clean condition.
- 25. ACCESS TO WORK:** District shall provide to Designer/Builder uninterrupted access to the Premises and to a reasonably sufficient staging area, as further detailed in **Exhibit I**. District representatives shall at all times have access to the Work wherever it is in preparation or in progress. Designer/Builder shall provide safe and proper facilities for such access. Without diminishing the District's obligation to provide access as required herein, the Parties acknowledge that Designer/Builder intends to install the Generating Facilities at the Sites in accordance with the Project Schedule and within the parameters as further detailed in **Exhibit I** and that the Contract Price and Contract Time are based on those parameters.
- 26. PROTECTION OF WORK AND PROPERTY:** The Designer/Builder shall erect and properly maintain at all times, as required by conditions and progress of the Work, all necessary safeguards, signs, barriers, lights, and security persons for protection of workers and the public, and shall post danger signs warning against hazards created by the Work. In an emergency affecting life and safety of life or of Work or of adjoining property, Designer/Builder, without special instruction or authorization from District, is permitted to act at his discretion

to prevent such threatened loss or injury.

27. OTHER CONTRACTS/CONTRACTORS: District reserves the right to let other contracts, and/or to perform work with its own forces, in connection with other work at the School Sites. Designer/Builder shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly coordinate and connect Designer/Builder's Work with the work of other contractors. In addition to Designer/Builder's obligation to protect its own Work, Designer/Builder shall protect the work of any other contractor that Designer/Builder encounters while working on the Project. Nothing herein contained shall be interpreted as granting to Designer/Builder exclusive occupancy of the Site, the Premises, or of the Project. Designer/Builder shall not cause any unnecessary hindrance or delay to the use and/or school operation(s) of the Premises and/or to District or any other contractor working on the Project. If simultaneous execution of any contract or school operation is likely to cause interference with performance of Designer/Builder's Contract, Designer/Builder shall coordinate with those contractor(s), person(s), and/or entity(s) and shall submit to the District a PCO based on such coordination if that coordination is different than as indicated in **Exhibit I**.

28. ASSIGNMENT OF CONTRACT: The Designer/Builder shall not assign or transfer in any way any or all of its rights, burdens, duties, or obligations under this Contract without the prior written consent of the District. This provision shall not limit the Designer/Builder's right to subcontract portions of its Work to other entities and assign this Contract and all related contracts without the consent of the District (i) to a direct affiliate of Designer/Builder; (ii) to an entity that is controlled by, controls, or is under common control with Designer/Builder; or (iii) pursuant to a merger, consolidation, transfer of substantially all its assets, or by operation of law. This Contract will be binding on, enforceable by, and inure to the benefit of, the Parties and their respective successors and permitted assigns. Any assignment made in contravention of this clause shall be void and unenforceable. The Parties acknowledge that Designer/Builder may obtain construction and long-term financing or other credit support from lenders or third parties (including tax equity or similar investors) ("**Financing Parties**") in connection with the installation, construction, ownership, operation and maintenance of the System. Both Parties agree in good faith to consider and to negotiate changes or additions to this Contract that may be reasonably requested by the Financing Parties; provided, that such changes do not alter the fundamental economic terms of this Contract, the District's rights and obligations, including buyout and termination, or other provisions, the materiality of which will be subject to the District's reasonable determination. The Parties also agree that Designer/Builder may assign this Contract to the Financing Parties as collateral, and in connection with any such assignment, District agrees to execute a consent to assignment in customary form and reasonably acceptable to the Financing Parties consistent with this provision.

29. COMPLETION:

29.1. **Walk-Through as Prerequisite to Determination of Completion.** When the Designer/Builder believes that the Work is complete except for minor corrective items, it shall so notify the District. Promptly thereafter, the District shall schedule a final walk-through of the Project by the Designer/Builder, the Inspector and the District to determine whether and to what extent the Work is complete. Any erroneous claims of completion by the Designer/Builder resulting in a premature walk-through shall be at the Designer/Builder's sole cost and expense, and the District shall be entitled to reduce its payments to the Designer/Builder under the Contract by an amount equal to any costs incurred by the District due to the erroneous claims by the Designer/Builder that the Project is complete. Minor corrective (or "punch-list") items shall be identified in the final walk-through of the Project. Notwithstanding the provisions listed prior, the District shall accept as complete the different scope of work as each is completed, at different dates, as opposed to waiting for the entire Work to be completed prior to issuance of its Acceptance of Work.

29.2. **District's Acceptance of Work.** The District, in its sole discretion, may either (a) accept the Work as complete notwithstanding the need to complete minor corrective items (as distinguished from incomplete items), if the Work has otherwise been completed to the satisfaction of the District and the Inspector, or (b) refrain from accepting the Work as complete until the entire Work and all portions thereof, including all punch-list items, have been completed to the satisfaction of the District and the Inspector. The Work shall only be accepted as complete by an action of the District's School

Board ("Completion").

- 29.3. **Notice of Completion.** Once the District has accepted the Work as indicated herein, the District shall thereafter cause a Notice of Completion to be recorded in the County Recorder's Office.
- 29.4. **Designer/Builder's Failure to Correct Punch-List Items.** If the Designer/Builder 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 owing to the Designer/Builder under the Contract an amount equal to 150% the estimated cost, as determined by the District, of each item until such time as the item is completed.
- 29.5. **Time Is of the Essence:** Time is of the essence in the performance of and compliance with each of the provisions and conditions of this Contract.

30. BENEFICIAL USE: District reserves the right to receive beneficial use of the Work before formal Contract completion and upon receipt of Permission to Operate Letter and/or Permission to Interconnect from the Utility. Beneficial use shall not constitute final acceptance or approval of any part of the Work covered by this Contract, nor shall beneficial use extend the date specified for Completion of the Work. The Parties may mutually agree that the date that the Generating Facilities begin producing power can be deemed the date of system start up for sake of the Performance Guarantee.

31. FORCE MAJEURE CLAUSE:

- 31.1. The term "Force Majeure" shall mean those events caused beyond the control of the affected Party and which by the exercise of due diligence such Party could not reasonably avoid and which it has been unable to overcome, including acts of God and public enemy; fire; epidemics, landslides, volcanic activity, terrorism, strike; loss or shortage of transportation facilities; lock-out; commandeering of materials, product, plant, or facilities by the government; relocation or construction of transmission facilities or the shutdown of such facilities for the purpose of necessary repairs; work by local utility directly impacting the Project; flood; earthquake; tornado; severe storm; civil disobedience; sabotage; restraint by court order or public authority (whether valid or invalid); which is beyond the control of the affected Party and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which it has been unable to overcome.
- 31.2. Neither party shall be considered to be in default in the performance of any material obligation hereunder during the time and to the extent that it is prevented from obtaining delivery or performing by a Force Majeure event. Neither Party shall be relieved of its obligation to perform if such failure is due to causes arising out of its own negligence or due to removable or remediable causes which it fails to remove or remedy with the exercise of diligent efforts within a reasonable time period. Either Party rendered unable to fulfill any of its obligations under this Contract by reason of an event of Force Majeure shall give prompt written notice of such fact to the other Party. Notwithstanding a Force Majeure event, the party claiming such an event must provide satisfactory evidence that the event caused the delay or lack of performance and was not due to the fault or neglect of the party claiming a Force Majeure event.
- 31.3. Designer/Builder is aware that governmental agencies and utilities, including, without limitation, the Division of the State Architect, the Department of General Services, gas companies, electrical utility companies, water districts, and other agencies ("Review Agencies") may have to approve Designer/Builder -prepared drawings or approve a proposed installation. Designer/Builder has included in the Project Schedule, time for possible review of its drawings and for reasonable delays and damages that may be caused by such agencies. Designer/Builder is entitled to additional time in the Project Schedule for review of Designer/Builder's drawings or other approvals from the Division of the State Architect, the Department of General Services, gas companies, electrical utility companies, water districts, and other agencies, if all of the following conditions have been satisfied:
- 31.3.1. The time for this review is in excess of the time expressly allocated for this review in the Project Schedule;
- 31.3.2. Designer/Builder has diligently pursued approval from the Review Agencies;

- 31.3.3. Designer/Builder's drawings and proposed installation are consistent with IR 16-8 as of the date of this Contract; and
- 31.3.4. Designer/Builder's drawings and proposed installation are consistent with Designer/Builder's pre-check(ed) ("PC") design as of the date of this Contract, where applicable, except as modified at the District's request.

32. INDEMNIFICATION / HOLD HARMLESS CLAUSE: To the furthest extent permitted by California law, Designer/Builder shall defend, indemnify, and hold harmless the District, its trustees, members, agents, representatives, officers, consultants, employees, and volunteers (the "indemnified parties") from any and all demands, losses, liabilities, claims, suits, and actions (the "claims") of any kind, nature, and description, including, but not limited to, attorneys' fees and costs, directly or indirectly arising from personal or bodily injuries, death, property damage, or otherwise arising out of, connected with, or resulting from the performance of this Contract to the extent the claims are caused by the negligence, recklessness, or willful misconduct of Designer/Builder. The District shall have the right to accept or reject any legal representation that Designer/Builder proposes to defend the District. However, such acceptance shall not be unreasonably withheld. This indemnification, defense, and hold harmless obligation includes any failure or alleged failure by Designer/Builder to comply with any provision of law, any failure or alleged failure to timely and properly fulfill all of its obligations under the Contract in strict accordance with their terms, and without limitation, any stop notice actions or liens, including liens by the California Department of Labor Standards Enforcement.

33. PERMITS, APPROVALS, AND LICENSES:

- 33.1. The Designer/Builder and all of its employees, agents, and subcontractors shall secure and maintain in force, at Designer/Builder's sole cost and expense, all licenses and permits as are required by law, in connection with the furnishing of materials, supplies, or Services herein listed with the exception of any mitigation measures required to obtain or maintain CEQA compliance.
- 33.2. Designer/Builder is responsible for obtaining on behalf of the District and at Designer/Builder's expense, all permits and approvals (including DSA approval), required for the building, installation, and start-up of the Work hereunder which are required to complete the Project.
- 33.3. District will cooperate fully with and assist Designer/Builder's obtaining all permits and approvals required under this Contract.

34. INDEPENDENT CONTRACTOR STATUS: While engaged in carrying out the Services of this Contract, the Designer/Builder is an independent contractor, and not an officer, employee, agent, partner, or joint venture of the District. Designer/Builder shall be solely responsible for its own Worker's Compensation insurance, taxes, and other similar charges or obligations. Designer/Builder shall be liable for its own actions, including its negligence or gross negligence, and shall be liable for the acts, omissions, or errors of its agents or employees.

35. PAYMENT BOND AND PERFORMANCE BOND: The Designer/Builder shall not commence the Work until it has provided to the District, in a form acceptable to the District, a Payment (Labor and Material) Bond and a Performance Bond, each in an amount equivalent to one hundred percent (100%) of the Contract Price issued by a surety admitted to issue bonds in the State of California and otherwise acceptable to the District. All performance bond liability will cease one (1) year from the completion date of the work of this Contract. The balance of any warranty or guarantee beyond one year required by District shall continue to be guaranteed solely by Designer/Builder. The payment bond liability will cease at the termination of any time required by law. Notwithstanding anything to the contrary in the Contract, the Payment (Labor and Material) Bond and the Performance Bond are not applicable to the Performance Guarantee.

36. DESIGNER/BUILDER'S INSURANCE: Designer/Builder has in force, and during the term of this Contract shall maintain in force with the minimum indicated limits, the following insurance. All policies shall contain waivers of subrogation against the District. All of Designer/Builder's insurance shall be with admitted insurance companies with an A.M. Best rating of no less than A: VII.

- 36.1. **Commercial General Liability Insurance.** Coverage to be written on an occurrence form. Coverage to be at least as broad as ISO form CG 002 (07/98), without endorsements that limit the policy terms

with respect to: (1) the definition of an Insured Contract, (2) provisions for severability of interest, (3) explosion, collapse, underground hazard:

- \$2,000,000 per occurrence for Bodily Injury and Property Damage
- \$4,000,000 General Aggregate - other than Products/Completed Operations
- \$4,000,000 Products/Completed Operations Aggregate
- \$1,000,000 Personal & Advertising Injury
- \$500,000 Fire Damage

36.2. **Automobile Liability.** Coverage to be written on an occurrence form. Coverage for any auto, including all owned, hired and non-owned vehicles: combined single limit of \$1,000,000;

36.3. **Excess Liability Insurance.** Coverage to be written on an occurrence form. Coverage terms and limits to apply excess of the per occurrence and/or aggregate limits provided for Commercial General Liability, Auto Liability and Professional Liability. Coverage terms and limits to also apply in excess of those required for Employers Liability:

- \$10,000,000 each occurrence
- \$10,000,000 aggregate

36.4. **Professional Liability insurance.** Coverage to be written on an occurrence-made form:

- \$1,000,000 per occurrence
- \$2,000,000 aggregate

36.5. **Workers Compensation:** Statutory limits; and

36.6. **Employers' Liability:** \$1,000,000.

- Bodily Injury by accident \$1,000,000 each accident
- Bodily Injury by disease \$1,000,000 each employee
- Bodily Injury by disease \$1,000,000 policy limit

Commercial General Liability, Automobile Liability, Workers Compensation, and Employer's Liability limits may be reached through a combination of primary and umbrella/excess policies. The Designer/Builder shall provide to the District certificate(s) of insurance and endorsements satisfactory to the District. The policy(ies) shall not be amended or modified and the coverage amounts shall not be reduced without thirty (30) days written notice to the District prior to cancellation. Except for worker's compensation insurance and professional liability insurance, the District, shall be named as an additional insured on all policies. The Designer/Builder's policy(ies) shall be primary; any insurance carried by the District shall only be secondary and supplemental. The Designer/Builder shall not allow any subcontractor, employee, or agent to commence work on this Contract or any subcontract until the insurance required of the Designer/Builder of the subcontractor, or agent has been obtained.

36.7. **Builder's Risk Insurance: Builder's Risk "All Risk" Insurance.** Designer/Builder shall procure and maintain, during the life of this Contract, Builder's Risk (Course of Construction), or similar first party property coverage acceptable to the District, issued on a replacement cost value basis. The cost shall be consistent with the total replacement cost of all insurable Work included within the Contract Documents. Coverage is to insure against all risks of accidental physical loss and shall include without limitation the perils of vandalism and/or malicious mischief (both without any limitation regarding vacancy or occupancy), sprinkler leakage, civil authority, theft, sonic disturbance, earthquake, flood, collapse, wind, fire, war, terrorism, lightning, smoke, and rioting. Coverage shall include debris removal, demolition, increased costs due to enforcement of all applicable ordinances and/or laws in the repair and replacement of damaged and undamaged portions of the property, and reasonable costs for the design and engineering services and expenses required as a result of any insured loss upon the Work and Project, including completed Work and Work in progress, to the full insurable

value thereof.

- 37. WARRANTY/QUALITY:** Unless a longer warranty is called for elsewhere in the Contract, the Designer/Builder, manufacturer, or their assigned agents shall guarantee the workmanship, product or service performed against defective workmanship, defects or failures of materials for a minimum period of one (1) year from date when District achieves Beneficial Use.
- 38. CONFIDENTIALITY:** To the extent permitted by applicable law, the Parties shall maintain the confidentiality of all information, documents, programs, procedures, and all other items that the Parties encounter during the Project and/or pursuant to the Contract. This requirement shall be ongoing and shall survive the expiration or termination of this Contract and specifically includes all student, parent, and disciplinary information.
- 39. CONFLICT OF INTEREST:** Designer/Builder understands that its professional responsibility is solely to the District. Designer/Builder warrants that it and its employees and/or subcontractors presently have no interest and will not acquire any direct or indirect interest that would conflict with its performance under this Contract, including, without limitation, any direct and/or indirect interest with: (an) entity(ies) performing construction in the same discipline and in competition with any contractor on a District project; (b) entity(ies) connected or related to a trade union or joint labor management committee; (c) the District.
- 40. COMPLIANCE WITH LAWS:** Designer/Builder shall give all notices and comply with all laws, ordinance, rules and regulations bearing on conduct of the Work as indicated or specified, including all "Interpretation(s) of Regulations" issued by DSA on or before the date of this Contract. If Designer/Builder observes that any of the Work required by this Contract is at variance with any such laws, ordinance, rules or regulations, Designer/Builder shall notify the District, in writing, and, at the sole option of the District, any necessary changes shall be made and this Contract shall be appropriately amended in writing, or this Contract shall be terminated effective upon Designer/Builder's receipt of a written termination notice from the District. If Designer/Builder performs any work that is in violation of any laws, ordinances, rules or regulations, without first notifying the District of the violation, Designer/Builder shall bear all costs arising therefrom.
- 41. DISTRICT'S RIGHT TO AUDIT:** District retains the right to review and audit, and the reasonable right of access to Designer/Builder's and any sub-consultant's premises to review and audit the Designer/Builder's compliance with the provisions of this Contract ("District's Right"). The District's Right includes the right to inspect, photocopy, and to retain copies, outside of the Designer/Builder's premises, of any and all Project-related records and other information with appropriate safeguards, if such retention is deemed necessary by the District in its sole discretion. The District shall keep this information confidential, as allowed by applicable law.
- 41.1. The District's Right includes the right to examine any and all books, records, documents and any other evidence of procedures and practices that the District determines are necessary to discover and verify that the Designer/Builder is in compliance with all requirements of this Contract.
 - 41.2. If there is a claim for additional compensation or for extra Services, the District's Right includes the right to examine books, records, documents, and any and all other evidence and accounting procedures and practices that the District determines are necessary to discover and verify all direct and indirect costs, of whatever nature, which are claimed to have been incurred, or anticipated to be incurred.
 - 41.3. The Designer/Builder shall maintain complete and accurate records in accordance with generally accepted accounting practices in the industry. The Designer/Builder shall make available to the District for review and audit, all Project-related accounting records and documents, and any other financial data. Upon District's request, the Designer/Builder shall submit exact duplicates of originals of all requested records to the District.
 - 41.4. The Designer/Builder shall include audit provisions in any and all of its subcontracts, and shall ensure that these sections are binding upon all sub-consultants.
 - 41.5. The Designer/Builder shall retain all Project-related records and other information with appropriate safeguards during the Term of this Contract and for a minimum of five (5) years thereafter.
 - 41.6. Designer/Builder shall comply with these provisions within fifteen (15) days of the District's written

request to review and audit any or all of Designer/Builder's Project-related records and information.

42. DISPUTES/CLAIMS: Public Contract Code § 9204. Claims between the District and the Designer/Builder shall be resolved in accordance with the procedures established in Public Contract Code § 9204.

42.1. **Claim.** The term "Claim" means a written demand by the Designer/Builder sent by registered mail or certified mail with return receipt requested for:

42.1.1. An extension of the Contract Time, including relief from damages or penalties assessed by the District for delay;

42.1.2. Payment of money or damages arising from work done by, or on behalf of, the Designer/Builder pursuant to the Contract and payment that is not otherwise expressly provided for in the Contract Documents or to which the Designer/Builder is not otherwise entitled; or

42.1.3. Payment of an amount that is disputed by the District.

42.2. **Submission of Claim.** A Claim arises upon the District's rejection of a request by the Designer/Builder for a Change Order. The Designer/Builder shall submit the Claim by registered mail or certified mail with return receipt requested to the District's Director of construction and Modernization, with a copy to the Project Manager/Construction Manager. The Designer/Builder shall submit its Claim in writing, together with all Supporting Documentation no later than the earlier of either: (1) thirty (30) days after the date the Claim arises; or (2) sixty (60) days after the date of Completion. It is the intent of the District to evaluate and resolve Claims with the Designer/Builder as close to the events giving rise to such Claims as possible and to avoid stale or late Claims, including late notice and documenting of Claims, and to timely mitigate the issue, event, condition, circumstance and/or cause of the Claim and any adverse impacts or damages related thereto.

42.3. **Contents of Claim.** A Claim must include all Supporting Documentation and a statement identifying it as a Claim signed by an authorized agent or officer of the Designer/Builder under penalty of perjury and including the following language immediately above or before the Designer/Builder's signature: "I declare under penalty of perjury under the laws of the State of California that the information provided and statements made in this Claim are true and correct, substantiated and of merit." The Designer/Builder recognizes and acknowledges that this requirement is not a mere formality but is intended to ensure that the Designer/Builder only submits Claims that it believes are true and correct, substantiated and have merit.

42.4. **Subcontractor Claims.** Pursuant to Public Contract Code § 9204(d)(5), a Subcontractor may request in writing, either on its own behalf or on behalf of a lower tier Subcontractor, that the Designer/Builder submit to the District a claim for work which was performed by the Subcontractor or by a lower tier Subcontractor on behalf of the Subcontractor. The Subcontractor requesting that the claim be submitted to the District shall furnish reasonable documentation to support the claim. Regardless of whether or not the Designer/Builder decides to submit the Subcontractor's claim to the District, Designer/Builder shall provide a copy of the Subcontractor's written request, including all supporting documentation, to the Project Manager/Construction Manager within ten (10) days of Designer/Builder's receipt of the request. In the event the Designer/Builder agrees to submit a Subcontractor's claim to the District, the Designer/Builder shall submit such claim as a request for a Change Order, unless such claim was previously submitted to the District as a request for a Change Order. Within forty-five (45) days of receipt of the Subcontractor's written request, the Designer/Builder shall notify the Subcontractor in writing as to whether the Designer/Builder submitted the claim to the District and, if the Designer/Builder did not submit the claim, the Designer/Builder shall provide the Subcontractor with a written statement of the reasons for not having done so and shall concurrently provide a copy of such written statement to the Project

Manager/Construction Manager. In the event the Designer/Builder includes supporting documentation with such written statement, the Designer/Builder shall concurrently provide a copy of such supporting documentation to the Project Manager/Construction Manager. If the Designer/Builder submits a Claim on behalf of a Subcontractor, the Claim shall include a statement in writing and signed by an authorized agent or officer of the Designer/Builder under penalty of perjury that includes the following language immediately above or before the Designer/Builder's signature: "I declare under penalty of perjury under the laws of the State of California that [insert name of Designer/Builder] has thoroughly evaluated the claim of [insert name of Subcontractor] and determined that the information provided and statements made in the claim are true and correct, substantiated and of merit."

- 42.5. **District Review of Claim.** Upon receipt of a Claim, the District shall review the Claim and, within a period not to exceed forty-five (45) days, shall provide Designer/Builder a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Upon receipt of a Claim, the District and the Designer/Builder may, by mutual written agreement, extend the forty-five (45) day time period. The District shall process and make payment of any undisputed portion of a Claim within sixty (60) days after the District issues its written statement. Failure by the District to provide a written statement in response to a Claim from the Designer/Builder within the forty-five (45) day time period, or within an agreed upon extended time period, shall result in the Claim being deemed rejected in its entirety. A Claim that is rejected by reason of the District's failure to respond, or failure to timely respond, to the Claim shall not constitute an adverse finding regarding the merits of the Claim or the claimant's responsibility or qualifications.
- 42.6. **Meet and Confer Meeting.** If the Designer/Builder disputes the District's written response, or if the District fails to respond within the time frame prescribed above, the Designer/Builder, within fifteen (15) days of the District's written response or, if the District fails to respond, within fifteen (15) days after the District's response was due, may demand, in a writing sent to the District's Superintendent by registered mail or certified mail, return receipt requested, with a copy to the District's Director of Construction and Modernization, and Project Manager/Construction Manager, an informal conference to meet and confer for settlement of the issues in dispute. The District shall schedule a meet and confer conference within thirty (30) days of its receipt of the Designer/Builder's written demand.
- 42.7. **Mediation.** Within ten (10) business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the District shall provide the Designer/Builder a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within sixty (60) days after the District issues its written statement. Any disputed portion of the Claim, as identified by the Designer/Builder in writing, shall be submitted to nonbinding mediation. The expenses and fees of the mediator and the administrative fees shall be divided among the parties equally. Each party shall pay its own legal fees, witness fees, and other expenses. The District and the Designer/Builder shall mutually agree to a mediator within ten (10) business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. The foregoing notwithstanding, pursuant to Public Contract Code § 9204(f), the parties may mutually agree in writing to waive mediation.
- 42.8. Pending resolution of the dispute, Designer/Builder agrees it will neither rescind the Contract nor stop the progress of the Work but will allow determination by the court of the State of California, in the county in which the District's administration office is located, having competent jurisdiction of the dispute.

- 42.9. Nothing in this Article shall prevent the Parties from resolving any disputes or claims pursuant to Public Contract Code section 20104, et seq., if applicable.
- 42.10. Nothing in this Contract, waives, modifies or tolls the Designer/Builder's obligation to present a timely claim under Government Code § 910, et seq. Therefore, in addition to complying with the contractual Claims procedures, the Designer/Builder is required to present claims to the District pursuant to Government Code § 910, et seq.

43. LABOR, WAGE & HOUR, APPRENTICE AND RELATED PROVISIONS

43.1. Designer/Builder & Subcontractor Registration

- 43.1.1. Designer/Builder shall comply with the registration and compliance monitoring provisions of Labor Code section 1771.4, including furnishing its CPRs to the Labor Commissioner of California and complying with any applicable enforcement by the Department of Industrial Relations. Labor Code section 1771.1(a) states the following:

"A contractor or subcontractor shall not 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 any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded."

- 43.1.2. Designer/Builder acknowledges that, for purposes of Labor Code section 1725.5, all or some of the Work is a public work to which Labor Code section 1771 applies. Designer/Builder shall comply with Labor Code section 1725.5, including without limitation the registration requirements. Additionally, all Contractor's 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. Designer/Builder represents that all of its Subcontractors are registered pursuant to Labor Code section 1725.5.
- 43.1.3. The Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Designer/Builder shall post job site notices, as prescribed by regulation. Designer/Builder shall comply with all requirements of Labor Code section 1771.4, except the requirements that are exempted by the Labor Commissioner for the Project.

43.2. Wage Rates, Travel and Subsistence

- 43.2.1. Pursuant to the provisions of article 2 (commencing at section 1770), chapter 1, part 7, division 2, of the Labor Code of California, 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 to execute this Contract are on file at the District's principal office and copies will be made available to any interested party on request. Designer/Builder shall obtain and post a copy of these wage rates at the job site.
- 43.2.2. 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. The holidays upon which those rates shall be paid need not be specified by the District, but shall be all holidays recognized in the applicable collective bargaining agreement. If the prevailing rate is not based on a collectively bargained rate, the holidays upon which the prevailing rate shall be paid shall be as provided in Section 6700 of the Government Code.
- 43.2.3. Designer/Builder 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 of the Department of Industrial Relations ("DIR") ("Director"), regardless of any

contractual relationship which may be alleged to exist between Designer/Builder or any Subcontractor and such workers.

- 43.2.4. If during the period this bid is required to remain open, the Director determines that there has been a change in any prevailing rate of per diem wages in the locality in which the Work under the Contract is to be performed, such change shall not alter the wage rates in the Notice to Bidders or the Contract subsequently awarded.
- 43.2.5. Pursuant to Labor Code section 1775, Designer/Builder shall, as a penalty to District, forfeit the statutory amount, (currently not to exceed two hundred dollars (\$200) for each calendar day, or portion thereof), for each worker paid less than the prevailing rates, as determined by the District and/or the Director, for the work or craft in which that worker is employed for any public work done under Contract by Designer/Builder or by any Subcontractor under it.
 - 43.2.5.1. The amount of the penalty shall not be less than forty dollars (\$40) for each calendar day, or portion thereof, unless the failure of Designer/Builder was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of Designer/Builder.
 - 43.2.5.2. The amount of the penalty shall not be less than eighty dollars (\$80) for each calendar day or portion thereof, if Designer/Builder has been assessed penalties within the previous three (3) years for failing to meet prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.
 - 43.2.5.3. The amount of the penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, if the Labor Commissioner determines the Designer/Builder willfully violated Labor Code section 1775.
 - 43.2.5.4. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by Designer/Builder.
- 43.2.6. Any worker employed to perform Work on the Project, which Work is not covered by any classification listed in the general prevailing wage rate of per diem wages determined by the Director, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to Work to be performed by him, and such minimum wage rate shall be retroactive to time of initial employment of such person in such classification.
- 43.2.7. Pursuant to Labor Code section 1773.1, per diem wages are deemed to include employer payments for health and welfare, pension, vacation, travel time, subsistence pay, and apprenticeship or other training programs authorized by section 3093, and similar purposes.
- 43.2.8. Designer/Builder shall post at appropriate conspicuous points on the Site of Project, a schedule showing all determined minimum wage rates and all authorized deductions, if any, from unpaid wages actually earned. In addition, Designer/Builder shall post a sign-in log for all workers and visitors to the Site, a list of all subcontractors of any tier on the Site, and the required Equal Employment Opportunity poster(s).

43.3. **Hours of Work**

- 43.3.1. 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 Designer/Builder or by any Subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract shall be limited and restricted by Designer/Builder 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 Designer/Builder 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.

- 43.3.2. Designer/Builder 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 Designer/Builder in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of District and to the Division of Labor Standards Enforcement of the DIR.
- 43.3.3. Pursuant to Labor Code section 1813, Designer/Builder shall as a penalty to the District forfeit the statutory amount (believed by the District to be currently twenty five dollars (\$25)) for each worker employed in the execution of this Contract by Designer/Builder 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 forty (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.
- 43.3.4. Any Work necessary to be performed after regular working hours, or on Sundays or other holidays shall be performed without additional expense to the District.

43.4. **Payroll Records**

- 43.4.1. If requested by the District, Designer/Builder shall provide to the District and shall cause each Subcontractor performing any portion of the Work to provide the District an accurate and certified payroll record ("CPR(s)"), 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 the Designer/Builder and/or each Subcontractor in connection with the Work.

43.4.1.1. In addition to any other requirements pursuant to Labor Code sections 1770, et seq., the CPRs enumerated hereunder shall be certified.

- 43.4.2. All CPRs shall be available for inspection at all reasonable hours at the principal office of Designer/Builder on the following basis:

43.4.2.1. A certified copy of an employee's CPR shall be made available for inspection or furnished to the employee or his/her authorized representative on request.

43.4.2.2. CPRs shall be made available for inspection or furnished upon request to a representative of District, Division of Labor Standards Enforcement, Division of Apprenticeship Standards, and/or the Department of Industrial Relations.

43.4.2.3. CPRs shall be made available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the District, Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested CPRs have not been provided pursuant to the provisions herein, the requesting party shall, prior to being provided the records reimburse the costs of preparation by Designer/Builder, 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 Designer/Builder.

- 43.4.3. The form of certification for the CPRs shall be as follows:

I, _____ (Name-Print), the undersigned, am the _____
_____ (Position in business) with the authority to act for and on
behalf of _____ (Name of business and/or
Designer/Builder), certify under penalty of perjury that the records or copies thereof
submitted 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 actual disbursements by way of cash, check, or whatever form to the

individual or individual named, and (b) we have complied with the requirements of sections 1771, 1811, and 1815 of the Labor Code for any work performed by our employees on the Project.

Date: _____ Signature: _____

(Section 16401 of Title 8 of the California Code of Regulations)

- 43.4.4. Designer/Builder and all Subcontractors shall file a certified copy of the CPRs with the entity that requested the records within ten (10) days after receipt of a written request.
 - 43.4.5. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by District, Division of Apprenticeship Standards, or 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 Designer/Builder awarded Contract or performing Contract shall not be marked or obliterated.
 - 43.4.6. Designer/Builder shall inform District of the location of the records enumerated hereunder, including the street address, city, and county, and shall, within five (5) working days, provide a notice of change of location and address.
 - 43.4.7. In the event of noncompliance with the requirements of this section, Designer/Builder shall have ten (10) days in which to comply subsequent to receipt of written notice specifying in what respects Designer/Builder must comply with this section. Should noncompliance still be evident after the ten (10) day period, Designer/Builder shall, as a penalty to District, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of Division of Apprenticeship Standards or Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.
 - 43.4.8. It shall be the responsibility of Designer/Builder to ensure compliance with the provisions of Labor Code section 1776.
- 43.5. **Apprentices**
- 43.5.1. Designer/Builder acknowledges and agrees that, if this Contract involves a dollar amount greater than or a number of working days greater than that specified in Labor Code section 1777.5, then this Contract is governed by the provisions of Labor Code Section 1777.5. It shall be the responsibility of Designer/Builder to ensure compliance with this Article and with Labor Code section 1777.5 for all apprenticeship occupations.
 - 43.5.2. 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.
 - 43.5.3. Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he/she is employed, and shall be employed only at the work of the craft or trade to which she/he is registered.
 - 43.5.4. Only apprentices, as defined in section 3077 of the Labor Code, 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. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which he/she is training.
 - 43.5.5. Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Designer/Builder and any Subcontractors employing workers in any apprenticeable craft or trade in performing any Work under this Contract shall apply to the applicable joint apprenticeship committee for a certificate approving the Designer/Builder or Subcontractor

under the applicable apprenticeship standards and fixing the ratio of apprentices to journeymen employed in performing the Work.

- 43.5.6. Pursuant to Labor Code section 1777.5, if that section applies to this Contract as indicated above, Designer/Builder and any Subcontractor may be required to make contributions to the apprenticeship program.
- 43.5.7. If Designer/Builder or Subcontractor willfully fails to comply with Labor Code section 1777.5, then, upon a determination of noncompliance by the Administrator of Apprenticeship, it shall:
 - 43.5.7.1. Be denied the right to bid on any subsequent project for one (1) year from the date of such determination;
 - 43.5.7.2. Forfeit as a penalty to District the full amount as stated in 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 and under the authority of the Chief of the Division of Apprenticeship Standards.
- 43.5.8. Designer/Builder and all Subcontractors shall comply with Labor Code section 1777.6, which section forbids certain discriminatory practices in the employment of apprentices.
- 43.5.9. Designer/Builder 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, San Francisco, California 94102.
- 43.5.10. Designer/Builder shall ensure compliance with all certification requirements for all workers on the Project including, without limitation, the requirements for electrician certification in Labor Code sections 108, et seq.

43.6. **Non-Discrimination**

- 43.6.1. It is the policy of the District that in connection with all work performed under contracts there be no discrimination against any employee engaged in the work because of race, national origin, ancestry, religion, age, physical or mental disability, sex, or sexual orientation of such person, and therefore the Designer/Builder agrees to comply with applicable Federal and California laws including, but not limited to the California Fair Employment Practice Act beginning with Government Code Section 12900 and Labor Code Section 1735. In addition, the Designer/Builder agrees to require like compliance by all its subcontractor(s).
- 43.6.2. Special requirements for Federally Assisted Construction Contracts: During the performance of this Contract, Designer/Builder agrees to incorporate in all subcontracts the provisions set forth in Chapter 60-1.4(b) of Title 41 published in Volume 33 No. 104 of the Federal Register dated May 28, 1968.

- 43.7. **Labor First Aid.** Designer/Builder shall maintain emergency first aid treatment for its workers on the Project which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.) the California Occupational Safety and Health Act of 1973, and all related regulations, including without limitation section 330 et seq. of Title 8 of the California Code of Regulations.

44. ANTI-TRUST CLAIM: Designer/Builder and its subcontractor(s) agree to assign to the District all rights, title, and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Contract or a subcontract. This assignment shall be made and become effective at the time the District tenders final payment to the Designer/Builder, without further acknowledgment by the Parties.

45. GOVERNING LAW: This Contract shall be governed by and construed in accordance with the laws of the State of California with venue of any action in a County in which the District administration office is located.

- 46. PROVISIONS REQUIRED BY LAW DEEMED INSERTED:** Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and this Contract shall be read and enforced as though it were included therein.
- 47. BINDING CONTRACT:** This Contract shall be binding upon the Parties and upon their successors and assigns, and shall inure to the benefit of said parties and their successors and assigns.
- 48. DISTRICT WAIVER:** District's waiver of any term, condition, covenant or waiver of a breach of any term, condition or covenant shall not constitute the waiver of any other term, condition or covenant or the waiver of a breach of any other term, condition or covenant.
- 49. INVALID TERM:** If any provision of this Contract is declared or determined by any court of competent jurisdiction to be illegal, invalid or unenforceable, the legality, validity or enforceability of the remaining parts, terms and provisions shall not be affected thereby, and said illegal, unenforceable or invalid part, term or provision will be deemed not to be a part of this Contract.
- 50. ENTIRE CONTRACT:** This Contract sets forth the entire Contract between the Parties and fully supersedes any and all prior agreements, understanding, written or oral, between the Parties pertaining to the subject matter thereof. This Contract may be modified only by a writing upon mutual consent.
- 51. OWNERSHIP OF CERTAIN PROPRIETARY PROPERTY RIGHTS:** District shall not, by virtue of this Contract, acquire any interest in any formulas, patterns, devices, secret inventions or processes, copyrights, patents, other intellectual or proprietary rights, or similar items of property which are or may be used in connection with the equipment. Designer/Builder shall grant to District a perpetual, irrevocable royalty-free license for any and all software or other intellectual property rights necessary for District to continue to operate, maintain, and repair the equipment in a manner that will yield maximum energy production and/or energy consumption reductions.
- 52. OWNERSHIP OF ANY EXISTING EQUIPMENT:** Ownership of any equipment and materials presently existing at the Facilities at the time of execution of this Contract shall remain the property of the District even if it is replaced or its operation made unnecessary by work performed by Designer/Builder pursuant to this Contract. If applicable, Designer/Builder shall advise District in writing of all equipment and materials that will be replaced at the Facilities and District shall, within five (5) business days of Designer/Builder' notice, designate in writing to Designer/Builder which replaced equipment and materials that should not be disposed of off-site by Designer/Builder (the "**Retained Items**"). It is understood and agreed to by both Parties that District shall be responsible for and designate the location and storage for the Retained Items. Designer/Builder shall be responsible for the disposal of replaced equipment and materials, except for the Retained Items. Designer/Builder shall use commercially reasonable efforts to remove the Retained Items in such a manner as to avoid damage thereto, or if it is unreasonable to avoid damage altogether, to minimize the damage done.
- 53. UTILITY WORK:** District expressly understands and agrees that the definition "Force Majeure" above also includes any Interconnection Facilities work that may need to be performed by the local Utility ("**Utility**") in order for Designer/Builder to fully implement the Project. "Interconnection Facilities" shall mean any distribution or transmission lines and other facilities that may be required to connect equipment supplied under this Contract to an electrical distribution/transmission system owned and maintained by the Utility. Any Interconnection Facilities work that may be required will be performed by the Utility under a separate contract between District and the Utility. Designer/Builder shall prepare all Interconnection Facilities documentation, and collect all Interconnection Facilities information in a time frame to ensure maximum benefit to the District and to comply with all requirements. Designer Builder shall also cooperate and assist the District in facilitating the Interconnection Facilities work.
- 54. ENERGY CREDITS:** District shall own all right, title, and interest associated with or resulting from the development, construction, installation and ownership of the any facilities installed on the Project ("**Generating Facilities**"). This ownership includes the production, sale, purchase or use of the energy output including, without limitation:
- 54.1. All Environmental Incentives associated in any way with the Generating Facilities. "Environmental Incentives" means all rights, credits (including tax credits), rebates, benefits, reductions, offsets and allowances and entitlements of any kind, howsoever entitled or named (including carbon credits and

allowances), whether arising under federal, state or local law, international treaty, trade association membership or the like arising from the Generating Facilities or the energy produced or otherwise from the development, construction, installation or ownership of the Generating Facilities or the production, sale, purchase, consumption or use of the energy produced from the Generating Facilities. Without limiting the foregoing, "Environmental Incentives" includes green tags, renewable energy credits, tradable renewable certificates, portfolio energy credits, the right to apply for (and entitlement to receive) incentives under the California Solar Initiative or other incentive programs offered by the State of California and the right to claim federal income tax credits under Section 45 or 48 of the Code as such credits are available arising from the Environmental Attributes of the Generating Facilities or the energy produced from the Generating Facilities or the production, sale, purchase, consumption or use of the energy produced from the Generating Facilities.

- 54.2. All rights and interests in performance based incentive payments to be made under the California Solar Initiative.
- 54.3. All reporting rights and the exclusive rights to claim that the District is responsible for the delivery of the energy from the Generating Facilities.
- 54.4. The District is responsible for the reductions in emissions of pollution and greenhouse gases resulting from the generation of the energy and the delivery thereof to each Energy Delivery Point.
- 54.5. The District is entitled to all credits, certificates, registrations, etc., evidencing or representing any of the foregoing.
- 54.6. District shall be the owner of and shall be entitled to all: (i) carbon reduction tonnes as defined under the California Action Reserve or such similar definition as enacted by the State of California or the U.S. Federal Government; and (ii) "renewable energy credits," as such term is defined in Section 399.12(h)(2) of the California Public Utilities Code, associated with the Generating Facilities, and Designer/Builder shall take such steps as District shall reasonably request to confirm District's ownership of such renewable energy credits.
- 54.7. Design/Builder is not responsible for compliance, certification, reporting, or other requirements associated with the sale, ownership, rights, or certifications for these energy credits, but Design/Builder will provide advice and consultation to the District as requested.
- 54.8. Design/Builder will use its best efforts so that the data collection of the system will be sufficient to take advantage of the energy credit market.

55. REBATE PROGRAMS: On behalf of the District, Designer/Builder shall prepare and submit to the applicable agencies all applications and documentation necessary for all available energy production and/or energy efficiency rebate(s), incentive(s), and/or loan program(s) ("Incentive Funds"). This shall include actions necessary to ensure compliance with the Utility's net metering program and all interconnection agreements and related documents for the District's participation and utilization of the benefits of that program. While Designer/Builder has extensive experience in assisting with procuring Incentive Funds for school districts, Designer/Builder cannot guarantee that these Incentive Funds will be received by the District. Procurement, or lack thereof, of these Incentive Funds will not alter the Contract Amount of this Contract, or payment timeline associated with standard progress invoicing and payments.

56. RESPONSIBILITIES OF THE DISTRICT

- 56.1. The District shall examine the documents submitted by the Designer/Builder and shall render decisions so as to avoid unreasonable delay in the process of the Designer/Builder's Services.
- 56.2. The District shall verbally or in writing advise the Designer/Builder if the District becomes aware of any fault or defect in the Project, including any errors, omissions or inconsistencies in the Designer/Builder's documents. Failure to provide such notice shall not relieve Designer/Builder of its responsibility therefore, if any.
- 56.3. Unless the District and the Designer/Builder agree that a hazardous materials consultant shall be a consultant of the Designer/Builder, the District shall furnish the services of a hazardous material consultant or other consultants when such services are requested in writing by Designer/Builder and

deemed necessary by the District or are requested by the District. These services shall include: asbestos and lead paint survey; abatement documentation; and specifications related to said matters which are to be incorporated into bid documents prepared by Designer/Builder. If the hazardous materials consultant is furnished by the District and not a consultant of the Designer/Builder, the specifications shall include a note to the effect that they are included in the Designer/Builder's bid documents for the District's convenience and have not been prepared or reviewed by the Designer/Builder. The note shall also direct questions about the specifications to its preparer.

- 56.4. District personnel and/or its designated representatives shall coordinate with Designer/Builder as may be requested and desirable for the coordination or management of work related to the Project.
- 56.5. The District shall provide to the Designer/Builder all relevant information it possesses regarding the Project that the Designer/Builder needs to perform its Services. The District shall provide this information and its decisions required under this Contract in a timely manner and to avoid unreasonable delay in the Project.
- 56.6. The District will pay for all fees associated with any rebate programs for programs the District wishes to participate in.

57. LIABILITY OF DISTRICT

- 57.1. Other than as provided in this Contract, District's financial obligations under this Contract shall be limited to the payment of the compensation provided in this Contract. Notwithstanding any other provision of this Contract, in no event shall District be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits or revenue, arising out of or in connection with this Contract for the Services performed in connection with this Contract.
- 57.2. District shall not be responsible for any damage to persons or property as a result of the Designer/Builder's use, misuse or failure of any equipment used by Designer/Builder, or by its employees, even though such equipment be furnished or loaned to Designer/Builder by District.

58. PERFORMANCE GUARANTEE. Designer/Builder hereby guarantees to District guaranteed energy output from each System as indicated in the attached **Exhibit G** (Performance Guarantee Parameters and Energy Output Data) ("Performance Guarantee"). The Performance Guarantee is only excused by the terms of **Exhibit G** and pursuant to its obligations under the Operations & Maintenance Contract, attached hereto as **Exhibit B**.

NONCOLLUSION DECLARATION
(Public Contract Code § 7106)

The undersigned declares:

I am the _____ **[PRINT YOUR TITLE]**

of _____ **[PRINT FIRM NAME]**,

the party making the foregoing Contract.

The Contract is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Contract is genuine and not collusive or sham. The Designer/Builder has not directly or indirectly induced or solicited any other entity to put in a false or sham bid or proposal. The Designer/Builder has not directly or indirectly colluded, conspired, connived, or agreed with any other designer/builder or anyone else to put in a sham bid or proposal, or to refrain from proposing. The Designer/Builder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the Contract Price of the Designer/Builder or any other entity, or to fix any overhead, profit, or cost element of the Contract Price, or of that of any other entity. All statements contained in the Contract are true. The Designer/Builder has not, directly or indirectly, submitted his or her Contract Price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid or proposal, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Designer/Builder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Designer/Builder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on the following date:

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

(ATTACH NOTARIAL ACKNOWLEDGMENT FOR THE ABOVE SIGNATURE)

PREVAILING WAGE CERTIFICATION

I hereby certify that I will conform to the State of California Public Works Contract requirements regarding prevailing wages, benefits, on-site audits with 48-hours notice, payroll records, and apprentice and trainee employment requirements, for all Work on the above Project.

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

WORKERS' COMPENSATION CERTIFICATION

Labor Code section 3700 in relevant part provides:

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 by 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, 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 employees.

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

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

(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 this Contract.)

FINGERPRINTING/CRIMINAL BACKGROUND INVESTIGATION CERTIFICATION

The undersigned does hereby certify to the governing board of the District that:

- (1) He/she is a representative of the Designer/Builder,
- (2) He/she is familiar with the facts herein certified,
- (3) He/she is authorized and qualified to execute this certificate on behalf of Designer/Builder; and
- (4) That the information in this Criminal Background Investigation / Fingerprinting Certification is true and correct.

1. **Education Code.** Designer/Builder has taken at least one of the following actions with respect to the Project (check all that apply):

_____ The Designer/Builder has complied with the fingerprinting requirements of Education Code section 45125.1 with respect to all Designer/Builder's employees and all of its subcontractors' employees who may have contact with District pupils in the course of providing services pursuant to the Contract, and the California Department of Justice ("DOJ") has determined (per the DOJ process for Applicant Agencies described more fully on its website, located at:

<http://oag.ca.gov/fingerprints/agencies>) that none of those employees have been convicted of a felony, as that term is defined in Education Code section 45122.1. A complete and accurate list of Designer/Builder's employees and of all of its subcontractors' employees who may come in contact with District pupils during the course and scope of the Contract is attached hereto; and/or

_____ Pursuant to Education Code section 45125.2, Designer/Builder has installed or will install, prior to commencement of work, a physical barrier at the Project site, that will limit contact between Designer/Builder's employees and District pupils at all times; and/or

_____ Pursuant to Education Code section 45125.2, Designer/Builder certifies that all employees will be under the continual supervision of, and monitored by, an employee of the Designer/Builder who the California Department of Justice has ascertained has not been convicted of a violent or serious felony. The name and title of the employee who will be supervising Designer/Builder's employees and its subcontractors' employees is:

Name: _____

Title: _____

_____ ~~The Work on the Contract is at an unoccupied school site and no employee and/or subcontractor or supplier of any tier of Contract shall come in contact with the District pupils.~~

2. **Megan's Law (Sex Offenders).** I have verified and will continue to verify that the employees of Designer/Builder that will be on the Project site and the employees of the Subcontractor(s) that will be on the Project site are **not** listed on California's "Megan's Law" Website (<http://www.meganslaw.ca.gov/>).

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

DRUG-FREE WORKPLACE / TOBACCO-FREE ENVIRONMENT CERTIFICATION

Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990, requires that every person or organization awarded a contract or grant for the procurement of any property or service 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 or grant awarded by a state agency may be subject to suspension of payments or termination of the contract or grant, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred. The District is not a "state agency" as defined in the applicable section(s) of the Government Code, but the District is a local agency and public school district under California law and requires all contractors on District projects to comply with the provisions and requirements of Government Code section 8350 et seq., the Drug-Free Workplace Act of 1990. Contractor shall certify that it will provide a drug-free workplace by doing all of the following:

- 1 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;
- 2 Establishing a drug-free awareness program to inform employees about all of the following:
 - a. The dangers of drug abuse in the workplace.
 - b. The person's or organization's policy of maintaining a drug-free workplace.
 - c. The availability of drug counseling, rehabilitation, and employee-assistance programs.
 - d. The penalties that may be imposed upon employees for drug abuse violations.
- 3 Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required above, and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I 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 termination, suspension of payments, 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.

In addition, and pursuant to, without limitation, 20 U.S.C section 6083, Labor Code section 6400 et seq., Health & Safety Code section 104350 et seq. and District Board Policies, all District sites, including the Project site, are tobacco-free environments. Smoking and the use of tobacco products by all persons is prohibited on or in District property. District property includes school buildings, school grounds, school owned vehicles and vehicles owned by others while on District property. I acknowledge that I am aware of the District's policy regarding tobacco-free environments and hereby certify that I will adhere to the requirements of that policy and not permit any of my firm's employees, agents, subcontractors, or my firm's subcontractors' employees or agents to use tobacco and/or smoke on the Project site

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

ASBESTOS & OTHER HAZARDOUS MATERIALS CERTIFICATION

Designer/Builder hereby certifies that no Asbestos, or Asbestos-Containing Materials, polychlorinated biphenyl (PCB), or any material listed by the federal or state Environmental Protection Agency or federal or state health agencies as a hazardous material, or any other material defined as being hazardous under federal or state laws, rules, or regulations "New Material Hazardous", shall be furnished, installed, or incorporated in any way into the Project or in any tools, devices, clothing, or equipment used to affect any portion of Designer/Builder's work on the Project for District.

Designer/Builder further certifies that it has instructed its employees with respect to the above-mentioned standards, hazards, risks, and liabilities.

Asbestos and/or asbestos-containing material shall be defined as all items containing but not limited to chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (.1%) asbestos shall be defined as asbestos-containing material.

Any disputes involving the question of whether or not material is New Hazardous Material shall be settled by electron microscopy or other appropriate and recognized testing procedure, at the District's determination. The costs of any such tests shall be paid by Designer/Builder if the material is found to be New Hazardous Material.

All Work or materials found to be New Hazardous Material or Work or material installed with "New Hazardous Material" containing equipment will be immediately rejected and this Work will be removed at Designer/Builder's expense at no additional cost to the District.

Designer/Builder has read and understood the document Hazardous Materials Procedures & Requirements, and shall comply with all the provisions outlined therein.

Date:	_____
Proper Name of Designer/Builder:	_____
Signature:	_____
Print Name:	_____
Title:	_____

LEAD-PRODUCT(S) CERTIFICATION

California Occupational Safety and Health Administration (CalOSHA), Environmental Protection Agency (EPA), California Department of Health Services (DHS), California Department of Education (CDE), and the Consumer Product Safety Commission (CPSC) regulate lead-containing paint and lead products.

Because the Designer/Builder and its employees will be providing services for the District, and because the Designer/Builder's work may disturb lead-containing building materials, **DESIGNER/BUILDER IS HEREBY NOTIFIED** of the potential presence of lead-containing materials located within certain buildings utilized by the District. All school buildings built prior to 1993 are presumed to contain some lead-based paint until sampling proves otherwise.

The CDE mandates that school districts utilize DHS lead-certified personnel when a lead-based hazard is identified. Examples of lead-certified personnel include: project designers, inspectors, and abatement workers. Furthermore, since it is assumed by the district that all painted surfaces (interior as well as exterior) within the District contain some level of lead, it is imperative that the Designer/Builder, its workers and subcontractors fully and adequately comply with all applicable laws, rules and regulations governing lead-based materials **(Including Title 8, California Code of Regulations, Section 1532.1)**. Any and all Work which may result in the disturbance of lead-containing building materials must be coordinated through the District.

The California Education Code also prohibits the use or import of lead-containing paint, lead plumbing and solders, or other potential sources of lead contamination in the construction of any new school facility or in the modernization or renovation of any existing school facility. The Designer/Builder shall provide the District with any sample results prior to beginning Work, during the Work, and after the completion of the Work. The District may request to examine, prior to the commencement of the Work, the lead training records of each employee of the Designer/Builder. If failure to comply with these laws, rules, and regulations results in a site or worker contamination, the Designer/Builder will be held solely responsible for all costs involved in any required corrective actions, and shall defend, indemnify and hold harmless the District, pursuant to the indemnification provisions of the Contract, for all damages and other claims arising therefrom. If lead disturbance is anticipated in the Work, only persons with appropriate accreditation, registrations, licenses and training shall conduct this Work.

It shall be the responsibility of the Designer/Builder to properly dispose of any and all waste products, including but not limited to, paint chips, any collected residue, or any other visual material that may occur from the prepping of any painted surface. It will be the responsibility of the Designer/Builder to provide the proper disposal of any hazardous waste by a certified hazardous waste hauler. This company shall be registered with the Department of Transportation (DOT) and shall be able to issue a current manifest number upon transporting any hazardous material from any school site within the District.

THE UNDERSIGNED HEREBY ACKNOWLEDGES, UNDER PENALTY OF PERJURY, THAT HE OR SHE HAS RECEIVED NOTIFICATION OF POTENTIAL LEAD-BASED MATERIALS ON THE OWNER'S PROPERTY, AS WELL AS THE EXISTENCE OF APPLICABLE LAWS, RULES AND REGULATIONS GOVERNING WORK WITH, AND DISPOSAL OF, SUCH MATERIALS WITH WHICH IT MUST COMPLY. THE UNDERSIGNED ALSO WARRANTS THAT HE OR SHE HAS THE AUTHORITY TO SIGN ON BEHALF OF AND BIND THE DESIGNER/BUILDER.

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

ROOFING CONTRACT FINANCIAL INTEREST CERTIFICATION
(Public Contract Code § 3006)

I, _____, _____
Name Name of Designer/Builder

certify that I have not offered, given, or agreed to give, received, accepted, or agreed to accept, any gift, contribution, or any financial incentive whatsoever to or from any person in connection with the roof project contract or subcontract on the Project. As used in this certification, "person" means any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

Furthermore, I _____, _____
Name Name of Designer/Builder

certify that I do not have, and throughout the duration of the Contract, I will not have, any financial relationship in connection with the performance of the Contract with any architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor that is not disclosed below.

I, _____, _____
Name Name of Designer/Builder

have the following financial relationships with an architect, engineer, roofing consultant, materials manufacturer, distributor, or vendor, or other person in connection with the following roof project contract:

Name of firm ("Firm"): _____

Mailing address: _____

Address of branch office used for this Project: _____

If subsidiary, name and address of parent company: _____

I certify that to the best of my knowledge, the contents of this disclosure are true, or are believed to be true.

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

IRAN CONTRACTING ACT CERTIFICATION
(Public Contract Code § 2204)

Pursuant to Public Contract Code (PCC) section 2204, an Iran Contracting Act certification is required for solicitations of goods or services of one million dollars (\$1,000,000) or more.

Designer/Builder shall complete **ONLY ONE** of the following two paragraphs. s

- ☐ 1. Designer/Builder's Proposal is less than one million dollars (\$1,000,000).

OR

- ☐ 2. Designer/Builder's Proposal is one million dollars (\$1,000,000) or more, but Designer/Builder is **not** on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code § 2203(b), and Designer/Builder is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

OR

- ☐ 3. Designer/Builder's Proposal is one million dollars (\$1,000,000) or more, but the District has given prior written permission to Designer/Builder to submit a proposal pursuant to PCC 2203(c) or (d). **A copy of the written permission from the District is included with this Contract.**

I certify that I am duly authorized to legally bind the Designer/Builder to this certification, that the contents of this certification are true, and that this certification is made under the laws of the State of California.

Date: _____
Proper Name of Designer/Builder: _____
Signature: _____
Print Name: _____
Title: _____

END OF DOCUMENT

PERFORMANCE BOND
(100% of construction cost, as agreed to by the District)

(Note: Designer/Builder must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the governing board ("**Board**") of the Fullerton Joint Union High School District ("**District**") and _____, Inc. ("**Principal**") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to perform the following project:

_____ (Project Name)
 ("**Project**" or "**Contract**")

which Contract dated _____, 20____, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof, and

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

NOW, THEREFORE, the Principal and _____ ("**Surety**") are held and firmly bound unto the Board of the District in the penal sum of _____ DOLLARS (\$_____), lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents, to:

- Perform all the work required to complete the Project; and
- Pay to the District all damages the District incurs as a result of the Principal's failure to perform all the Work required to complete the Project.

The condition of the obligation is such that, if the above bounden Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in the Contract and any alteration thereof made as therein provided, on his or its part to be kept and performed at the time and in the intent and meaning, including all contractual guarantees and warranties of materials and workmanship for one (1) year from the completion date of the work of this Contract, and shall indemnify and save harmless the District, its trustees, officers and agents, as therein stipulated, then this obligation shall become null and void, otherwise it shall be and remain in full force and virtue.

As a condition precedent to the satisfactory completion of the Contract, the above obligation shall hold good for one (1) year from the completion date of the work of this Contract, during which time Surety's obligation shall continue if Designer/Builder shall fail to make full, complete, and satisfactory repair, replace and totally protect the District from loss or damage resulting from or caused by defective materials or faulty workmanship. Nothing herein shall limit the District's rights or the Designer/Builder's or Surety's obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15 during the bond term.

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

Any claims under this bond may be addressed to the Surety at the following address. This cannot be the Designer/Builder's broker for this bond, but must be an employee of the Surety or the Surety's legal counsel:

Attention: _____

Telephone No.: (_____) _____ - _____

Fax No.: (_____) _____ - _____

E-mail Address: _____

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____, 20____.

(Affix Corporate Seal)

_____, Inc.
Principal

By

Surety

By

Name of California Agent of Surety

Address of California Agent of Surety

Telephone Number of California Agent of Surety

Designer/Builder must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.

PAYMENT BOND
Contractor's Labor & Material Bond
(100% of construction cost, as agreed to by the District)

(Note: Designer/Builder must use this form, NOT a surety company form.)

KNOW ALL PERSONS BY THESE PRESENTS:

WHEREAS, the governing board ("**Board**") of the Fullerton Joint Union High School District ("**District**") and _____, Inc. ("**Principal**") have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to

_____ (Project Name)
 ("**Project**" or "**Contract**")

which Contract dated _____, 20____, and all of the Contract Documents attached to or forming a part of the Contract, are hereby referred to and made a part hereof, and

WHEREAS, pursuant to law and the Contract, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by which the Contract is awarded in an amount equal to 100 percent (100%) of the Contract price, to secure the claims to which reference is made in sections 3179 through 3214 and 3247 through 3252 of the Civil Code of California, and division 2, part 7, of the Labor Code of California.

NOW, THEREFORE, the Principal and _____, ("**Surety**") are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the sum of _____ Dollars (\$ _____), lawful money of the United States, being a sum not less than the total amount payable by the terms of Contract, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The condition of this obligation is that if the Principal or any of his or its subcontractors, of the heirs, executors, administrators, successors, or assigns of any, all, or either of them shall fail to pay for any labor, materials, provisions, provender, 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 Act with respect to such work or labor, that the Surety will pay the same in an amount not exceeding the amount herein above set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney's fee to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under sections 3179 through 3214 and 3247 through 3252 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void; otherwise it shall be and remain in full force and affect.

And the Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of Contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety above named, on the _____ day of _____, 20____.

(Affix Corporate Seal)

_____, Inc.

Principal

By

Surety

By

Name of California Agent of Surety

Address of California Agent of Surety

Telephone Number of California Agent of Surety

Designer/Builder must attach a Notarial Acknowledgment for all Surety's signatures and a Power of Attorney and Certificate of Authority for Surety. The California Department of Insurance must authorize the Surety to be an admitted surety insurer.

Exhibit A

SCOPE OF WORK

Article 1. ASSESSMENT. Designer/Builder shall prepare an analysis of the site and suggest the best option, in its professional opinion, for photovoltaic (PV) panel design and installation at the Sites.

Article 2. DESIGN SERVICES

- 2.1. During the Design and Construction Phases of the Project, Designer/Builder will meet with District to review equipment, scope of work, and installation plans that relate to the design and construction of the Project.
- 2.2. During the course of the Work, and at least weekly, Designer/Builder will provide reports to the District of the general status and progress of the Work.
- 2.3. Although the Parties acknowledge that the Designer/Builder's Services are not completely severable between design, procurement, installation, construction, commissioning, and training, the following scopes of services will be generally referred to as the Services that the Designer/Builder shall perform during the design phase of the Work for the scopes of work for which Designer/Builder is designing the Project, which are the following portions of the Project:

Design, Installation, and Construction of a _____ kWdc (first year energy production of _____ kilowatt hours) Photovoltaic Entire System at the Sites, as further described herein below, and similar in size, appearance, and structure as indicated in Exhibit F:

[PREPARE THE FOLLOWING INFORMATION FOR EACH SITE.]

_____ **School**

System Size (DC kW): _____ kWdc Site Total

System Size (AC kW): _____ kWcec-ac Site Total

System Location: [physical descriptions of locations on the property]

Modules: [manufacturer and model number] _____ (_____ modules) PV modules or better

Expected Energy: Year 1 Total = _____ kWh

25-Year Total = _____ kWh

Inverter: [manufacturer and model number] _____ [Number? String? Single?]

Structure: _____ fixed tilt dual-cantilever and single-cantilever carport DSA pre-checked structures or better. Expected characteristics: (i) _____ depth piers with _____ exposed concrete bollards above grade; (ii) _____ degree azimuth; (iii) up to _____ degree tilt; and (iv) _____ clearance.

Point of Interconnection: Main Electrical Meter # _____
("Delivery Point")

2.4. Scope, Responsibilities, and Services of Designer/Builder

- 2.4.1. Designer/Builder shall provide Services that shall comply with professional architectural and engineering standards, recognized industry standards for professional skill and judgment, and applicable requirements of federal, state, and local law.
- 2.4.2. Designer/Builder acknowledges that all California school districts are now obligated to develop and implement storm water requirements.
- 2.4.3. Designer/Builder shall contract for or employ at Designer/Builder's expense, consultant(s) to the extent deemed necessary for completion of its Services on the Project including, but not limited to, architects, mechanical, electrical, structural, civil engineers, landscape architects, low voltage, data, and telephone consultants as necessary, licensed as required by the State of California. Nothing in the foregoing procedure shall create any contractual relationship between the District and any consultant employed by the Designer/Builder under terms of the Contract.
- 2.4.4. The District shall provide to Design/Builder information and documentation that the District currently has related to the School Sites including geotechnical reports, topographic surveys, and related items. If Designer/Builder determines that the information or documentation the District provides is insufficient for purposes of design or if the Designer/Builder believes it needs additional information, including a topographical survey; geotechnical report; structural, mechanical, and/or chemical tests; tests for air and/or water pollution; test borings; test pits; determinations of soil bearing values; determinations of the location of all subsurface utilities; percolation tests; ground corrosion tests; resistivity tests; tests for hazardous materials; and/or tests for anticipating subsoil conditions, the Designer/Builder shall procure those items, at its expense, that it determines are required to complete the Project.
- 2.4.5. Designer/Builder shall coordinate with District personnel and/or its designated representatives as may be requested and desirable, including with other professionals employed by the District for the design, coordination or management of other work on the School Sites.
- 2.4.6. Designer/Builder shall identify the regulatory agencies that have jurisdiction over essential building and design elements and coordinate with and implement the requirements of the regulatory agencies or their authorized agents, including, without limitation, California Department of Education (CDE), the Office of Public School Construction (OPSC), the Department of General Services (DGS), DSA Fire/Life Safety, DSA Access Compliance Section, DSA Structural Safety, State Fire Marshal, County and City Health Inspectors and any regulatory office or agency that has authority for review and supervision of school district construction projects.
 - 2.4.6.1. Construction Documents must be reviewed and approved by the DSA. Designer/Builder shall be responsible for obtaining all DSA approvals and shall account for DSA requirements in their system designs, project pricing, and schedule. Designer/Builder represents to the District that it has a complete and accurate understanding of DSA requirements.
- 2.4.7. Designer/Builder shall be held solely responsible for obtaining approvals from the District, including revising designs as necessary until they are given approval by the District and all other required entities and organizations. System design shall comply with all applicable laws, statutes, ordinances, codes, rules, and regulations for construction projects of jurisdictions with authority over the District. Designer/Builder is responsible for providing

designs approved by professionals of all necessary disciplines, each duly licensed in the State of California. Designer/Builder's designs shall conform to the District's determination of aesthetics, and the designs must not conflict with any current District operations.

- 2.4.8. Designer/Builder shall provide Services required to obtain local agencies' approval for off-site work related to the Project including review by regulatory agencies having jurisdiction over the Project, if applicable.
- 2.4.9. Designer/Builder shall coordinate with the District's DSA Project Inspector(s).
- 2.4.10. Designer/Builder shall provide pictures downloaded to computer files, updated as requested by the District that the District may use on its website. Pictures shall be limited to Designer/Builder's Project scope.
- 2.4.11. As part of the basic Services pursuant to this Contract, Designer/Builder is NOT responsible for the following, however, it shall coordinate and integrate its work with any of the following information and/or services provided by District:
 - 2.4.11.1. Ground contamination or hazardous material analysis.
 - 2.4.11.2. Any asbestos and/or lead testing, design or abatement.
 - 2.4.11.3. Compliance with the California Environmental Quality Act ("CEQA"), except that Designer/Builder agrees to coordinate its work with that of any CEQA consultants retained by the District, to provide current elevations and schematic drawings for use in CEQA compliance documents at no additional cost to the District. If the District and/or its CEQA consultant does not provide mitigation measures to the Designer/Builder when reasonably required for incorporation into the Project design, the Designer/Builder may invoice the District for the work required to incorporate those mitigation measures as a change order.
 - 2.4.11.4. Historical significance report.
 - 2.4.11.5. Re-zoning: it is assumed that the proposed locations are zoned for solar electric installations and no delays will occur due to zoning issues.
 - 2.4.11.6. Easement adjustments: it is assumed that no roads, bridges, utility power lines, local CC&R's, etc., will be of such a nature as to disrupt the solar installation and no delays will occur due to easement issues.

2.5. Designer/Builder Staff

- 2.5.1. The Designer/Builder has been selected to perform the Services herein because of the skills and expertise of key individuals.
- 2.5.2. The Designer/Builder shall not change any of the key personnel without prior written approval by District, unless said personnel cease to be employed by Designer/Builder. In either case, District shall be allowed to interview and approve replacement personnel. Such approval shall not be unreasonably withheld.
- 2.5.3. If any designated lead or key person fails to perform to the reasonable satisfaction of the District, then upon written notice the Designer/Builder shall have five (5) days to remove that person from the Project and replace that person with one reasonably acceptable to the District.
- 2.5.4. Designer/Builder shall comply with Education Code section 17302(a) and agrees that any plans and/or specifications included in the Services shall be prepared under the supervision of licensed personnel, and that licensed personnel shall be in "responsible charge" of persons who observe the construction.

2.6. Ownership of Data

- 2.6.1. Pursuant to Education Code section 17316, this Contract creates a non-exclusive and perpetual license for District to use, at its discretion, all plans, including, but not limited to, record drawings, specifications, and estimates that the Designer/Builder or its consultants, prepares or causes to be prepared pursuant to this Contract, limited to this Work.
- 2.6.2. The Designer/Builder retains all rights to all copyrights, designs and other intellectual property embodied in the plans, record drawings, specifications, estimates, and other documents that the Designer/Builder or its consultants prepares or causes to be prepared pursuant to this Contract.
- 2.6.3. The Designer/Builder shall perform the Services and prepare all documents under this Contract with the assistance of Computer Aided Design Drafting (CADD) (e.g., AutoCAD) Technology. The Designer/Builder shall deliver to the District, on request, by tape, "thumb" drive, compact disc and/or Box file hosting service (at the District's option), and compatible with AutoCAD 2006 and/or Adobe Portable Document Format (at the District's option).
- 2.6.4. In order to document exactly what CADD information was given to the District, Designer/Builder and District shall each sign a "hard" copy of reproducible documents that depict the information at the time Designer/Builder produces the CADD information. District agrees to release Designer/Builder from all liability, damages, and/or claims that arise due to any changes made to this information by anyone other than the Designer/Builder or Consultant(s) subsequent to it being given to the District.
- 2.6.5. Following the termination of this Contract, for any reason whatsoever, the Designer/Builder shall promptly deliver to the District upon written request the following items (hereinafter "Instruments of Service") in electronic format (Microsoft Word), unless otherwise indicated, assuming the District has made all payments to Designer/Builder as required by the termination provisions in this Contract.
 - 2.6.5.1. One set of the Contract, including the bidding requirements, specifications, and all existing cost estimates for the Project, in hard copy, reproducible format.
 - 2.6.5.2. One set of fixed image CADD files in DXF format of the drawings that are part of the Contract.
 - 2.6.5.3. One set of non-fixed image CADD drawing files in DXF and/or DWG format of the site plan, floor plans (architectural, plumbing, structural mechanical and electrical), roof plan, sections and exterior elevations of the Project.
 - 2.6.5.4. All finished or unfinished documents, studies, reports, calculations, drawings, maps, models, photographs, technology data and reports prepared by the Designer/Builder under this Contract.
- 2.6.6. In the event the District changes or uses any fully or partially completed documents without the Designer/Builder's knowledge and participation, the District agrees to release Designer/Builder of responsibility for such changes, and shall indemnify, defend and hold the Designer/Builder harmless from and against any and all claims, liabilities, suits, demands, losses, costs and expenses, including, but not limited to, reasonable attorneys' fees, on account of any damages or losses to property or persons, including injuries or death, or economic losses, arising out of that change or use except to the extent the Designer/Builder is found to be liable in a forum of competent jurisdiction. In the event District uses any fully or partially completed documents without the Designer/Builder's full involvement, the District shall remove all title blocks and other information that might identify the Designer/Builder and the Designer/Builder's consultants.

2.7. Certificate of Designer/Builder

- 2.7.1. Designer/Builder certifies that the Designer/Builder is properly certified and licensed under the laws and regulations of the State of California to provide the professional Services that it has herein agreed to perform.

Article 3. DESIGN SERVICES BY PHASE

- 3.1. **Early Design Phase(s).** Designer/Builder agrees to provide the services described below:
- 3.2. Designer/Builder shall be responsible for the professional quality and technical accuracy of all studies, reports, projections, master plans, designs, drawings, specifications and other services furnished by Designer/Builder under the Contract as well as coordination with all Master plans, studies, reports and other information provided by District. Designer/Builder shall, without additional compensation, correct or revise any errors or omissions in its studies, reports, projections, master plans, design, drawings, specifications and other services.
- 3.3. **Schematic Design / Design Development Phase.** The Designer/Builder shall prepare for the District's review a design report, containing the following items if applicable to the Project scope, as follows:
 - 3.3.1. Prepare and review with District staff a scope of work list and work plan identifying specific tasks including, but not limited to: concepts and schematic design preparation and estimating that are part of the work of the Project. Also identified will be specific task responsibilities of the Designer/Builder, required completion times necessary for the review and approval by the District and by pertinent regulatory agencies and additional definition of deliverables.
 - 3.3.2. Solar structure layout at the School Sites.
 - 3.3.3. **Structural**
 - 3.3.3.1. Structural drawing with all major members located and sized.
 - 3.3.3.2. Layout structural and identify structural systems
 - 3.3.3.3. Identify foundation requirement (including fill requirement, piles) with associated soil pressure, water table and seismic center.
 - 3.3.4. **Landscape and Hardscape**
 - 3.3.4.1. Landscape and hardscape plans, as necessary to return Sites to presentable condition, for each Site for areas under and around each new structure, fencing, and parking lot areas.
 - 3.3.4.2. Trees to be removed within the construction area will be identified. Designer/Builder will assist the District in identifying other potential trees it may be required to remove to prevent shading that will impact power generation of the System(s) in areas outside the construction area
 - 3.3.5. **Presentation**
 - 3.3.5.1. Designer/Builder shall present and review with the District the detailed design information and deliverables for this phase.
- 3.4. **Construction Documents Phase.** Upon District's acceptance of Designer/Builder's work in the previous Phase and assuming District has not delayed or terminated the Contract, the Designer/Builder shall prepare from the accepted deliverables from the previous design phase a set of 90% complete construction documents for submission to DSA and for review by the District, and which will consist of the following for each proposed System within Designer/Builder's scope of work:
 - 3.4.1. **Architectural**
 - 3.4.1.1. Completed Site plan.

- 3.4.1.2. Architectural details completed.
- 3.4.1.3. Site utility plans completed.
- 3.4.1.4. Fixed equipment details and identification completed.
- 3.4.2. **Structural**
 - 3.4.2.1. Structural calculations completed.
- 3.4.3. **Mechanical**
 - 3.4.3.1. Complete energy production calculations and report.
- 3.4.4. **Landscape and Hardscape**
 - 3.4.4.1. Unless agreed to in writing in advance by the District, Designer/Builder shall complete all landscape and hardscape plans for each Site for areas under and around each new structure, fencing, and parking lot areas as necessary to return Sites to practical, presentable and functional condition(s), consistent with the surrounding area. This includes, unless inappropriate, paving where surrounding areas are paved and planting where surrounding areas have planting, but excludes replanting of trees and plants removed to allow construction of the System.
 - 3.4.4.2. Designer/Builder shall identify trees and plants within the construction area and shall notify the District in advance of the trees and plants that Designer/Builder intends to be removed so the District can determine whether it wishes Designer/Builder to replace the tree(s) or plant(s) at a one to one ratio (1:1) at Designer/Builder's cost not to exceed the Tree and Plant Replacement Allowance Amount described below or whether to remove the tree(s) or plant(s) and replace them with tree bark at Designer/Builder's cost. The Tree and Plant Replacement Allowance Amount is: _____ Dollars (\$###.###)
- 3.4.5. **Deliverables and Numbers of Copies**
 - 3.4.5.1. Designer/Builder shall provide to the District a hard copy of the following items produced in this phase, together with one copy of each item in electronic format:
 - 3.4.5.1.1. Two copies of reproducible copies of working drawings;
 - 3.4.5.1.2. Two copies of engineering calculations;
 - 3.4.5.1.3. Two copies of statement of requirements for testing and inspection of service for compliance with applicable codes;
 - 3.4.5.1.4. Two copies of DSA file including all correspondence, meeting, back check comments, checklists to date.
- 3.4.6. **Record Drawings.** During construction, Designer/Builder shall incorporate all information on all As-Builts, sketches, details, and clarifications, and prepare one set of final Record Drawings for the District. The Record Drawings shall incorporate onto one set of electronic drawings, all changes from all As-Builts, sketches, details, and clarifications. The Designer/Builder shall deliver the Record Drawings to the District at completion of the construction and it shall be a condition precedent to the District's approval of the Designer/Builder's final payment.
- 3.4.7. **O&M Manuals / Warranties.** Designer/Builder shall review equipment, operation and maintenance manuals, and a complete set of warranty documents for all equipment and installed systems, to ensure that they meet the requirements of the plans and specifications.

The Designer/Builder shall deliver the O&M Manuals / Warranties to the District at completion of the construction and it shall be a condition precedent to the District's approval of the Designer/Builder's final payment.

Article 4. DESCRIPTION OF WORK AND SERVICES BY SCOPE

4.1. **General.** Designer/Builder shall design, install, and construct the Work at the School Sites. The Entire System shall be installed to conform to National Electric Code, Division of the State Architect ("DSA") requirements, the Utility's interconnection agreements, and City and County access requirements. Designer/Builder's Work shall include:

- 4.1.1. Meetings and discussions as needed with DSA, Fire Department, Utility and others as needed to achieve project approval.
- 4.1.2. Criteria for beneficial use as defined in the Contract,
- 4.1.3. Installation of elevated solar structures allowing parking below and traffic circulation between canopies, that shall provide a minimum of ten (10) feet clearance beneath each canopy. Structures shall be limited to the areas generally indicated on the site plans provided in **Exhibit F**, unless changes to locations are mutually agreed upon by the District and Designer/Builder.
- 4.1.4. Installation of electrical equipment pad and utility tie-ins shall be limited to the areas generally indicated on the site plans provided in **Exhibit F**, unless changes to locations are mutually agreed upon by the District and Designer/Builder. To the extent practical, the selection of the final location will consider methods to block the view of the electrical equipment from offsite public areas.
- 4.1.5. Removal of light standards in areas with solar structure(s) and replacement with lighting attached to the underside of the solar structure(s). Existing lighting circuits can be re-used for PV Array support structures lighting system and those existing circuits have ample current carrying capacity to provide required lighting at PV Array support structures. New lighting circuit installation is excluded from this proposal as well as any required timing circuit reconfiguration. Lighting design and/or installation beyond the PV Array support structures is not included in this agreement.

4.2. Utility Requirements.

- 4.2.1. Designer/Builder shall ensure that all Work shall comply with all requirements of the Utility.
- 4.2.2. Designer/Builder shall manage existing and new interconnection applications for Sites with Utility. Legacy TOU rate status shall be maintained for previously filed applications at the following sites: Buena Park High School, La Habra High School, La Sierra/La Vista High School, Sonora High School, Sunny Hills High School, and Troy High School.
- 4.2.3. Even though there are no California Solar Initiative rebates available to the District, the Utility may institute a rebate or incentive program in the future. Therefore, Designer/Builder shall ensure that all of the Work, as required, complies with all requirements, including the metering and monitoring requirements, outlined in the California Solar Initiative Program Handbook.

4.3. DSA Approvals & Permits

- 4.3.1. Designer/Builder, its designers and contractors shall provide documentation required for all approvals by DSA.
- 4.3.2. Designer/Builder shall notify the District and the District's Project Inspector(s) of required inspections and shall provide reasonable access and accommodations for inspections.

4.4. Monitoring

- 4.4.1. Install a data acquisition system, which provides access by unlimited individuals to data via the internet, which shall include options for display of daily energy generation by Site, and system-check features. This will include a system that will monitor and log the Entire System performance on a daily basis by School Site. This information can be reviewed on a daily basis by District personnel. This information can be used to establish an operational baseline operation. Following is a detailed description of the Monitoring requirements:

- 4.4.1.1. Electricity generation monitoring reports,
- 4.4.1.2. Communication with a third party monitoring company to be provided via internet connection.

4.5. Protection of Existing Structures and Utilities

- 4.5.1. The School Sites have above-grade and below-grade structures, utility lines, and other installations that are known or believed to exist in the area of the Work. Designer/Builder shall locate these existing installations before proceeding with excavation and other operations that could damage same; maintain them in service, where appropriate; and repair damage to them caused by the performance of the Work. Should damage occur to these existing installations, the costs of repair shall be at the Designer/Builder's expense and made to the District's satisfaction.
- 4.5.2. Designer/Builder shall be alert to the possibility of the existence of additional structures and utilities. If Designer/Builder encounters additional structures and utilities, Designer/Builder will immediately report to the District for disposition of same as indicated in the Contract Documents.
- 4.5.3. Landscape and Hardscape
 - 4.5.3.1. Designer/Builder shall perform all landscape and hardscape work at each site for areas under and around each new structure, fencing, and parking lot areas as necessary to return sites to practical, presentable and functional condition(s), consistent with the surrounding area. This includes, unless inappropriate, paving where surrounding areas are paved and planting where surrounding areas have planting. Planting includes re-seeding grass or re-planting trees.
- 4.5.4. Designer/Builder shall ensure that none of the undergrounding power lines it installs will create the potential for electrolytic corrosion of any other underground utilities near such power lines. Where the potential for electrolytic corrosion exists, Designer/Builder shall design and install either (1) a cathodic protection system to protect such utilities or (2) another protection system approved by the District.

4.6. Site Access

- 4.6.1. No new access roads are planned; however, should the need arise, District and Designer/Builder shall agree upon reasonable accommodations and compensation. Designer/Builder shall return existing surfaces to a preconstruction condition.
- 4.6.2. District and Designer/Builder shall provide 24/7 unrestricted access to existing electric utility meter and the utility lockable disconnect location
- 4.6.3. District to permit using on site water and power as available for construction at no charge to Designer/Builder, with the exception of fire hydrants
- 4.6.4. District to permit use of a temporary diesel generator onsite during construction activities, subject to local ordinances.

4.7. Specific Requirements:

- 4.7.1. **General Considerations.** All documentation and components furnished by Designer/Builder shall be developed, designed, and/or fabricated using high quality design, materials, and workmanship meeting the requirements of the District and all applicable industry codes and standards. Designer/Builder shall perform the Work in accordance with all standards within these Specific Requirements. The design and construction shall comply with at least, but not limited to, the latest approved versions of the International Building Code (IBC), National Electrical Code (NEC), Uniform Building Code, latest addition, and the California Code of Regulations, Title 24, including amendments; Regulations of the State Fire Marshall (title 19, California Code of Regulations) and Pertinent Local Fire Safety Codes; Americans with Disabilities Act; Education Code of the State of California; Government Code of the State of California; Labor Code of the State of California, division 2, part 7, Public Works and Public Agencies; Public Contract Code of the State of California; U. S. Copyright Act; the Utility's Interconnection Requirements, and all other federal, state, and local jurisdictions having authority.
- 4.7.2. **Electrical Design Standards.** All Work shall comply with at least, but not limited to, the following electrical industry standards, wherever applicable:
- 4.7.2.1. Electronic Industries Association (EIA) Standard 569
 - 4.7.2.2. Illumination Engineering Society of North America (IESNA) Lighting Standards
 - 4.7.2.3. Institute of Electrical and Electronics Engineers (IEEE) Standards
 - 4.7.2.4. National Electrical Manufacturers Association (NEMA)
 - 4.7.2.5. National Electric Code (NEC)
 - 4.7.2.6. California Electrical Code (CEC)
 - 4.7.2.7. Insulated Power Cable Engineers Association (IPCEA)
 - 4.7.2.8. Certified Ballast Manufacturers Association (CBMA)
 - 4.7.2.9. Underwriters Laboratories, Inc. (UL)
 - 4.7.2.10. National Fire Protection Association (NFPA)
 - 4.7.2.11. Pacific Gas and Electric Utility Requirements
 - 4.7.2.12. American National Standards Institute (ANSI)
 - 4.7.2.13. Occupational Health and Safety Administration (OSHA)
 - 4.7.2.14. Americans with Disabilities Act (ADA)
 - 4.7.2.15. American Society for Testing and Materials (ASTM)
 - 4.7.2.16. National Electrical Contractors Association (NECA)
 - 4.7.2.17. National Electrical Testing Association (NETA)
 - 4.7.2.18. International Building Code (IBC)
 - 4.7.2.19. All other authorities having jurisdiction
- 4.7.3. **Modules.** The District has facilities located in and around residential areas and glare from panels that reflects into nearby residences must be minimized. During the Schematic Design / Design Development Phase, the Designer/Builder shall submit to the District an analysis of the glare from installed modules, showing the extent that glare is likely to reach adjacent residential structures at all times throughout the year. In addition to other applicable standards, the PV modules provided by Designer/Builder shall comply with at least, but not limited to, the following:
- 4.7.3.1. IEEE 1262 "Recommended Practice for Qualifications of Photovoltaic Modules".
 - 4.7.3.2. Modules shall be new, undamaged, fully warranted without defect.
 - 4.7.3.3. Modules shall comply with the State of California SB1 Guidelines for Eligibility,

listed at: http://www.gosolarcalifornia.org/equipment/pv_modules.php

- 4.7.3.4. Modules shall have minimum maintenance requirements and high reliability, have a minimum 25-year design life, and be designed for normal, unattended operation.
- 4.7.3.5. Acceptable mounting methods for unframed modules provided by the manufacturer. Bolted and similar connections shall be non-corrosive and include locking devices designed to prevent twisting over the 25-year design life of the PV system.
- 4.7.3.6. The environmental impact of any hazardous material in the PV modules must be disclosed to the District, including any special maintenance requirements and proper disposal/recycling of the modules at the end of their useful life.
- 4.7.3.7. Minimum Performance Parameters as per IBC 1509.7.4, IRC M2302.3, UL 1703.
- 4.7.3.8. Photovoltaic Panel Types:
 - 4.7.3.8.1. Monocrystalline: Listed to UL 1703.
 - 4.7.3.8.2. Polycrystalline: Listed to UL 1703.
 - 4.7.3.8.3. Thin-Film/Flexible: Listed to UL 1703.
 - 4.7.3.8.4. Building-Integrated & Solar Shingles: Listed to UL 1703.
- 4.7.3.9. Module and System Identification
 - 4.7.3.9.1. Listed to UL 969 for weather resistance.
 - 4.7.3.9.2. Listed to UL 1703 for marking contents and format.
 - 4.7.3.9.3. Main Service Disconnect: per NEC.
 - 4.7.3.9.4. Identification Content and Format: per NEC.
 - 4.7.3.9.5. Identification for DC Conduit, Raceways, Enclosures, Cable Assemblies, and Junction Boxes: IFC 605.
 - 4.7.3.9.6. Identification for Inverter: per NEC.
- 4.7.3.10. Bypass diodes shall be built into each PV module either between each cell or each string of cells.
- 4.7.3.11. Other Components: per UL 1703.
- 4.7.3.12. Hail Protection: Compliant with testing procedure per ASTM E-1038.
- 4.7.3.13. Lightning Protection: Shall ground according to manufacturer instructions per UL 1703.
- 4.7.3.14. Access, Pathways, and Smoke Ventilation: Per IFC 605.3, access and spacing requirements must be observed to: ensure access to the roof, provide pathways to specific areas of the roof, provide for smoke ventilation opportunities area, and, where applicable, provide emergency access egress from the roof.
- 4.7.3.15. Fire Classification:
 - 4.7.3.15.1. IBC 1505.8 for building-integrated photovoltaic and solar shingles.
 - 4.7.3.15.2. IBC 1509.7.2: Although not technically enforceable, every effort shall be made to ensure the solar photovoltaic module is not combustible.

- 4.7.4. **Inverters.** In addition to other applicable standards, inverters provided by Designer/Builder must comply with at least, but not limited to the following:
- 4.7.4.1. Inverters shall be suitable for grid interconnection and shall be compliant with all Utility interconnection requirements.
 - 4.7.4.2. Inverters shall comply with the State of California SB1 Guidelines for Eligibility, listed at: <http://www.gosolarcalifornia.org/equipment/inverters.php>
 - 4.7.4.3. IEEE 929-2000 – “Recommended Practice for Utility Interface of Photovoltaic Systems”.
 - 4.7.4.4. Inverters must automatically reset and resume normal operation after a power limiting operation.
 - 4.7.4.5. The inverter shall be capable of continuous operation into a system with voltage variation of plus or minus 10% of nominal. The inverter shall operate in an ambient temperature range of -20°C to +50°C.
 - 4.7.4.6. Inverters shall include all necessary self-protective features and self-diagnostic features to protect the inverter from damage (in the event of component failure or from parameters beyond normal operating range due to internal or external causes). The self protective features shall not allow the inverters to be operated in a manner which may be unsafe or damaging.
 - 4.7.4.7. Inverters shall be true sine wave high frequency PWM.
 - 4.7.4.8. Inverters shall be sized to provide maximum power point tracking for voltage and current range expected from PV array for temperatures and solar insolation conditions expected for Project conditions.
 - 4.7.4.9. Inverters shall be capable of adjusting to "sun splash" from all possible combinations of cloud fringe effects without interruption of electrical production.
 - 4.7.4.10. Isolation transformers shall be provided.
 - 4.7.4.11. Inverters shall be UL 1741, IEEE 519 and IEEE 1547 compliant.
 - 4.7.4.12. Inverters shall be listed per FCC Part 15 Class A.1.
 - 4.7.4.13. Inverters shall have a THD < 5%.
 - 4.7.4.14. Enclosures shall be rated NEMA 3R within an appropriate shelter.
 - 4.7.4.15. Power factor shall be 0.99 or higher.
 - 4.7.4.16. Inverters shall have utility-interactive, or stand-alone, or combined capabilities.
 - 4.7.4.17. Inverters shall include maximum power point tracking (MPPT) features.
 - 4.7.4.18. Inverters shall include anti-islanding protection if paralleling arrangement is required.
 - 4.7.4.19. Inverter selection shall take into account anticipated noise levels produced and minimize interference with District activities.
- 4.7.5. **Mounting Systems.** The mounting systems shall be designed and installed with reliable components proven in similar projects, and the PV modules may be fixed or tracking. The mounting systems shall be designed to resist dead load, live load, corrosion UV degradation, wind loads, and seismic loads appropriate to the geographic area over the expected 25-year lifetime. Designer/Builder shall submit an analysis of each structure impacted by the Project, and Designer/Builder shall submit all supporting evidence, calculations, and documentation.

The analysis shall demonstrate that existing structures are not compromised or adversely impacted by the installation of PV systems, equipment, or other activity related to the Work. Mounting systems must also meet the following requirements at a minimum:

- 4.7.5.1. All structural components, including array structures, shall be designed in a manner commensurate with attaining a minimum 25-year design life. Design of structural components shall account for the prevention of corrosion at the connections between dissimilar metals.
- 4.7.5.2. Thermal loads caused by fluctuations of component and ambient temperatures shall be accounted for in the design and selection of mounting systems such that neither the mounting system nor the surface on which it is mounted shall degrade or be damaged over time.
- 4.7.5.3. Each PV module mounting system must be certified by the module manufacturer as (1) an acceptable mounting system that shall not void the module warranty, and as (2) a conforming mounting system per the module manufacturer's mounting parameters.
- 4.7.5.4. Final coating and paint colors shall be reviewed and approved by the District during Design Review.
- 4.7.5.5. Painting or other coatings must not interfere with the grounding and bonding of the array.

4.7.6. Corrosion Control.

- 4.7.6.1. Each PV system and associated components must be designed and selected to withstand the environmental conditions of the Site (e.g., temperatures, winds, rain, flooding, etc.) to which they will be exposed.
- 4.7.6.2. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals.
- 4.7.6.3. A Corrosion control plan must be submitted by Designer/Builder during the Schematic Design / Design Development Phase for District approval which will include at a minimum the analysis of the corrosion risk and mitigation measures.

4.7.7. Roofing Requirements. The installation of PV modules, inverters and other equipment shall provide adequate room for access and maintenance of the existing building and existint fixtures. A minimum of three feet of clearance will be provided between PV equipment and existing mechanical equipment and other equipment mounted on the roof. A minimum of four feet of clearance shall be provided between PV equipment and the edge of the roof. Clearance guidelines of the DSA as well as the local fire marshal shall be followed. The installation of solar systems of roof tops will be reviewed by the DSA for code compliance by adherence to the State Fire Marshal Solar Photovoltaic Installation Guideline. The PV equipment shall not be installed in a way that obstructs air flow into or out of building systems or equipment. Proposed roof top mounted systems may be ballasted or penetrating systems and must meet or exceed the following requirements:

- 4.7.7.1. Systems shall not exceed the ability of the existing structure to support the entire solar system and withstand increased wind uplift and seismic loads. The capability of the existing structure to support proposed solar systems shall be verified by Designer/Builder prior to design approval.
- 4.7.7.2. All racking systems shall allow for the District staff to perform roof inspection, cleaning, and maintenance operations with minimal obstructions from the racking; maintenance activities include, but are not limited to, leak

identification, or repair once the solar system is installed.

- 4.7.7.3. Roof penetrations, if part of the mounting solution, shall be kept to a minimum.
- 4.7.7.4. Designer/Builder shall perform all work so that existing roof warranties shall not be voided, reduced, or otherwise negatively impacted.
- 4.7.7.5. No work shall compromise roof drainage, cause damming or standing water or cause excessive soil build-up.
- 4.7.7.6. All materials and/or sealants must be chemically compatible.
- 4.7.7.7. Thermal movement that causes scuffing to the roof must be mitigated as part of the mounting solution.
- 4.7.7.8. All roof penetrations shall be waterproofed.
- 4.7.7.9. The Designer/Builder shall not create a roof penetration until, as part of system design review and approval, Designer/Builder submits detail(s) for the sealing of that roof penetrations, and the detail(s) are approved in writing by the District and the manufacturer of the existing roofing system. The District will make available the roofing manufacturer for each building for consultation with Designer/Builder as part of the design process.
- 4.7.7.10. All roofing work shall be performed by a licensed roofing contractor who is certified by the roofing materials manufacturer for the specific materials or systems comprising each roof upon which a solar system will be installed. The roofing contractor shall also be safety prequalified by the District.
- 4.7.7.11. As part of the design submittals, Designer/Builder shall include signed certificates from the roofing manufacturer stating:
 - 4.7.7.11.1. The roofing contractor is certified installer of the complete roofing system.
 - 4.7.7.11.2. The manufacturer's Technical Representative is qualified and authorized to approve the complete roofing system.
 - 4.7.7.11.3. Project plans and specifications meet the requirements of the warranty of the complete roofing system for a minimum twenty-five (25) year period.
 - 4.7.7.11.4. Existing warranty incorporates the new roofing work and flashing work.
- 4.7.7.12. Any damage to roofing material during installation of PV systems must be remedied by the Designer/Builder.
- 4.7.7.13. The installation of PV modules, inverters and other equipment on building roofs will be designed to minimize visibility of the equipment from the ground.
- 4.7.8. **Shade Structure Requirements.** Designer/Builder is responsible for incorporating the following elements in the design and construction of the Project:
 - 4.7.8.1. Minimum height: all shade structures shall be designed to have a minimum clear height of ten(10) feet.
 - 4.7.8.2. All shade structures shall be designed to have a bollard at each low corner point.
 - 4.7.8.3. All shade structures shall be installed with fascia surrounding the exposed edge of the structure's purlins.

- 4.7.8.4. Shade structures located in parking lots shall have a protective concrete surround / base installed on support posts.
- 4.7.8.5. Shade structure columns, beams, and fascia shall be painted or finished to match Site colors or to a finish of the District's approval.
- 4.7.8.6. Shade structures and all attached equipment shall be designed and installed so as to minimize the ability to climb structures.
- 4.7.8.7. Shade structures shall be installed such that the finished height of the array is uniform and is subject to the District's approval at design submittal.
- 4.7.9. **Ancillary Equipment Enclosures.** Designer/Builder will be responsible for incorporating the following elements in the design and construction of the Project:
 - 4.7.9.1. All ancillary equipment be grouped to a single location per site and shall be surrounded by a fence to prevent students, vandals, and trespassers from gaining access. The fence shall be a six (6) foot high chain link fence with vinyl privacy slats. If the system is a ground mount design, ancillary equipment shall be located within the fenced array area.
 - 4.7.9.2. All ancillary equipment shall be located in a manner that minimizes its impact to normal District operations and minimizes resulting visual impacts.
- 4.7.10. **Infrastructure for Ground Mount Systems (Not Preferred).** The District does not prefer ground mounted systems. However, if the District approves a ground mounted system, the Designer/Builder will be responsible for incorporating the following elements in the design and construction of the Project:
 - 4.7.10.1. Ground mounted systems shall be surrounded by a fence to prevent students, vandals, and trespassers from gaining access the system. The fence shall be a eight (8) foot high chain link fence with vinyl privacy slats.
 - 4.7.10.2. At least two gates shall be installed to enable site access for trucks.
 - 4.7.10.3. A pathway a minimum of ten (10) feet wide passable by a maintenance truck shall be provided within the array fence to allow for access to all equipment enclosed within the fence area.
 - 4.7.10.4. Access to water (from the main campus) for maintenance (module cleaning) purposes, as determined adequate by Designer/Builder and approved by the District.
 - 4.7.10.5. Designer/Builder shall install pole-mounted light fixtures to illuminate the site perimeter at night, the associated cabling required for powering these fixtures, and photocell controls/switches. Exterior lights shall be installed around the perimeter of the PV array to provide a minimum of 0.5 fc throughout the array at ground level. Light poles shall be located in a manner such that they do not create shade on a PV system at any time during the system electrical generating hours.
 - 4.7.10.6. Access to low voltage (120V) AC power (from the main campus) to power maintenance equipment and miscellaneous equipment.
 - 4.7.10.7. Installation and activation of sufficient security cameras on Site to monitor array area, connected to the Site's security system, in collaboration with the District.
 - 4.7.10.8. Installation of an acceptable surface cover material under and around the modules and throughout the Site that provides appropriate weed control,

erosion and dust management.

4.7.10.9. Creation of an access road to the any ground mount system for maintenance and fire access purposes. The access road shall be passable under all weather conditions.

4.7.10.10. Inclusion of safety equipment (electrical equipment, signage, etc).

4.7.11. Lightning and Surge Protection

4.7.11.1. Designer/Builder shall utilize lightning arrestors to protect appropriate equipment from lightning strikes.

4.7.11.2. Designer/Builder shall utilize surge suppressors to protect the appropriate equipment from electrical surges.

4.7.12. Short Circuit Coordination Study

4.7.12.1. The Designer/Builder shall conduct a short-circuit and coordination study (SCCS) that includes all of the overcurrent protective devices installed on the project (AC/DC fuses and AC/DC circuit breakers). This study will ensure that the devices installed as part of a PV system are coordinated with the rest of a site's distribution, preventing an unintentional outage due to an isolated PV system fault.

4.7.12.2. The study shall be submitted, with calculations, for District review as part of design review.

4.7.13. Wiring and Cabling Runs

4.7.13.1. Designer/Builder shall layout and install all AC conductors in conduit.

4.7.13.2. Conduit buried underground shall be suitable for the application and compliant with all applicable codes. PVC shall be constructed of a virgin homopolymer PVC compound and be manufactured according to NEMA and UL specifications. All PVC conduit feeders shall contain a copper grounding conductor sized per NEC requirements and continuity shall be maintained throughout conduit runs and pullboxes. Pullboxes shall be traffic rated with lockable lids. Minimum conduit size shall be ¾". A tracing/caution tape must be installed in the trench over all buried conduit. All underground conduits placed in trenches, buried under roadways, or swales shall be encased with red dyed concrete slurry cap.

4.7.13.3. Conduit installed using horizontal directional boring (HDB), shall include tracer tape or traceable conduit. The minimum depth of the conduit shall be per NEC 2011 Article 300.5. The Designer/Builder is responsible for demonstrating that all conduits installed utilizing horizontal boring meets the minimum depth requirement and is solely responsible for any remediation costs and schedule impacts if the specification is not met. Designer/Builder must provide documentation of final depth and routes of all conduit installed in horizontal bores.

4.7.13.4. Conduit installed on building roofs shall not be installed near roof edges or parapets to reduce visibility. Any conduit penetrations through roof surfaces shall not be made within five (5) feet of the roof edge to reduce visibility. If conduit is installed on the exterior face of any building, it shall be painted to match the existing building color. In all cases, the visible impact of conduit runs shall be minimized and the design and placement of conduit shall be reviewed and approved by the District as part of Design Review.

4.7.13.5. Electric metallic tubing (EMT) shall be used for wiring or cabling indoors, above

grade locations, and where conduit needs to be protected from damage. EMT shall not be installed underground, outdoors, or embedded in concrete. EMT shall be cold-rolled zinc coated steel and be manufactured to UL and ANSI standards. Fittings shall be watertight and malleable gripping ring compression type. Pressure cast material for nuts of compression ring type fittings and set-screw type connections are not acceptable.

- 4.7.13.6. Galvanized Rigid Conduit (GRC) shall be used where exposed to weather or where subject to physical damage in exposed areas. GRC shall be continuous hot-dipped galvanized manufactured per UL and ANSI requirements. Rigid aluminum conduit is not acceptable. Conduit bodies for use with steel conduit, rigid or flexible, shall be manufactured per UL requirements and shall be cast metal with gasketed closures. Fittings for GRC conduit shall be malleable iron or forged steel with cadmium or zinc coating. Union couplings for joining rigid conduit at intermediate runs shall be of the same material as the conduit. Couplings shall be threaded concrete-tight to permit completing conduit runs when neither conduit can be turned and to permit breaking the conduit run at the union. Set screw connectors are not acceptable.
- 4.7.13.7. Minimum conduit size shall be ¾”.
- 4.7.13.8. All conduits, boxes, enclosures, etc. shall be secured per NEC 690 requirements.
- 4.7.13.9. All conductors shall be insulated copper rated for 600V, maximum. DC conductors shall be PV Wire 600V or 1000V UL Listed Sunlight resistant wire.
- 4.7.13.10. All items shall be U.L. listed and shall bear the U.L. label.
- 4.7.13.11. All spare conduits shall be cleaned, mandrelled, and provided with a pullwire. Spare conduits shall be required for security cameras for ground mount systems.
- 4.7.13.12. All feeders and branch circuits shall be sized to minimize voltage drop and losses and shall be in compliance with NEC requirements.
- 4.7.13.13. Designer/Builder shall furnish, install, and connect combiners and recombiners as necessary to complete the System. Enclosures for combiners and recombiners shall be NEMA 4 or 4X rated, shall be listed UL 1741, and shall include internal overcurrent protection devices with dead front. Up to 48 volts DC: Shall use UL-listed DC breakers that meet NEC requirements for overcurrent protection. Up to 1000 volts DC, paralleling system: Shall use fuses instead of breakers. Ground and pole-mounted arrays shall have a separate combiner box mounted to the pole itself. Where applicable, combiner box shall be a disconnecting combiner box.
- 4.7.13.14. All systems, conduit, boxes, components, etc. shall be grounded and bonded per NEC requirements and in accordance with Section 1.3.6.14.
- 4.7.13.15. Designer/Builder will be responsible for locating, identifying and protecting existing underground utilities conduits, piping, substructures, etc. and ensuring that no damage is inflicted upon existing infrastructure.
- 4.7.13.16. Designer/Builder shall install the exposed string cable homeruns along the beams or structure where the combiner box is installed.
- 4.7.13.17. All exposed string wiring must be installed above the lower surface of the structural purlins and beams. Wire loops under framing members are not acceptable.

4.7.14. Grounding and Bonding

- 4.7.14.1. All applicable components of the solar energy electrical power generating system must be grounded per latest NEC requirements.
- 4.7.14.2. DC Ground-Fault Protector:
 - 4.7.14.2.1. Shall be listed per UL 1703.
 - 4.7.14.2.2. Shall comply with requirements of the NEC.
- 4.7.14.3. Module ground wiring splices shall be made with irreversible crimp connectors.
- 4.7.14.4. All exposed ground wiring must be routed above the lower surface of any structural framing.
- 4.7.14.5. For shade structure installations, grounding electrode conductors shall be bonded to structure columns either just below grade or below the top surface of concrete bollards.

4.7.15. Battery Charge Controller (if applicable)

- 4.7.15.1. Listed per UL 1741.
- 4.7.15.2. Charge controller or self-regulating system shall be required for a stand-alone system with battery storage. Charge controller's adjusting mechanism shall be accessible only to qualified persons.
- 4.7.15.3. Shall be capable of withstanding 25% over-amperage while charging for limited time per the NEC.
- 4.7.15.4. Charge controller shall include maximum power point tracking (MPPT) and temperature compensation.

4.7.16. Battery (if applicable)

- 4.7.16.1. All batteries for the System shall comply with NEC. Flooded lead-acid, captive electrolyte lead acid, nickel-cadmium, and lithium are acceptable. Consider climate when selecting battery type.
- 4.7.16.2. Installation and Maintenance: Follow practices per IEEE 937.
- 4.7.16.3. Test and Evaluation:
 - 4.7.16.3.1. Stand-Alone System: Follow procedures per IEEE 1361.
 - 4.7.16.3.2. Hybrid System: Follow procedures per IEEE 1661.
- 4.7.16.4. Optimize Performance and Life: Follow practices per IEEE 1561.
- 4.7.16.5. Safety and Ventilation:
 - 4.7.16.5.1. Use protective enclosure and proper ventilation per the NEC.
 - 4.7.16.5.2. Exposed battery terminals and cable connections shall be protected, and live parts of batteries shall be guarded. Batteries should be accessible only to a qualified person via locked room, battery box, or other container.
 - 4.7.16.5.3. Spacing around battery enclosures and boxes and other equipment shall be at least 915 mm [36 inches]; batteries shall not be installed in living areas, or below enclosures, panelboards, or load centers.

- 4.7.16.5.4. Prohibited are conductive cases for flooded, lead-acid batteries operating above 48-volt nominal. Battery racks shall have no conductive parts within 155 mm [6 inches] of the tops of cases.
- 4.7.16.6. Interconnection:
 - 4.7.16.6.1. Per NEC, battery cables shall be a standard building wire type conductor. Welding and automobile "battery" cables (listed and non-listed) are prohibited.
 - 4.7.16.6.2. Flexible cables, listed for hard service use and moisture resistance, are permitted (not required) from battery terminals to nearby junction box and between battery cells. Flexible, highly-stranded building-wire type cables (USE/RHW and THW) are available. Battery terminals shall be compatible with flexible cables.
- 4.7.17. **Switch/Disconnecting Means**
 - 4.7.17.1. Shall be UL-listed, in accordance with the NEC, as shown on the drawings, and as specified.
 - 4.7.17.2. Utility External Disconnect Switch (UEDS): Refer to code, as several states do not require UEDS for small solar photovoltaic systems if the inverter provides the same function per NEC. Coordinate requirements with serving electric utility.
- 4.7.18. **System Security Requirements**
 - 4.7.18.1. Designer/Builder shall utilize tamper-resistant PV module to rack fasteners for all PV module mounting.
 - 4.7.18.2. Designer/Builder shall utilize tamper-resistant fasteners for all electrical fittings, pull boxes and other enclosures.
- 4.7.19. **Meters**
 - 4.7.19.1. Designer/Builder shall supply and install a Utility approved Net Generation Output Meter (NGOM) for each PV system.
 - 4.7.19.2. Generation Meters shall use Internet Protocol (IP) communication and shall not require a custom network for connection.
 - 4.7.19.3. Generation Meters shall have the capability to store metered data (including instantaneous kW, kWh, voltage, current, and phase information) in fifteen (15) minute intervals and retain such information for at least seven (7) days.
- 4.7.20. **Shade Structure Lighting**
 - 4.7.20.1. Installation of shade structure PV systems in all locations shall include and the installation of new security high efficiency lighting. Installation of shade structure PV systems shall include the removal of existing security light poles, foundations, and fixtures that are no longer effective.
 - 4.7.20.2. Lighting shall be LED lighting or other similar energy efficient lighting system.
 - 4.7.20.3. New parking lot fixtures shall be installed to provide parking lot illumination compliant with IESNA requirements or recommendations for illumination and safety.
 - 4.7.20.4. Minimum horizontal illuminance of one (1) foot-candle shall be maintained at ground level with a uniformity ratio (maximum to minimum) of 15:1.

- 4.7.20.5. The new lighting is required to illuminate the entire parking area and adjacent pedestrian walkways affected by the removal of existing lights, not just the area under the PV modules.
- 4.7.20.6. A photometric illumination plot must be submitted for each parking lot showing all existing lighting and proposed new SSS canopy lighting.
- 4.7.20.7. Submit California Title 24 Outdoor Lighting calculations with all lighting drawings and show evidence of compliance.
- 4.7.21. Photocell controls shall be used in conjunction with a lighting control system for all exterior lighting and energize lighting when ambient lighting levels fall below two (2) foot-candles measured horizontally at ground level. The lighting control system shall also be able to function based on time clock control adjustable by District staff. Lighting shall also be permitted to operate manually without regards to photocell or time clock input. Replacement parking lot lighting shall be served from an existing parking lot lighting circuit and any existing circuits and existing control function shall be maintained, or if replaced, done so at the approval of the District.
- 4.7.22. **Monitoring System, DAS, and Reporting.** Designer/Builder shall design, build, activate and ensure proper functioning of Data Acquisition Systems (DAS) that enable the District to track the performance of the PV Systems as well as environmental conditions through an online web-enabled graphical user interface and information displays. Designer/Builder shall provide equipment to connect the DAS via existing Wi-Fi network or cellular data network at all locations. The means of data connection will be determined during design. The District will pay for the cost of cellular data service if needed, but not for the modem or other equipment needed to connect to the cellular network.
 - 4.7.22.1. The DAS(s) shall provide access to at least the following data:
 - 4.7.22.1.1. Inverter and System Level Instantaneous AC system output (kW)
 - 4.7.22.1.2. Inverter and System Level PV System production (kWh) over pre-defined intervals that may be user configured
 - 4.7.22.1.3. Inverter and System Level AC and DC voltage
 - 4.7.22.1.4. Horizontal and in-plane irradiance (at least two (2) sensors for each, at different positions in the array)
 - 4.7.22.1.5. Ambient and back-of-cell temperature (at least two (2) sensors for each, at different positions in the array)
 - 4.7.22.1.6. Inverter status flags and general system status information
 - 4.7.22.1.7. System availability
 - 4.7.22.1.8. Site Load information. Available load data for the meter the system is connected to shall be collected by the solar monitoring solution as part of the DAS.
 - 4.7.22.2. Environmental data (temperatures, wind speed, and irradiance) shall be collected via an individual weather station installed for each system at the District.
 - 4.7.22.3. Data collected by the DAS shall be presented in an online web interface, accessible from any computer through the Internet with appropriate security (e.g., password controlled access). The user interface shall allow visualization of the data at least in the following increments: 15 minutes, hour, day, week, month, and year. The interface shall access data recorded in a server that may be stored on-site or remotely with unfettered access by the District for the life of the Project, 25 years after the issuance of the Permission to Operate Letter

from the Utility. The online interface shall enable users to export all available data in Excel or ASCII comma-separated format for further analysis and data shall be downloadable in at least 15 minute intervals for daily, weekly, monthly and annual data.

4.7.22.4. The Monitoring system shall enable for the diagnoses potential problems and perform remediating action. The monitoring system shall provide alerts when the system is not functioning within acceptable operating parameters. These parameters shall be defined during the design phase of the Project and specified in the DAS design document.

4.7.22.5. Additionally, Designer/Builder shall provide the following reports for the life of the Project:

4.7.22.5.1. Monthly Production report shall be available online to the District personnel.

4.7.22.5.2. Annual Performance report shall be sent electronically to the District personnel.

4.7.22.5.3. System performance data shall be made available electronically to the District in a format and at a frequency to be determined during the Design Review process.

4.7.22.5.4. Additional reports shall be made available to the District to assist the District in reconciling system output with utility bills and the production guarantee, as determined in the Design Review process.

4.7.22.6. A Monitoring Manual shall be provided to the District in printed or online form that describes how to use the monitoring system, including the export of data and the creation of custom reports.

4.7.23. Other Considerations

4.7.23.1. All Balance of System (wiring, components, conduits, and connections) must be suited for conditions for which they are to be installed.

4.7.23.2. Local DC and AC disconnects shall be located in accessible locations near inverters.

4.7.23.3. Outdoor enclosures shall be rated NEMA 3R, NEMA 4, or NEMA 4X.

4.7.24. **Federal Aviation Administration (FAA) Requirements.** Designer/Builder shall be responsible to submit the appropriate FAA Form 7460-1, along with any other required forms and documentation, for all proposed PV systems within the approach or takeoff paths or on the property of airports as defined by the Code of Federal Regulations Title 14 Part 77.9.

4.7.25. **Interconnection.** Designer/Builder is responsible for obtaining all necessary Utility interconnection approvals for each PV system being installed. Designer/Builder must comply with all interconnection requirements, such as California Public Utilities Commission (CPUC) rules for the Utility service territory. Designer/Builder is responsible for the proper planning and scheduling of interconnection approvals and any potential interconnection study. Systems installed as part of this Project will take advantage of Net Energy Metering (NEM). Designer/Builder shall be responsible for ensuring the system design and interconnection qualifies for NEM.

4.7.26. **Production Modeling.** Production modeling of the PV systems shall be performed using PVSYST or equivalent modeling software using TMY3 weather data for the nearest local International Airport. The simulations shall accurately simulate energy production for

proposed system layouts, sizes, and orientation. It is critical that PV production models are accurate with all methodology and assumptions described. The District will independently verify production models are accurate to the designed systems and utilize simulation results for economic evaluations. Designer/Builder shall be responsible for updating the production models each time changes are made to the proposed system designs that will impact production.

4.7.27. Shading

4.7.27.1. Designer/Builder shall adhere to the following requirements in order to avoid excessive shading on modules. For any object near an array that is higher than the lowest point of that array by height "H", Designer/Builder shall locate the array farther from the object than:

4.7.27.1.1. 3H to the North of the object

4.7.27.1.2. 3H to the East or West of the object

4.7.27.1.3. 3H to any non-cardinal direction of the object

4.7.27.2. Any Designer/Builder whose system design does not adhere to these rules shall perform a shading analysis justifying the basis for their design, including any proposed tree removal, and explaining why shading does not create an adverse performance and/or economic impact.

4.7.27.3. Any trees that are in the footprint of systems to be installed by the Designer/Builder shall be removed by the Designer/Builder at their expense, subject to the approval of the District. A tree shall be considered to be in the footprint of a system if its canopy would extend over any part of the system, including structural components or modules. The District will remove or prune, at its discretion, trees planted outside of the work area that shade PV systems (at present time or in the foreseeable future), provided the Designer/Builder identifies these trees during the design process. The Designer/Builder shall be responsible for any required tree remediation efforts resulting from tree removal, including compliance with all applicable tree removal ordinances, laws and regulations.

4.7.27.4. **Weather Station – Data Collection.** Installation of Data Acquisition System (DAS) that displays historical meteorological and production data over an Internet connection and consists of hardware located on-site, including a "weather station" at each Site and software housed on Designer/Builder's DAS provider's server. The DAS shall measure and log, at a minimum, the following parameters on a 15-minute average basis at the Sites:

4.7.27.4.1. Actual AC electricity production of the System at each School Site (in kWh),

4.7.27.4.2. Solar irradiance (in W/m² and/or W/feet²), at the District's option

4.7.27.4.3. Temperature (in °C and/or Fahrenheit, at the District's option), and

4.7.27.4.4. Wind speed (in meters or feet per second, at the District's option).

4.7.27.5. Pass through manufacturer warranties as indicated in **Exhibit H**.

4.8. **Maintenance, Operations, and Repair.** The Designer/Builder shall perform all work and services as indicated in the Operations & Maintenance Contract, attached hereto as **Exhibit B**.

4.9. **Training.** Designer/Builder shall provide twelve (12) hours of on-site training for District personnel in

all aspects of operation, routine maintenance, and safety of the PV systems, DAS, and monitoring solution. At a minimum, training topics shall include the following:

- 4.9.1. PV system safety, including shut-down procedures
- 4.9.2. PV module maintenance and troubleshooting
- 4.9.3. Structural elements maintenance and repair guidelines
- 4.9.4. Inverter overview and maintenance procedures
- 4.9.5. Calibration and adjustment procedures for the inverters and tracking systems (if any)
- 4.9.6. Solar panel replacement
- 4.9.7. DAS and monitoring solution, including standard and custom reporting
- 4.9.8. Designer/Builder shall submit a proposed Training Plan during the design process for approval. The on-site portion of the training program shall be scheduled to take place at the Sites at a time agreeable to both the District and Designer/Builder.

- 4.10. **Educational Programs.** Designer/Builder shall develop and deploy an educational program consisting of the following mandatory elements:

- 4.10.1. Sample lesson plans including teaching materials appropriate for grades 7-12

Optional elements may also include:

- 4.10.2. Physical design elements
 - 4.10.3. Outdoor classroom space
 - 4.10.4. Promotion of solar career opportunities

Exhibit B

Operations & Maintenance Contract

This Operations and Maintenance Contract ("O&M Contract") is made and entered into by and between the Fullerton Joint Union High School District ("District" or "Customer") and _____, Inc. ("Operator") (collectively, "Parties"). The Customer and the Operator entered into a Solar Contract for Design and Construction ("Solar Contract") pursuant to which Operator is obligated to provide operations and maintenance services for the system that was constructed pursuant to that Solar Contract ("System").

NOW, THEREFORE, the Parties agree as follows:

1. **Services.** The Operator shall provide the services as described herein, as may be modified as permitted herein ("Services" or "Work").

During the Term, and for the Annual Fees, Operator shall perform the following services on each System:

[SCOPE TO BE FULLY REVISED/NEGOTIATED TO CONFORM TO REQUIREMENTS AND AGREED UPON SERVICES.]

Description of Work	Frequency
Remote System Monitoring	24 hours / 7 days per week
On-Call System Service Technician	Per request
Electrical Inspection	One time per year
Module Washing	One Time per year

- A. **System Monitoring and On-Call Service Technician**
 - a. Provide remote monitoring of System operations via Internet connection. Track changes and respond to power outages within twenty-four (24) hours.
 - b. If necessary and reasonably appropriate as a solution to the alarm a Service Technician will be required to visit the site or determine an action plan to trouble shoot and resolve the issue within twenty-four (24) hours of alarm to identify cause.
- B. **Electrical Inspection & Maintenance:**
 - a. **Electrical Maintenance**
The technician will:
 - i. Perform a visual inspection and ensure proper operation of PV modules and array wiring, strain relief, mounting system, trackers, inverters, switchgear, transformers, combiner boxes, wireways and conduit, protection devices, data acquisition system, weather sensors and outdoor lighting.
 - ii. Perform vegetation management around array and equipment pad or make recommendations to host for vegetation removal.
 - iii. Inspect and ensure proper operation of pyranometers and reference cells. Calibrate equipment per manufacturer guidelines.
 - iv. Record operational data from inverters and meters.
 - b. **External and/or Internal DC Disconnects and Combiner Boxes.** During the inspection, the technician will:
 - i. Ensure that Imp testing is performed on all DC strings.
 - ii. Tighten loose electrical connections in combiner boxes, switchgear and inverters.
 - c. **Inverter and Transformer.** The technician will:
 - i. Clean out all electrical enclosures.
 - ii. Clean inverter air filters.
 - iv. Perform visual inspection of security and equipment fences.
 - v. Perform Preventive Maintenance on the inverter(s) as required to maintain inverter

manufacturer's warranty.

d. AC Disconnect

- i. The technician will check for proper operation.

e. Service Report

- i. Provide a report annually documenting all service and maintenance on the site.

f. Corrective Maintenance. The Operator shall perform the following:

- i. On-site troubleshooting & diagnostics of all system components
- ii. Inverter and Data Acquisition System resets:
 - Unlimited remote resets (if capability enabled and connection available)
 - Unlimited on-site resets for systems under Operator warranty
 - Up to two on-site resets per year for systems out of warranty
- iii. Processing of warranty claims on behalf of Customer and verification of replaced equipment
- iv. Management of repair and replacement for equipment out of warranty, where Operator is responsible to perform all labor related to procuring, installing, and maintaining those components or acceptable replacement components, at no additional cost to the District.
- v. Ongoing warranty support and representation of Customer's interest with System equipment manufacturers
- vi. Provide a report annually documenting all service and maintenance on the site.

C. Module Washing:

Operator shall wash all modules a minimum of one (1) time per year.

D. System Monitoring Equipment

On an annual basis the monitoring system will be tested to verify that it is operating as intended. The Operator will notify the District of alerts and Operator will acknowledge the alerts and respond with a reason for the alert or an action plan to continue to monitor for changes or trouble shoot the problem.

E. Excluded Services

- a. Any installation of additional monitoring equipment that may be required if site conditions change for reasons beyond Operator's control.
- b. Parts or equipment that were not installed by Operator or its Subcontractors.
- c. In the event that any manufacturer of the solar specific equipment including any modules, inverters, racking, combiner boxes or monitoring equipment relating to a material component of the Generating Facilities is not able or willing to honor its warranty to District and District does not remedy by replacement at its own expense and Operator uses its best efforts to assist the District in its attempts to oblige the manufacturer to comply with its warranty obligations, Operator shall not be responsible for the costs of any such manufacturer's components, but Operator will remain responsible to perform all labor related to procuring, installing and maintaining those components or acceptable replacement components, at no additional cost to the District.
- d. Repair of damage due to damage from third parties including damage associated with baseball field activities.

- 2. **Term.** Operator shall commence providing services under this O&M Contract on the Performance Guarantee Start Date and will diligently perform as required herein for up to five (5) successive terms of five (5) years from that date, with the District having the option at the end of each successive term to (1) Terminate this O&M

Contract or (2) extend this O&M Contract for a subsequent five (5) year term, provided that such option may only be exercised four (4) times. Documentation of the Start Date for each system will be as noted on the first invoice submitted to the Utility by the third party monitoring provider required.

3. **Submittal of Documents.** The Operator shall not commence the Work under this O&M Contract until the Operator has submitted and the District has approved the certificate(s) and affidavit(s), and the endorsement(s) of insurance required as indicated below:

<u> X </u>	Signed O&M Contract
<u> X </u>	Workers' Compensation Certification
<u> X </u>	Fingerprinting/Criminal Background Investigation Certification
<u> X </u>	Insurance Certificates and Endorsements
<u> X </u>	W-9 Form
_____	_____

4. **Compensation.** Compensation to Operator for the Work was part of its compensation under the Solar Contract, except as specifically indicated in the description of the Scope of Services herein.

4.1. Payment for Work that requires additional payment shall be made for all undisputed amounts in monthly installment payments within thirty (30) days after the Operator submits an invoice to the District for Work actually completed and after the District's written approval of the Work, or the portion of the Work for which payment is to be made.

4.2. Invoices furnished by Operator under this O&M Contract must be in a form acceptable to the District. All amounts paid by District shall be subject to audit by District.

4.3. The granting of any payment by District, or the receipt thereof by Consultant, shall in no way lessen the liability of Operator to correct unsatisfactory work, although the unsatisfactory character of that work may not have been apparent or detected at the time a payment was made. Work, which does not conform to the requirements of this O&M Contract, may be rejected by District and in that case must be replaced by Operator without delay.

5. **Notice.** Any notice required or permitted to be given under this O&M Contract shall be as indicated in the Solar Contract.

6. **Termination.**

6.1. **Without Cause by District.** District may, at any time, with or without reason, terminate this O&M Contract and compensate Operator only for services satisfactorily rendered to the date of termination. Written notice by District shall be sufficient to stop further performance of services by Operator. Notice shall be deemed given when received by the Operator or no later than three days after the day of mailing, whichever is sooner. In addition, if District terminates this O&M Contract without cause, Operator shall no longer be obligated to provide the Performance Guarantee as defined and as set forth in the Solar Contract and that guarantee shall be immediately terminated and be of no further force and effect.

6.2. **With Cause by Operator.** Operator may terminate this O&M Contract with cause. Cause shall include:

6.2.1. Upon thirty (30) days of Operator's notice of material violation of this O&M Contract by the District;

6.2.2. Upon thirty (30) days of Operator's notice of any act by District exposing the Operator to liability to others for personal injury or property damage; or

6.2.3. Upon Operator's notice to District if District is adjudged a bankrupt, District makes a general assignment for the benefit of creditors or a receiver is appointed on account of District's insolvency.

Written notice by Operator shall contain the reasons for such intention to terminate for cause. District shall have thirty (30) calendar days after that notice to cure Operator's reasons for such intention to terminate for cause, to the reasonable satisfaction of Operator, which shall not be unreasonably withheld. In the event of this termination with cause by Operator, the District may secure the required services from another contractor. If Operator terminates this O&M Contract with cause as permitted in this provision Operator shall no longer be obligated to provide the Performance Guarantee set forth in the Solar Contract and said guarantee shall be immediately terminated and be of no further force and effect. If the District disputes the validity of the termination for cause, the District may seek resolution of said dispute pursuant to the dispute resolution procedures established in the Solar Contract. If a determination is made that the termination was invalid, the Performance Guarantee shall be reinstated and shall be retroactive to the date of termination.

6.3. **With Cause by District.** District may terminate this O&M Contract upon giving of written notice of intention to terminate for cause. Cause shall include:

6.3.1. Upon thirty (30) days of District's notice material violation of this O&M Contract by the Operator; or

6.3.2. Upon thirty (30) days of District's notice of any act by Operator exposing the District to liability to others for personal injury or property damage; or

6.3.3. Upon District's notice to Operator if Operator is adjudged a bankrupt, Operator makes a general assignment for the benefit of creditors or a receiver is appointed on account of Operator's insolvency.

Written notice by District shall contain the reasons for such intention to terminate for cause. Operator shall have twenty (20) calendar days after that notice to cure District's reasons for such intention to terminate for cause, to the reasonable satisfaction of District, which shall not be unreasonably withheld. In the event of this termination with cause, the District may secure the required services from another operator. If the expense, fees, and/or costs to the District exceeds the cost of providing the services pursuant to this O&M Contract, the Operator shall immediately pay the excess expenses, fees, and/or costs to the District upon the receipt of the District's notice of the expenses, fees, and/or costs, provided that the aggregate amount of those expenses, fees and costs shall not exceed twice (two times) the total not-to-exceed compensation amount indicated herein. The foregoing provisions are in addition to and not a limitation of any other rights or remedies available to District. If District terminates this O&M Contract with cause as permitted in this provision, Operator shall remain obligated to provide the Performance Guarantee set forth in the Solar Contract; provided that a substitute operator is engaged without hiatus and has consistently been performing Operator's obligations at least to the standard and in the scope set forth in the O&M Contract entered into by Operator. If the Operator disputes the validity of the termination for cause, the Operator may seek resolution of said dispute pursuant to the dispute resolution procedures established in the Solar Contract. If a determination is made that the termination was invalid, then, at the District's discretion, (1) the termination shall be deemed to be a termination without cause by the District pursuant to the provisions herein above or (2) this O&M Contract shall be reinstated.

7. **Right to Hire.** If Operator fails to perform any of its material obligations ("a Material Breach") under this O&M Contract, the District shall notify the Operator in writing, and if after 30 days upon receiving such notice Operator hasn't corrected the Material Breach, the District shall have the right to hire other contractor(s) to correct the Material Breach at the sole cost and expense of Operator, which Operator shall pay within thirty (30) days of District's invoicing to Operator, provided that the District shall seek fair pricing when selecting such other contractors.

8. **Indemnification.** To the furthest extent permitted by California law, Operator shall defend, indemnify, and hold free and harmless the District, its agents, representatives, officers, consultants, employees, trustees, and volunteers ("the indemnified parties") from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity ("Claim"), to property or persons, including personal injury and/or death, to the extent that any of the above arise out of, pertain to, or relate to the negligence, recklessness, errors or omissions, or willful misconduct of Operator, its officials, officers, employees, subcontractors, consultants, or agents directly or indirectly arising out of, connected with, or resulting from the performance of the Services, the Project, or this O&M Contract. The District shall have the right to accept or reject any legal representation that Operator proposes to defend the indemnified parties.

9. **Insurance.**

9.1. The Operator shall procure and maintain at all times it performs any portion of the Services the following insurance with minimum limits equal to the amount indicated below.

9.1.1. **Commercial General Liability and Automobile Liability Insurance.** Commercial General Liability Insurance and any Auto Automobile Liability Insurance that shall protect the Operator, the District, and the State from all claims of bodily injury, property damage, personal injury, death, advertising injury, and medical payments arising performing any portion of the Services. (Form CG 0001 and CA 0001, or forms substantially similar, if approved by the District.)

9.1.2. **Workers' Compensation and Employers' Liability Insurance.** Workers' Compensation Insurance and Employers' Liability Insurance for all of its employees performing any portion of the Services. In accordance with provisions of section 3700 of the California Labor Code, the Operator shall be required to secure workers' compensation coverage for its employees. If any class of employee or employees engaged in performing any portion of the Services under this O&M Contract are not protected under the Workers' Compensation Statute, adequate insurance coverage for the protection of any employee(s) not otherwise protected must be obtained before any of those employee(s) commence performing any portion of the Services.

9.1.3. **Professional Liability (Errors and Omissions).** Professional Liability (Errors and Omissions) Insurance as appropriate to the Operator's profession.

Type of Coverage	Minimum Requirement
Commercial General Liability Insurance , including Bodily Injury, Personal Injury, Property Damage, Advertising Injury, and Medical Payments	
Each Occurrence	\$ 2,000,000
General Aggregate	\$ 4,000,000
Automobile Liability Insurance - Any Auto	
Each Occurrence	\$ 1,000,000
General Aggregate	\$ 1,000,000
Professional Liability	\$ 1,000,000
Workers Compensation	Statutory Limits
Employer's Liability	\$ 1,000,000

9.2. **Proof of Carriage of Insurance.** The Operator shall not commence performing any portion of the Services until all required insurance has been obtained and certificates indicating the required coverage have been delivered in duplicate to the District and approved by the District. Certificates and insurance policies shall include the following:

9.2.1. A clause stating: "This policy shall not be canceled or reduced in required limits of liability or

amounts of insurance until notice has been mailed to the District, stating date of cancellation or reduction. Date of cancellation or reduction shall not be less than thirty (30) days after date of mailing notice.”

9.2.2. *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.*

9.2.3. *An endorsement stating that the District and the State and their agents, representatives, employees, trustees, officers, consultants, and volunteers are named additional insured under all policies except Workers’ Compensation Insurance, Professional Liability, and Employers’ Liability Insurance. An endorsement shall also state that Operator’s insurance policies shall be primary to any insurance or self-insurance maintained by District.*

9.2.4. *All policies shall be written on an occurrence form.*

9.3. **Acceptability of Insurers.** *Insurance shall be with admitted insurance companies with an A.M. Best rating of no less than A: VII, unless otherwise acceptable to the District.*

10. **Assignment / Subcontracting.** *Operator may subcontract the Work of this O&M Contract or any part of it only upon prior approval of the District, which shall not be unreasonably withheld. Neither party shall, on the basis of this O&M Contract, contract on behalf of or in the name of the other party. An agreement made in violation of this provision shall confer no rights on any party and shall be null and void.*

11. **Compliance with Laws.** *Operator shall observe and comply with all rules and regulations of the governing board of the District and all federal, state, and local laws, ordinances and regulations. Operator shall give all notices required by any law, ordinance, rule and regulation bearing on conduct of the Work as indicated or specified. If Operator observes that any of the Work required by this O&M Contract is at variance with any laws, ordinance, rules or regulations, Operator shall notify the District, in writing, and, at the sole option of the District, any necessary changes to the scope of the Work shall be made and this O&M Contract shall be appropriately amended in writing, or this O&M Contract shall be terminated effective upon Operator’s receipt of a written termination notice from the District. If Operator performs any work that is in violation of any laws, ordinances, rules or regulations, without first notifying the District of the violation, Operator shall bear all costs arising therefrom.*

12. **Certificates/Permits/Licenses.** *Operator and all Operator's employees or agents shall secure and maintain in force all certificates, permits and licenses as are required by law in connection with the furnishing of Services pursuant to this O&M Contract.*

13. **Employment with Public Agency.** *Operator, if an employee of another public agency, agrees that Operator will not receive salary or remuneration, other than vacation pay, as an employee of another public agency for the actual time in which services are actually being performed pursuant to this O&M Contract.*

14. **Drug-Free / Smoke Free Policy.** *No drugs, alcohol and/or smoking are allowed at any time in any buildings and/or grounds on District property. No students, staff, visitors, consultants or contractors are to use drugs on these sites.*

15. **Anti-Discrimination.** *It is the policy of the District that in connection with all work performed under contracts there be no discrimination against any employee engaged in the work because of race, color, ancestry, national origin, religious creed, physical disability, medical condition, marital status, sexual orientation, gender, or age and therefore the Operator agrees to comply with applicable Federal and California laws including, but not limited to the California Fair Employment and Housing Act beginning with Government Code Section 12900 and Labor Code Section 1735 and District policy. In addition, the Operator agrees to require like*

compliance by all its subcontractor(s).

16. **Labor Code Requirements.** The Operator shall comply with all applicable provisions of the California Labor Code, Division 3, Part 7, Chapter 1, Articles 1-5, including, without limitation, the payment of the general prevailing per diem wage rates for public work projects of more than one thousand dollars (\$1,000). Copies of the prevailing rate of per diem wages are on file with the District. Operator specifically acknowledges and understands that the District and/or the State monitors and enforces compliance with Labor Code requirements through statutorily-authorized programs and the Operator shall perform the Work of the Project while complying with all the applicable provisions of those programs. The Operator and each subcontractor shall comply with Chapter 1 of Division 2, Part 7 of the California Labor Code, beginning with Section 1720, and including Section 1735, 1777.5 and 1777.6, forbidding discrimination, and Sections 1776, 1777.5 and 1777.6 concerning the employment of apprentices by Operator or subcontractors. Willful failure to comply may result in penalties, including loss of the right to bid on or receive public works contracts. **Registration:** The Operator and its subcontractors shall comply with the registration and qualification requirements pursuant to sections 1725.5 and 1771.1 of the California Labor Code. **Certified Payroll Records:** Operator and its subcontractor(s) shall keep accurate certified payroll records of employees and shall make them available to the District immediately upon request.
17. **Fingerprinting of Employees.** The Fingerprinting/Criminal Background Investigation Certification must be completed and attached to this Contract prior to Operator's performing of any portion of the Services.
18. **No Rights in Third Parties.** This O&M Contract does not create any rights in, or inure to the benefit of, any third party except as expressly provided herein.
19. **Limitation of District Liability.** Other than as provided in this O&M Contract, District's financial obligations under this O&M Contract shall be limited to the payment of the compensation provided in this O&M Contract. Notwithstanding any other provision of this O&M Contract, in no event, shall District be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits or revenue, arising out of or in connection with this O&M Contract for the services performed in connection with this O&M Contract.
20. **Conflict of Interest.** Through its execution of this O&M Contract, Operator acknowledges that it is familiar with the provisions of section 1090 et seq. and Section 87100 et seq. of the Government Code of the State of California, and certifies that it does not know of any facts which constitute a violation of said provisions. In the event Operator receives any information subsequent to execution of this O&M Contract, which might constitute a violation of said provisions, Operator agrees it shall notify District of this information.
21. **Integration/Entire Contract of Parties.** This O&M Contract constitutes the entire agreement between the Parties related to the Work of this O&M Contract and supersedes all prior discussions, negotiations, and agreements, whether oral or written. This O&M Contract may be amended or modified only by a written instrument executed by both Parties.
22. **California Law.** This O&M Contract shall be governed by and the rights, duties and obligations of the Parties shall be determined and enforced in accordance with the laws of the State of California. The Parties further agree that any action or proceeding brought to enforce the terms and conditions of this O&M Contract shall be maintained in the county in which the District's administrative offices are located.
23. **Disputes:** In the event of a dispute between the parties as to performance of Work, O&M Contract interpretation, or payment, the Parties shall attempt to resolve the dispute by negotiation and/or mediation, if agreed to by the Parties. Pending resolution of the dispute, Operator shall neither rescind the Contract nor stop Work.
24. **Waiver.** The waiver by either party of any specific breach of any term, covenant, or condition herein contained

shall not be deemed to be a waiver of that term, covenant, condition, or any subsequent breach of the same or any other term, covenant, or condition herein contained.

- 25. Severability.** If any term, condition or provision of this O&M Contract is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force and effect, and shall not be affected, impaired or invalidated in any way.
- 26. Authority to Bind Parties.** Neither party in the performance of any and all duties under this O&M Contract, except as otherwise provided in this O&M Contract, has any authority to bind the other to any agreements or undertakings.
- 27. Attorney Fees/Costs.** Should litigation be necessary to enforce any terms or provisions of this O&M Contract, then each party shall bear its own litigation and collection expenses, witness fees, court costs and attorney's fees.
- 28. Captions and Interpretations.** Paragraph headings in this O&M Contract are used solely for convenience, and shall be wholly disregarded in the construction of this O&M Contract. No provision of this O&M Contract shall be interpreted for or against a party because that party or its legal representative drafted that provision, and this O&M Contract shall be construed as if jointly prepared by the Parties.
- 29. Calculation of Time.** For the purposes of this O&M Contract, "days" refers to calendar days unless otherwise specified.
- 30. Signature Authority.** Each party has the full power and authority to enter into and perform this O&M Contract, and the person signing this O&M Contract on behalf of each Party has been properly authorized and empowered to enter into this O&M Contract.
- 31. Counterparts.** This O&M Contract and all amendments and supplements to it may be executed in counterparts, and all counterparts together shall be construed as one document.
- 32. Incorporation of Recitals and Exhibits.** The Recitals and each exhibit attached hereto are hereby incorporated herein by reference.

IN WITNESS WHEREOF, the Parties hereto have executed this O&M Contract on the date indicated below.

Dated: _____, 20__

Dated: _____, 20__

Fullerton Joint Union High School District

_____, Inc.

By: _____

By: _____

Print Name: _____

Print Name: _____

Print Title: _____

Print Title: _____

WORKERS' COMPENSATION CERTIFICATION

Labor Code Section 3700 in relevant part provides:

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

- *By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.*
- *By securing from the Director of Industrial Relations a certificate of consent to self-insure, 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 its employees.*

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

Date: _____

Name of Operator or Company: _____

Signature: _____

Print Name and Title: _____

(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 District prior to performing any Work under this O&M Contract.)

FINGERPRINTING/CRIMINAL BACKGROUND INVESTIGATION CERTIFICATION

The undersigned does hereby certify to the governing board of the District that:

- (1) He/she is a representative of the Operator,
- (2) He/she is familiar with the facts herein certified,
- (3) He/she is authorized and qualified to execute this certificate on behalf of Operator; and
- (4) That the information in this Criminal Background Investigation / Fingerprinting Certification is true and correct.

1. **Education Code.** Operator has taken at least one of the following actions with respect to the Project (check all that apply):

_____ The Operator has complied with the fingerprinting requirements of Education Code section 45125.1 with respect to all Operator's employees and all of its subcontractors' employees who may have contact with District pupils in the course of providing services pursuant to the Contract, and the California Department of Justice ("DOJ") has determined (per the DOJ process for Applicant Agencies described more fully on its website, located at: <http://oag.ca.gov/fingerprints/agencies>) that none of those employees have been convicted of a felony, as that term is defined in Education Code section 45122.1. A complete and accurate list of Operator's employees and of all of its subcontractors' employees who may come in contact with District pupils during the course and scope of the Contract is attached hereto; and/or

_____ Pursuant to Education Code section 45125.2, Operator has installed or will install, prior to commencement of work, a physical barrier at the Project site, that will limit contact between Operator's employees and District pupils at all times; and/or

_____ Pursuant to Education Code section 45125.2, Operator certifies that all employees will be under the continual supervision of, and monitored by, an employee of the Operator who the California Department of Justice has ascertained has not been convicted of a violent or serious felony. The name and title of the employee who will be supervising Operator's employees and its subcontractors' employees is:

Name: _____

Title: _____

_____ ~~The Work on the Contract is at an unoccupied school site and no employee and/or subcontractor or supplier of any tier of Contract shall come in contact with the District pupils.~~

2. **Megan's Law (Sex Offenders).** I have verified and will continue to verify that the employees of Operator that will be on the Project site and the employees of the Subcontractor(s) that will be on the Project site are **not** listed on California's "Megan's Law" Website (<http://www.meganslaw.ca.gov/>).

Date: _____
Proper Name of Operator: _____
Signature: _____
Print Name: _____
Title: _____

Exhibit C

Detailed Construction Schedule for Each Site

[INCLUDE A DETAILED CPM CONSTRUCTION SCHEDULE THAT MEETS ALL THE MILESTONES IN THE MILESTONE SCHEDULE]

Form for Project Schedule for each Site

SCHOOL	
Milestone	Milestone Date
Award of contract	
Notice to proceed	
Schematic design submitted to district for approval	
Schematic design approved by District	
DSA package submitted to DSA and District	
DSA approval	
Construction Begins	
Completion	
Designer/Builder Requests Permission to Operate Letter From Utility	
Permission to Operate Letter Issued by Utility	
O&M Services and Performance Guarantee Start Date (estimated)	

Completion Date noted in this table applies only to the Construction portion of this Contract and not to the Operations & Maintenance terms, as described in **Exhibit B**, nor the Performance Guarantee terms as described in **Exhibit G**.

Designer/Builder acknowledges the District's Instructional Calendar that has already been provided and shall coordinate its work to not disrupt, in any way, District activities, including testing, at each Site. At the time of execution of this Contract, the District's school site test calendars with the exact dates of testing activities are still being prepared. Those will be provided to Designer/Builder as soon as they are ready.

Designer/Builder shall include in its construction schedule at least fifteen (15) weekdays at elementary school sites and at least twenty (20) weekdays at intermediate school sites and high school sites when Designer/Builder shall not be permitted to perform any work at the site.

Exhibit D

Pricing Items and Payment Provisions

[INCLUDE A DETAILED PRICE BREAKDOWN FOR EACH SITE THAT DISTRICT AND DESIGNER/BUILDER CAN UTILIZE.]

These provisions have been agreed to by Designer/Builder and District set forth the terms and conditions for the purchase and sale of solar generated electric energy from the solar panel system described in **Exhibit F** ("the **System(s)**") installed at the School Sites.

1. **Term:** Twenty-five (25) years, beginning on the Commercial Operation Date.
2. **Additional Terms:** Up to two (2) Additional Terms of five (5) years each.
3. **Environmental Incentives and Environment Attributes Accrue to District.**
4. **Contract Price:**

Price per kilowatt hour (\$/kWh) for Contract Year One (1) through Contract Year Twenty-Five (25)	\$0.0000
--	----------

5. **Scheduled Commercial Operation Date:** _____

6. **Purchase Option Price:**

End of Contract Year	Option Price
6	Fair Market Value
10	Fair Market Value
25	Fair Market Value

7. **Termination Value:**

Contract Year	Termination Value
1	\$0.0000
2	\$0.0000
3	\$0.0000
4	\$0.0000
5	\$0.0000
6	\$0.0000
7	\$0.0000
8	\$0.0000
9	\$0.0000
10	\$0.0000
11	\$0.0000
12	\$0.0000
13	\$0.0000
14	\$0.0000
15	\$0.0000
16	\$0.0000
17	\$0.0000
18	\$0.0000
19	\$0.0000
20	\$0.0000
21	\$0.0000

22	\$0.0000
23	\$0.0000
24	\$0.0000
25	\$0.0000

8. Estimated Annual Production:

Contract Year	Estimated Annual Production (kWh)
1	_____
2	_____
3	_____
4	_____
5	_____
6	_____
7	_____
8	_____
9	_____
10	_____
11	_____
12	_____
13	_____
14	_____
15	_____
16	_____
17	_____
18	_____
19	_____
20	_____
21	_____
22	_____
23	_____
24	_____
25	_____

9. Allowance: The District will provide an allowance of funds ("Allowance") in order to fund any change orders or other additional work as the District directs, pursuant to the following terms:

- a. All Allowance amounts can only be used as directed by the District.
- b. All Allowance amounts are used exclusively for the District's purposes and for scope(s) of work as directed by District.
- c. The Designer/Builder will prepare detailed breakdown of all costs associated with the work defined for the Allowance. These amounts will be charged against the Allowance based on final detailed payment receipts and back-up as required by District, and will include all costs of work performed under the defined work scope.
- d. If required by District, Designer/Builder shall obtain quotes for equipment from three separate vendors and present to District for consideration and selection.

- e. Designer/Builder shall not include in its pricing for any use of the Allowance amount, any cost of coordination, supervision, bond costs, installation or indirect project costs associated with performing the work of each Allowance. Designer/Builder shall be permitted to charge only its direct costs plus five percent (5%) to perform the work of any use of the Allowance amount, as indicated through documentation approved by the District.

Exhibit E

SCHEDULE OF VALUES (DRAFT)

[INCLUDE A DETAILED SOV THAT MEETS ALL REQUIREMENTS]

Form of Schedule of Values for Each Site














Designer/Builder shall prepare a detailed schedule of values for all of the Work that must include quantities and prices of items aggregating the Contract Price and must subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. This schedule of values must be approved by the District prior to it being used as a basis for payment.

<u>Schedule of Values</u>		
<u>Activity Name</u>		<u>Percent of Total</u>
<u>Notice to Proceed</u>		0%
<u>Preconstruction Work</u>		
	Design Development	3%
	100% Design completed	4%
	DSA Approval	3%
	Management Labor	1%
<u>Construction</u>		
	Temp Facilities	2%
	Foundations	5%
	Structural Install	20%
	Management Labor	1%
	PV Delivery	10%
	Equipment Delivery	10%
	Electrical installation	20%
	Interconnection	6%
	Commissioning	5%
	Testing	4%
	Management Labor	3%
<u>Final Completion</u>		
	Training	0%
	Punch List	1%
<u>DSA Close out</u>	DSA Certification	2%
		100%

Exhibit F
INITIAL LAYOUT AND STAGING DOCUMENTS AND LIST OF PLANS AND SPECIFICATIONS

Initial Layout and Staging Rendering –
_____ School
List of Plans and Specifications

[SAMPLE – EACH SITE MUST HAVE ITS OWN LAYOUT, DOCUMENTS, ETC.]

<u>SHEET NO.</u>	<u>SHEET NAME</u>
S0.0	TITLE SHEET
S1.0	GENERAL NOTES
S1.0A	GENERAL NOTES
 S1.1	SPECIFICATIONS
 S1.1A	SPECIFICATIONS
 S1.1B	SPECIFICATIONS
S2.0	STANDARD AND FOUNDATION DETAILS
 S2.1	FOUNDATION DETAILS
 S2.2	FOUNDATION DETAILS
 S3.0	STANDARD DOUBLE ARRAY OPTION FOUNDATION AND ROOF FRAMING PLAN
 S3.0A	STANDARD DOUBLE ARRAY OPTION SPREAD FOOTING / GRADE BM FOUNDATION PLAN
 S3.1	STANDARD SLOPE UP ARRAY OPTION FOUNDATION AND ROOF FRAMING PLAN
 S3.1A	STANDARD SLOPE UP ARRAY OPTION SPREAD FOOTING / GRADE BM FOUNDATION PLAN
 S3.2	STANDARD SLOPE DOWN ARRAY OPTION FOUNDATION AND ROOF FRAMING PLAN
 S3.2A	STANDARD SLOPE DOWN ARRAY OPTION SPREAD FOOTING / GRADE BM FOUNDATION PLAN
S3.3	SPECIAL DOUBLE ARRAY OPTION FOUNDATION AND ROOF FRAMING PLAN
S3.4	SPECIAL SLOPE UP ARRAY OPTION FOUNDATION AND ROOF FRAMING PLAN
S3.5	SPECIAL SLOPE DOWN ARRAY OPTION FOUNDATION AND ROOF FRAMING PLAN
S4.0	FRAME ELEVATION AND DETAILS
 S4.1	FRAME ELEVATIONS
 S4.2	DETAILS

PLANS / DRAWINGS

<u>Sheet number</u>	<u>File number</u>	<u>Description</u>
---------------------	--------------------	--------------------

[LIST ALL PLANS AND/OR DRAWINGS FOR PROJECT]

SPECIFICATIONS

<u>Specification Description</u>	<u>Specification Number</u>
----------------------------------	-----------------------------

[LIST ALL SPECIFICATIONS FOR PROJECT]

Exhibit G
PERFORMANCE GUARANTEE

Contract for Performance Guarantee and Parameters and Energy Output Data for School Sites

This Contract for Performance Guarantee and Parameters and Energy Output Data for School Sites ("**PeGu Contract**") dated [] ("**Effective Date**"), is entered into by and between [] ("**Provider**"), and Fullerton Joint Union High School District, a California school district ("**District**" or "**Customer**"). In this PeGu Contract, Provider and Customer are referred to individually as a "**Party**" and collectively as the "**Parties**."

Recitals

WHEREAS, The Customer and the Provider entered into a Solar Contract for Design and Construction ("**Solar Contract**") pursuant to which to which Provider has designed and constructed a System for the production of energy for the District's use; and

WHEREAS, Provider and Customer desire to enter into an agreement pursuant to which Provider will guarantee annual energy generation by the System;

NOW, THEREFORE, FOR GOOD AND VALUABLE CONSIDERATION, the receipt and adequacy of which is hereby acknowledged, Provider and Customer agree as follows:

1. Defined Terms.

- 1.1. **Actual Generation** means, for each Guarantee Year during the Term, the System's alternating current or "AC" electricity production in kilowatt-hours ("kWh") as measured pursuant to the provisions and formulas herein under "Guaranteed Payment."
- 1.2. **Avoided Energy Price per kWh** means the amount that the Customer will be paid for each Kilowatt-hour as set out in **Attachment A: Avoided Energy Price**.
- 1.3. **Commissioning Date** means the date the System is capable of commercial deliveries of energy to the full extent of its designed capacity and commences delivery of energy for sale or use.
- 1.4. **Customer Responsibilities** shall have the meaning set forth herein.
- 1.5. **Data Acquisition System or DAS** means Provider's system that displays historical meteorological and production data over an Internet connection and consists of hardware located on-site and software housed on Provider's DAS server. The DAS measures and logs, at a minimum, the following parameters on a 15-minute average basis at the Sites: actual AC electricity production of the System (in kWh) and solar irradiance (in W/m²).
- 1.6. **Expected Energy** means, for the System in a specified Guarantee Year, the kilowatt hours set forth in the Attachments A and B of this PeGu Contract for each Site.
- 1.7. **Force Majeure** means the same as that term is defined in the Solar Contract.
- 1.8. **Guaranteed Level** means one hundred percent (100%) of the Expected Energy for a Guarantee Year for specified System(s).
- 1.9. **Guarantee Year** means each successive 12-month period during the Term commencing on the first day of the Term.
- 1.10. **Kilowatt-hour or kWh** means electrical energy expressed in kilowatt-hours and recorded from the kWh interval records of the Revenue Meter.
- 1.11. **Operations & Maintenance Contract** (or "O&M" Contract) means that certain Operations & Maintenance Contract of even date herewith between [] and [].
- 1.12. **PVSim** means the software program utilized by Provider to predict the amount of energy a Solar Power System will produce in an average year which currently has the following characteristics: (1) based on PVFORM, the photovoltaic simulation software produced by Sandia National Laboratories and the US Department of Energy, (2) all photovoltaic characteristics are modeled, (3) all ancillary array losses are taken into account and (4) PVSim simulations use either measured data or typical meteorological year

files from Meteonorm and NREL.

- 1.13. **Revenue Meter** means the principal meter of a given System from which energy output is read and documented.
- 1.14. **SEMMY** or Simulated Energy in a Measured Meteorological Year, means, with respect to any Guarantee Year, Year 1 AC Energy output of the System simulated by PVSIM using measured average hourly irradiance, wind speed, and air temperature as recorded by the Data Acquisition System, holding all other inputs equal to those used in calculating SETMY.
- 1.15. **SETMY** or Simulated Energy for a Typical Meteorological Year, means the Year 1 AC Energy output of the System simulated by PVSIM using average hourly irradiance, wind speed, and air temperature data contained within the Weather File.
- 1.16. **Site** means the real estate where the System and any support structure are located including any building and building roof that touch or support the System.
- 1.17. **System** means Customer's photovoltaic system located at the Site(s) and purchased from Provider as more particularly identified in the Solar Contract.
- 1.18. **Subcontractor** means, any person or firm who contracts with Provider or with any contractor of any tier operating under a contract with Provider to provide or furnish any supplies, materials, equipment, or services of any kind, whether design, construction, service, or otherwise, for the System.
- 1.19. **Term:** The Performance Guarantee Start Date is the date of the Permission to Operate Letter from the Utility for the specific Site. The termination provisions in the Operations & Maintenance Contract shall alter the enforceability of the Performance Guarantee, as indicated in those termination provisions.
- 1.20. **True-up Period** means each successive two (2) year period during the Term commencing on the first day of the Term.
- 1.21. **Weather Adjustment** means the method for reconciling expected kWh during a typical weather year with the actual meteorological conditions measured on-site, pursuant to the provisions and formulas herein under "Guaranteed Output Calculations."
- 1.22. **Weather File** means the following typical meteorological year data set, which contains average hourly values of measured solar radiation, temperature, and wind speed: _____ NREL TMY3.
2. **Guaranteed Output Calculations.**
 - 2.1. Provider shall calculate the Annual Deficit for each Guarantee Year during the Term:
Annual Deficit = ((Expected Energy x Guarantee Level) x Weather Adjustment) - Actual Generation
 - 2.2. Where "Weather Adjustment" means the following ratio:
$$\frac{\text{Simulated Energy in a Measured Meteorological Year (SEMMY)}}{\text{Simulated Energy for a Typical Meteorological Year (SETMY)}}$$
 - 2.3. For each Guarantee Year, Provider shall calculate the Annual Deficit.
3. **Guarantee Payment.**
 - 3.1. At the end of each True-up Period:
 - 3.1.1. if the \sum Annual Deficits > 0, then Provider shall pay to Customer an amount equal to the product of (i) the Annual Deficit and (ii) the Avoided Energy Price per kWh for each Guarantee Year, with each product then aggregated for the Guarantee Years comprising such True-Up Period (a "Guarantee Payment");
 - 3.1.2. Provider shall, by invoice, promptly notify Customer of any Guarantee Payment due. A Guarantee Payment shall be payable within thirty (30) days of the date of such invoice.
 - 3.1.3. Provider shall provide Customer with a report detailing the calculations set forth in the "Guaranteed Output Calculations" and the "Guarantee Payment" Sections. This report shall contain sufficient information for the Customer to be able to determine the accuracy of Provider's conclusion as the amount, if any, of Guarantee Payment.
4. **Actual Generation Measurement.** The process for measuring Actual Generation for each Guarantee Year shall be:
 - 4.1. **Initial Output Data Collection.** During the Term, Provider will collect energy output data using its Data Acquisition System. For each Guarantee Year, Provider will sum the daily kWh output provided by the DAS to calculate the Actual Generation for such Guarantee Year.
 - 4.2. **Equipment Calibration and Replacement.** Provider may request to have the meteorological equipment independently calibrated or replaced at its own expense every eighteen to thirty months. Provider shall

notify the other party of the scheduled calibration date and time no less than 30 days prior, and shall provide the Customer written proof of calibration or replacement.

- 4.3. **Contingency for Equipment Failure.** In the event of hardware, communication, or other failure affecting the DAS, Provider will make commercially reasonable efforts to resolve the failure in a timely manner. In the event that data is lost, Actual Generation shall be adjusted to compensate for such lost data, which shall be Provider's sole liability, and Customer's exclusive remedy, for any Guaranteed Output arising from any equipment failure or lost data relating to the DAS:

4.3.1. In lieu of lost meteorological data, Provider will utilize such data obtained from a nearby meteorological station that Provider monitors and selects for such purpose.

4.3.2. In lieu of lost electricity data, Provider will utilize the cumulative data from System meter readings to calculate the electricity generated during the missing interval. In the event that data from the System meter is inaccurate or missing, Provider will simulate electricity production during the missing interval utilizing measured meteorological data and PVSIM. The simulated electricity production during the missing interval will be added to the Actual Generation for the subject Guarantee Year.

5. Guarantee.

- 5.1. Provider guarantees to Customer that the Actual Generation of the System during any Guarantee Year, subject to the limitations, terms and conditions stated in the Solar Contract, into which this Performance Guarantee Standard Terms ("PeGu Contract") is incorporated, shall be not less than the product of the Guaranteed Level and the Expected Energy, as adjusted for measured meteorological conditions per the Weather Adjustment as defined herein.

6. Customer Responsibilities.

- 6.1. Throughout the Term, and as conditions to the obligations of Provider hereunder, Customer shall:
- 6.1.1. maintain an Operations & Maintenance Contract with Provider for the System and allow repairs in a timely fashion as may be recommended from time to time by Provider;
 - 6.1.2. not be in breach of any Customer obligations under the Solar Contract;
 - 6.1.3. grant reasonable access to the System by Provider personnel and representatives;
 - 6.1.4. insure that Primary and Secondary Contacts have the capability to resolve any failures of DAS communications, and
 - 6.1.5. not modify, alter, damage, service, shade, or repair, without Provider's prior written approval, any part of the System, the supporting structure for the System (including building roof, if applicable), or the associated wiring.

7. Customer's Failure to Uphold Responsibilities.

- 7.1. Provider's obligations under this PeGu Contract shall be suspended for the duration of Customer's failure to satisfy one or more of Customer Responsibilities as indicated herein. Provider shall promptly notify Customer of any such failures ("Out of Compliance Letter"), but in no case later than seventy-two (72) hours after notice of any alleged failure of Customer to satisfy one or more of Customer Responsibilities. Upon Customer's cure of all failures described in an Out of Compliance Letter, Provider will notify Customer ("In Compliance Letter") that Customer is complying with Customer Responsibilities. For any period between the issuance of an Out of Compliance Letter and of an In Compliance Letter (a "Noncompliance Period"), Provider shall have no liability under this PeGu Contract. Each month in which there is a Noncompliance Period and any Actual Generation in such month(s) shall be disregarded in the calculation of Annual Deficits or Annual Surpluses as indicated herein and the Expected kWh for any Guarantee Year in which there is a Noncompliance Period shall be reduced by an amount proportionate to the period so disregarded and to the actual or reasonably estimated meteorological data during such period.
- 7.2. Any dispute as to whether Customer in fact has failed to satisfy one or more of Customer Responsibilities shall be resolved pursuant to the Dispute provisions below.

8. Adjustment of Expected Energy.

- 8.1. If, and to the extent, any of the following events results in a change in the production of electricity by the System, Expected Energy shall be adjusted correlatively for the period of such change:
- 8.1.1. There is structural failure in a building supporting the System;
 - 8.1.2. There is any failure of the System to perform caused by legislative, administrative or executive

action, regulation, order or requisition of any federal, state or local government, local utility or public utilities commission;

8.1.3. There is an event of Force Majeure; or

8.1.4. There is any change in usage of or structures on any of the Sites, or buildings at or near any of the Sites, which causes additional shading, soiling, or otherwise reduced performance of the System.

9. Notification of Changes to Expected Energy.

If either Party determines that any changes to Expected Energy are required based on an event or events described herein that, then that Party shall notify the other Party in writing of the basis for its determination and shall either provide revised definitions of Expected Energy in Attachments. The Parties shall negotiate in good faith whether to revise the Expected Energy and, if mutually agreed to by the Parties, the Parties shall revise this PeGu Contract pursuant to the terms of this PeGu Contract.

10. Additional Provisions.

10.1. Notices. All notices, certificates or other communications hereunder shall be sufficiently given and shall be deemed to have been received as indicated below and to the persons indicated below. If notice is given by personal delivery thereof, it shall be considered delivered on the day of delivery. If notice is given by overnight delivery service, it shall be considered delivered on (1) day after date deposited, as indicated by the delivery service. If notice is given by depositing same in United States mail, enclosed in a sealed envelope, it shall be considered delivered three (3) days after date deposited, as indicated by the postmarked date. If notice is given by registered or certified mail with postage prepaid, return receipt requested, it shall be considered delivered on the day the notice is signed for.

If to District:	If to Provider:
Fullerton Joint Union High School District	_____ Corporation
_____	_____
_____, CA 9 _____	_____, CA 9 _____
Attention: _____	Attention: _____
Telephone: () ____ - _____	Telephone: () ____ - _____
Facsimile: () ____ - _____	Facsimile: () ____ - _____

10.2. Disputes. Disputes between the parties arising out of this PeGu Contract shall be resolved by the following processes:

10.2.1. Negotiation. The parties shall first attempt in good faith to resolve any controversy or dispute arising out of or relating to this PeGu Contract by negotiation.

10.2.2. Mediation. Within 30 days, but no earlier than 15 days, following the earlier of (1) receipt of notice by one party by the other party of a demand for mediation, the parties shall submit the dispute to non-binding mediation administered by the AAA (or other agreed upon rules) under its construction industry mediation rules, unless waived by mutual stipulation of both parties.

10.2.3. Litigation. Disputes arising from this PeGu Contract that cannot be settled through negotiation or mediation (after those processes have been exhausted) shall be litigated in the California Superior Court in the county in which the Project that is the subject of this PeGu Contract is located.

10.3. Amendments.

This PeGu Contract may not be amended, supplemented or otherwise modified except by a written instrument specifically referring to this PeGu Contract and signed by both parties, or as specifically allowed under the terms and conditions outlined in this PeGu Contract

10.4. Severability.

If any part of this PeGu Contract shall be invalid or unenforceable under any applicable law, such invalidity or unenforceability shall not affect the enforceability of any other part hereof.

10.5. Counterparts.

This PeGu Contract may be executed in any number of counterparts, each of which shall be deemed to be

an original and all of which together shall constitute one and the same instrument.

10.6. Successors and Assigns.

Except as provided herein, no party may assign this PeGu Contract without the prior written consent of the other party. Such consent shall not be unreasonably withheld. Either party may assign the PeGu Contract without consent to a parent or subsidiary, an acquirer of assets, or a successor by merger. Nothing in this PeGu Contract, expressed or implied, is intended to confer any rights, remedies, obligations or liabilities under or by reason of this PeGu Contract upon any person or entity other than the parties.

IN WITNESS WHEREOF, the Parties hereto have executed this Contract for Performance Guarantee and Parameters and Energy Output Data for School Sites on the date indicated below.

Dated: _____, 20__

Dated: _____, 20__

Fullerton Joint Union High School District

_____ **Corporation**

By: _____

By: _____

Print Name: _____

Print Name: _____

Print Title: _____

Print Title: _____

Attachment A: Avoided Energy Price

Guarantee Year	Utility Avoided Cost Rate	Avoided Energy Price (\$/kWh)
1	\$0.____	\$0.____
2	\$0.____	\$0.____
3	\$0.____	\$0.____
4	\$0.____	\$0.____
5	\$0.____	\$0.____
6	\$0.____	\$0.____
7	\$0.____	\$0.____
8	\$0.____	\$0.____
9	\$0.____	\$0.____
10	\$0.____	\$0.____
11	\$0.____	\$0.____
12	\$0.____	\$0.____
13	\$0.____	\$0.____
14	\$0.____	\$0.____
15	\$0.____	\$0.____
16	\$0.____	\$0.____
17	\$0.____	\$0.____
18	\$0.____	\$0.____
19	\$0.____	\$0.____
20	\$0.____	\$0.____

Attachment B: Expected Energy

_____ School

Guarantee Year	Annual kWh
1	____,000
2	____,000
3	____,000
4	____,000
5	____,000
6	____,000
7	____,000
8	____,000
9	____,000
10	____,000
11	____,000
12	____,000
13	____,000
14	____,000
15	____,000
16	____,000
17	____,000
18	____,000
19	____,000
20	____,000
Total	____,____,000

Attachment C: Typical Solar Insolation and AC Energy

_____ School

Time Range	Daylight Hours	Gh (kWh/m²/day)	Ipoa (kWh/m²/day)	AC Energy (kWh)
Jan	____.____	____.____	____.____	____,000
Feb	____.____	____.____	____.____	____,000
Mar	____.____	____.____	____.____	____,000
Apr	____.____	____.____	____.____	____,000
May	____.____	____.____	____.____	____,000
Jun	____.____	____.____	____.____	____,000
Jul	____.____	____.____	____.____	____,000
Aug	____.____	____.____	____.____	____,000
Sep	____.____	____.____	____.____	____,000
Oct	____.____	____.____	____.____	____,000
Nov	____.____	____.____	____.____	____,000
Dec	____.____	____.____	____.____	____,000
Year 1	____.____	____.____	____.____	____,____,000

This table is for informational purposes only; this table does not affect the Parties' respective obligations.

Exhibit H

WARRANTIES

The following warranties are the standard warranties from the manufacturers of components of the System. Designer/Builder is assigning these warranties to the District and these warranties shall not, in any way, reduce or limit the Performance Guarantee and/or any additional warranty terms or durations indicated in the Contract.

Photovoltaic Module Warranty

_____ -year

Inverter Warranty

_____ -year

Designer/Builder shall provide Owner with an extended manufacturer's warranty for the inverters for an additional _____ years (for a total inverter(s) warranty period to the District of _____ (_____) years) under the same terms as the following terms of the initial _____ (_____) year warranty from the manufacturer.

Exhibit I
ADDITIONAL CONTRACT DOCUMENTS
TO
CONTRACT FOR DESIGN AND CONSTRUCTION

Fullerton Joint Union High School District
and
_____, Inc.

- Coordination and Project Meetings
- Construction Schedule - Network Analysis
- Submittals
- Regulatory Requirements
- Testing Laboratory Services
- Temporary Facilities and Controls
- Site Standards
- Temporary Tree and Plant Protection
- Storm Water Pollution Prevention Plan – Construction
- Materials and Equipment
- Delivery, Storage and Handling
- Contract Closeout and Final Cleaning
- Field Engineering
- Cutting and Patching
- Operation and Maintenance Data
- Warranties
- Record Documents
- Commissioning

COORDINATION AND PROJECT MEETINGS

1. GENERAL

1.1. SECTION INCLUDES

- 1.1.1. Coordination Responsibilities of the Designer/Builder
- 1.1.2. Field Engineering Responsibilities of the Designer/Builder
- 1.1.3. Preconstruction Conference.
- 1.1.4. Progress Meetings.
- 1.1.5. Pre-Installation Conferences.
- 1.1.6. Post Construction Dedication.

1.2. COORDINATION RESPONSIBILITIES OF THE DESIGNER/BUILDER

- 1.2.1. Coordinate scheduling, submittals, and Work of the Specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- 1.2.2. Prior to commencement of a particular type or kind of work examine relevant information, contract documents, and subsequent data issued to the Project.
- 1.2.3. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- 1.2.4. Closing up of holes, backfilling, and other covering up operations shall not proceed until all enclosed or covered work and inspections have been completed. Verify before proceeding.
- 1.2.5. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- 1.2.6. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- 1.2.7. In locations where several elements of mechanical and electrical work must be sequenced and positioned with precision in order to fit into available space, prepare coordination drawings showing the actual conditions required for the installation. Prepare coordination drawings prior to purchasing, fabricating, or installing any of the elements required to be coordinated.
- 1.2.8. Closing up of walls, partitions or furred spaces, backfilling, and other covering up operations shall not proceed until all enclosed or covered work and inspections have been completed. Verify before proceeding.
- 1.2.9. Coordinate completion and clean up of Work of separate sections in preparation for completion and for portions of work designated for District's occupancy.
- 1.2.10. After District occupancy of Project, coordinate access to Site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of District's activities.
- 1.2.11. Coordinate all utility company work in accordance with the Contract Documents.

1.3. FIELD ENGINEERING RESPONSIBILITIES OF THE DESIGNER/BUILDER

- 1.3.1. Designer/Builder shall employ a Civil Engineer registered in the State of California and acceptable to the District.
- 1.3.2. Control datum for survey is that established by District provided-survey. Designer/Builder to locate and protect survey control and reference points.
- 1.3.3. Replace dislocated survey control points based on original survey control.
- 1.3.4. Provide field engineering services. Establish elevations, lines, and levels utilizing recognized engineering survey practices.
- 1.3.5. Upon completion of Work, submit certificate signed by the Civil Engineer, that elevations and locations of Work are in conformance with Contract Documents. Record

deviations on Record Drawings.

1.4. PRECONSTRUCTION CONFERENCE

- 1.4.1. Construction Manager or Project Engineer will schedule a conference immediately after receipt of fully executed Contract Documents prior to Project mobilization.
- 1.4.2. Mandatory Attendance: Construction Manager, Project Engineer, Inspector of Record, District, Designer/Builder, Designer/Builder's Project Manager, and Designer/Builder's Job/Project Superintendent.
- 1.4.3. Optional Attendance: District's consultants, subcontractors, and utility company representatives.
- 1.4.4. Construction Manager shall preside at conference and shall prepare and record minutes and distribute copies.
- 1.4.5. Agenda:
 - 1.4.5.1. Execution of District-Designer/Builder Contract.
 - 1.4.5.2. Issue Notice to Proceed.
 - 1.4.5.3. Submission of executed bonds and insurance certificates.
 - 1.4.5.4. Distribution of Contract Documents.
 - 1.4.5.5. Submission of list of Subcontractors, list of Products, Schedule of Values, and Progress Schedule.
 - 1.4.5.6. Designation of responsible personnel representing the parties.
 - 1.4.5.7. Procedures for processing Construction Directives and Change Orders.
 - 1.4.5.8. Procedures for Request for Information.
 - 1.4.5.9. Procedures for testing and inspecting.
 - 1.4.5.10. Procedures for processing applications for payment.
 - 1.4.5.11. Procedures for Project closeout.
 - 1.4.5.12. Use of Premises.
 - 1.4.5.13. Work restrictions.
 - 1.4.5.14. District's occupancy requirements or options.
 - 1.4.5.15. Responsibility for temporary facilities and controls.
 - 1.4.5.16. Construction waste management and recycling.
 - 1.4.5.17. Parking availability.
 - 1.4.5.18. Office, work and storage areas.
 - 1.4.5.19. Equipment deliveries and priority.
 - 1.4.5.20. Security.
 - 1.4.5.21. Progress cleaning.

1.5. PROGRESS MEETINGS

- 1.5.1. Construction Manager shall schedule and administer meetings throughout progress of the Work at a minimum of every week.
- 1.5.2. Construction Manager or Project Engineer will make arrangements for meetings, prepare agenda, and preside at meetings and shall record minutes (Field Reports), and distribute copies.
- 1.5.3. Attendance Required: Job Superintendent, Construction Manager, Project Engineer, Project Inspector (Inspector of Record), District, Subcontractors, and suppliers as appropriate to agenda topics for each meeting.
- 1.5.4. Agenda:
 - 1.5.4.1. Review minutes of previous meetings. (Field Reports)
 - 1.5.4.2. Review of Work progress.
 - 1.5.4.3. Field observations, problems, and decisions.
 - 1.5.4.4. Identification of problems which impede planned progress.
 - 1.5.4.5. Review of submittals schedule and status of submittals.
 - 1.5.4.6. Review of off-site fabrication and delivery schedules.
 - 1.5.4.7. Maintenance of construction schedule.
 - 1.5.4.8. Corrective measures to regain projected schedules.
 - 1.5.4.9. Planned progress during succeeding work period.

- 1.5.4.10. Coordination of projected progress.
- 1.5.4.11. Maintenance of quality and work standards.
- 1.5.4.12. Effect of proposed changes on progress schedule and coordination.
- 1.5.4.13. Other business relating to Work.
- 1.5.5. District has authority to schedule meetings other than those listed, as necessary.
- 1.6. PRE-INSTALLATION CONFERENCES**
 - 1.6.1. When required in individual specification section, Designer/Builder shall convene a pre-installation conference prior to commencing work of the section. Refer to individual specification section for timing requirements of conference.
 - 1.6.2. Designer/Builder shall require his/her subcontractors and suppliers directly affecting, or affected by, work of the specific section to attend.
 - 1.6.3. Notify the Construction Manager, Project Engineer, Inspector of Record, and District two (2) days in advance of meeting date.
 - 1.6.4. The pre-installation conference may coincide with a regularly scheduled progress meeting.
 - 1.6.5. Designer/Builder shall prepare agenda, preside at conference, record minutes, and distribute copies within two (2) days after conference to participants.
 - 1.6.6. The purpose of the meeting will be to review Contract Documents, conditions of installation, preparation and installation procedures, and coordination with related work and manufacturer's recommendations.
 - 1.6.7. Pre-installation Schedule: As a minimum, Work being installed under the Contract Documents technical sections will require pre-installation conferences. Designer/Builder shall review the technical specifications and add all additional requirements for pre-installation meetings contained in those sections.
- 1.7. POST CONSTRUCTION DEDICATION**
 - 1.7.1. Attendance Required: Project Superintendent, Designer/Builder, Project Manager, major subcontractors, Construction Manager, Project Engineer, Inspector of Record, and District.
 - 1.7.2. Preparation prior to Dedication: Designer/Builder and appropriate subcontractors and suppliers shall:
 - 1.7.2.1. Assist District in operation of mechanical devices and systems.
 - 1.7.2.2. Verify operation and adjust controls for communication systems.
 - 1.7.2.3. Assist District in operation of lighting systems.

END OF DOCUMENT

CONSTRUCTION SCHEDULE - NETWORK ANALYSIS

1. GENERAL

1.1. REFERENCES

- 1.1.1. Construction Planning and Scheduling Manual - A Manual for General Designer/Builders and the Construction Industry, The Associated General Contractors of America (AGC).
- 1.1.2. CSI - Construction Specifications Institute MP-2-1 Master Format.
- 1.1.3. U.S. National Weather Service - Local Climatological Data (NOAA.gov).
- 1.1.4. Designer/Builder shall utilize MS Project or approved alternative scheduling software for Project and construction planning and scheduling.

1.2. PERFORMANCE REQUIREMENTS

- 1.2.1. Ensure adequate scheduling during construction activities so Work may be prosecuted in an orderly and expeditious manner within stipulated Contract Time.
- 1.2.2. Ensure coordination of Designer/Builder and subcontractors at all levels.
- 1.2.3. Ensure coordination of submittals, fabrication, delivery, erection, installation, and testing of Products, materials and equipment.
- 1.2.4. Ensure on-time delivery of District furnished Products, materials and equipment.
- 1.2.5. Ensure coordination of jurisdictional reviews.
- 1.2.6. Prepare applications for payment.
- 1.2.7. Monitor progress of Work.
- 1.2.8. Prepare proper requests for changes to Contract Time.
- 1.2.9. Prepare proper requests for changes to Construction Schedule.
- 1.2.10. Detect potential schedule delays and identification of corrective actions.

1.3. QUALITY ASSURANCE

- 1.3.1. Perform scheduling work in accordance with Construction Planning and Scheduling Manual published by the AGC.
- 1.3.2. Maintain one copy of Construction Planning and Scheduling Manual on Site.
- 1.3.3. In the event of discrepancy between the AGC publication and the Contract Documents, provisions of the Contract Documents shall govern.

1.4. SUBMITTALS

- 1.4.1. Submission of submittals pursuant to the Construction Documents. Adobe "PDF" files are not acceptable, but Autodesk or similar format is acceptable.
- 1.4.2. Submit Short Interval Schedule at each Construction Progress Meeting.
- 1.4.3. Submit Time Adjustment Schedule within five (5) days of commencement of a claimed delay.
- 1.4.4. Submit Recovery Schedules as required for timely completion of Work or when demanded by the District.
- 1.4.5. Submit one (1) reproducible and two (2) copies of each schedule.

1.5. REVIEW AND EVALUATION

- 1.5.1. Designer/Builder shall participate in joint review of Construction Schedule and Reports with District and Construction Manager.
- 1.5.2. Within seven (7) days of receipt of District and Construction Manager's comments provide satisfactory revision to Construction Schedule or adequate justification for activities in question.
- 1.5.3. In the event that an activity or element of Work is not detected by District or Construction Manager review, such omission or error shall be corrected by next scheduled update and shall not affect Contract Time.
- 1.5.4. Acceptance by District of corrected Construction Schedule shall be a condition precedent to making any progress payments.
- 1.5.5. Schedule of Values shall be basis for determining progress payments.
- 1.5.6. Review and acceptance by District and Construction Manager of Preliminary Work Schedule or Construction Schedule does not constitute responsibility whatsoever for accuracy or feasibility of schedules nor does such acceptance expressly or impliedly

warrant, acknowledge or admit reasonableness of activities, logic, duration, manpower, cost or equipment loading stated or implied on schedules.

1.6. FORMAT

- 1.6.1. Prepare diagrams and supporting mathematical analyses in a form reasonably acceptable to the District.
- 1.6.2. **Listings:** Reading from left to right, in ascending order for each activity.
- 1.6.3. **Diagram Size:** 11X17.
- 1.6.4. **Scale and Spacing:** To allow for legible notations and revisions.
- 1.6.5. Illustrate order and interdependence of activities and sequence of Work.
- 1.6.6. Illustrate complete sequence of construction by activity.
- 1.6.7. Schedule will have all predecessors and successors shown for review.
- 1.6.8. Provide legend of symbols and abbreviations used.

1.7. COST AND SCHEDULE REPORTS

- 1.7.1. **Activity Analysis:** Tabulate each activity of network diagram and identify for each activity:
 - 1.7.1.1. Description.
 - 1.7.1.2. Interface with outside contractors or agencies.
 - 1.7.1.3. Number.
 - 1.7.1.4. Preceding and following number.
 - 1.7.1.5. Duration.
 - 1.7.1.6. Earliest start date, earliest finish date.
 - 1.7.1.7. Actual start date, actual finish date.
 - 1.7.1.8. Latest start date, latest finish date.
 - 1.7.1.9. Total and free float.
 - 1.7.1.10. Identification of critical path activity.
 - 1.7.1.11. Monetary value keyed to Schedule of Values.
 - 1.7.1.12. delete
 - 1.7.1.13. delete
 - 1.7.1.14. Percentage complete.
 - 1.7.1.15. Variance positive or negative.
- 1.7.2. **Required Sorts:** List activities in sorts or groups:
 - 1.7.2.1. By activity number.
 - 1.7.2.2. By amount of float time in order of early start.
 - 1.7.2.3. By responsibility in order of earliest start date.
 - 1.7.2.4. In order of latest start dates.
 - 1.7.2.5. In order of latest finish dates.
 - 1.7.2.6. Application for payment sorted by Schedule of Values.
 - 1.7.2.7. Listing of activities on critical path.
- 1.7.3. Listing of basic input data which generates schedule.

1.8. CONSTRUCTION SCHEDULE

- 1.8.1. Designer/Builder shall develop and submit a preliminary schedule of construction (or Preliminary Construction Schedule) as required by this Document and the Contract Documents. It shall be submitted in computer generated network format and shall be organized by Activity Codes representing the Designer/Builder's intended sequencing of the Work, and with time scaled network diagrams of activities. The Preliminary Construction Schedule shall include activities such as mobilization, preparation of submittals, specified review periods, procurement items, fabrication items, milestones, and all detailed construction activities.
- 1.8.2. Upon District's acceptance of the Preliminary Construction Schedule, Designer/Builder shall update the accepted Preliminary Construction Schedule until Designer/Builder's Construction Schedule is fully developed and accepted. Once approved by District, this shall become the Construction Schedule. This schedule shall include and identify all tasks that are on the Project's critical path with a specific determination of the start and

completion of each critical path task, all contract milestones and each milestone's completion date(s) as may be required by the District, and the date of Project Completion. Since updates to the Construction Schedule are the basis for payment to Designer/Builder, submittal and acceptance of the Construction Schedule and updates shall be a condition precedent to making of monthly payments, as indicated in the Contract and the Schedule of Values.

- 1.8.3. Failure to submit an adequate or accurate Preliminary Construction Schedule, Construction Schedule, updates thereto or failure to submit on established dates, will be considered a breach of Contract.
- 1.8.4. Failure to include any activity shall not be an excuse for completing all Work by required Completion Date.
- 1.8.5. Activities of long intervals shall be broken into increments no longer than seven (7) days or a value over \$20,000.00 unless approved by the District or it is non-construction activity for procurement and delivery.
- 1.8.6. The Construction Schedule shall comply with the following and include the following:
 - 1.8.6.1. Provide a written narrative describing Designer/Builder's approach to mobilization, procurement, and construction during the first thirty (30) calendar days including crew sizes, equipment and material delivery, Site access, submittals, and permits.
 - 1.8.6.2. Shall designate critical path or paths.
 - 1.8.6.3. Procurement activities to include mobilization, shop drawings and sample submittals.
 - 1.8.6.4. Identification of key and long-lead elements and realistic delivery dates.
 - 1.8.6.5. Construction activities in units of whole days limited to fourteen (14) days for each activity except non-construction, procurement and delivery.
 - 1.8.6.6. Duration of each activity.
 - 1.8.6.7. Shall contain seasonal weather considerations.
 - 1.8.6.8. Indicate a date for Project Completion that is no later than Completion Date subject to any time extensions processed as part of a Change Order.
 - 1.8.6.9. Conform to mandatory dates specified in the Contract Documents.
 - 1.8.6.10. Designer/Builder shall allow for inclement weather in the Proposed Baseline Schedule by incorporating an activity titled "Rain Day Impact Allowance" as the last activity prior to the Completion Milestone. No other activities may be concurrent with it. The duration of the Rain Day Impact Allowance activity will be calculated from the Notice to Proceed until the Completion.
 - 1.8.6.11. Level of detail shall correspond to complexity of work involved.
 - 1.8.6.12. Indicate procurement activities, delivery, and installation of District furnished material and equipment.
 - 1.8.6.13. Designate critical path or paths.
 - 1.8.6.14. Subcontractor work at all levels shall be included in schedule.
 - 1.8.6.15. As developed shall show sequence and interdependence of activities required for complete performance of Work.
 - 1.8.6.16. Shall be logical and show a coordinated plan of Work.
 - 1.8.6.17. Show order of activities and major points of interface, including specific dates of completion.
 - 1.8.6.18. Duration of activities shall be coordinated with subcontractors and suppliers and shall be best estimate of time required.
 - 1.8.6.19. Shall show description, duration and float for each activity.
- 1.8.7. **Activity.** An activity shall meet the following criteria:
 - 1.8.7.1. Any portion or element of Work or action that is precisely described, readily identifiable, and is a function of a logical sequential process.
 - 1.8.7.2. Descriptions shall be clear and concise. Beginning and end shall be readily

- verifiable. Starts and finishes shall be scheduled by logical restraints.
 - 1.8.7.3. Responsibility shall be identified with a single performing entity.
 - 1.8.7.4. Additional codes shall identify building, floor, and CSI classification.
 - 1.8.7.5. Each activity shall have manpower-loading assigned.
 - 1.8.7.6. Major construction equipment shall be assigned to each activity.
 - 1.8.7.7. Activities labeled start, continue or completion are not allowed.
 - 1.8.8. **Equipment and Materials.** For major equipment and materials show a sequence of activities including:
 - 1.8.8.1. Preparation of shop drawings and sample submissions.
 - 1.8.8.2. Review of shop drawings and samples.
 - 1.8.8.3. Finish and color selection.
 - 1.8.8.4. Fabrication and delivery.
 - 1.8.8.5. Erection or installation.
 - 1.8.8.6. Testing.
 - 1.8.9. Include a minimum of fifteen (15) days prior to Completion Date for punch lists and clean up. No other activities shall be scheduled during this period.
- 1.9. **SHORT INTERVAL SCHEDULE**
 - 1.9.1. The Three-Week Rolling Schedule shall be based on the most recent District Accepted Construction Schedule or Update. It shall include weekly updates to all construction, submittal, fabrication/procurement, and separate Work Contract activities. Designer/Builder shall ensure that it accurately reflects the current progress of the Work.
 - 1.9.2. Shall be fully developed horizontal bar-chart-type schedule directly derived from Construction Schedule.
 - 1.9.3. Prepare schedule on sheet of sufficient width to clearly show data.
 - 1.9.4. Provide continuous heavy vertical line identifying first day of week.
 - 1.9.5. Provide continuous subordinate vertical line identifying each day of week.
 - 1.9.6. Identify activities by same activity number and description as Construction Schedule.
 - 1.9.7. Show each activity in proper sequence.
 - 1.9.8. Indicate graphically sequences necessary for related activities.
 - 1.9.9. Indicate activities completed or in progress for previous two (2) week period.
 - 1.9.10. Indicate activities scheduled for succeeding two (2) week period.
 - 1.9.11. Further detail may be added if necessary to monitor schedule.
- 1.10. **REQUESTED TIME ADJUSTMENT SCHEDULE**
 - 1.10.1. Updated Construction Schedule shall not show a Completion Date later than the Contract Time, subject to any time extensions processed as part of a Change Order.
 - 1.10.2. If an extension of time is requested, a separate schedule entitled "Requested Time Adjustment Schedule" shall be submitted to District and Construction Manager.
 - 1.10.3. Indicate requested adjustments in Contract Time which are due to changes or delays in completion of Work.
 - 1.10.4. Extension request shall include forecast of Project Completion date and actual achievement of any dates listed in Contract Documents.
 - 1.10.5. To the extent that any requests are pending at time of any Construction Schedule update, Time Adjustment Schedule shall also be updated.
 - 1.10.6. Schedule shall be a time-scaled network analysis.
 - 1.10.7. Accompany schedule with formal written time extension request and detailed impact analysis justifying extension.
 - 1.10.8. Time impact analysis shall demonstrate time impact based upon date of delay, and status of construction at that time and event time computation of all affected activities. Event times shall be those as shown in latest Construction Schedule.
 - 1.10.9. Activity delays shall not automatically constitute an extension of Contract Time.
 - 1.10.10. Failure of subcontractors shall not be justification for an extension of time.
 - 1.10.11. Float is not for the exclusive use or benefit of any single party. Float time shall be

apportioned according to needs of project, as determined by the District.

- 1.10.12. Float suppression techniques such as preferential sequencing, special lead/lag logic restraints, extended activity durations, or imposed dates shall be apportioned according to benefit of Project.
- 1.10.13. Extensions will be granted only to extent that time adjustments to activities exceed total positive float of the critical path and extends Completion date.
- 1.10.14. District shall not have an obligation to consider any time extension request unless requirements of Contract Documents, and specifically, but not limited to these requirements are complied with.
- 1.10.15. District shall not be responsible or liable for any construction acceleration due to failure of District to grant time extensions under Contract Documents should requested adjustments in Contract Time not substantially comply with submission and justification requirements of Contract for time extension requests.
- 1.10.16. In the event a Requested Time Adjustment Schedule and Time Impact Analysis are not submitted within ten (10) days after commencement of a delay it is mutually agreed that delay does not require a Contract Time extension.

1.11. RECOVERY SCHEDULE

- 1.11.1. When activities are behind Construction Schedule a supplementary Recovery Schedule shall be submitted.
- 1.11.2. Designer/Builder shall prepare and submit to the District a Recovery Schedule at any time requested by the District, at no cost to the District.
- 1.11.3. Form and detail shall be sufficient to explain and display how activities will be rescheduled to regain compliance with Construction Schedule and to complete the Work by the Completion Date.
- 1.11.4. Maximum duration shall be one (1) month and shall coincide with payment period.
- 1.11.5. Ten (10) days prior to expiration of Recovery Schedule, Designer/Builder shall have to show verification to determine if activities have regained compliance with Construction Schedule. Based upon this verification the following will occur:
 - 1.11.5.1. Supplemental Recovery Schedule will be submitted to address subsequent payment period
 - 1.11.5.2. Construction Schedule will be resumed.

1.12. UPDATING SCHEDULES

- 1.12.1. Review and update schedule at least ten (10) days prior to submitting an Application for Payment.
- 1.12.2. Maintain schedule to record actual prosecution and progress.
- 1.12.3. Identify approved Change Orders which affect schedule as separate new activities.
- 1.12.4. Change Orders of less than \$5,000.00 value or less than three (3) days duration need not be shown unless critical path is affected.
- 1.12.5.
- 1.12.6. No other revisions shall be made to schedule unless authorized by District.
- 1.12.7. **Written Narrative Report:** Designer/Builder shall include a written report to explain the Monthly Schedule Update. The narrative shall, at a minimum include the following headings with appropriate discussions of each topic:
 - 1.12.7.1. Activities or portions of activities completed during previous reporting period.
 - 1.12.7.2. Actual start dates for activities currently in progress.
 - 1.12.7.3. Deviations from critical path in days ahead or behind.
 - 1.12.7.4. List of major construction equipment used and any equipment idle.
 - 1.12.7.5. Number of personnel by craft engaged on Work during reporting period.
 - 1.12.7.6. Progress analysis describing problem areas.
 - 1.12.7.7. Current and anticipated delay factors and their impact.
 - 1.12.7.8. Proposed corrective actions and logic revisions for Recovery Schedule.
 - 1.12.7.9. Proposed modifications, additions, deletions and changes in logic of

Construction Schedule.

- 1.12.7.10. In updating the Schedule, Designer/Builder shall not modify Activity ID numbers, schedule calculation rules/criteria, or the Activity Coding Structure required.

1.12.8. Schedule update will form basis upon which progress payments will be made.

1.12.9. District will not be obligated to review or process Application for Payment until schedule and Progress Report have been submitted.

1.13. DISTRIBUTION

1.13.1. Following joint review and acceptance of updated schedules distribute copies to District, Construction Manager, and all other concerned parties.

1.13.2. Instruct recipients to promptly report in writing any problem anticipated by projections shown in schedule.

2. PRODUCTS

2.1. SCHEDULING SOFTWARE

Designer/Builder shall utilize a District-approved equivalent scheduling software such as MS Project to employ the Critical Path Method (CPM) in the development and maintenance of the Construction Schedule. The scheduling software shall be capable of being resource loaded with manpower, costs and materials. It shall also be capable of generating time-scaled logic diagrams, resource histograms and profiles, bar charts, layouts and reports with any and/or all activity detail.

2.2. ELECTRONIC DATA

Provide compact disk(s) that contain a back-up of the Proposed Baseline Schedule data on it. The electronic MS Project files shall be saved in a readable type format, showing logical ties and links.

END OF DOCUMENT

SUBMITTALS

1. GENERAL

1.1. SUBMITTAL PROCEDURES – USE A PRE-APPROVED PROGRAM

1.1.1. DESIGNER/BUILDER SHALL USE A DISTRICT-APPROVED PROGRAM/SOFTWARE FOR THE SUBMITTAL PROCESS

- 1.1.2. Designer/Builder shall transmit each submittal in conformance with requirements of this Document. For each submittal, Designer/Builder shall:
 - 1.1.2.1. Sequentially number the transmittal forms. Resubmitted submittals must have the original number with an alphabetic suffix;
 - 1.1.2.2. Identify Project and District's project number, Designer/Builder, Subcontractor or supplier; pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate;
 - 1.1.2.3. Apply Designer/Builder's stamp, signed or initialed certifying that review, verification of Products required, field dimensions, adjacent construction work, and coordination of information is in accordance with the requirements of the Work and Contract Documents. Submittals without Designer/Builder's stamp and signature will be returned without review.
- 1.1.3. Coordinate preparation and processing of submittals with performance of Work. Transmit each submittal sufficiently in advance of performance of Work to avoid delay.
 - 1.1.3.1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1.1.3.2. Coordinate transmittal of different types of submittals for related parts of Work so processing will not be delayed because of the need to review submittals concurrently for coordination.
 - 1.1.3.3. District reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- 1.1.4. Comply with Contract Documents for list of submittals and time requirements for scheduled performance of Work.
- 1.1.5. No extension of Contract Time will be authorized because of failure to transmit submittals to the District sufficiently in advance of the Work to permit processing.
- 1.1.6. District shall review as diligently as possible and return all submittals in a timely fashion to not cause any delay to the Project Schedule.
- 1.1.7. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- 1.1.8. Provide space for review stamps.
- 1.1.9. Revise and resubmit submittals as required, identify all changes made since previous submittal.
- 1.1.10. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- 1.1.11. Submittals not requested will not be recognized or processed. Submittals not requested will be returned without review.

1.2. SHOP DRAWINGS

- 1.2.1. Do not reproduce Contract Documents or copy standard information as the basis of shop drawings. Standard information prepared without specific reference to the Project is not a shop drawing.
- 1.2.2. Do not use or allow others to use Shop Drawings which have been submitted and have been rejected.

1.3. ELECTRONIC SUBMITTAL PROCESS

1.3.1. Submittal Procedure for Large Format shop drawings.

- 1.3.1.1. Designer/Builder shall provide six (6) paper copies of the large format Shop

Drawings directly to the District and the Construction Manager (CM) and Designer/Builder will upload/post an electronic transmittal (with a detailed description of the submittal including the subject, specification number and number of drawings) on pre-approved program.

- 1.3.1.2. Designer/Builder shall verify that the Schedule of Submittals and all submittal log(s) on pre-approved program are accurate and up to date.
- 1.3.1.3. The District and Construction Manager will review and markup each Submittal and provide changes to Designer/Builder for Designer/Builder's incorporation into the Submittal.
- 1.3.1.4. This process will continue until the Designer/Builder has provided a Submittal that is acceptable to the District and the Construction Manager.
- 1.3.1.5. Once a Submittal is accepted, the District will provide a final accepted Submittal to the Designer/Builder and the Designer/Builder will closeout that one Submittal.
- 1.3.1.6. Designer/Builder shall send one (1) copy of the completed record submittal of the large format documents to a vendor for scanning and posting on pre-approved program.

1.3.2. Product Data, Calculations and Small Format Drawings

- 1.3.2.1. Designer/Builder shall upload/post one (1) electronic copy (from manufacturer's website or pre-scanned) of the product literature, data, calculations, and/or small format shop drawings on pre-approved program with a Transmittal (with a detailed description of the submittal) directly to the CM.
- 1.3.2.2. The District and Construction Manager will review and markup each Submittal and provide changes to Designer/Builder for Designer/Builder's incorporation into the Submittal.
- 1.3.2.3. This process will continue until the Designer/Builder has provided a Submittal that is acceptable to the District and the Construction Manager.
- 1.3.2.4. Once a Submittal is accepted, the District will provide a final accepted Submittal to the Designer/Builder and the Designer/Builder will closeout that one Submittal.

1.3.3. Sample Submittal Procedure – (Product / Assembly Samples)

- 1.3.3.1. Designer/Builder shall provide four (4) physical samples directly to the District and the CM and Designer/Builder will upload/post an electronic transmittal (with a detailed description of the submittal including the subject, specification number and number of drawings) on.
- 1.3.3.2. The District and Construction Manager will review and markup each Submittal and provide changes to Designer/Builder for Designer/Builder's incorporation into the Submittal.
- 1.3.3.3. This process will continue until the Designer/Builder has provided a Submittal that is acceptable to the District and the Construction Manager.
- 1.3.3.4. Once a Submittal is accepted, the District will provide a final accepted Submittal to the Designer/Builder and the Designer/Builder will closeout that one Submittal.

1.4. PRODUCT DATA

In addition to the above requirements, mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.

1.5. SAMPLES

Designer/Builder shall provide photographs of other installations that are similar to the finished Project.

1.6. MANUFACTURER'S INSTRUCTION

- 1.6.1. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.
- 1.6.2. Identify conflicts between manufacturers' instructions and Contract Documents.

1.7. MANUFACTURER'S CERTIFICATES

- 1.7.1. When specified in individual specification Sections, submit manufacturers' certificate to Construction Manager for review, in quantities specified for Product Data.
- 1.7.2. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- 1.7.3. Certificates may be recent or previous test results on material or Product, but must be acceptable to District.

1.8. MOCK-UP

Not Required for this Contract.

1.9. DEFERRED APPROVAL REQUIREMENTS

- 1.9.1. Installation of deferred approval items shall not be started until detailed plans, specifications, and engineering calculations have been accepted and signed by the Architect or Engineer in general responsible charge of design and signed by a California registered Architect or professional engineer who has been delegated responsibility covering the work shown on a particular plan or specification and approved by the Division of the State Architect (DSA). Deferred approval items for this Project are as indicated in the Contract Documents
- 1.9.2. Deferred approval drawings and specifications become part of the approved documents for the Project when they are submitted to and approved by DSA.
- 1.9.3. Submit material using electronic submittal process as defined above.
- 1.9.4. Identify and specify all supports, fasteners, spacing, penetrations, etc., for each of the deferred approval items, including calculations for each and all fasteners.
- 1.9.5. Submit documents to District for review prior to forwarding to the DSA.
- 1.9.6. Documents shall bear the stamp and signature of the Structural, Mechanical, or Electrical Engineer licensed in California who is responsible for that work.
- 1.9.7. District and its subconsultants will review the documents only for conformance with general design concept. The Designer/Builder will then forward the Submittal to DSA for approval.
- 1.9.8. Designer/Builder shall respond to review comments made by DSA and revise and resubmit submittal to DSA for final approval.

END OF DOCUMENT

REGULATORY REQUIREMENTS

1. GENERAL

1.1. DESCRIPTION

This section covers the general requirements for regulatory requirements pertaining to the Work and is supplementary to all other regulatory requirements mentioned or referenced elsewhere in the Contract Documents.

1.2. REQUIREMENTS OF REGULATORY AGENCIES

- 1.2.1.** All statutes, ordinances, laws, rules, codes, regulations, standards, and the lawful orders of all public authorities having jurisdiction of the Work, are hereby incorporated into the Contract Documents as if repeated in full herein and are intended to be included in any reference to Code or Building Code, unless otherwise specified, including, without limitation, the references in the list below. Designer/Builder shall make available at the Site copies of all the listed documents applicable to the Work as the District and/or Construction Manager may request, including, without limitation, applicable portions of the California Code of Regulations (C.C.R.).
- 1.2.2.** This Project shall be governed by applicable regulations, including, without limitation, the State of California's Administrative Regulations for the Division of the State Architect-Structural Safety (DSA/SS), Chapter 4, Part 1, Title 24, C.C.R., and the most current version on the date the Contract is executed and as it pertains to school construction including, without limitation:
 - 1.2.2.1.** Test and testing laboratory pursuant to Section 4-335 (District shall pay for the testing laboratory).
 - 1.2.2.2.** All special inspections pursuant to Section 4-333(d).
 - 1.2.2.3.** Designer/Builder shall submit verified reports pursuant to Section 4-336 & 4-343(c).
 - 1.2.2.4.** Administration
 - 1.2.2.4.1.** Duties of Architect and Engineers working for Designer/Builder shall be pursuant to Section 4-341.
 - 1.2.2.4.2.** Duties of Designer/Builder shall be pursuant Section 4-343.
 - 1.2.2.4.3.** Verified Reports shall be pursuant to Section 4-336.
 - 1.2.2.5.** Designer/Builder shall keep and make available a copy of Part 1 and 2 of the most current version of C.C.R., Title 24 at the Site during construction.
 - 1.2.2.6.** Designer/Builder shall notify the Division of State Architect (DSA) upon the start of construction pursuant to Section 4-331.
 - 1.2.2.7.** Addenda and Change Orders shall be pursuant to Section 4-338.
- 1.2.3.** Items of deferred approval shall be clearly marked on the first sheet of the Designer/Builder's and/or Engineer's approved Drawings. All items later submitted for approval shall be pursuant to Title 24 requirements to the DSA.
 - 1.2.3.1.** Building Standards Administrative Code, C.C.R., Title 24, Part 1.
 - 1.2.3.2.** California Building Code (CBC), C.C.R., Title 24, Part 2; (Uniform Building code volumes 1-3 and California Amendments).
 - 1.2.3.3.** California Electrical Code (CEC), C.C.R., Title 24, Part 3; (National Electrical Code and California Amendments).
 - 1.2.3.4.** California Mechanical Code (CMC), C.C.R., Title 24, Part 4; (Uniform Mechanical Code and California Amendments).
 - 1.2.3.5.** California Plumbing Code (CPC), C.C.R., Title 24, Part 5; (Uniform Plumbing Code and California Amendments).
 - 1.2.3.6.** California Fire Code (CFC), C.C.R., Title 24, Part 9; (Fire Plumbing Code and California Amendments).
 - 1.2.3.7.** California Referenced Standards Code, C.C.R., Title 24, Part 12.
 - 1.2.3.8.** State Fire Marshal Regulations, C.C.R., Title 19, Public Safety.
 - 1.2.3.9.** Partial List of Applicable NFPA Standards:
 - 1.2.3.9.1.** NFPA 13 - Automatic Sprinkler System.

- 1.2.3.9.2. NFPA 14 - Standpipes Systems.
- 1.2.3.9.3. NFPA 17A - Wet Chemical System
- 1.2.3.9.4. NFPA 24 - Private Fire Mains.
- 1.2.3.9.5. (California Amended) NFPA 72 - National Fire Alarm Codes.
- 1.2.3.9.6. NFPA 253 - Critical Radiant Flux of Floor Covering System.
- 1.2.3.9.7. FPA 2001 - Clean Agent Fire Extinguishing Systems.
- 1.2.3.10. California Division of the State Architect Interpretation of Regulations Manual.

END OF DOCUMENT

TESTING LABORATORY SERVICES

1. GENERAL

1.1. REFERENCES

- 1.1.1. ASTM D3740 - Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- 1.1.2. ASTM E329 - Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.
- 1.1.3. CBC - California Building Code.
- 1.1.4. UBC - Uniform Building Code.
- 1.1.5. Title 24, Parts 1 and 2, of the California Code of Regulations. Designer/Builder shall keep a copy of these available at the job Site for ready reference during construction
- 1.1.6. DSA - Division of the State Architect, Office of Regulation Services, Structural Safety Section. DSA shall be notified at or before the start of construction.

1.2. OBSERVATION AND SUPERVISION

- 1.2.1. The District and Construction Manager or their appointed representatives will review the Work and the Designer/Builder shall provide facilities and access to the Work at all times as required to facilitate this review. Administration by the Designer/Builder and any consulting Structural Engineer will be in accordance with applicable regulations, including, without limitation, 24 C.C.R. §4-341.
- 1.2.2. One or more Project Inspector(s) approved by DSA and employed by or in contract with the District ("Project Inspector"), will observe the Work in accordance with 24 C.C.R. §§4-333(b) and 4-342:
- 1.2.3. Project Inspector shall have access to the Work wherever it is in preparation or progress for ascertaining that the Work is in accordance with the Contract Documents and all applicable code sections. Designer/Builder shall provide facilities and access as required and shall provide assistance for sampling or measuring materials.
 - 1.2.3.1. Project Inspector will notify District and Construction Manager and inform Designer/Builder of any observed failure of Work or material to conform to Contract Documents.
 - 1.2.3.2. The Project Inspector shall observe and monitor all testing and inspection activities required.
- 1.2.4. Designer/Builder shall conform with all applicable laws as indicated in the Contract Documents, including, without limitation, to 24 C.C.R. §4-343. Designer/Builder shall supervise and direct the Work and maintain a competent superintendent on the Project who is authorized to act in all matters pertaining to the Work. The Designer/Builder shall inspect all materials, as they arrive, for compliance with the Contract Documents. Designer/Builder shall reject defective Work or materials immediately upon delivery or failure of the Work or material to comply with the Contract Documents. The Designer/Builder shall submit verified reports as indicated in the Contract Documents, including, without limitation, the Specifications and as required by 24 C.C.R. §4-336.

1.3. TESTING LABORATORIES AND AGENCIES

- 1.3.1. Testing agencies and tests shall be in conformance with the Contract Documents and the requirements of 24 C.C.R. §4-335.
- 1.3.2. Testing and inspection in connection with earthwork shall be under the direction of the District's consulting soils engineer ("Soils Engineer").
- 1.3.3. Testing and inspection of construction materials and workmanship shall be performed by a qualified laboratory ("Testing Laboratory" or "Laboratory"). The Testing Laboratory shall be under direction of an engineer registered in the State of California, shall conform to requirements of ASTM E329, and shall be employed by or in contract with the District.

1.4. TESTS AND INSPECTIONS

- 1.4.1. Designer/Builder shall be responsible for notifying District and Project Inspector of all

required tests and inspections. Designer/Builder shall notify District and Project Inspector forty-eight (48) hours in advance of performing any Work requiring testing or inspection.

- 1.4.2. Designer/Builder shall provide access to Work to be tested and furnish incidental labor, equipment, and facilities to facilitate all inspections and tests.
- 1.4.3. District will pay for first inspections and tests required by the Title 24 and other inspections or tests that District and/or Construction Manager may direct to have made, including, but not limited to, the following principal items:
 - 1.4.3.1. Tests and observations for earthwork and pavings.
 - 1.4.3.2. Tests for concrete mix designs, including tests of trial batches.
 - 1.4.3.3. Tests and inspections for structural steel work.
 - 1.4.3.4. Field tests for framing lumber moisture content.
 - 1.4.3.5. Additional tests directed by District that establish that materials and installation comply with the Contract Documents.
 - 1.4.3.6. Test and observation of welding and expansion anchors.
 - 1.4.3.7. Factory observation of components and assembly of modular prefabrication structures and buildings.
- 1.4.4. District may at its discretion, pay and back charge Designer/Builder for:
 - 1.4.4.1. Retests or reinspections, if required, and tests or inspection required due to Designer/Builder error or lack of required identifications of material.
 - 1.4.4.2. Uncovering of work in accordance with Contract Documents.
 - 1.4.4.3. Testing done on weekends, holidays, and overtime will be chargeable to Designer/Builder for the overtime portion.
 - 1.4.4.4. Testing done off site.
- 1.4.5. Testing and inspection reports and certifications:
 - 1.4.5.1. If initially received by Designer/Builder, Designer/Builder shall provide to each of the following a copy of the agency or laboratory report of each test or inspection or certification: District; Construction Manager, if any; Consulting Engineer, if any; Other Engineers on the Project, as appropriate; and; Project Inspector.
 - 1.4.5.2. When the test or inspection is one required by the Title 24, a copy of the report shall also be provided to the DSA.

1.5. SELECTION AND PAYMENT

- 1.5.1. District will hire and pay for services of an independent Testing Laboratory to perform specified inspection and testing as specified by District's Testing Laboratory.
- 1.5.2. District's hiring of Testing Laboratory shall in no way relieve Designer/Builder of its obligation to perform work in accordance with requirements of Contract Documents.

1.6. DISTRICT'S TESTING LABORATORY RESPONSIBILITIES

- 1.6.1. Test samples of mixes submitted by Inspector.
- 1.6.2. Perform specified inspection, sampling, and testing of Products in accordance with specified standards.
- 1.6.3. Notify Designer/Builder of observed irregularities or non-conformance of Work or Products.
- 1.6.4. Attend preconstruction conferences and progress meetings when requested by Designer/Builder.

1.7. LABORATORY REPORTS

- 1.7.1. After each inspection and test, District shall then submit one copy of laboratory report to Designer/Builder Reports of test results of materials and inspections found not to be in compliance with the requirements of the Contract Documents shall be forwarded immediately.
- 1.7.2. Each Testing Laboratory shall submit a verified report covering all of the tests which were required to be made by that agency during the progress of the Project. Such report shall be furnished each time that Work is suspended, covering the tests up to that time

and at the Completion of the Project, covering all tests.

1.8. LIMITS ON TESTING LABORATORY AUTHORITY

- 1.8.1. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
- 1.8.2. Laboratory may not approve or accept any portion of the Work.
- 1.8.3. Laboratory may not assume any duties of Designer/Builder
- 1.8.4. Laboratory has no authority to stop the Work.

1.9. DESIGNER/BUILDER RESPONSIBILITIES

- 1.9.1. Submit proposed items for testing as required herein and/or as further required in the Contract Documents for review in accordance with applicable specifications.
- 1.9.2. Cooperate with Laboratory personnel, and provide access to the Work and to manufacturer's facilities.
- 1.9.3. Notify Construction Manager, District, and Testing Laboratory 48 hours prior to expected time for operations requiring inspection and testing services.
- 1.9.4. When tests or inspections cannot be performed after such notice, reimburse District for Laboratory personnel and travel expenses incurred due to the Designer/Builder's negligence.
- 1.9.5. Designer/Builder shall notify District a sufficient time in advance of the manufacture of material to be supplied by Designer/Builder pursuant to the Contract Documents, which must by terms of the Contract be tested, in order that the District may arrange for the testing of same at the source of supply.
 - 1.9.5.1. Any material shipped by the Designer/Builder from the source of supply prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice that such testing and inspection will not be required shall not be incorporated in the Work.
- 1.9.6. Contract and pay for services of District's Testing Laboratory to perform additional inspections, sampling and testing required when initial tests indicate Designer/Builder's work and/or materials does not comply with Contract Documents.

1.10. SCHEDULE OF INSPECTIONS AND TESTS PER DSA APPROVED T&I SHEET

To the extent the following scopes of work are part of the Project, the Testing Laboratory shall perform tests and inspections for the following in conformance with the (CBC) California Building Code (International Building Code with State of California Amendments), California Code of Regulations, Title 24, Part 2:

- Structural Tests and Special Inspections (Chapter 17A)
 - Special Inspections (§ 1704A)
- Soils and Foundations (Chapter 18A)
 - Geotechnical Investigations (§ 1803A)
- Concrete (Chapter 19A)
 - Specifications for Tests and Materials (§)
 - Concrete Quality, Mixing and Placing (§)
 - Concrete Reinforcement and Anchor Testing Inspection (§ 1916A)
- Masonry (Chapter 21A)
 - Masonry Construction Materials (§ 2103A)
 - Masonry Quality (§ 2103A)
 - Quality Assurance (§ 2105A)
- Structural Steel (Chapter 22A)
 - Structural Steel (§ 2205A)
 - Identification & Protection of Steel for Structural Purposes (§ 2203A)
 - Inspection and Tests of Structural Steel (§ 2212A)
- Wood (Chapter 23)
 - Minimum Standards and Quality (§ 2303)
 - Wood Construction (§ 1704A.6)

- Exterior Walls (Chapter 14)
 - Masonry Units (§ 1404.4)
 - Masonry Construction Materials (§ 2103A)
 - Exterior Insulation and Finish Systems (§ 1408)
- Roof Assemblies and Roofing Structures (Chapter 15)
 - Materials (§ 1506)
- Aluminum (Chapter 20)
 - Materials (§ 2002.1)
 - Inspection (§ 2003.1)

1.10.1. Plumbing (where applicable)

Testing as required including, but not limited to: Sterilization, soil waste and vent, water piping, source of water, gas piping, downspouts and storm drains.

1.10.2. Automatic Fire Sprinklers (where applicable)

Testing as required including, but not limited to: hydrostatic pressure.

1.10.3. Heating, Ventilating and Air Conditioning (where applicable)

Testing as required including, but not limited to: Ductwork tests, cooling tower tests, boiler tests, controls testing, piping tests, water and air systems, and test and balance of heating and air conditioning systems.

1.10.4. Electrical (where applicable)

Testing as required including, but not limited to: Equipment testing, all electrical system operations, grounding system and checking insulation after cable is pulled.

1.11. PROJECT INSPECTOR'S ACCESS TO SITE

- 1.11.1. A Project Inspector employed by the District in accordance with the requirement of State of California Code of Regulations, Title 24, Part 1 will be assigned to the Work. Project Inspector's duties are specifically defined in 24. C.C.R. §4-342, and as indicated in the Contract.
- 1.11.2. District and Construction Manager shall at all times have access for the purpose of inspection to all parts of the Work and to the shops wherein the Work is in preparation, and Designer/Builder shall at all times maintain proper facilities and provide safe access for such inspection.
- 1.11.3. The Work in all stages of progress shall be subject to the personal continuous observation of the Inspector. Inspector shall have free access to any or all parts of the Work at any time. Designer/Builder shall furnish the Inspector reasonable facilities for obtaining such information as may be necessary to keep Inspector fully informed respecting the progress and manner of the Work and the character of the materials. Inspection of the Work shall not relieve the Designer/Builder from any obligation set forth in the Contract Documents.
- 1.11.4. The Inspector is not authorized to change, revoke, alter, enlarge or decrease in any way any requirement of the Contract Documents, drawings, specifications or subsequent change orders.
- 1.11.5. Whenever there is insufficient evidence of compliance with any of the provisions of Title 24 or evidence that any material or construction does not conform to the requirements of Title 24, the Division of the State Architect may require tests as proof of compliance. Test methods shall be as specified herein or by other recognized and accepted test methods determined by the Division of the State Architect. All tests shall be performed by a testing laboratory accepted by the Division of the State Architect.

END OF DOCUMENT

TEMPORARY FACILITIES AND CONTROLS

1. GENERAL

1.1. TEMPORARY UTILITIES

1.1.1. Electric Power and Lighting

- 1.1.1.1. Designer/Builder will furnish and pay for power during the course of the work to the extent power is not in the building(s) or on the Site. Designer/Builder shall be responsible for providing temporary facilities required on the Site to point of intended use.
- 1.1.1.2. Designer/Builder shall furnish, wire for, install, and maintain temporary electrical lights wherever it is necessary to provide illumination for the proper performance and/or observation of the Work: a minimum of 20 foot-candles for rough work and 50 foot-candles for finish work.
- 1.1.1.3. Designer/Builder shall be responsible for maintaining existing lighting levels in the Project vicinity should temporary outages or service interruptions occur.

1.1.2. Heat and Ventilation

- 1.1.2.1. Designer/Builder shall provide temporary heat to maintain environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for the installation and curing of materials, and to protect materials and finishes from damage due to improper temperature and humidity conditions. Portable heaters shall be standard units complete with controls.
- 1.1.2.2. Designer/Builder shall provide forced ventilation and dehumidification, as required, of enclosed areas for proper installation and curing of materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors, and gases.
- 1.1.2.3. Designer/Builder shall pay the costs of installation, maintenance, operation, and removal of temporary heat and ventilation, including costs for fuel consumed, required for the performance of the Work.

1.1.3. Water

- 1.1.3.1. District will furnish and pay for water during the course of the work.
- 1.1.3.2. Designer/Builder shall make potable water available for human consumption.

1.1.4. Sanitary Facilities

- 1.1.4.1. Designer/Builder shall provide sanitary temporary 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 facilities shall be maintained in a sanitary condition at all times and shall be left at the Site until removal is directed by the Project Inspector or Designer/Builder completes all Work.
- 1.1.4.2. Use of toilet facilities in the Work shall not be permitted except by consent of the Project Inspector and District.

1.1.5. Telephone Service [Not applicable]

1.1.6. Fire Protection:

- 1.1.6.1. Designer/Builder shall provide and maintain fire extinguishers and other equipment for fire protection. Such equipment shall be designated for use for fire protection only and shall comply with all requirements of the California Fire, State Fire Marshall and/or its designee.
- 1.1.6.2. Where on-site welding and burning of steel is unavoidable, Designer/Builder shall provide protection for adjacent surfaces.

1.1.7. Trash Removal:

Designer/Builder shall provide trash removal on a timely basis from all Site Offices and the Site.

1.2. CONSTRUCTION AIDS

- 1.2.1. No District tools or equipment shall be used by Designer/Builder for the performance of the Work.

1.3. BARRIERS AND ENCLOSURES

- 1.3.1. Designer/Builder shall obtain District's written permission for locations and types of temporary barriers and enclosures, including fire-rated materials proposed for use, prior to their installation.
- 1.3.2. Designer/Builder shall provide a six (6) foot high, chain link perimeter fence with posts and fabric screen as a temporary barrier around construction area. Designer/Builder shall provide and maintain temporary enclosures to prevent public entry and to protect persons using other buildings and portions of the Site and/or Premises. Designer/Builder shall remove temporary fence, barriers and enclosure upon Completion of the Work.
- 1.3.3. Designer/Builder shall provide site access to existing facilities for persons using other buildings and portions of the Site, the public, and for deliveries and other services and activities.

1.4. SECURITY

Designer/Builder shall secure all construction equipment, machinery and vehicles, park and store only within fenced area, and render inoperable during non-work hours. Designer/Builder is responsible for insuring that no construction materials, tools, equipment, machinery or vehicles can be used for unauthorized entry or other damage or interference to activities and security of existing facilities adjacent to and in the vicinity of the Project Site.

1.5. TEMPORARY CONTROLS

1.5.1. Noise Control

- 1.5.1.1. Designer/Builder acknowledges that adjacent facilities may remain in operation during all or a portion of the Work, and it shall take all reasonable precautions to minimize noise as required by applicable laws and the Contract Documents.
- 1.5.1.2. Notice of proposed noisy operations, including without limitation, operation of pneumatic demolition tools, concrete saws, and other equipment, shall be submitted to District a minimum of forty-eight (48) hours in advance of their performance.

1.5.2. Noise and Vibration

- 1.5.2.1. Equipment and impact tools shall have intake and exhaust mufflers.
- 1.5.2.2. Designer/Builder shall cooperate with District to minimize and/or cease the use of noisy and vibratory equipment if that equipment becomes objectionable by its longevity.

1.5.3. Dust and Dirt

- 1.5.3.1. Designer/Builder shall conduct demolition and construction operations to minimize the generation of dust and dirt, and prevent dust and dirt from interfering with the progress of the Work and from accumulating in the Work and adjacent areas including, without limitation, occupied facilities.
- 1.5.3.2. Designer/Builder shall periodically water exterior demolition and construction areas to minimize the generation of dust and dirt.
- 1.5.3.3. Designer/Builder shall ensure that all hauling equipment and trucks carrying loads of soil and debris shall have their loads sprayed with water or covered with tarpaulins, and as otherwise required by local and state ordinance.
- 1.5.3.4. Designer/Builder shall prevent dust and dirt from accumulating on walks, roadways, parking areas, and planting, and from washing into sewer and storm drain lines.

1.5.4. Water

Designer/Builder shall not permit surface and subsurface water, and other liquids, to accumulate in or about the vicinity of the Premises. Should accumulation develop, Designer/Builder shall control the water or other liquid, and suitably dispose of it by means of temporary pumps, piping, drainage lines, troughs, ditches, dams, or other methods.

1.5.5. Pollution

- 1.5.5.1. No burning of refuse, debris, or other materials shall be permitted on or in the vicinity of the Premises.

1.5.5.2. Designer/Builder shall comply with applicable regulatory requirements and anti-pollution ordinances during the conduct of the Work including, without limitation, demolition, construction, and disposal operations.

1.5.6. Lighting

If portable lights are used after dark, all light must be located so as not to direct light into neighboring property.

1.6. PUBLICITY RELEASES

Designer/Builder shall not release any information, story, photograph, plan, or drawing relating information about the Project to anyone, including press and other public communications medium, including, without limitation, on website(s).

END OF DOCUMENT

SITE STANDARDS

1. GENERAL

1.1. REQUIREMENTS OF THE DISTRICT

1.1.1. Drug-Free Schools and Safety Requirements:

- 1.1.1.1. No drugs, alcohol, smoking or the use of tobacco products are allowed at any time in any buildings, Designer/Builder-owned vehicles or vehicles owned by others while on District property. No students, staff, visitors, or contractors are to use drugs on these sites.
- 1.1.1.2. Designer/Builder shall post: "Non-Smoking Area" in a highly visible location on Site. Designer/Builder may designate a smoking area outside of District property within the public right-of-way, provided that this area remains quiet and unobtrusive to adjacent neighbors. This smoking area must be kept clean at all times.
- 1.1.1.3. Designer/Builder shall ensure that no alcohol, firearms, weapons, or controlled substances enter or are used at the Site. Designer/Builder shall immediately remove from the Site and terminate the employment of any employee(s) found in violation of this provision.

- 1.1.2. **Language:** Unacceptable and/or loud language will not be tolerated, "Cat calls" or other derogatory language toward students or public will not be allowed.

1.1.3. Disturbing the Peace (Noise and Lighting):

- 1.1.3.1. Designer/Builder shall observe the noise ordinance of the Site at all times including, without limitation, all applicable local, city, and/or state laws, ordinances, and/or regulations regarding noise and allowable noise levels.
- 1.1.3.2. District reserves the right to prohibit the use of radios at the Site, except for handheld communication radios.
- 1.1.3.3. If portable lights are used after dark, the lights must be located so as not to direct light into neighboring properties.

1.1.4. Traffic:

- 1.1.4.1. Driving on the Premises shall be limited to periods when students and public are not present. If driving or deliveries must be made during the school hours, a ground guide shall lead the vehicle across the area of travel. In no case shall driving take place across playgrounds or other pedestrian paths during recess, lunch, and/or class period changes. The speed limit on-the Premises shall be five (5) miles per hour (maximum) or less if conditions require.
- 1.1.4.2. All paths of travel for deliveries, including without limitation, material, equipment, and supply deliveries, shall be reviewed and approved by District in advance.
- 1.1.4.3. District shall designate a construction entry to the Site. If Designer/Builder requests, District determines it is required, and to the extent possible, District shall designate a staging area so as not to interfere with the normal functioning of school facilities. Location of gates and fencing shall be approved in advance with District and at Designer/Builder's expense.
- 1.1.4.4. Parking areas shall be reviewed and approved by District in advance. No parking is to occur under the drip line of trees or in areas that could otherwise be damaged.
- 1.1.4.5. All of the above shall be observed and complied with by the Designer/Builder and all workers on the Site. Failure to follow these directives could result in individual(s) being suspended or removed from the work force at the discretion of the District. The same rules and regulations shall apply equally to delivery personnel, inspectors, consultants, and other visitors to the Site.

END OF DOCUMENT

TEMPORARY TREE AND PLANT PROTECTION

WHERE SUBSTANTIAL TREE PROTECTION WILL BE REQUIRED ON THE SITE, OBTAIN AN ARBORIST TO REVIEW THIS DOCUMENT PRIOR TO CONSTRUCTION.

1. GENERAL

1.1. SUMMARY

This Document includes the protection and trimming of existing trees that interfere with, or are affected by, execution of the Work, whether temporary or permanent construction.

1.2. DEFINITIONS

Tree Protection Zone: Area surrounding individual trees or groups of trees to remain during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.3. SUBMITTALS

- 1.3.1. Product Data: For each type of product indicated.
- 1.3.2. Tree Pruning Schedule: Written schedule from arborist detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.
- 1.3.3. Qualification Data: For tree service firm and arborist.
- 1.3.4. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- 1.3.5. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.

1.4. QUALITY ASSURANCE

- 1.4.1. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of tree protection and trimming.
- 1.4.2. Arborist Qualifications: An arborist certified by ISA (International Society of Arboriculture) or licensed in the jurisdiction where Project is located.
- 1.4.3. Tree Pruning Standard: Comply with ANSI A300 (Part 1), "Tree, Shrub, and Other Woody Plant Maintenance--Standard Practices (Pruning)."
 - 1.4.3.1. Before tree protection and trimming operations begin, meet with District to review tree protection and trimming procedures and responsibilities.

2. PRODUCTS

2.1. MATERIALS

- 2.1.1. Drainage Fill: Selected crushed stone, or crushed or uncrushed gravel, washed, ASTM D 448, Size 24, with 90 to 100 percent passing a 2-1/2-inch (63-mm) sieve and not more than 10 percent passing a 3/4-inch (19-mm) sieve.
- 2.1.2. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 1 inch (25 mm) in diameter; and free of weeds, roots, and toxic and other nonsoil materials.
 - 2.1.2.1. Obtain topsoil only from well-drained sites where topsoil is 4 inches (100 mm) deep or more; do not obtain from bogs or marshes.
- 2.1.3. Filter Fabric: Manufacturer's standard, nonwoven, pervious, geotextile fabric of polypropylene, nylon, or polyester fibers.
- 2.1.4. Chain-Link Fence: Metallic-coated steel chain-link fence fabric of 0.120-inch- (3-mm-) diameter wire; a minimum of 48 inches (1200 mm) high; with 1.9-inch- (48-mm-) diameter line posts; 2-3/8-inch- (60-mm-) diameter terminal and corner posts; 1-5/8-inch- (41-mm-) diameter top rail; and 0.177-inch- (4.5-mm-) diameter bottom tension wire; with tie wires, hog ring ties, and other accessories for a complete fence system.

- 2.1.5. Select mulch as recommended by arborist or landscape architect.
- 2.1.6. Organic Mulch: Use shredded hardwood, ground or shredded bark, or wood and bark chips, all free of deleterious materials.

3. EXECUTION

3.1. PREPARATION

- 3.1.1. Temporary Fencing: Install temporary fencing around tree protection zones to protect remaining trees and vegetation from construction damage. Maintain temporary fence and remove when construction is complete.
- 3.1.2. Install chain-link fence according to ASTM F 567 and manufacturer's written instructions.
- 3.1.3. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- 3.1.4. Mulch areas inside tree protection zones and other areas indicated.
 - 3.1.4.1. Select mulch as recommended by arborist or landscape architect.
 - 3.1.4.2. Apply 2-inch (50-mm) to 3-inch (75-mm) average thickness of organic mulch. Do not place mulch within 6 inches (150 mm)] of tree trunks.
- 3.1.5. Do not store construction materials, debris, or excavated material inside tree protection zones. Do not permit vehicles or foot traffic within tree protection zones; prevent soil compaction over root systems.
- 3.1.6. Maintain tree protection zones free of weeds and trash.
- 3.1.7. Do not allow fires within tree protection zones.

3.2. EXCAVATION

- 3.2.1. Install shoring or other protective support systems to minimize sloping or benching of excavations where construction or utility excavation is near trees to be protected.
- 3.2.2. Do not excavate within tree protection zones, unless otherwise indicated.
- 3.2.3. Where excavation for new construction is required within tree protection zones, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks and comb soil to expose roots.
 - 3.2.3.1. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.
- 3.2.4. Where utility trenches are required within tree protection zones, tunnel under or around roots by drilling, auger boring, pipe jacking, or digging by hand.
 - 3.2.4.1. Root Pruning: Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots with sharp pruning instruments; do not break or chop.

3.3. REGRADING

- 3.3.1. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade beyond tree protection zones. Maintain existing grades within tree protection zones.
- 3.3.2. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade away from trees as recommended by arborist, unless otherwise indicated.
 - 3.3.2.1. Root Pruning: Prune tree roots exposed during grade lowering. Do not cut main lateral roots or taproots; cut only smaller roots. Cut roots with sharp pruning instruments; do not break or chop.
- 3.3.3. Minor Fill: Where existing grade is 6 inches (150 mm) or less below elevation of finish grade, fill with topsoil. Place topsoil in a single uncompacted layer and hand grade to required finish elevations.
- 3.3.4. Moderate Fill: Where existing grade is more than 6 inches (150 mm) but less than 12 inches (300 mm) below elevation of finish grade, place drainage fill, filter fabric, and

topsoil on existing grade as follows:

- 3.3.4.1. Carefully place drainage fill against tree trunk approximately 2 inches (50 mm) above elevation of finish grade and extend not less than 18 inches (450 mm) from tree trunk on all sides. For balance of area within drip-line perimeter, place drainage fill up to 6 inches (150 mm) below elevation of grade.
- 3.3.4.2. Place filter fabric with edges overlapping 6 inches (150 mm) minimum.
- 3.3.4.3. Place fill layer of topsoil to finish grade. Do not compact drainage fill or topsoil. Hand grade to required finish elevations.

3.4. TREE PRUNING

- 3.4.1. Prune trees to remain that are affected by temporary and permanent construction.
- 3.4.2. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.
- 3.4.3. Pruning Standards: Prune trees according to ANSI A300 (Part 1), as recommended by arborist report.
- 3.4.4. Adjust pruning requirements per arborist's recommendations.
- 3.4.5. Cut branches with sharp pruning instruments; do not break or chop.
- 3.4.6. Modify below to specific project requirements.
- 3.4.7. Chip removed tree branches and dispose of or spread over areas identified by District.

3.5. TREE REPAIR AND REPLACEMENT

- 3.5.1. Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
- 3.5.2. Remove and replace trees indicated to remain that die or are damaged during construction operations or that are incapable of restoring to normal growth pattern.
 - 3.5.2.1. Provide new trees of 6-inch (150-mm) caliper size when damaged trees more than 6 inches (150 mm) in caliper size, measured 12 inches (300 mm) above grade, are required to be replaced.
 - 3.5.2.2. **Plant and maintain new trees as specified in Contract Documents.**
- 3.5.3. Where recommended by arborist report, aerate surface soil, compacted during construction, 10 feet (3 m) beyond drip line and no closer than 36 inches (900 mm) to tree trunk. Drill 2-inch (50-mm) diameter holes a minimum of 12 inches (300 mm) deep at 24 inches (600 mm) o.c. Backfill holes with an equal mix of augured soil and sand.

3.6. DISPOSAL OF WASTE MATERIALS

- 3.6.1. Burning is not permitted.
- 3.6.2. Disposal: Remove excess excavated material and displaced trees from Site.

END OF DOCUMENT

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) – CONSTRUCTION

1. Designer/Builder shall implement erosion control and storm water best management practices (BMPs) on the Project site to avoid or minimize any potential impacts associated with storm water runoff and sedimentation.
2. The Designer/Builder and its civil engineer each determined that the construction of this Project is not anticipated to approach or exceed the one-acre disturbance threshold that would necessitate enrollment under the CGP. However, if prior to construction the project design is modified and will result in one or more acres of disturbance, the Designer/Builder shall comply with the requirements *italicized* below in this “SWPPP – CONSTRUCTION” Section to obtain permit coverage from the State Water Board.

2.1. **GENERAL.** *The Clean Water Act and Porter Cologne Water Quality Act prohibit the discharge of any water containing pollutants from certain construction sites unless a National Pollutant Discharge Elimination System permit is first obtained and followed. The National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction Storm Water Permit) Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ (NPDES No. CAS000002) issued by the California State Water Resources Control Board (State Water Board) authorizes the discharge of storm water and certain non-storm water from construction sites if certain conditions and measures are taken. The District has determined that the construction of this Project requires enrollment in the Construction Storm Water Permit.*

2.2. **SUBMITTAL.** *All submittals shall be made in a form conducive for the District to electronically upload the approved submittals to the Storm water Multi-Application Reporting and Tracking System (SMARTS).*

2.2.1. RISK ASSESSMENT

- 2.2.1.1. *Concurrent with the Schedule of Submittals as indicated in the Contract, Designer/Builder shall prepare and submit a proposed “Risk Assessment” as set forth in the Construction Storm Water Permit.*
- 2.2.1.2. *The District’s Qualified SWPPP Designer/Builder (“QSD”) will review the Designer/Builder’s proposed Risk Assessment for compliance with the Construction Storm Water Permit. If changes to the proposed Risk Assessment are required to comply with the Construction Storm Water Permit, the District QSD will identify such changes to the Designer/Builder*
- 2.2.1.3. *Designer/Builder shall make the changes specified by the District’s QSD and shall submit the revised Risk Assessment to the District within seven (7) days of receipt of the changes identified by the District’s QSD. If the changes had been acceptably made, the District’s QSD will approve the Risk Assessment and provide the Contract with a copy within seven (7) days of receipt of the revised Risk Assessment.*

2.2.2. SITE MAPS

- 2.2.2.1. *Concurrent with the Schedule of Submittals as indicated in the Contract, Designer/Builder shall prepare and submit proposed “Site Maps” as described in Attachment B of the Construction Storm Water Permit.*
- 2.2.2.2. *The District’s QSD will review the Designer/Builder’s proposed Site Maps for compliance with the Construction Storm Water Permit. If changes to the proposed Site Maps are required to comply with the Construction Storm Water Permit, the District QSD will identify such changes to the Designer/Builder*
- 2.2.2.3. *Designer/Builder shall make the changes specified by the District’s QSD and shall submit the revised Site Maps to the District within seven (7) days of receipt of the changes identified by the District’s QSD. If the changes had been acceptably made, the District’s QSD will approve the Site Maps and provide the Contract with a copy within seven (7) days of receipt of the revised SWPPP.*

2.2.3. SWPPP

- 2.2.3.1. *Concurrent with the Schedule of Submittals as indicated in the Contract, Designer/Builder shall prepare and submit to the District a proposed SWPPP for the*

Work.

- 2.2.3.2. *The District's Qualified SWPPP Designer/Builder ("QSD") will review the Designer/Builder's proposed SWPPP for compliance with the Construction Storm Water Permit. If changes to the proposed SWPPP are required to comply with the Construction Storm Water Permit, the District QSD will identify such changes to the Designer/Builder*
- 2.2.3.3. *Designer/Builder shall make the changes specified by the District's QSD and shall submit the revised SWPPP to the District within seven (7) days of receipt of the changes identified by the District's QSD. If the changes had been acceptably made, the District's QSD will approve the SWPPP and provide the Contract with a copy within seven (7) days of receipt of the revised SWPPP.*

2.2.4. RAINAIN EVENT ACTION PLAN (REAP)

- 2.2.4.1. *If Designer/Builder determines that Site is a Risk Level 1, concurrent with the Schedule of Submittals as indicated in the Contract, Designer/Builder shall prepare and submit to the District a proposed REAP for the Work.*
- 2.2.4.2. *The District's QSD will review the Designer/Builder's proposed REAP for compliance with the Construction Storm Water Permit. If changes to the proposed REAP are required to comply with the Construction Storm Water Permit, the District QSD will identify such changes to the Designer/Builder*
- 2.2.4.3. *Designer/Builder shall make the changes specified by the District's QSD and shall submit the revised REAP to the District within seven (7) days of receipt of the changes identified by the District's QSD. If the changes had been acceptably made, the District's QSD will approve the REAP and provide the Contract with a copy within seven (7) days of receipt of the revised REAP.*

2.2.5. ACTIVE TREATMENT SYSTEM (ATS)

- 2.2.5.1. *If Designer/Builder determines that Site requires an ATS under the Construction Storm Water Permit, concurrent with the Schedule of Submittals as indicated in the Contract, Designer/Builder shall prepare and submit to the District a proposed ATS for the Work.*
- 2.2.5.2. *The District's QSD will review the Designer/Builder's proposed ATS for compliance with the Construction Storm Water Permit. If changes to the proposed ATS are required to comply with the Construction Storm Water Permit, the District QSD will identify such changes to the Designer/Builder*
- 2.2.5.3. *Designer/Builder shall make the changes specified by the District's QSD and shall submit the revised ATS to the District within seven (7) days of receipt of the changes identified by the District's QSD. If the changes had been acceptably made, the District's QSD will approve the ATS and provide the Contract with a copy within seven (7) days of receipt of the revised ATS.*

- 2.2.6. **RECORDS.** *All electronic and hardcopy records required by the Construction Storm Water Permit shall be submitted to the District within seven (7) days of Completion of the Project.*

- 2.3. **PERMIT REGISTRATION DOCUMENTS.** *Prior to any activities on Site that disturb the Site's surface, the Permit Registration Documents (PRDs) required by the Construction Storm Water Permit must be filed with the Regional Water Quality Control Board. The District shall file the PRDs with the Regional Water Quality Control Board to activate coverage under the Construction Storm Water Permit.*

2.4. IMPLEMENTATION REQUIREMENTS

- 2.4.1. *Designer/Builder shall not conduct any activities that may affect the Site's construction runoff water quality until the District provides Designer/Builder with the Waste Discharger Identification Number (WDID) assigned to this Project by the State Water Board.*
- 2.4.2. *Designer/Builder shall keep a copy of the approved SWPPP at the job site. The SWPPP shall be made available when requested by a representative of the Regional Water Quality Control Board, State Water Resources Control Board, United States Environmental Protection Agency, or the local storm water management agency. Requests from the public shall be directed to the District for response.*
- 2.4.3. *Designer/Builder shall designate in writing to the District a Qualified SWPPP Practitioner (QSP) who shall be responsible for implementing the SWPPP, REAP (if applicable), ATS (if*

- applicable), conducting non-storm water and storm water visual observations, and for ensuring that all best management practices (BMPs) required by the SWPPP and General Permit are properly implemented and maintained.
- 2.4.4. All measures required by the SWPPP shall be implemented concurrent with the commencement of construction. Pollution practices and devices shall be followed or installed as early in the construction schedule as possible with frequent upgrading of devices as construction progresses.
- 2.4.5. Designer/Builder shall ensure that all measures are properly maintained and repaired to protect the water quality of discharges.
- 2.5. **INSPECTION, SAMPLING, ANALYSIS, AND RECORD KEEPING REQUIREMENTS.** The Designer/Builder's QSP shall conduct all required visual observations, sampling, analysis, reporting, and record keeping required by the SWPPP and the Construction Storm Water Permit.
- 2.6. **REPORTING REQUIREMENTS.** Designer/Builder shall prepare and provide all the reports, which include, but are not limited to the Annual Report and any NEL Violation Reports or NAL Exceedance Reports, all of which are required by the SWPPP and the Construction Storm Water Permit.
- 2.7. **ANNUAL REPORT.** By August 1 of each year (defined as July 1 to June 30) that had at least one continuous three (3) month period coverage under the General Permit, Designer/Builder shall complete and submit to the District an Annual Report, as required by the General Permit. If the Project is complete prior to August 1, Designer/Builder shall submit the report prior to acceptance of the Project.
- 2.8. **COMPLETION OF WORK**
- 2.8.1. Clean-up shall be performed as each portion of the work progresses. All refuse, excess material, and possible pollutants shall be disposed of in a legal manner off-site and all temporary and permanent SWPPP devices shall be in place and maintained in good condition.
- 2.8.2. At Completion of Work, Designer/Builder shall inspect installed SWPPP devices, and present the currently implemented SWPPP with all backup records to the District.
- 2.9. **NOTICE OF TERMINATION (NOT).** A Notice of Termination (NOT) must be submitted by the Designer/Builder to the District for electronic submittal by the Legally Responsible Person via SMARTS to terminate coverage under the General Permit. The NOT must include a final Site Map and representative photographs of the Project site that demonstrate final stabilization has been achieved. The NOT shall be submitted to the District on or before the Designer/Builder submits its final application for payment. If the Regional Water Board rejects the NOT for any reason, the Designer/Builder shall revise the NOT as many times as necessary to get the Regional Water Board's approval. The Regional Water Board will consider a construction site complete when the conditions of the General Permit, Section II.D have been met.
- 2.10. **QUALITY ASSURANCE**
- 2.10.1. Before performing any of the obligations indicated herein, the Designer/Builder's QSP shall meet the training and certification requirements in the Construction Storm Water Permit.
- 2.10.2. Designer/Builder shall perform the Work in strict compliance with the approved SWPPP, REAP, ATS, and the Construction Storm Water Permit.
- 2.10.3. Designer/Builder shall conduct at least a one-hour training session on the requirements of the SWPPP for each employee before an employee conducts any construction on the Site. Designer/Builder shall maintain documentation of this employee training at the site for review by the District or any regulatory agency.
- 2.11. **PERFORMANCE REQUIREMENTS**
- 2.11.1. The Storm Water Pollution Prevention Plan is a minimum requirement. Revisions and modifications to the SWPPP are acceptable only if they maintain levels of protection equal to or greater than originally specified.
- 2.11.2. Read and be thoroughly familiar with all of the requirements of the SWPPP.
- 2.11.3. Inspect and monitor all work and storage areas for compliance with the SWPPP prior to any anticipated rain.
- 2.11.4. Complete any and all corrective measures as may be directed by the regulatory agency.

- 2.11.5. **Penalties:** *Designer/Builder shall pay any fees and any penalties that may be imposed by the regulatory agency for non-compliance with SWPPP during the course of Work.*
- 2.11.6. **Costs:** *Designer/Builder to pay all costs associated with the implementation of the requirements of the SWPPP in order to maintain compliance with the Permit. This includes installation of all Housekeeping BMPs, General Site and Material Management BMPs, Inspection requirements, maintenance requirements, and all other requirements specified in the SWPPP.*
- 2.12. **MATERIALS.** *All temporary and permanent storm water pollution prevention facilities, equipment, and materials as required by or as necessary to comply with the SWPPP as described in the BMP Handbook.*

END OF DOCUMENT

MATERIALS AND EQUIPMENT

1. GENERAL

1.1. MATERIAL AND EQUIPMENT

- 1.1.1. Only items approved by the District and/or Construction Manager shall be used.
- 1.1.2. Designer/Builder shall submit lists of Products and other Product information in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.

1.2. MATERIAL AND EQUIPMENT COLORS

- 1.2.1. The Designer/Builder shall comply with all schedule(s) of colors provided by the District and/or Construction Manager.
- 1.2.2. No individual color selections will be made until after approval of all pertinent materials and equipment and after receipt of appropriate samples in accordance with the Contract Documents, including, without limitation, the provisions regarding the submittals.
- 1.2.3. Designer/Builder shall request priority in writing for any item requiring advance ordering to maintain the approved Construction Schedule.

1.3. DELIVERY, STORAGE, AND HANDLING

- 1.3.1. Designer/Builder shall deliver manufactured materials in original packages, containers, or bundles (with seals unbroken), bearing name or identification mark of manufacturer.
- 1.3.2. Designer/Builder shall deliver fabrications in as large assemblies as practicable; where specified as shop-primed or shop-finished, package or crate as required to preserve such priming or finish intact and free from abrasion.
- 1.3.3. Designer/Builder shall store materials in such a manner as necessary to properly protect them from damage. Materials or equipment damaged by handling, weather, dirt, or from any other cause will not be accepted.
- 1.3.4. Materials are not acceptable that have been warehoused for long periods of time, stored or transported in improper environment, improperly packaged, inadequately labeled, poorly protected, excessively shipped, deviated from normal distribution pattern, or reassembled.
- 1.3.5. Designer/Builder shall store material so as to cause no obstructions of sidewalks, roadways, and underground services. Designer/Builder shall protect material and equipment furnished pursuant to the Contract Documents.
- 1.3.6. Designer/Builder may store materials on Site with prior written approval by the District, all material shall remain under Designer/Builder's control and Designer/Builder shall remain liable for any damage to the materials. Should the Project Site not have storage area available, the Designer/Builder shall provide for off-site storage at no cost to District.
- 1.3.7. When any room in Project is used as a shop or storeroom, the Designer/Builder shall be responsible for any repairs, patching, or cleaning necessary due to that use. Location of storage space shall be subject to prior written approval by District.

2. PRODUCTS

2.1. MANUFACTURERS

- 2.1.1. Manufacturers listed in various sections of Contract Documents are names of those manufacturers that are believed to be capable of supplying one or more of items specified therein.
- 2.1.2. The listing of a manufacturer does not imply that every product of that manufacturer is acceptable as meeting the requirements of the Contract Documents.

2.2. FACILITIES AND EQUIPMENT

Designer/Builder shall provide, install, maintain, and operate a complete and adequate facility for handling, the execution, disposal, and distribution of material and equipment as required for proper and timely performance of Work.

2.3. MATERIAL REFERENCE STANDARDS

Where material is specified solely by reference to "standard specifications" and if requested by District, Designer/Builder shall submit for review data on actual material proposed to be incorporated into Work, listing name and address of vendor, manufacturer, or producer, and trade or brand names of those materials, and data substantiating compliance with standard specifications.

3. EXECUTION

3.1. WORKMANSHIP

3.1.1. Where not more specifically described in any other Contract Documents, workmanship shall conform to methods and operations of best standards and accepted practices of trade or trades involved and shall include items of fabrication, construction, or installation regularly furnished or required for completion (including finish and for successful operation, as intended).

3.1.2. Work shall be executed by tradespersons skilled in their respective field of work. When completed, parts shall have been durably and substantially built and present a neat appearance.

3.2. COORDINATION

3.2.1. Designer/Builder shall coordinate installation of materials and equipment so as to not interfere with installation of other work. Adjustment or rework because of Designer/Builder's failure to coordinate will be at no additional cost to District.

3.2.2. Designer/Builder shall examine in-place materials and equipment for readiness, completeness, fitness to be concealed or to receive Work, and compliance with Contract Documents. Concealing or covering work constitutes acceptance of additional cost which will result should in-place materials and equipment be found unsuitable for receiving other work or otherwise deviating from the requirements of the Contract Documents.

3.3. COMPLETENESS

Designer/Builder shall provide all portions of the Work, unless clearly stated otherwise, installed complete and operational with all elements, accessories, anchorages, utility connections, etc., in manner to assure well-balanced performance, in accordance with manufacturer's recommendations and in accordance with Contract Documents. For example, electric water coolers require water, electricity, and drain services; roof drains require drain system; sinks fit within countertop, etc. Terms such as "installed complete," "operable condition," "for use intended," "connected to all utilities," "terminate with proper cap," "adequately anchored," "patch and refinish," "to match similar," should be assumed to apply in all cases, except where completeness of functional or operable condition is specifically stated as not required.

3.4. APPROVED INSTALLER OR APPLICATOR

Designer/Builder shall ensure that all installations are only performed by a manufacturer's approved installer or applicator.

3.5. MANUFACTURER'S RECOMMENDATIONS

All installations shall be in accordance with manufacturer's published recommendations and specific written directions of manufacturer's representative. Should Contract Documents differ from recommendations of manufacturer or directions of manufacturer's representative, Designer/Builder shall analyze differences, make recommendations to the District and the Construction Manager in writing, and shall not proceed until interpretation or clarification has been issued by the District and/or the Construction Manager.

END OF DOCUMENT

DELIVERY, STORAGE AND HANDLING

1. GENERAL

1.1. PRODUCTS

- 1.1.1. Products are as defined in the Contract.
- 1.1.2. Designer/Builder shall not use and/or reuse materials and/or equipment removed from existing Premises, except as specifically permitted by the Contract Documents.
- 1.1.3. Designer/Builder shall provide interchangeable components of the same manufacturer, for similar components.

1.2. TRANSPORTATION AND HANDLING

- 1.2.1. Designer/Builder shall transport and handle Products in accordance with manufacturer's instructions.
- 1.2.2. Designer/Builder shall promptly inspect shipments to confirm that Products comply with Contract requirements, are of correct quantity, and are undamaged.
- 1.2.3. Designer/Builder shall provide equipment and personnel to properly handle Products to prevent soiling, disfigurement, or damage.

1.3. STORAGE AND PROTECTION

- 1.3.1. Designer/Builder shall store and protect Products in accordance with manufacturer's instructions, with seals and labels intact and legible. Designer/Builder shall store sensitive Products in weather-tight, climate controlled enclosures.
- 1.3.2. Designer/Builder shall place fabricated Products that are stored outside, on above-ground sloped supports.
- 1.3.3. Designer/Builder shall provide off-site storage and protection for Products when Site does not permit on-site storage or protection.
- 1.3.4. Designer/Builder shall cover Products subject to deterioration with impervious sheet covering and provide ventilation to avoid condensation.
- 1.3.5. Designer/Builder shall store loose granular materials on solid flat surfaces in a well-drained area and prevent mixing with foreign matter.
- 1.3.6. Designer/Builder shall provide equipment and personnel to store Products by methods to prevent soiling, disfigurement, or damage.
- 1.3.7. Designer/Builder shall arrange storage of Products to permit access for inspection and periodically inspect to assure Products are undamaged and are maintained under specified conditions.

END OF DOCUMENT

CONTRACT CLOSEOUT AND FINAL CLEANING

1. GENERAL

1.1. CLOSEOUT PROCEDURES

Designer/Builder shall comply with all closeout provisions as indicated in the Contract.

1.2. FINAL CLEANING

- 1.2.1. Designer/Builder shall execute final cleaning prior to final inspection.
- 1.2.2. Delete
- 1.2.3. Designer/Builder shall clean equipment and fixtures to a clean condition.
- 1.2.4. Delete
- 1.2.5. Designer/Builder shall clean debris from roofs, gutters, down spouts, and drainage systems.
- 1.2.6. Designer/Builder shall clean Site, sweep paved areas, and rake clean landscaped surfaces.
- 1.2.7. Designer/Builder shall remove waste and surplus materials, rubbish, and construction facilities from the Site.

1.3. ADJUSTING

Designer/Builder shall adjust operating products and equipment to ensure smooth and unhindered operation.

1.4. RECORD DOCUMENTS AND SHOP DRAWINGS

Designer/Builder shall legibly mark each item to record actual construction, including:

- 1.4.1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permit surface improvements.
- 1.4.2. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
- 1.4.3. Field changes of dimension and detail.
- 1.4.4. Details not on original Contract Drawings
- 1.4.5. Changes made by modification(s).
- 1.4.6. References to related Shop Drawings and modifications.
- 1.4.7. Designer/Builder will provide one set of Record Drawings to District.
- 1.4.8. Designer/Builder shall submit all required documents to District and/or Construction Manager prior to or with its final Application for Payment.

1.5. INSTRUCTION OF DISTRICT PERSONNEL

- 1.5.1. Before final inspection, at agreed upon times, Designer/Builder shall instruct District's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- 1.5.2. For equipment requiring seasonal operation, Designer/Builder shall perform instructions for other seasons within six (6) months.
- 1.5.3. Designer/Builder shall use operation and maintenance manuals as basis for instruction. Designer/Builder shall review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- 1.5.4. Designer/Builder shall prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

1.6. SPARE PARTS AND MAINTENANCE MATERIALS

- 1.6.1. Designer/Builder shall provide products, spare parts, maintenance, and extra materials in quantities specified in the Specifications and in Manufacturer's recommendations.
- 1.6.2. Designer/Builder shall provide District all required Operation and Maintenance Data.

END OF DOCUMENT

FIELD ENGINEERING

1. GENERAL

1.1. REQUIREMENTS INCLUDED

- 1.1.1. Designer/Builder shall provide and pay for field engineering services by a California-registered engineer, required for the Project, including, without limitations:
 - 1.1.1.1. Survey work required in execution of the Project.
 - 1.1.1.2. Civil or other professional engineering services specified, or required to execute Designer/Builder's construction methods.

1.2. QUALIFICATIONS OF SURVEYOR OR ENGINEERS

Designer/Builder shall only use a qualified licensed engineer or registered land surveyor, to whom District makes no objection.

1.3. SURVEY REFERENCE POINTS

- 1.3.1. Existing basic horizontal and vertical control points for the Project are those designated on the Drawings.
- 1.3.2. Designer/Builder shall locate and protect control points prior to starting Site Work and preserve all permanent reference points during construction. In addition, Designer/Builder shall:
 - 1.3.2.1. Make no changes or relocation without prior written notice to District and Construction Manager.
 - 1.3.2.2. Report to District and Construction Manager when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
 - 1.3.2.3. Require surveyor to replace Project control points based on original survey control that may be lost or destroyed.

1.4. RECORDS

Designer/Builder shall maintain a complete, accurate log of all control and survey work as it progresses.

1.5. SUBMITTALS

- 1.5.1. Designer/Builder shall submit name and address of Surveyor and Professional Engineer to District and Construction Manager prior to its/their work on the Project.
- 1.5.2. On request of District and Construction Manager, Designer/Builder shall submit documentation to verify accuracy of field engineering work, at no additional cost to the District.
- 1.5.3. Designer/Builder shall submit a certificate signed by registered engineer or surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

2. EXECUTION

2.1. COMPLIANCE WITH LAWS

Designer/Builder is responsible for meeting all applicable codes, OSHA, safety and shoring requirements.

2.2. NONCONFORMING WORK

Designer/Builder is responsible for any re-surveying required by correction of nonconforming work.

END OF DOCUMENT

CUTTING AND PATCHING

1. GENERAL

1.1. CUTTING AND PATCHING

- 1.1.1. Designer/Builder shall be responsible for all cutting, fitting, and patching, including associated excavation and backfill, required to complete the Work or to:
 - 1.1.1.1. Make several parts fit together properly.
 - 1.1.1.2. Uncover portions of Work to provide for installation of ill-timed Work.
 - 1.1.1.3. Remove and replace defective Work.
 - 1.1.1.4. Remove and replace Work not conforming to requirements of Contract Documents.
 - 1.1.1.5. Remove Samples of installed Work as specified for testing.
 - 1.1.1.6. Provide routine penetrations of non-structural surfaces for installation of piping and electrical conduit.
 - 1.1.1.7. Attaching new materials to existing remodeling areas – including painting (or other finishes) to match existing conditions.
- 1.1.2. In addition to Contract requirements, upon written instructions from District, Designer/Builder shall uncover Work to provide for observations of covered Work in accordance with the Contract Documents; remove samples of installed materials for testing as directed by District; and remove Work to provide for alteration of existing Work.
- 1.1.3. Designer/Builder shall not cut or alter Work, or any part of it, in such a way that endangers or compromises the integrity of the Work, the Project, or work of others.
- 1.1.4. Designer/Builder shall not cut and patch operating elements and safety related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety. Operating elements include the following:
 - 1.1.4.1. Primary operational systems and equipment.
 - 1.1.4.2. Air or smoke barriers.
 - 1.1.4.3. Fire-suppression systems.
 - 1.1.4.4. Mechanical systems piping and ducts.
 - 1.1.4.5. Control systems.
 - 1.1.4.6. Communication systems.
 - 1.1.4.7. Conveying systems.
 - 1.1.4.8. Electrical wiring systems.
- 1.1.5. Designer/Builder shall not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing capacity to perform as intended, or that results in increased maintenance or decreased operational life of safety. Miscellaneous elements include the following:
 - 1.1.5.1. Water, moisture or vapor barriers.
 - 1.1.5.2. Membranes and flashings.
 - 1.1.5.3. Exterior curtain-wall construction.
 - 1.1.5.4. Equipment supports.
 - 1.1.5.5. Piping, ductwork, vessels and equipment.
 - 1.1.5.6. Noise and vibration control elements and systems.
 - 1.1.5.7. Shoring, bracing and sheeting.

1.2. SUBMITTALS

- 1.2.1. Designer/Builder shall submit written notice to District pursuant to the applicable notice provisions of the Contract Documents, requesting consent to proceed with the cutting or alteration (Request) at least ten (10) days prior to any cutting or alterations that may affect the structural safety of Project, or work of others, including the following:
 - 1.2.1.1. The work of the District or other trades.
 - 1.2.1.2. Structural value or integrity of any element of Project.

- 1.2.1.3. Integrity or effectiveness of weather-exposed or weather-resistant elements or systems.
 - 1.2.1.4. Efficiency, operational life, maintenance or safety of operational elements.
 - 1.2.1.5. Visual qualities of sight-exposed elements.
 - 1.2.2. Contractor's Request shall also include:
 - 1.2.2.1. Identification of Project.
 - 1.2.2.2. Description of affected Work.
 - 1.2.2.3. Necessity for cutting, alteration, or excavations.
 - 1.2.2.4. Affects of Work on District, other trades, or structural or weatherproof integrity of Project.
 - 1.2.2.5. Description of proposed Work:
 - 1.2.2.5.1. Scope of cutting, patching, alteration, or excavation.
 - 1.2.2.5.2. Trades that will execute Work.
 - 1.2.2.5.3. Products proposed to be used.
 - 1.2.2.5.4. Extent of refinishing to be done.
 - 1.2.2.6. Alternates to cutting and patching.
 - 1.2.2.7. Cost proposal, when applicable.
 - 1.2.2.8. The scheduled date the Designer/Builder intends to perform the Work and the duration of time to complete the Work.
 - 1.2.2.9. Written permission of other trades whose Work will be affected.
 - 1.3. QUALITY ASSURANCE**
 - 1.3.1. Designer/Builder shall ensure that cutting, fitting, and patching shall achieve security, strength, weather protection, appearance for aesthetic match, efficiency, operational life, maintenance, safety of operational elements, and the continuity of existing fire ratings.
 - 1.3.2. Designer/Builder shall ensure that cutting, fitting, and patching shall successfully duplicate undisturbed adjacent profiles, materials, textures, finishes, colors, and that materials shall match existing construction. Where there is dispute as to whether duplication is successful or has been achieved to a reasonable degree, the District's decision shall be final.
 - 1.4. PAYMENT FOR COSTS**
 - 1.4.1. Cost caused by ill-timed or defective Work or Work not conforming to Contract Documents, including costs for additional services of the District, its consultants, including but not limited to the Construction Manager, the Project Inspector(s), Engineers, and Agents, will be paid by Designer/Builder and/or deducted from the Contract by the District.
 - 1.4.2. District shall only pay for cost of Work if it is part of the original Contract Price or if a change has been made to the contract in compliance with the provisions of the Contract. Cost of Work performed upon instructions from the District, other than defective or nonconforming Work, will be paid by District on approval of written Change Order.
- 2. PRODUCTS**
- 2.1. MATERIALS**
 - 2.1.1. Designer/Builder shall provide for replacement and restoration of Work removed. Designer/Builder shall comply with the Contract Documents and with the Industry Standard(s), for the type of Work, and the Specification requirements for each specific product involved. If not specified, Designer/Builder shall first recommend a product of a manufacturer or appropriate trade association for approval by the District.
 - 2.1.2. Materials to be cut and patched include those damaged by the performance of the Work.
- 3. EXECUTION**
- 3.1. INSPECTION**
 - 3.1.1. Designer/Builder shall inspect existing conditions of the Site and the Work, including

elements subject to movement or damage during cutting and patching, excavating and backfilling. After uncovering Work, Designer/Builder shall inspect conditions affecting installation of new products.

- 3.1.2. Designer/Builder shall report unsatisfactory or questionable conditions in writing to District as indicated in the Contract and shall proceed with Work as indicated in the Contract.

3.2. PREPARATION

- 3.2.1. Designer/Builder shall provide shoring, bracing and supports as required to maintain structural integrity for all portions of the Project, including all requirements of the Project.
- 3.2.2. Designer/Builder shall provide devices and methods to protect other portions of Project from damage.
- 3.2.3. Designer/Builder shall, provide all necessary protection from weather and extremes of temperature and humidity for the Project, including without limitation, any work that may be exposed by cutting and patching Work. Designer/Builder shall keep excavations free from water.

3.3. ERECTION, INSTALLATION AND APPLICATION

- 3.3.1. With respect to performance, Designer/Builder shall:
 - 3.3.1.1. Execute fitting and adjustment of products to provide finished installation to comply with and match specified tolerances and finishes.
 - 3.3.1.2. Execute cutting and demolition by methods that will prevent damage to other Work, and provide proper surfaces to receive installation of repairs and new Work.
 - 3.3.1.3. Execute cutting, demolition excavating, and backfilling by methods that will prevent damage to other Work and damage from settlement.
 - 3.3.1.4. Designer/Builder shall employ original installer or fabricator to perform cutting and patching for:
 - 3.3.1.5. Weather-exposed surfaces and moisture-resistant elements such as roofing, sheet metal, sealants, waterproofing, and other trades.
 - 3.3.1.6. Sight-exposed finished surfaces.
- 3.3.2. Designer/Builder shall execute fitting and adjustment of products to provide a finished installation to comply with specified products, functions, tolerances, and finishes as shown or specified in the Contract Documents including, without limitation, the Drawings and Specifications.
- 3.3.3. Designer/Builder shall fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Designer/Builder shall conform to all Code requirements for penetrations or the Drawings and Specifications, whichever calls for a higher quality or more thorough requirement. Designer/Builder shall maintain integrity of both rated and non-rated fire walls, ceilings, floors, etc.
- 3.3.4. Designer/Builder shall restore Work which has been cut or removed. Designer/Builder shall install new products to provide completed Work in accordance with requirements of the Contract Documents and as required to match surrounding areas and surfaces.
- 3.3.5. Designer/Builder shall refinish all continuous surfaces to nearest intersection as necessary to match the existing finish to any new finish.

END OF DOCUMENT

OPERATION AND MAINTENANCE DATA

1. GENERAL

1.1. QUALITY ASSURANCE

- 1.1.1. Designer/Builder shall prepare instructions and data by personnel experienced in maintenance and operation of described products.
- 1.1.2. The provisions in this "Operations and Maintenance Data" document only apply to activities that the Designer/Builder does not perform as the Operator under a separate O&M Contract. Any conflict between this Section and the O&M Contract will be resolved in favor of the O&M Contract.

1.2. FORMAT

- 1.2.1. Designer/Builder shall prepare data in the form of an instructional manual entitled "OPERATIONS AND MAINTENANCE MANUAL & INSTRUCTIONS" ("Manual").
- 1.2.2. Binders: Designer/Builder shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size. When multiple binders are used, Designer/Builder shall correlate data into related consistent groupings.
- 1.2.3. Cover: Designer/Builder shall identify each binder with typed or printed title "OPERATION AND MAINTENANCE MANUAL & INSTRUCTIONS"; and shall list title of Project and identify subject matter of contents.
- 1.2.4. Designer/Builder shall arrange content by systems process flow under section numbers and sequence of Table of Contents of the Contract Documents.
- 1.2.5. Designer/Builder shall provide tabbed fly leaf for each separate Product and system, with typed description of Product and major component parts of equipment.
- 1.2.6. Text: The content shall include Manufacturer's printed data, or typewritten data on 24 pound paper.
- 1.2.7. Drawings: Designer/Builder shall provide with reinforced punched binder tab and shall bind in with text; folding larger drawings to size of text pages.

1.3. CONTENTS, EACH VOLUME

- 1.3.1. Table of Contents: Designer/Builder shall provide title of Project; names, addresses, and telephone numbers of any engineers, subconsultants, Subcontractor(s), and Designer/Builder with name of responsible parties; and schedule of Products and systems, indexed to content of the volume.
- 1.3.2. For Each Product or System: Designer/Builder shall list names, addresses, and telephone numbers of Subcontractor(s) and suppliers, including local source of supplies and replacement parts.
- 1.3.3. Product Data: Designer/Builder shall mark each sheet to clearly identify specific Products and component parts, and data applicable to installation. Delete inapplicable information.
- 1.3.4. Drawings: Designer/Builder shall supplement Product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Designer/Builder shall not use Project Record Documents as maintenance drawings.
- 1.3.5. Text: The Designer/Builder shall include any and all information as required to supplement Product data. Designer/Builder shall provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

1.4. MANUAL FOR MATERIALS AND FINISHES

- 1.4.1. Building Products, Applied Materials, and Finishes: Designer/Builder shall include Product data, with catalog number, size, composition, and color and texture designations. Designer/Builder shall provide information for re-ordering custom manufactured Products.
- 1.4.2. Instructions for Care and Maintenance: Designer/Builder shall include Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- 1.4.3. Moisture Protection and Weather Exposed Products: Designer/Builder shall include Product data listing applicable reference standards, chemical composition, and details of

installation. Designer/Builder shall provide recommendations for inspections, maintenance, and repair.

1.4.4. Additional Requirements: Designer/Builder shall include all additional requirements as specified in the Specifications.

1.4.5. Designer/Builder shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.5. MANUAL FOR EQUIPMENT AND SYSTEMS

1.5.1. Each Item of Equipment and Each System: Designer/Builder shall include description of unit or system, and component parts and identify function, normal operating characteristics, and limiting conditions. Designer/Builder shall include performance curves, with engineering data and tests, and complete nomenclature, and commercial number of replaceable parts.

1.5.2. Panelboard Circuit Directories: Designer/Builder shall provide electrical service characteristics, controls, and communications.

1.5.3. Designer/Builder shall include color coded wiring diagrams as installed.

1.5.4. Operating Procedures: Designer/Builder shall include start-up, break-in, and routine normal operating instructions and sequences. Designer/Builder shall include regulation, control, stopping, shut-down, and emergency instructions. Designer/Builder shall include summer, winter, and any special operating instructions.

1.5.5. Maintenance Requirements: Designer/Builder shall include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.

1.5.6. Designer/Builder shall provide servicing and lubrication schedule, and list of lubricants required.

1.5.7. Designer/Builder shall include manufacturer's printed operation and maintenance instructions.

1.5.8. Designer/Builder shall include sequence of operation by controls manufacturer.

1.5.9. Designer/Builder shall provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.

1.5.10. Designer/Builder shall provide control diagrams by controls manufacturer as installed.

1.5.11. Designer/Builder shall provide Designer/Builder's coordination drawings, with color coded piping diagrams as installed.

1.5.12. Designer/Builder shall provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.

1.5.13. Designer/Builder shall provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.

1.5.14. Additional Requirements: Designer/Builder shall include all additional requirements as specified in Specification(s).

1.5.15. Designer/Builder shall provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.6. SUBMITTAL

1.6.1. Concurrent with the Schedule of Submittals as indicated in the Contract, Designer/Builder shall submit to the District for review two (2) copies of a preliminary draft of proposed formats and outlines of the contents of the Manual.

1.6.2. For equipment, or component parts of equipment put into service during construction and to be operated by District, Designer/Builder shall submit draft content for that portion of the Manual within ten (10) days after acceptance of that equipment or component.

1.6.3. On or before the Designer/Builder submits its final application for payment, Designer/Builder shall submit two (2) copies of a complete Manual in final form. The District will provide comments to Designer/Builder and Designer/Builder must revise the content of the Manual as required by District prior to District's approval of Designer/Builder's final Application for Payment.

- 1.6.4. Designer/Builder must submit two (2) copies of revised Manual in final form within ten (10) days after receiving District's comments: one copy shall be physically delivered to the District in "hardcopy form"; and the other copy shall be submitted to the District by means of the Box file hosting service. Failure to do so will be a basis for the District withholding funds sufficient to protect itself for Designer/Builder's failure to provide a final Manual to the District.

END OF DOCUMENT

WARRANTIES

1. GENERAL

1.1. The provisions in this "Warranties" document only applies to warranties for any part of the Generating Facilities not including the inverter(s) or the solar panels, which are detailed in other areas of the Contract. Any conflict between this Section and the Contract shall be resolved in favor the Contract.

1.2. FORMAT

1.2.1. Binders: Designer/Builder shall use commercial quality, 8-1/2 by 11 inch, three-side rings, with durable plastic covers; two inch maximum ring size.

1.2.2. Cover: Designer/Builder shall identify each binder with typed or printed title "WARRANTIES" and shall list title of Project.

1.2.3. Table of Contents: Designer/Builder shall provide title of Project; name, address, and telephone number of Designer/Builder and equipment supplier, and name of responsible principal. Designer/Builder shall identify each item with the number and title of the specific Specification, document, provision, or section in which the name of the Product or work item is specified.

1.2.4. Designer/Builder shall separate each warranty with index tab sheets keyed to the Table of Contents listing, providing full information and using separate typed sheets as necessary. Designer/Builder shall list each applicable and/or responsible Subcontractor(s), supplier(s), and/or manufacturer(s), with name, address, and telephone number of each responsible principal(s).

1.3. PREPARATION

1.3.1. Designer/Builder shall obtain warranties, executed in duplicate by each applicable and/or responsible subcontractor(s), supplier(s), and manufacturer(s), within ten (10) days after completion of the applicable item or work. Except for items put into use with District's permission, Designer/Builder shall leave date of beginning of time of warranty until the date of completion is determined.

1.3.2. Designer/Builder shall verify that warranties are in proper form, contain full information, and are notarized, when required.

1.3.3. Designer/Builder shall co-execute submittals when required.

1.3.4. Designer/Builder shall retain warranties until time specified for submittal.

1.4. TIME OF SUBMITTALS

1.4.1. For equipment or component parts of equipment put into service during construction with District's permission, Designer/Builder shall submit a draft warranty for that equipment or component within ten (10) days after acceptance of that equipment or component.

1.4.2. On or before the Designer/Builder submits its final application for payment, Designer/Builder shall submit all warranties and related documents in final form. The District will provide comments to Designer/Builder and Designer/Builder must revise the content of the warranties as required by District prior to District's approval of Designer/Builder's final Application for Payment.

1.4.3. For items of Work that are not completed until after the date of Completion, Designer/Builder shall provide an updated warranty for those item(s) of Work within ten (10) days after acceptance, listing the date of acceptance as start of warranty period.

END OF DOCUMENT

RECORD DOCUMENTS

1. RECORD DRAWINGS

1.1. GENERAL

- 1.1.1. "Record Drawings" may also be referred to in the Contract as "As-Built Drawings."
- 1.1.2. As indicated in the Contract Documents, District will provide Designer/Builder with one set of reproducible plans of the original Contract Drawings.
- 1.1.3. Designer/Builder shall maintain at each Project Site one (1) set of marked-up plans and shall transfer all changes and information to those marked-up plans, as often as required in the Contract Documents, but in no case less than once each month. Designer/Builder shall submit to the Project Inspector one set of reproducible vellums of the Project Record Drawings ("As-Built") showing all changes incorporated into the Work since the preceding monthly submittal. The As-Built shall be available at the Project Site. The Designer/Builder shall submit reproducible vellums at the conclusion of the Project following review of the blue line prints.
- 1.1.4. Label and date each Record Drawing "RECORD DOCUMENT" in legibly printed letters.
- 1.1.5. All deviations in construction, including but not limited to pipe and conduit locations and deviations caused by without limitation Change Orders, Construction Directives, RFI's, and Addenda, shall be accurately and legibly recorded by Designer/Builder
- 1.1.6. Locations and changes shall be done by Designer/Builder in a neat and legible manner and, where applicable, indicated by drawing a "cloud" around the changed or additional information.

1.2. RECORD DRAWING INFORMATION

- 1.2.1. Designer/Builder shall record the following information:
 - 1.2.1.1. Locations of Work buried under or outside each building, including, without limitation, all utilities, plumbing and electrical lines, and conduits.
 - 1.2.1.2. Actual numbering of each electrical circuit.
 - 1.2.1.3. Locations of significant Work concealed inside each building whose general locations are changed from those shown on the Contract Drawings.
 - 1.2.1.4. Locations of all items, not necessarily concealed, which vary from the Contract Documents.
 - 1.2.1.5. Installed location of all cathodic protection anodes.
 - 1.2.1.6. Deviations from the sizes, locations, and other features of installations shown in the Contract Documents.
 - 1.2.1.7. Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stubouts, invert elevations, etc.
 - 1.2.1.8. Sufficient information to locate Work concealed in each building with reasonable ease and accuracy.
- 1.2.2. In some instances, this information may be recorded by dimension. In other instances, it may be recorded in relation to the spaces in the building near which it was installed.
- 1.2.3. Designer/Builder shall provide additional drawings as necessary for clarification.
- 1.2.4. Designer/Builder shall provide reproducible record drawings, made from final Shop Drawings marked "No Exceptions Taken" or "Approved as Noted."

2. RECORD SPECIFICATIONS

Designer/Builder shall mark each section legibly to record manufacturer, trade name, catalog number, and supplier of each Product and item of equipment actually installed.

3. MAINTENANCE OF RECORD DOCUMENTS

- 3.1. Designer/Builder shall store Record Documents apart from documents used for construction as follows:
 - 3.1.1. Provide files and racks for storage of Record Documents.
 - 3.1.2. Maintain Record Documents in a clean, dry, legible condition and in good order.
- 3.2. Designer/Builder shall not use Record Documents for construction purposes.

END OF DOCUMENT

COMMISSIONING

4. GENERAL

4.1. SUMMARY

- 4.1.1. Commissioning is a process for validating and documenting that the facility and its systems are constructed and perform in conformity with the Contract Documents.
- 4.1.2. The objective of the commissioning process is to verify that the performance of the facility and its systems meet or exceed the design intent.
- 4.1.3. Commissioning includes special facility start-up processes used to bring the facility to a fully operational state, free of deficiencies in an efficient and timely manner.
- 4.1.4. Training on related systems and equipment operation and maintenance shall be scheduled to commence only after start-up is complete and systems are verified to be 100% complete and functional.

4.2. DESCRIPTION

- 4.2.1. **Designer/Builder Startup:** Sub-phase of Designer/Builder's work ending with Acceptance of Work, during which Designer/Builder performs a pre-planned program of activities including starting, testing, inspecting, adjusting balancing, correcting deficiencies and other similar activities.
 - 4.2.1.1. The District, Construction Manager and the Inspector shall be present to observe, inspect and identify deficiencies in building systems operations.
- 4.2.2. The completion of startup means the entire Construction Project including startup and fine tuning has been performed to the requirements of the Contract Documents and is verified in writing by the District and Construction Manager.
- 4.2.3. **Fine Tuning:** Fine tuning is the responsibility of Designer/Builders after District occupancy and ending one (1) year after District occupancy. During this time the Designer/Builder is responsible for optimizing systems and correcting deficiencies arising under normal operating conditions.
 - 4.2.3.1. Includes a period after occupancy where systems are optimized under "live" operating conditions and all construction deficiencies are corrected.
 - 4.2.3.2. Fine Tuning shall extend from date of District occupancy to one year after occupancy.

4.3. DEFINITION OF TERMS

- 4.3.1. **Contractor's Pre-Commissioning Checklists:** Includes installation and start-up items as specified to be completed by the appropriate contractors prior to operational verification through the functional testing process.
- 4.3.2. **Installation Verification Process:** Includes the on-site inspection and review of related system components for conformance to Contract Documents. The Designer/Builder shall verify systems readiness for functional testing procedures prior to the start of functional testing. Deficiencies will be documented by the Inspector for future resolution.
- 4.3.3. **Functional Performance Testing Process:** Includes the documented testing of system parameters, under actual or simulated operating conditions. Final performance commissioning of systems will begin only after the appropriate Designer/Builder certifies that systems are 100% complete and ready for functional testing. The Designer/Builder will be required to schedule, coordinate and perform device tests, calibration and functional performance test procedures.
- 4.3.4. **Deficiencies and Resolutions List:** Includes a list of noted deficiencies discovered as a result of the commissioning process. This list also includes the current disposition of issues, and the date of final resolution as confirmed by the Construction Manager and Inspector. Deficiencies are defined as those issues where products execution or performance does not satisfy the Project Contract Documents and/or the design intent.

4.4. COMMISSIONING SCHEDULE

- 4.4.1. Provide schedules for Designer/Builder Start-Up work.
- 4.4.2. Incorporate in overall construction schedule.

- 4.4.3. Contractor's activities, which will be performed as specified under Fine Tuning, shall be completed within one (1) year from date of occupancy by the District.

4.5. SUBMITTALS

- 4.5.1. Submit Draft and Final Designer/Builder Start-up Forms as described in this Document. Submit Draft Report for Construction Manager's review and comment prior to Final Submission. Submit Final Report not later than twenty weeks before scheduled date of Acceptance of Work.
- 4.5.2. Prepare and submit one copy of report form to be used in preparation of reports for each electrical system that is part of the Generating Facilities.
- 4.5.3. Each System Report shall be submitted including the following:
 - 4.5.3.1. Project Name
 - 4.5.3.2. Name of System
 - 4.5.3.3. Index of report's content
 - 4.5.3.4. Adjacent to list of equipment, columns to indicate status of equipment operation, to date and to sign off equipment start-up.
 - 4.5.3.5. Space to record equipment and operational problems which cannot be corrected with scheduled Designer/Builder Start-Up program and which may delay Acceptance of Work.
 - 4.5.3.6. Manufacturer's equipment start-up reports.
 - 4.5.3.7. Systems' testing, balancing, and adjusting reports.
 - 4.5.3.8. Equipment Report Forms shall include the following: Project name, name of equipment, starting and testing procedures to be performed and observations and test results to be recorded.

4.6. COMMISSIONING DUTIES AND RESPONSIBILITIES

- 4.6.1. Designer/Builder Duties and Responsibilities:
 - 4.6.1.1. Assure the participation and cooperation of Subcontractors and Suppliers under their jurisdictions as required to complete the commissioning process.
 - 4.6.1.2. Complete Commissioning Report Forms. Reports are to be completed in a neat easily readable condition.
 - 4.6.1.3. Complete the respective start-up and check out procedures and insure readiness of equipment and systems prior to the start of the functional performance testing. Written confirmation of system readiness for performance testing is required.
 - 4.6.1.4. Provide qualified representatives for the functional performance commissioning process.
 - 4.6.1.5. Assure that all subcontractors, suppliers, test and balance, controls, etc. include in their respective contracts cost necessary to participate in and complete the commissioning process.
- 4.6.2. **Duties and Responsibilities of Others for Commissioning:** The commissioning process requires the active participation of the Construction Manager, District, and any other related consultants on the project.

4.7. SYSTEM FAILURES

After a second failure of a system to successfully meet the criteria as set for in the functional performance testing process, the Designer/Builder shall reimburse the District for cost associated with any additional retesting required due to uncorrected deficiencies. Costs shall include salary, benefits, overhead, travel costs and per diem lodging costs if applicable.

END OF DOCUMENT

Attachment 3 - Cost Proposal

Project: Fullerton Joint Union High School District - Design-Build of Solar Photovoltaic System
Bidder:

SITE	Buena Park High School	District Learning Center	Fullerton High School	La Habra High School	La Sierra/La Vista High School	Sonora High School	Sunny Hills High School	Troy High School
SYSTEM DETAILS								
System Size (kW DC)								
System Production (kWh)								
System Module Degredation (%)								
Panel type/model								
Inverter type(s)/model								

SYSTEM PRICING								
Capital Cost								
PV Modules (\$)								
Inverters (\$)								
Electrical Switchgear and Meters and other Components of System								
Data Acquisition and Monitoring System (\$)								
Installation and Labor (\$)								
TOTAL	0	0	0	0	0	0	0	0
OPERATION AND MAINTENANCE COSTS								
Year 1 Operation Maintenance (\$)								
O&M Escalator, if applicable (%)								

PPA PRICING	
Year 1 PPA Price (\$/kWh):	
Year 1 PPA Price with value-added options, if applicable (\$/kWh):	
PPA Escalator, if applicable (%)	

VALUE ADD IN OPTION: EV CHARGE STATIONS	
Will site have EV Charge Station(s) (Yes/No)	
Device charging solar workstation(s) (Yes/No)	
EV CHARGING STATION PRICING	
EV Charging Station Price	
EV CHARGE STATION OPERATION AND MAINTENANCE COSTS	
Year 1 O&M Price (\$)	
O&M Escalator, if applicable (%)	
Device charging solar workstation/ picnic area	
Solar Workstation Price	