BIDDING DOCUMENTS FOR THE THERMALITO UNION ELEMENTARY SCHOOL DISTRICT GENERATOR INFRASTRUCTURE PROJECT

400 Grand Ave. Oroville, CA 95965

Project No. TUESD22-001 Bid No. TUESD22-001

MARCH 18, 2022

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NOTICE INVITING INFORMAL BIDS

THERMALITO UNION ELEMENTARY SCHOOL DISTRICT

The Thermalito Union Elementary School District, acting by and through its Governing Board, hereinafter referred to as "District", will receive prior to <u>March 30, 2022, 3:00 p.m.</u> bids for the following:

BID NO. TUESD22-001

GENERATOR INFRASTRUCTURE PROJECT

All bids shall be made and presented only on the forms presented by the District. Bids shall be received at 400 Grand Ave., Oroville, California, 95965 and shall be opened at the above state time and place. Any bids received after the time specified above or after any extensions due to material changes shall be returned unopened.

The Contract Time is 90 calendar days.

This Project is being let in accordance with the informal bid requirements of the California Uniform Public Construction Cost Accounting Act ("CUPCCAA") set forth in Public Contract Code section 22000 *et seq.* (specifically, the informal bidding procedures in Section 22032(b)). Bidders shall comply with any requirements set forth in the CUPCCAA including all guidelines and requirements in the current California Uniform Public Construction Cost Accounting Commission Cost Accounting Policies and Procedures Manual. All contractors submitting bids must be on the District's current list of approved contractors pursuant to Public Contract Code section 22034.

Miscellaneous Information

Bids shall be received in the place identified above, and shall be opened at the above-stated time and place.

The bid documents are available at https://www.thermalito.org/domain/154.

There will be a mandatory Pre-Bid Conference on March 22, 2022 at 10:00 a.m. at the District Office located at 400 Grand Ave., Oroville, CA 95965. Any Contractor bidding on the Project who fails to attend the entire mandatory job walk and conference will be deemed a non-responsive bidder and will have its bid returned unopened.

Each bidder shall be a licensed contractor pursuant to the California Business and Professions Code, and be licensed to perform the work called for in the Contract Documents. Contractor's Subcontractors shall be licensed pursuant to California law for the trades necessary to perform the work called for in the Contract Documents.

Each bid must strictly conform with and be responsive to the Contract Documents as defined in the General Conditions.

The District reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding.

Each bidder shall submit with its bid, on the form furnished with the Contract Documents, a list of the designated subcontractors on this Project as required by the Subletting and Subcontracting Fair Practices Act, California Public Contract Code section 4100 *et seq*.

In accordance with California Public Contract Code section 22300, the District will permit the substitution of securities for any moneys withheld by the District to ensure performance under the Contract. At the request and expense of the Contractor, securities equivalent to the amount withheld shall be deposited with the District, or with a state or federally chartered bank as the escrow agent, who shall then pay such moneys to the Contractor. Upon satisfactory completion of the Contract, the securities shall be returned to the Contractor.

Each bidder's bid must be accompanied by one of the following forms of bidder's security: (1) cash; (2) a cashier's check made payable to the District; (3) a certified check made payable to the District; or (4) a bidder's bond executed by a California admitted surety as defined in Code of Civil Procedure section 995.120, made payable to the District in the form set forth in the Contract Documents. Such bidder's security must be in an amount not less than ten percent (10%) of the maximum amount of bid as a guarantee that the bidder will enter into the proposed Contract, if the same is awarded to such bidder, and will provide the required Performance and Payment Bonds, insurance certificates and any other required documents. In the event of failure to enter into said Contract or provide the necessary documents, said security will be forfeited.

The Contractor and all Subcontractors shall comply with the requirements set forth in Division 2, Part 7, Chapter 1 of the Labor Code. The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the Contract. These per diem rates, including holiday and overtime work, as well as employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the District, and are also available from the Director of the Department of Industrial Relations. Pursuant to California Labor Code section 1720 *et seq.*, it shall be mandatory upon the Contractor to whom the Contract is awarded, and upon any subcontractor under such Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

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.

This Project is a public works project as defined in Labor Code section 1720. Each Contractor bidding on this Project and all Subcontractors (of any tier) performing any portion of the work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations ("DIR") and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. The Contractor and all subcontractors shall furnish certified payroll records as required pursuant Labor Code section 1776 directly to the Labor Commissioner in accordance with Labor Code section 1771.4 on at least on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner.

Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/Department of Labor Standards Enforcement (DLSE). The Contractor and all Subcontractors shall furnish certified payroll records as required pursuant Labor Code section 1776 directly to the Labor Commissioner in accordance with Labor Code section 1771.4 on at least on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner.

No bidder may withdraw any bid for a period of ninety (90) calendar days after the date set for the opening of bids.

Separate payment and performance bonds, each in an amount equal to 100% of the total Contract amount, are required, and shall be provided to the District prior to execution of the Contract and shall be in the form set forth in the Contract Documents.

All bonds (Bid, Performance, and Payment) must be issued by a California admitted surety as defined in California Code of Civil Procedure section 995.120.

Where applicable, bidders must meet the requirements set forth in Public Contract Code section 10115 *et seq.*, Military and Veterans Code section 999 *et seq.* and California Code of Regulations, Title 2, Section 1896.60 *et seq.* regarding Disabled Veteran Business Enterprise ("DVBE") Programs. Forms are included in this Bid Package.

Any request for substitutions pursuant to Public Contract Code section 3400 must be made at the time of Bid on the Substitution Request form set forth in the Contract Documents and included with the bid.

No telephone or facsimile machine will be available to bidders on the District premises at any time.

It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

INSTRUCTIONS TO BIDDERS

1. <u>Preparation of Bid Form</u>. Proposals under these specifications shall be submitted on the blank forms furnished herewith at the time and place stated in the Notice Inviting Bids. All blanks in the bid form must be appropriately filled in, and all proposed prices must be stated clearly and legibly in both words and numerals. All bids must be signed by the bidder in permanent blue ink and submitted in sealed envelopes, bearing on the outside, the bidder's name, address, telephone number, and California Contractor's License number, and the name of the Project for which the bid is submitted. The District reserves the right to reject any bid if all of the above information is not furnished. It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

2. <u>Bid Security</u>. Each bid must be accompanied by one of the following forms of bidder's security: (1) cash; (2) a cashier's check made payable to the District; (3) a certified check made payable to the District; or (4) a bidder's bond executed by a California admitted surety as defined in Code of Civil Procedure section 995.120, made payable to the District, in the form set forth in the Contract Documents. Such bidder's security must be in an amount not less than ten percent (10%) of the maximum amount of such bidder's bid as a guarantee that the bidder will enter into the Contract, if the same is awarded to such bidder, and will provide the required Performance and Payment Bonds, insurance certificates and any other required documents. In the event that a bidder is awarded the Contract and such bidder fails to enter into said Contract or provide the surety bond or bonds within five (5) calendar days after award of the Contract to bidder, said security will be forfeited.

3. <u>Signature</u>. The bid form, all bonds, all designations of subcontractors, the Contractor's Certificate, the Agreement, and all Guarantees must be signed in permanent blue ink in the name of the bidder and must bear the signature in longhand of the person or persons duly authorized to sign the bid.

If bidder is a corporation, the legal name of the corporation shall first be set forth, together with two signatures: one from the President and one from the Secretary or Assistant Secretary. Alternatively, the signature of other authorized officers or agents may be affixed, if a certified copy of the resolution of the corporate board of directors authorizing them to do so is provided to the District. Such documents shall include the title of such signatories below the signature and shall bear the corporate seal.

If bidder is a partnership, the true name of the firm shall first be set forth, together with the names of all persons comprising the partnership or co-partnership. The bid must be signed by all partners comprising the partnership unless proof in the form of a certified copy of a statement of partnership acknowledging the signer to be a general partner is presented to the District, in which case the general partner may sign.

Bids submitted as joint ventures must so state and be signed by each joint venturer.

Bids submitted by individuals must be signed by the bidder unless an up to date power-of-attorney is on file in the District office, in which case, said person may sign for the individual.

The above rules also apply in the case of the use of a fictitious firm name. In addition, however, where a fictitious name is used, it must be so indicated in the signature.

4. <u>Modifications</u>. Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the

Contract Documents may result in the District's rejection of the bid as not being responsive to the Notice Inviting Bids. No oral or telephonic modification of any bid submitted will be considered.

5. Erasures, Inconsistent or Illegible Bids. The bid submitted must not contain any erasures, interlineations, or other corrections unless each such correction creates no inconsistency and is suitably authenticated by affixing in the margin immediately opposite the correction the signature or signatures of the person or persons signing the bid. In the event of inconsistency between words and figures in the bid price, words shall control figures. In the event that the District determines that any bid is unintelligible, inconsistent, or ambiguous, the District may reject such bid as not being responsive to the Notice Inviting Bids.

6. Examination of Site and Contract Documents. Each bidder shall visit the site of the proposed work and become fully acquainted with the conditions relating to the construction and labor so that the facilities, difficulties, and restrictions attending the execution of the work under the Contract are fully understood. Bidders shall thoroughly examine and be familiar with the drawings and specifications and all other documents and requirements that are attached to and/or contained in the Project Manual or other documents issued to bidders. The failure or omission of any bidder to receive or examine any Contract Documents, form, instrument, addendum, or other document or to visit the site and become acquainted with conditions there existing shall not relieve any bidder from obligations with respect to the bid or to the Contract. The submission of a bid shall be taken as prima facie evidence of compliance with this Section. Bidders shall not, at any time after submission of the bid, dispute, complain, or assert that there were any misunderstandings with regard to the nature or amount of work to be done.

7. Withdrawal of Bids. Any bid may be withdrawn, either personally or by written request, at any time prior to the scheduled closing time for receipt of bids. The bid security for bids withdrawn prior to the scheduled closing time for receipt of bids, in accordance with this paragraph, shall be returned upon demand therefor.

No bidder may withdraw any bid for a period of ninety (90) calendar days after the date set for the opening of bids.

8. Agreements, Insurance and Bonds. The Agreement form which the successful bidder, as Contractor, will be required to execute, and the forms and amounts of surety bonds and insurance endorsements which will be required to be furnished at the time of execution of the Agreement, are included in the bid documents and should be carefully examined by the bidder. The number of executed copies of the Agreement, the Performance Bond, and the Payment Bond required is three (3). Payment and Performance bonds must be executed by an admitted surety insurer as defined in Code of Civil Procedure 995.120.

9. Interpretation of Plans and Documents/Pre-Bid Clarification. If any prospective bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in, or omissions, a written request for an interpretation or correction thereof may be submitted to the District. The bidder submitting the request shall be responsible for its prompt delivery. Any interpretation or correction of the Contract Documents will only be made by Addendum duly issued, and a copy of such Addendum will be made available for each Contractor receiving a set of the Contract Documents. No person is authorized to make any oral interpretation of any provision in the Contract Documents, nor shall any oral interpretation be binding on the District. If discrepancies on Drawings, specifications or elsewhere in the Contract Documents are not covered by addenda, bidder shall include in their bid methods of construction and materials for the higher quality and complete assembly. Each

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request for clarification shall be submitted in writing, via email, to only the following person: Andrew Koster, email: akoster@thermalito.org.

Each transmitted request shall contain the name of the person and/or firm filing the request, address, telephone, and fax number, Specifications and/or Drawing number. Bidder is responsible for the legibility of hand written requests. Pre-bid clarification request shall be filed a minimum of **six (6)** days prior to bid opening. Requests received less than **six (6)** days before bid opening shall not be considered or responded to. A written response to timely pre-bid clarifications requests which materially affects the bidders price will be made by Addendum issued by the Thermalito Union Elementary School District not less than seventy-two (72) hours prior to bid opening.

10. <u>Bidders Interested in More Than One Bid.</u> No person, firm, or corporation shall be allowed to make, or file, or be interested in more than one prime bid for the same work unless alternate bids are specifically called for. A person, firm, or corporation that has submitted a proposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a proposal or quoting prices to other bidders or making a prime proposal.

11. <u>Award of Contract</u>. The Contract will be awarded to the lowest responsive responsible bidder by action of the governing Board. The District reserves the right to reject any or all bids, or to waive any irregularities or informalities in any bids or in the bidding. In the event an award is made to bidder, and such bidder fails or refuses to execute the Contract and provide the required documents within five (5) calendar days after award of the Contract to bidder, the District may award the Contract to the next lowest responsible and responsive bidder or release all bidders. **Each bid must conform and be responsive to the Contract Documents as defined in the General Conditions**.

12. <u>Bid Protest Procedure</u>. Any bidder may file a bid protest. The protest shall be filed in writing with the District's Director of Maintenance, Operations and Transportation not more than five (5) business days after the date of the bid opening. An e-mail address shall be provided and by filing the protest, protesting bidder consents to receipt of e-mail notices for purposes of the protest and protest related questions and protest appeal, if applicable. The protest shall specify the reasons and facts upon which the protest is based.

a. <u>Resolution of Bid Controversy:</u> Once the bid protest is received, the apparent lowest responsible bidder will be notified of the protest and the evidence presented. If appropriate, the apparent low bidder will be given an opportunity to rebut the evidence and present evidence that the apparent low bidder should be allowed to perform the work. If deemed appropriate by the District, an informal hearing will be held. District will issue a written decision within fifteen (15) calendar days of receipt of the protest, unless factors beyond the District's reasonable control prevent such resolution. The decision on the bid protest will be copied to all parties involved in the protest.

b. <u>Appeal</u>: If the protesting bidder or the apparent low bidder is not satisfied with the decision, the matter may be appealed to the Assistant Superintendent of Business & Operations, or his or her designee, within three (3) business days after receipt of the District's written decision on the bid protest. The appeal must be in writing and sent via overnight registered mail with all accompanying information relied upon for the appeal and an e-mail address from which questions and responses may be provided to:

Thermalito Union Elementary School District 400 Grand Ave. Oroville, CA 95965

Generator Infrastructure Project Thermalito Union Elementary School District c. <u>Appeal Review</u>: The Assistant Superintendent of Business & Operations or his or her designee shall review the decision on the bid protest from the Director of Maintenance, Operations and Transportation and issue a written response to the appeal, or if appropriate, appoint a Hearing Office to conduct a hearing and issue a written decision. The written decision of the Assistant Superintendent of Business & Operations or the Hearing Officer shall be rendered within fifteen (15) calendar days and shall state the basis for the decision. The decision concerning the appeal will be final and not subject to any further Appeals.

d. <u>Reservation of Rights to Proceed with Project Pending Appeal</u>. The District reserves the right to proceed to award the Contract for the Project and commence construction pending an Appeal. If there is State Funding or a critical completion deadline, the District may choose to shorten the time limits set forth in this Section due to the urgency of proceeding with work if written notice is provided to the protesting party. E-mailed notice with a written confirmation sent by First Class Mail shall be sufficient to constitute written notice. If there is no written response to a written notice shortening time, the District may proceed with the award.

e. <u>Finality</u>. Failure to comply with this Bid Protest Procedure shall constitute a waiver of the right to protest and shall constitute a failure to exhaust the protesting bidder's administrative remedies.

13. <u>Alternates</u>. If alternate bids are called for, the Contract may be awarded at the election of the Governing Board to the lowest responsible and responsive bidder using the method and procedures outlined in the Notice Inviting Bids and as specified in the Section entitled Alternate/Deductive Bid Alternates.

a. <u>Subcontractor Listing for Alternates</u>. If alternate bids are called for and the bidder intends to use different or additional subcontractors, a separate list of subcontractors must be submitted for each such alternate.

14. <u>Evidence of Responsibility</u>. Upon the request of the District, a bidder whose bid is under consideration for the award of the Contract shall submit promptly to the District satisfactory evidence showing the bidder's financial resources, surety and insurance claims experience, construction experience, completion ability, workload, organization available for the performance of the Contract, and other factors pertinent to a Project of the scope and complexity involved.

15. <u>Listing Subcontractors</u>. Each bidder shall submit with his bid, on the form furnished with the Contract Documents, a list of the names, license numbers, scopes of work, locations of the places of business, contact information, and Department of Industrial Relations ("DIR") registration numbers of each subcontractor who will perform work or labor or render service to the bidder in or about the project, or a subcontractor who under subcontract to the bidder, specially fabricates and installs a portion of the work, in an amount in excess of one-half of one (1) percent of the bidder's total bid as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code section 4100, *et seq.*) Pursuant to Labor Code section 1725.5, all subcontractors (of any tier) performing work on this Project must be properly registered with DIR.

16. <u>Workers' Compensation</u>. In accordance with the provisions of Labor Code section 3700, the successful bidder as the Contractor shall secure payment of compensation to all employees. The Contractor shall sign and file with the District the following certificate prior to performing the work under this contract: "I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing

the performance of the work of this contract." The form of such certificate is included as a part of the Bid Documents.

17. <u>Contractor's License</u>. To perform the work required by this notice, the Contractor must possess the contractor's license as specified in the Notice Inviting Bids, and the Contractor must maintain the license throughout the duration of the Contract. If, at the time of award of the Contract, bidder is not licensed to perform the Project in accordance with Division 3, Chapter 9, of the Business and Professions Code for the State of California and the Notice to Contractors calling for bids, such bid will not be considered and the Contractor will forfeit its bid security to the District.

18. <u>Anti-Discrimination</u>. It is the policy of the District that in connection with all work performed under contracts, there be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, or marital status. The Contractor 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. In addition, the Contractor agrees to require like compliance by any subcontractors employed on the work by such Contractor.

19. <u>Preference for Materials and Substitutions</u>.

a. <u>One Product Specified</u>. Unless the Plans and Specifications state that no Substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, construction, or any specific name, make, trade name, or catalog number, with or without the words, "or equal," such specification shall be read as if the language "or equal" is incorporated.

b. <u>Request for Substitution</u>. Bidder may, unless otherwise stated, offer any material, process, article, etc., which is materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Document. If bidder desires to offer a Substitution for a Specified Item, such bidder must make a request in writing on the District's Substitution Request Form ("Request Form") and submit the completed Request Form with the bidder's bid. The Request Form must be accompanied by evidence as to whether the proposed substitution:

- 1) Is equal in quality, service, and ability to the Specified Item as demonstrated by a side by side comparison of key characteristics and performance criteria (CSI comparison chart);
- 2) Will entail no changes in detail, construction and scheduling of related work;
- 3) Will be acceptable in consideration of the required design and artistic effect;
- 4) Will provide no cost disadvantage to the District;
- 5) Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
- 6) Will require no change in the Contract Time.

In completing the Request Form, bidder must state with respect to each requested substitution whether bidder will agree to provide the Specified Item in the event that the District denies bidder's request for substitution of a Specified Item. In the event that bidder does not agree in the Request Form to provide the Specified Item and the District denies the requested Substitution, the bidder's bid shall be considered non-responsive and the District may award the Contract to the next lowest bidder or in its sole discretion, release all bidders. In the event that bidder has agreed in the Request Form to provide the Specified Item and the District denies bidder's requested substitution for a Specified Item, bidder shall

Generator Infrastructure Project Thermalito Union Elementary School District execute the Agreement and provide the Specified Item without any additional cost or charge to the District, and if bidder fails to execute the Agreement with the Specified Item(s), bidder's bid bond will be forfeited.

After the bids are opened, the apparent lowest bidder shall provide, within five (5) calendar days of opening such bids, any and all Drawings, specifications, samples, performance data, calculations, and other information as may be required to assist the Architect and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

After the District's receipt of such evidence by bidder, the District will make its final decision as to whether the bidder's request for Substitution for any Specified Items will be granted. The District shall have sole discretion in deciding as to whether a proposed request for Substitution is equal to or better than a Specified Item. Any request for Substitution which is granted by the District shall be documented and processed through a Change Order/Construction Change Document. The District may condition its approval of any Substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the Substitution. Any and all risks of delay due to DSA, or any other governmental agency having jurisdiction shall be on the bidder.

20. <u>Disqualification of Bidders and Proposals</u>. More than one proposal for the same work from any individual, firm, partnership, corporation, or association under the same or different names will not be accepted; and reasonable grounds for believing that any bidder is interested in more than one proposal for the work will be cause for rejecting all proposals in which such bidder is interested and the bidder will forfeit their bid security to the District.

21. <u>Unbalanced or Altered Bids</u>. Proposals in which the prices are obviously unbalanced, and those which are incomplete or show any alteration of form, or contain any additions or conditional or alternate bids that are not called for or otherwise permitted, may be rejected. A proposal on which the signature of the bidder has been omitted may be rejected. If, in the District's sole discretion, it determines any pricing, costs or other information submitted by a bidder may result in an unbalanced bid, the District may deem such bid non-responsive. A bid may be determined by the District to be unbalanced if the bid is based on prices significantly less than the cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the District even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advanced payment.

22. <u>Employment of Apprentices</u>. The Contractor and all Subcontractors shall comply with the provisions of California Labor Code including, but not limited to Sections 1777.5, 1777.6, and 1777.7 concerning the employment of apprentices. The Contractor and any Subcontractor under him shall comply with the requirements of said Sections, including applicable portions of all subsequent amendments in the employment of apprentices; however, the Contractor shall have full responsibility for compliance with said Labor Code Sections, for all apprenticeable occupations, regardless of any other contractual or employment relationships alleged to exist.

23. <u>Non-Collusion Declaration</u>. Public Contract Code section 7106 requires bidders to submit declaration of non-collusion with their bids. This form is included with the bid documents and must be signed and dated by the bidder under penalty of perjury.

24. <u>Wage Rates, Travel and Subsistence</u>.

a. The Contractor and all Subcontractors shall comply with the requirements set forth in Division 2, Part 7, Chapter 1 of the Labor Code. Pursuant to Labor Code section 1770 *et seq.*, the District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the contract. Copies are available from the District to any interested party on request and are also available from the Director of the Department of Industrial Relations. The Contractor shall obtain copies of the above-referenced prevailing wage sheets and post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

b. Any worker employed to perform work on the Project and such work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

c. Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half $(1\frac{1}{2})$ times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

d. These per diem rates, including holiday and overtime work, and employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the administrative office of the District, located as noted above and are also available from the Director of the Department of Industrial Relations. It is the Contractor's responsibility to ensure the appropriate prevailing rates of per diem wages are paid for each classification. It shall be mandatory upon the Contractor to whom the Contract is awarded, and upon any subcontractor under such Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

25. <u>DIR Registration of Contractor and Subcontractors</u>. 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 the Labor Code, 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.

This Project is a public works project as defined in Labor Code section 1720. Each contractor bidding on this Project and all subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with DIR and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. For more information and up to date requirements, contractors are recommended to periodically review the DIR's website at www.dir.ca.gov. Contractor shall be solely responsible for

ensuring compliance with Labor Code section 1725.5 as well as any requirements implemented by DIR applicable to its services or its subcontractors throughout the term of the Agreement and in no event shall contractor be granted increased payment from the District or any time extensions to complete the Project as a result of contractor's efforts to maintain compliance with the Labor Code or any requirements implemented by DIR. Failure to comply with these requirements shall be deemed a material breach of this Agreement and grounds for termination for cause. The contractor and all subcontractors shall furnish certified payroll records as required pursuant Labor Code section 1776 directly to the Labor Commissioner in accordance with Labor Code section 1771.4 on at least on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. The District reserves the right to withhold contract payments if the District is notified, or determines as the result of its own investigation, that contractor is in violation of any of the requirements set forth in Labor Code section 1720 *et seq.* at no penalty or cost to the District. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/Department of Labor Standards Enforcement (DLSE).

26. <u>No Telephone or Facsimile Availability</u>. No telephone or facsimile machine will be available to bidders on the District premises at any time.

27. <u>Bidding Documents</u>. Bidder shall utilize a complete set of Bidding Documents in preparing a bid. The failure or omission of bidder to receive any Bidding Document, form, instrument, Addendum, or other document shall not relieve bidder from any obligations with respect to the bid and/or Contract.

28. <u>Addenda</u>. Clarification or any other notice of a change in the Bidding Documents will be issued only by the District and only in the form of a written Addendum, transmitted by fax, e-mail, or available for pick up to all who are known by the issuing office to have received a complete set of Bidding Documents. Any other purported Addenda are void and unenforceable.

Bidder is responsible for ascertaining the disposition of all Addenda issued regardless of District notification and to acknowledge all Addenda in the submitted sealed bid prior to the bid opening. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for inspection. Each Addendum will be numbered, dated, and identified with the Project number. Oral statements or any instructions in any form, other than Addendum as described above, shall be void and unenforceable. Addenda issued by the District and not noted as being acknowledged by bidder as required in the Bid Form, may result in the bid being deemed non-responsive.

29. <u>CUPCCAA</u>. This Project is being let in accordance with the California Uniform Public Construction Cost Accounting ("CUPCCAA") set forth in Public Contract Code section 22000 *et seq*. Bidders shall comply with any requirements set forth in the CUPCCAA including all guidelines and requirements in the current California Uniform Public Construction Cost Accounting Commission Cost Accounting Policies and Procedures Manual. If applicable, only Contractors included on the District's Qualified List shall submit bids for the Project as set forth in the CUPCCAA.

30. <u>Debarment</u>. Bidder may also be subject to debarment, in addition to seeking remedies for False Claims under Government Code section 12650 *et seq.* and Penal Code section 72, the District may debar a Contractor if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:

a. Intentionally or with reckless disregard, violated any term of a contract with the District

b. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District;

c. Committed an act or offense which indicates a lack of business integrity or business honesty; or

d. Made or submitted a false claim against the District or any other public entity (See Government Code section 12650, *et seq.*, and Penal Code section 72)

PRE-BID CLARIFICATION FORM (For Contractor's Use)						
PROJECT NAME:	Generator Infrastructure Proje	ct				
PROJECT NUMBER:	TUESD22-001					
TO:	Andrew Koster EMAIL: akoster@thermalito.org					

DATE:	
FROM:	EMAIL:
DOCUMENT/DIVISION	DRAWING
NUMBER:	NUMBER:

REQUESTED CLARIFICATION:
RESPONSE TO CLARIFICATION:

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

CHECKLIST OF MANDATORY BID FORMS

(For Contractor's use and reference only. Additional documents may be required so bidders should carefully review all Contract Documents and Bid Documents)

- **D** Bid Form
- Designation of Subcontractors Form
- Bid Bond (or Bid Guarantee Form if Security is Other Than Bid Bond)
- Contractor's Certificate Regarding Workers' Compensation
- Non-Collusion Declaration
- □ Substitution Request Form (If Substitution Request Form is not submitted then NO Substitutions will be allowed after the bids are opened)
- Acknowledgment of Bidding Practices Regarding Indemnity
- **DVBE** Participation Statement
- □ Site Visit Certification
- **D** References

BID FORM

Generator Infrastructure Project 400 Grand Ave. Oroville, CA 95965 Project No. TUESD22-001 Bid No. TUESD22-001

FOR

Thermalito Union Elementary School District

CONTRACTOR NAME:					
ADDRESS:					
TELEPHONE:	()			
FAX:	_()			
EMAIL					

382680.1

TO: Thermalito Union Elementary School District, acting by and through its Governing Board, herein called "District".

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract, the local conditions affecting the performance of the Contract, the cost of the work at the place where the work is to be done, with the Drawings and Specifications, and other Contract Documents, hereby proposes and agrees to perform within the time stipulated, the Contract, including all of its component parts, and everything required to be performed, including its acceptance by the District, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the Contract and complete all of the work in a workmanlike manner required in connection with the construction of:

BID NO. TUESD22-001

Generator Infrastructure Project

in the District described above, all in strict conformance with the drawings and other Contract Documents on file at the Business Office of said District for amounts set forth herein.

2. <u>BIDDER ACKNOWLEDGES THE FOLLOWING ADDENDUM:</u>

| Number |
|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | |

Acknowledge the inclusion of all Addenda issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

3. A. <u>TOTAL CASH PURCHASE PRICE IN WORDS & NUMBERS</u>:

DOLLARS

(\$_____)

4. <u>ALTERNATE BIDS</u>: There are no alternate bids for this Project.

5. <u>TIME FOR COMPLETION</u>: The District may give a notice to proceed within ninety (90) days of the award of the bid by the District. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, rain days, and the requisite time to complete the punch list.

In the event that the District desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the District. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.

Generator Infrastructure Project Thermalito Union Elementary School District If the Contractor believes that a postponement will cause a hardship to it, the Contractor may terminate the contract with written notice to the District within ten (10) days after receipt by the Contractor of the District's notice of postponement. Should the Contractor terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsible bidder, if applicable.

It is understood that the District reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that it may not withdraw this bid for a period of ninety (90) days after the date set for the opening of bids.

6. It is understood that the District reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that it may not withdraw this bid for a period of ninety (90) days after the date set for the opening of bids.

7. Attached is bid security in the amount of not less than ten percent (10%) of the bid:

Bid bond (10% of the Bid), certified check, or cashier's check (circle one)

- 8. The required List of Designated Subcontractors is attached hereto.
- 9. The required Non-Collusion Declaration is attached hereto.
- 10. The Substitution Request Form, if applicable, is attached hereto.

11. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District a Contract in the form attached hereto in accordance with the bid as accepted, and that he or she will also furnish and deliver to the District the Performance Bond and Payment Bond, all within five (5) calendar days after award of Contract, and that the work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, by the start date provided in the District's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents.

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

(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm; if bidder or other interested person is an individual, state the first and last names in full.)

Generator Infrastructure Project Thermalito Union Elementary School District 13. <u>PROTEST PROCEDURES.</u> If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.

14. The undersigned bidder shall be licensed and shall provide the following California Contractor's license information:

License Number:	
License Expiration Date:	
Name on License:	
Class of License:	
DIR Registration Number:	

If the bidder is a joint venture, each member of the joint venture must include the above information.

15. Time is of the essence regarding this Contract, therefore, in the event the bidder to whom the Contract is awarded fails or refuses to post the required bonds and return executed copies of the Agreement form within five (5) calendar days from the date of receiving the Notice of Award, the District may declare the bidder's bid deposit or bond forfeited as damages.

16. The bidder declares that he/she has carefully examined the location of the proposed Project, that he/she has examined the Contract Documents, including the Plans, General Conditions, Supplemental Conditions (if any), Addenda, and Specifications, all others documents and requirements that are attached to and/or contained in the Project Manual, all other documents issued to bidders and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

17. <u>DEBARMENT.</u> In addition to seeking remedies for False Claims under Government Code section 12650 *et seq.* and Penal Code section 72, the District may debar a Contractor if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:

a. Intentionally or with reckless disregard, violated any term of a contract with the District;

b. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District;

c. Committed an act or offense which indicates a lack of business integrity or business honesty; or

d. Made or submitted a false claim against the District or any other public entity. (See Government Code section 12650, *et seq.*, and Penal Code section 72)

18. <u>DESIGNATION OF SUBCONTRACTORS</u>. In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 *et seq.*) and any

amendments thereof, each bidder shall list subcontractors on the District's form Subcontractor list. This subcontractor list shall be submitted with the bid and is a required form.

I agree to receive service of notices at the e-mail address listed below.

I the below-indicated bidder, declare under penalty of perjury that the information provided and representations made in this bid are true and correct.

Proper Name of Company		
Name of Bidder Representative		
Street Address		
City, State, and Zip		
()		
Phone Number		
()		
Fax Number		
E-Mail		
_		
By:	Date:	
Signature of Bidder Representative		

<u>NOTE</u>: If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents and the document shall bear the corporate seal; if bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; and if bidder is an individual, his signature shall be placed above.

All signatures must be made in permanent blue ink.

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code section 4100 *et seq.*,) and any amendments thereof, each Bidder shall set forth below: (a) the name, license number, and location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor, who will perform work or labor or work or improvement to be performed under this Contract, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvements according to detailed Drawings contained in the Plans and Specifications in an amount in excess of one-half of one percent of the Contractor's total bid; and (b) the portion and description of the work which will be done by each subcontractor under this Act. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in this bid. All subcontractors shall be properly licensed by the California State Licensing Board.

If a Contractor fails to specify a subcontractor, or if a Contractor specifies more than one subcontractor for the same portion of work to be performed under the Contract in excess of one-half of one percent of the Contractor's total bid, the Contractor shall be deemed to have agreed that the Contractor is fully qualified to perform that portion, and that the Contractor alone shall perform that portion of the work.

No Contractor whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow the relevant portion of the work to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the Contractor's total bid where the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act.

Subletting or subcontracting of any portion of the work in excess of one-half (1/2) of one (1) percent of the Contractor's total bid where no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record, of the authority awarding this Contract setting forth the facts constituting the emergency or necessity.

All subcontractors (of any tier) performing any portion of the work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project.

NOTE: If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such Alternate.

DESIGNATION OF SUBCONTRACTORS FORM

Scope of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	DIR Registration Number	E-Mail & Telephone*

Scope of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	DIR Registration Number	E-Mail & Telephone*

* This information must be provided at the time of submission of bid or must be provided within 24 hours after the time set for the opening of bids. Bidders who choose to provide this information within 24 hours after the time set for the opening of bids are solely responsible to ensure the District receives this information in a timely manner. The District is not responsible for any problems or delays associated with emails, faxes, delivery, etc. Absent a verified fax or email receipt date and time by the District, the District's determination of whether the information was received timely shall govern and be determinative. Bidder shall not revise or amend any other information in this form submitted at the time of bid shall govern over any conflicts, discrepancies, ambiguities or other differences in any subsequent Subcontractor Designation Forms submitted by the bidder.

Proper Name of Bidder:	
Date:	
Name:	
Signature of Bidder Representative:	
Address:	
Phone:	
- -	

Generator Infrastructure Project Thermalito Union Elementary School District

BID BOND FORM

KNOW ALL MEN BY THESE PRESENT that we, the undersigned, (hereafter called "Principal"), and __________(hereafter called "Surety"), are hereby held and firmly bound unto the Thermalito Union Elementary School District (hereafter called "District") in the sum of ________(\$_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

SIGNED this _____ day of _____, 20 __.

The condition of the above obligation is such that whereas the Principal has submitted to the District a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of .

NOW, THEREFORE,

- a. If said Bid is rejected, or
- b. If said Bid is accepted and the Principal executes and delivers a Contract or the attached Agreement form within five (5) calendar days after acceptance (properly completed in accordance with said Bid), and furnishes bonds for his faithful performance of said Contract and for payment of all persons performing labor or furnishing materials in connection therewith,

Then this obligation shall be void; otherwise, the same shall remain in force and effect.

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

In the event suit is brought upon this bond by the District and judgment is recovered, the Surety shall pay all costs incurred by the District in such suit, including without limitation, attorneys' fees to be fixed by the court.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year first set forth above.

	By	
(Corporate Seal)	·	Principal's Signature
		Typed or Printed Name
	By	Principal's Title
(Corporate Seal)	Бу	Surety's Signature
		Typed or Printed Name
		Title
(Attached Attorney in Fact Certificate)		Surety's Name
		Surety's Address
		Surety's Phone Number

BID GUARANTEE FORM

(Use only when not using a Bid Bond)

Accompanying this proposal is a cashier's check payable to the order of the Thermalito Union Elementary School District or a certified check payable to the order of the Thermalito Union Elementary School District in an amount equal to ten (10) percent of the base bid and alternates (\$_____).

The proceeds of this check shall become the property of said District, if, this proposal shall be accepted by the District through the District's Governing Board, and the undersigned fails to execute a Contract with and furnish the sureties required by the District within the required time; otherwise, said check is to be returned to the undersigned.

Bidder

CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION FORM

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:

1. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.

2. 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 employees.

3. For any county, city, city and county, municipal corporation, public district, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

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

(Signature)

(Print)

(Date)

In accordance with Article 5 (commencing at Section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and submitted with the Contractor's bid.

NON-COLLUSION DECLARATION

The undersigned declares:

I am the _____ [Title] of _____ [Name of Company], the party making the foregoing bid.

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

Any person executing this declaration on behalf of a bidder 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 bidder.

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 _____ [Date], at _____ [City], _____ [State].

Signed:

Typed Name: _____

382680.1

REQUEST FOR SUBSTITUTION AT TIME OF BID

Pursuant to Public Contract Code section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not an "or equal" or is not accepted by District and I answer "no" I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods, or types of construction:

	Specification Section	Specified Item	Requested Substituted Item	Agrees Provide Specific if reque Substitu Denied	Contractor Agrees to Provide Specified Item if request to Substitute is Denied ¹ (circle one)		District Decision (circle one)	
1.	<u>^</u>			Yes	No	Grant	Deny	
2.				Yes	No	Grant	Deny	
3.				Yes	No	Grant	Deny	
4.				Yes	No	Grant	Deny	
5.				Yes	No	Grant	Deny	
6.				Yes	No	Grant	Deny	
7.				Yes	No	Grant	Deny	
8.				Yes	No	Grant	Deny	
9.				Yes	No	Grant	Deny	
10.				Yes	No	Grant	Deny	
11.				Yes	No	Grant	Deny	
12.				Yes	No	Grant	Deny	

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no

¹ Bidder must state whether bidder will provide the Specified Item in the event the Substitution request is evaluated and denied. If bidder states that bidder will not provide the Specified Item, the denial of a request to Substitute shall result in the rejection of the bidder as non-responsive. However, if bidder states that bidder will provide the Specified Item in the event that bidder's request for Substitution is denied, bidder shall execute the Agreement and provide the Specified Item(s). If bidder refuses to execute the Agreement due to the District's decision to require the Specified Item(s) at no additional cost, bidder's Bid Bond shall be forfeited.

excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Contractor agrees to pay for any DSA Fees or other Governmental Plan check costs associated with this Substitution Request.

The undersigned states that the following paragraphs are correct:

- 1. The proposed Substitution does not affect the dimensions shown on the Drawings.
- 2. The undersigned will pay for changes to the building design, including Architect, engineering, or other consultant design, detailing, DSA plan check or other governmental plan check costs, and construction costs caused by the requested substitution.
- 3. The proposed substitution will have no adverse effect on other trades, the Contract Time, or specified warranty requirements.
- 4. Maintenance and service parts will be available locally for the proposed substitution.
- 5. In order for the Architect to properly review the substitution request, within five (5) days following the opening of bids, the Contractor shall provide samples, test criteria, manufacturer information, and any other documents requested by Architect or Architect's engineers or consultants, including the submissions that would ordinarily be required for Shop Drawings along with a document which provides a side by side comparison of key characteristics and performance criteria (often known as a CSI side by side comparison chart).
- 6. If Substitution Request is accepted by the District, Contractor is still required to provide a Submittal for the substituted item pursuant to the General Conditions and shall provide required Schedule information (including schedule fragnets, if applicable) for the substituted item. The approval of the Architect, Engineer, or District of the substitution request does not mean that the Contractor is relieved of Contractor's responsibilities for Submittals, Shop Drawings, and schedules under the General Conditions if the Contractor is awarded the Project.

Name of Bidder:

By:_____

District: _____

By:_____

ACKNOWLEDGMENT OF BIDDING PRACTICES REGARDING INDEMNITY FORM

TO: Thermalito Union Elementary School District

RE: Project / Bid Number <u>TUESD22-001</u>

Construction Contract for the Generator Infrastructure Project

Please be advised that with respect to the above-referenced Project the undersigned Contractor on behalf of itself and all Contractor's subcontractors hereby waives the benefits and protection of Labor Code section 3864, which provides:

"If an action as provided in this chapter is prosecuted by the employee, the employer, or both jointly against the third person results in judgment against such third person, the employer shall have no liability to reimburse or hold such third person harmless on such judgment or settlement in the absence of a written agreement to do so executed prior to the injury."

This Agreement has been signed by an authorized representative of the contracting party and shall be binding upon its successors and assignees. The undersigned further agrees to promptly notify the District of any changes of ownership of the contracting party or any subcontractor while this Agreement is in force.

Contracting Party

Name of Agent/Title

DISABLED VETERAN BUSINESS ENTERPRISE (DVBE) PARTICIPATION STATEMENT AT TIME OF BID

Each bidder must complete this form in order to comply with the Thermalito Union Elementary School District ("District") policy for participation of disabled veteran business enterprises (School District projects funded in whole or in part by the State of California pursuant to the Leroy F. Greene School Facilities Act of 1998). (Education Code §17070.10, *et seq.*)

Project Name: _____

Bid No.:

The undersigned, on behalf of the Contractor named below, certifies that the Contractor has made reasonable efforts to secure participation by DVBE in the Contract to be awarded for the above-referenced Bid No., including participation by DVBE subcontractors and/or material suppliers.

Check only one of the following:

- □ The Contractor was unable after reasonable efforts to secure DVBE participation in the Contract for the above-referenced Project/Bid No. However, the Contractor will use DVBE services if the opportunity arises at any time during construction of the Project. Upon completion of the Project, the Contractor will report to the District the total dollar amount of DVBE participation in any Contract awarded to Contractor, and in any Change Order/Construction Change Document, for the above-referenced Project.
- □ The Contractor has secured DVBE participation in the Contract for the above referenced Project/Bid No., and anticipates that such DVBE participation will equal approximately dollars (\$______), which represents approximately percent (____%) of the total Contract for such Project. Upon completion of the Project, Contractor will report to the District the actual total dollar amount of DVBE participation in the Contract awarded to Contractor, and in any Change Order/Construction Change Document, for such Project

Company:			

Name: ______ Title:

Signature: _____

Date: _____

Generator Infrastructure Project Thermalito Union Elementary School District

DVBE Participation Statement Form Page 31

SITE VISIT CERTIFICATION

I certify that I have visited the site of the proposed work and have fully acquainted myself with the conditions of the Project site, as well as those relating to construction and labor of the Project, and I fully understand the facilities, difficulties, and restrictions which may impact the total and adequate completion of the Project.

I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

I agree to fully defend, indemnify and hold harmless the DISTRICT, Architect, Inspectors, Construction Manager (if any), and their directors, officers, employees, agents and volunteers from any damages, costs, expenses, or omissions related to conditions that could or should have been identified during my visit to the site.

Signature of Bidder:

Typed Name of Bidder: _____

REFERENCES

1. The DISTRICT expressly reserves the right to reject the proposal of any Bidder who, upon investigation, has been determined to fail to complete similar Contracts in a timely fashion or in a satisfactory manner. Such rejection would, if applicable, be based upon the principle that the Bidder is "non-responsible" and poses a substantial risk of being unable to supply the material, equipment, or services to complete the work in a cost-effective, professional and timely manner. The Bidder must complete and submit the attached form; failure to do so may be sufficient cause for the DISTRICT to reject the Bidder's bid as non-responsive.

2. In performing the above-described responsibility determination, the DISTRICT reserves the right to utilize all possible sources of information in making its determination, including but not limited to: inquiries to regulatory State boards and agencies; Dun and Bradstreet credit reports, inquiries to companies and public entities for which the Bidder has previously supplied material or performed work, reference checks and examination of all public records.

3. The Bidder must also demonstrate knowledge of school purchasing and business techniques and should possess a working ability and experience in providing similar material to a public agency. The Bidder shall furnish the names, current phone numbers, addresses, points of contact, and scope of work of at least five (5) customers served within the past three (3) years with requirements similar to the needs of the Thermalito Union Elementary School District.

4. Failure to furnish the references (*in the complete format required*) may cause your proposal to be rejected as non-responsive.

5. EXAMPLE: Your references should be listed in the following format (facts are example only)

- (a) Work for X Y Z Unified School District
- (b) Phone # (222) 123-4567
- (c) 999 Holly Drive, L. A., CA 92000
- (d) Contact: J. Q. Jones III at above #

6. <u>Reference #1</u>

District or Entity:
Phone No.:
Address:
Name of Contact:
Reference #2
District or Entity:
Phone No.:
Address:

Name of Contact:	
Reference #3	
District or Entity:	
Reference #4	
District or Entity:	
Phone No.:	
Address:	
Name of Contact:	
Reference #5	
District or Entity:	
Name of Contact:	

By:

Signature of Bidder

Name

CONTRACT FORMS

- **G** Form Agreement
- Payment Bond
- Performance Bond
- Contractor's Certificate Regarding Drug-Free Work Place
- Contractor's Certificate Regarding Alcoholic Beverage and Tobacco-Free Campus Policy
- Guarantee
- Contractor DVBE Participation Close-Out Statement
- Escrow Agreement for Security Deposits In Lieu of Retention
- □ Insurance Documents and Endorsements
- Contractor Certification Regarding Background Checks and Attachment "A"

FORM AGREEMENT

THIS AGREEMENT, entered into this day of , 2022 in the City of Oroville of the State of California, by and between the Thermalito Union Elementary School District, hereinafter called the "District", an , hereinafter called the "Contractor". Contractor acknowledges that this Project is being awarded in accordance with the California Uniform Public Construction Cost Accounting ("CUPCCAA") set forth in Public Contract Code section 22000 *et seq.* Bidders shall comply with any requirements set forth in the CUPCCAA including all guidelines and requirements in the current California Uniform Public Construction Cost Accounting Commission Cost Accounting Policies and Procedures Manual. Contractor shall cooperate with the District and provide any requested information or documents as requested by the District to comply with the CUPCCAA including, but not limited to, all Project cost data, invoices, accounting records, payroll records, etc.

WITNESSETH that the District and the Contractor for the consideration stated herein agree as follows:

ARTICLE I - SCOPE OF WORK: The Contractor shall furnish all labor, materials, equipment, tools, and utility and transportation services, and perform and complete all work required in connection with Generator Infrastructure Project ("Project") in strict accordance with the Contract Documents enumerated in Article 7 below. The Contractor shall be liable to the District for any damages arising as a result of a failure to comply with that obligation, and the Contractor shall not be excused with respect to any failure to so comply by an act or omission of the Architect, Engineer, Inspector, Division of the State Architect (DSA), or representative of any of them, unless such act or omission actually prevents the Contractor from fully complying with the Contract Documents and the Contractor from fully complying with the act or omission is preventing the Contractor from fully complying with the District office within seven (7) days of the date of occurrence of such act or omission preventing the Contractor from fully complying with the Contract Documents.

ARTICLE 2 - TIME OF COMPLETION: The District may give notice to proceed within ninety (90) days of the award of the bid by the District. Once the Contractor has received a notice to proceed, the Contractor shall complete the Project (See Article 47) of the work within Ninety (90) calendar days from receipt of the Notice to Proceed. This shall be called Contract Time. It is expressly understood that time is of the essence.

Contractor has thoroughly studied the Project and has satisfied itself that the time period for this Project was adequate for the timely and proper completion of the Project within each milestone and within the Contract Time.

In the event that the District desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the District. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the District's postponement of giving the notice to proceed.

If the Contractor believes that a postponement will cause hardship to it, the Contractor may terminate the Contract with written notice to the District within ten (10) days after receipt by the Contractor of the District's notice of postponement. It is further understood by the Contractor that in the

event that the Contractor terminates the Contract as a result of postponement by the District, the District shall only be obligated to pay the Contractor for the work performed by the Contractor at the time of notification of postponement. Should the Contractor terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsible bidder.

ARTICLE 3 - LIQUIDATED DAMAGES: It being impracticable and infeasible to determine the amount of actual damage, it is agreed that the Contractor will pay the District the sum of Fifty Dollars (\$50.00) per calendar day for each and every day of delay beyond the Contract Time set forth in Article 2 of this Agreement (inclusive of Milestones that are critical on the critical path or noted as critical to the District) as liquidated damages and not as a penalty or forfeiture. In the event liquidated damages are not paid, the Contractor further agrees that the District may deduct such amount thereof from any money due or that may become due the Contractor under the Contract.

ARTICLE 4 - CONTRACT PRICE: The District shall pay to the Contractor as full consideration for the faithful performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, the sum of ______ DOLLARS (\$______), said sum being the total amount stipulated in the Bid Contractor submitted. Payment shall be made as set forth in the General Conditions.

Should any Change Order/Construction Change Document result in an increase in the Contract Price, the cost of such Change Order/Construction Change Document shall be agreed to in advance by the Contractor and the District, subject to the monetary limitations set forth in Public Contract Code section 20118.4. In the event that the Contractor proceeds with a Change in work without an agreement between the District and Contractor regarding the cost of a Change Order/Construction Change Document, the Contractor waives any Claim of additional compensation for such additional work.

ARTICLE 5 - HOLD HARMLESS AGREEMENT: Contractor shall defend, indemnify and hold harmless District, Architect, Construction Manager (if any), Inspector, the State of California and their officers, employees, agents and independent contractors from all liabilities, claims, actions, liens, judgments, demands, damages, losses, costs or expenses of any kind arising from death, personal injury, property damage or other cause based or asserted upon any act, omission, or breach connected with or arising from the progress of work or performance of service under this Agreement or the Contract Documents. As part of this indemnity, Contractor shall protect and defend, at its own expense, District, Architect, Construction Manager (if any), Inspector, the State of California and their officers, employees, agents and independent contractors from any legal action including attorney's fees or other proceeding based upon such act, omission, breach or as otherwise required by this Article.

Furthermore, Contractor agrees to and does hereby defend, indemnify and hold harmless District, Architect, Construction Manager (if any), Inspector, the State of California and their officers, employees, agents and independent contractors from every claim or demand made, and every liability, loss, damage, expense or attorney's fees of any nature whatsoever, which may be incurred by reason of:

(a) Liability for (1) death or bodily injury to persons; (2) damage or injury to, loss (including theft), or loss of use of, any property; (3) any failure or alleged failure to comply with any provision of law or the Contract Documents; or (4) any other loss, damage or expense, sustained by any person, firm or corporation or in connection with the work called for in this Agreement or the Contract Documents, except for liability resulting from the sole or active negligence, or the willful misconduct of the District.

(b) Any bodily injury to or death of persons or damage to property caused by any act, omission or breach of Contractor or any person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages or injury to or death of persons, loss (including theft) or loss of use of any property, sustained by any person, firm or corporation, including the District, arising out of or in any way connected with work covered by this Agreement or the Contract Documents, whether said injury or damage occurs either on or off District property, but not for any loss, injury, death or damages caused by the sole or active negligence or willful misconduct of the District.

(c) Any dispute between Contractor and Contractor's subcontractors/supplies/Sureties, including, but not limited to, any failure or alleged failure of the Contractor (or any person hired or employed directly or indirectly by Contractor) to pay any Subcontractor or Materialman of any tier or any other person employed in connection with the work and/or filing of any stop notice or mechanic's lien claims.

(d) Any claims, allegations, penalties, assessments, or liabilities to the extent caused by the Contractor's failure or the failure of any Subcontractor of any tier, to fully comply with the DIR registration requirements under Labor Code section 1725.5 at all times during the performance of any Work on the Project and shall reimburse the District for any penalties assessed against the District arising from any failure by the Contractor or any Subcontractor of any tier from complying with Labor Code sections 1725.5 and 1771.1. Nothing in this paragraph, however, shall require the Contractor or any Subcontractor to be liable to the District or indemnify the District for any penalties caused by the District in accordance with Labor Code section 1773.3 (g).

Contractor, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on account of or founded upon any cause, damage, or injury identified herein Article 5 and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

The Contractor's and Subcontractors' obligation to defend, indemnify and hold harmless the Owner, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors hereunder shall include, without limitation, any and all claims, damages, and costs for the following: (1) any damages or injury to or death of any person, and damage or injury to, loss (including theft), or loss of use of, any property; (2) breach of any warranty, express or implied; (3) failure of the Contractor or Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement; (4) products installed in or used in connection with the Work; and (5) any claims of violation of the Americans with Disabilities Act ("ADA")

ARTICLE 6 - PROVISIONS REQUIRED BY LAW: Each and every provision of law and clause required 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 herein, and if through mistake or otherwise any such provision is not inserted or is not inserted correctly, then upon application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

ARTICLE 7 - COMPONENT PARTS OF THE CONTRACT: The Contract entered into by this Agreement consists of the following Contract Documents, all of which are component parts of the Contract as if herein set out in full or attached hereto:

Notice Inviting Bids Instructions to Bidders

Generator Infrastructure Project Thermalito Union Elementary School District Form Agreement Page 38

Bid Form Designation of Subcontractors Bid Bond **Bid Guarantee Form** Contractor's Certificate Regarding Worker's Compensation Non-Collusion Declaration Substitution Request Form Acknowledgment of Bidding Practices Regarding Indemnity DVBE Participation Statement and Close-Out Forms Site Visit Certification References Agreement Payment Bond Performance Bond Contractor's Certificate Regarding Drug-Free Workplace Contractor's Certificate Regarding Alcohol and Tobacco Guarantee Escrow Agreement for Security Deposit In Lieu of Retention Insurance Documents and Endorsements Contractor DVBE Close-Out Statement Contractor's Certificate Regarding Background Checks General Conditions Supplementary and Special Conditions Specifications All Addenda as Issued Drawings/Plans Requirements, Reports and/or Documents in the Project Manual or Other Documents Issued to **Bidders**

All of the above named Contract Documents are intended to be complementary. Work required by one of the above named Contract Documents and not by others shall be done as if required by all.

ARTICLE 8 - PREVAILING WAGES: Wage rates for this Project shall be in accordance with the general prevailing rate of holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of work needed to execute the Contract as determined by the Director of the Department of Industrial Relations. Copies of schedules of rates so determined by the Director of the Department of Industrial Relations are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations and related requirements will be performed by the Labor Commissioner/Department of Labor Standards Enforcement (DLSE).

The following are hereby referenced and made a part of this Agreement and Contractor stipulates to the provisions contained therein.

- 1. Chapter 1 of Part 7 of Division 2 of the Labor Code (Section 1720 et seq.)
- 2. California Code of Regulations, Title 8, Chapter 8, Subchapters 3 through 6 (Section 16000 *et seq.*)

ARTICLE 9 - RECORD AUDIT: In accordance with Government Code section 8546.7(and Davis Bacon, if applicable) and the General Conditions, records of both the District and the Contractor shall be subject to examination and audit for a period of five (5) years after a Final Retention Payment or the Recording of a Notice of Completion, whichever occurs first.

ARTICLE 10 - CONTRACTOR'S LICENSE: The Contractor must possess throughout the Project a Class C-10 Contractor's License, issued by the State of California, which must be current and in good standing.

IN WITNESS WHEREOF, this Agreement has been duly executed by the above named parties, on the day and year first above written.

Thermalito Union Elementary School District	[Contractor]
By:	Typed or Printed Name
	Title
Dated:	Signature
	Type or Printed Name
	Title (Authorized Officers or Agents)
	Signature

(CORPORATE SEAL)

PAYMENT BOND

(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the Thermalito Union Elementary School District (sometimes referred to hereinafter as "Obligee") has awarded to ______ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: ______ (hereinafter referred to as the "Public Work or Project");

and

WHEREAS, said Contractor is required to furnish a bond in connection with said Contract, and pursuant to California Civil Code section 9550;

NOW, THEREFORE, We, ______, the undersigned Contractor, as Principal; and ______, a corporation organized and existing under the laws of the State of ______, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Thermalito Union Elementary School District and to any and all persons, companies, or corporations entitled by law to file stop notices under California Civil Code section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of ______ Dollars (\$______), such sum being not less than one hundred (100) percent of the total amount payable by said Obligee under the terms of said Contract, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code section 13020 with respect to work and labor thereon of any kind, then said Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code section 9550 *et seq*.

This bond shall inure to the benefit of any person named in Civil Code section 9100 giving such person or his/her assigns a right of action in any suit brought upon this bond.

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

Generator Infrastructure Project Thermalito Union Elementary School District Payment Bond Page 41 extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Obligee and the Contractor or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code section 9100, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

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

PRINCIPAL/CONTRACTOR:

By:_____

SURETY:

By: ______Attorney-in-Fact

382680.1

IMPORTANT: THIS IS A REQUIRED FORM.

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code section 105, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to: (Name and Address of Surety)	(Name and Address of agent or representative for service for service of process in California)
Telephone:	Telephone:
	ificate verifies only the identity of the individual who ched, and not the truthfulness, accuracy, or validity of
STATE OF CALIFORNIA)) ss. COUNTY OF)	
evidence to be the person(s) whose name(s) is/are s to me that he/she/they executed the same in his/her. of (Surety) and on the instrument the person(s), or the entity upon be	, who proved on the basis of satisfactory ubscribed to the within instrument and acknowledged /their authorized capacity(ies) as the Attorney-in-Fact acknowledged to me that by his/her/their signature(s) ehalf of which the person(s) executed the instrument. he laws of the State of California that the foregoing
WITNESS my hand and official seal.	(SEAL)

Notary Public in and for said State

Commission expires:

NOTE: A copy of the power-of-attorney to local representatives of the bonding company must be attached hereto.

PERFORMANCE BOND

(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the work to be performed by the Contractor is more particularly set forth in that certain contract for said Public Work dated _______, (hereinafter referred to as the "Contract"), which Contract is incorporated herein by this reference; and

WHEREAS, the Contractor is required by said Contract to perform the terms thereof and to provide a bond both for the performance and guaranty thereof.

NOW, THEREFORE, we, ______, the undersigned Contractor, as Principal, and ______, a corporation organized and existing under the laws of the State of ______, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Thermalito Union Elementary School District in the sum of ______ Dollars (\$______), said sum being not less than one hundred (100) percent of the total amount payable by said Obligee under the terms of said Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the bounded Contractor, his or her 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 said Contract and any alteration thereof made as therein provided, on his or her part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill guarantees of all materials and workmanship; and indemnify, defend and save harmless the Obligee, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any change, extension of time, alteration in or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same, nor by any change or modification to any terms of payment or extension of time for any payment pertaining or relating to any scheme of work of improvement under the contract. Surety also stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any overpayment or underpayment by the Obligee that is based upon estimates approved by the Architect. The Surety stipulates and agrees that none of the aforementioned changes, modifications, alterations, additions, extension of time or actions shall in any way affect its obligation on this bond, and it does hereby waive

Generator Infrastructure Project Thermalito Union Elementary School District Contract Forms Page 44 notice of any such changes, modifications, alterations, additions or extension of time to the terms of the contract, or to the work, or the specifications as well notice of any other actions that result in the foregoing.

Whenever Principal shall be, and is declared by the Obligee to be, in default under the Contract, the Surety shall promptly either remedy the default, or shall promptly take over and complete the Contract through its agents or independent contractors, subject to acceptance and approval of such agents or independent contractors by Obligee as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages; or, at Obligee's sole discretion and election, Surety shall obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Obligee of the lowest responsible bidder, arrange for a contract between such bidder and the Obligee and make available as work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the "balance of the Contract price" (as hereinafter defined), and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable to Principal by the Obligee under the Contract and any modifications thereto, less the amount previously paid by the Obligee to the Principal, less any withholdings by the Obligee allowed under the Contract. Obligee shall not be required or obligated to accept a tender of a completion contractor from the Surety.

Surety expressly agrees that the Obligee may reject any agent or contractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal. Unless otherwise agreed by Obligee, in its sole discretion, Surety shall not utilize Principal in completing the Contract nor shall Surety accept a bid from Principal for completion of the work in the event of default by the Principal.

No final settlement between the Obligee and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

The Surety shall remain responsible and liable for all patent and latent defects that arise out of or relate to the Contractor's failure and/or inability to properly complete the Public Work as required by the Contract and the Contract Documents. The obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.

Contractor and Surety agree that if the Obligee is required to engage the services of an attorney in connection with enforcement of the bond, Contractor and Surety shall pay Obligee's reasonable attorneys' fees incurred, with or without suit, in addition to the above sum.

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

IN	WITNESS	WHEREOF,	we	have	hereunto	set	our	hands	and	seals	this	 day	of
	, 20												
					PRINCIP	PAL/	CON	ITRAC	TOR	:			

	By:		
	SURETY:		
	By:	Attorney-in-Fact	
The rate of premium on this bond is			_ per thousand.
The total amount of premium charged: by a corporate surety).	\$		(This must be filled in

IMPORTANT: THIS IS A REQUIRED FORM.

Surety companies executing bonds must possess a certificate of authority from the California Insurance Commissioner authorizing them to write surety insurance defined in California Insurance Code section 105, and if the work or project is financed, in whole or in part, with federal, grant or loan funds, Surety's name must also appear on the Treasury Department's most current list (Circular 570 as amended).

Any claims under this bond may be addressed to:

(Name and Address of Surety)	(Name and Address of agent or representative for service for service of process in California)
Telephone:	Telephone:

A notary public or other office completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA

COUNTY OF

) ss.

On ______, before me, ______, personally appeared ______, who proved on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies) as the Attorney-in-Fact of ______ (Surety) and acknowledged to me that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Notary Public in and for said State

Commission expires:_____

NOTE: A copy of the power-of-attorney to local representatives of the bonding company must be attached hereto.

(SEAL)

CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE

This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code section 8350 *et seq.*, the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract 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 performing 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.

Pursuant to Government Code section 8355, every person or organization awarded a contract or grant from a State agency 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; and
- 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 by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code section 8355 listed above and will (a) publish a statement notifying employees concerning the prohibition of controlled substance at the workplace, (b) establish a drug-free awareness program, and (c) require each employee engaged in the performance of the contact be given a copy of the statement required by section 8355(a) and require such employee agree to abide by the terms of that statement.

I also understand that if the Thermalito Union Elementary School 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 Sections 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.

DATE:

CONTRACTOR

By:_____

Signature

Generator Infrastructure Project Thermalito Union Elementary School District Certificate Regarding Alcohol & Tobacco Page 48

<u>CONTRACTOR'S CERTIFICATE REGARDING ALCOHOLIC BEVERAGE AND</u> <u>TOBACCO-FREE CAMPUS POLICY</u>

The Contractor agrees that it will abide by and implement the District's Alcoholic Beverage and Tobacco-Free Campus Policy prohibits the use of alcoholic beverages and tobacco products, of any kind and at any time, on District-owned or leased buildings, on District property and in District vehicles. The Contractor shall procure signs stating "ALCOHOLIC BEVERAGE AND TOBACCO USE IS PROHIBITED" and shall ensure that these signs are prominently displayed in all entrances to school property at all times.

DATE:_____

Contractor

By:____

Signature

Generator Infrastructure Project Thermalito Union Elementary School District Certificate Regarding Alcohol & Tobacco Page 49

GUARANTEE

Guarantee	for				·	We	hereby	guarantee	that	the
		,	which	we	have	insta	alled	in		
		has	been	done in	accorda	nce w	vith the	Contract I)ocume	ents,
including without li	mitation, tl	ne drawings a	nd spec	ifications	s, and tha	t the v	vork as	installed wil	1 fulfil	l the
requirements includ	led in the b	oid documents	. The	undersig	ned and	its sur	ety agre	es to repair	or rep	lace

any or all such work, together with any other adjacent work, which may be displaced in connection with such replacement, that may prove to be defective in workmanship or material within a period of one (1) year from the date of the Notice of Completion of the above-mentioned structure by the Thermalito Union Elementary School District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event the undersigned or its Surety fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the District, but not later than ten (10) days after being notified in writing by the District or within two (2) business days in the case of an emergency or urgent matter, the undersigned and its surety authorizes the District to proceed to have said defects repaired and made good at the expense of the undersigned and its surety, who will pay the costs and charges therefor upon demand. The undersigned and its surety shall be jointly and severally liable for any costs arising from the District's enforcement of this Guarantee.

	Countersigned
(Proper Name)	(Proper Name)
By:	By:
(Signature of Subcontractor or Contractor)	(Signature of Contractor if for Subcontractor)
Representatives to be contacted for service:	
Name:	·
Address:	
Phone Number:	

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between the Thermalito Union Elementary School District, 400 Grand Ave., Oroville, CA 95965, hereinafter called "Owner", and whose address is ______, hereinafter called "Contractor", and ______ whose address is ______, hereinafter called "Escrow Agent".

For the consideration hereinafter set forth, the Owner, Contractor and Escrow Agent agree as follows:

1. Pursuant to Section 22300 of the Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for Retention earnings required to be withheld by Owner pursuant to the Construction Contract entered into between the Owner and Contractor for _______ in the amount of _______ dated _______ (hereinafter referred to as the "Contract"). Alternatively, on written request of the Contractor, the Owner shall make payments of the Retention earnings directly to the escrow agent. When Contractor deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the Owner within ten (10) days of deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as Retention under the terms of the Contract between the Owner and Contractor. Securities shall be held in the name of the Owner, and shall designate the Contractor as beneficial owner.

2. The Owner shall make progress payments to the Contractor for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

3. When the Owner makes payments of Retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this Contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the Owner pays the Escrow Agent directly.

4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the Owner. These expenses and payment terms shall be determined by the Owner, Contractor, and Escrow Agent.

5. The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to the Owner.

6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the Owner to the Escrow Agent that Owner consents to the withdrawal of the amount sought to be withdrawn by Contractor. 7. The Owner shall have a right to draw upon the securities in the event of default by the Contractor. Upon seven (7) days' written notice to the Escrow Agent from the Owner of the notice of default under Article 14 of the General Conditions, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the Owner.

8. Upon receipt of written notification from the Owner certifying that the Contract is final and complete, and that the Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payment of fees and charges.

9. Escrow Agent shall rely on the written notifications from the Owner and the Contractor pursuant to Sections (5) to (8), inclusive, of this Agreement and the Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

10. The names of the persons who are authorized to give written notice or to receive written notice on behalf of the Owner and on behalf of Contractor in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:

Title		
Name		
Signature		
Address		
On behalf of Contractor:		
Title	 	
Name	 	
Signature	 	
Address		

Generator Infrastructure Project Escrow Agreement for Security Deposits in Lieu of Retention Thermalito Union Elementary School District Page 52 005797.0000136 382680.1 On behalf of Agent:

Title

Name

Signature

Address

At the time the Escrow Account is opened, the Owner and Contractor shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date set forth above.

OWNER	CONTRACTOR
Title	Title
Name	Name
Signature	Signature

INSURANCE DOCUMENTS & ENDORSEMENTS

The following insurance endorsements and documents must be provided to the Thermalito Union Elementary School District within five (5) calendar days after receipt of notification of award. If the apparent low bidder fails to provide the documents required below, the District may award the Contract to the next lowest responsible and responsive bidder or release all bidders, and the bidder's bid security will be forfeited. All insurance provided by the bidder shall fully comply with the requirements set forth in Article 18 of the General Conditions.

1. <u>General Liability Insurance</u>: Certificate of Insurance with all specific insurance coverages set forth in Article 18 of the General Conditions, proper Project description, designation of the District as the Certificate Holder, a statement that the insurance provided is primary to any insurance obtained by the District and minimum of 30 days' cancellation notice. Bidder shall also provide required additional insured endorsement(s) designating all parties required in Article 18 of the General Conditions. The additional insured endorsement shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the District in its sole discretion.

(State)	(Zip Code
	(State)

Incidents and claims are to be reported to the insurer at:

2. <u>Workers' Compensation/Employer's Liability Insurance</u>: Certificate of Workers' Compensation Insurance meeting the coverages and requirements set forth in Article 18 of the General Conditions, minimum of 30 days' cancellation notice, proper Project description, waiver of subrogation and any applicable endorsements. 3. <u>Automobile Liability Insurance</u>: Certificate of Automobile Insurance meeting the coverages and requirements set forth in Article 18 of the General Conditions, minimum 30 days' cancellation notice, any applicable endorsements and a statement that the insurance provided is primary to any insurance obtained by the District.

Incidents and claims are to be reported to the insurer at:

Attn:			
	(Title)		(Department)
	(Company)		
	(Street Address)		
	(City)	(State)	(Zip Code)
	()(Telephone Number)		
DATE:			
		CONTRACTOR	
		By:	
		Signature	

382680.1

CONTRACTOR DVBE CLOSE-OUT STATEMENT

The Contractor shall complete this form, as a condition to Final Payment, for purposes of reporting participation by Disabled Veteran Business Enterprises (DVBE) in the Contract for the Project/Bid No. specified below.

Project Name:

Bid No.:

Name	Address/Phone	Category of Work*	\$ Amount of Contract

* Categories of work include: (1) construction services (specify services that DVBE will provide); (2) architecture and engineering services; (3) procurement of materials, supplies and equipment; and (4) information technology.

The undersigned, on behalf of the Contractor, certifies that DVBE participation on the Contract for Bid No. ______equaled ______dollars (\$______), which represents approximately ______percent (___%) of the total Contract price including any Change Order/Construction Change Document for the Project.

Company: _____

Title:_____

Signature: _____

Date: _____

Generator Infrastructure Project Thermalito Union Elementary School District

Name:

CONTRACTOR CERTIFICATION REGARDING BACKGROUND CHECKS

[Name of Contractor/consultant]

_____ certifies that it has performed one of the following:

Pursuant to Education Code section 45125.1, Contractor has conducted criminal background checks, through the California Department of Justice, of all employees providing services to the Thermalito Union Elementary School District, pursuant to the contract/purchase order dated _______, and that none have been convicted of serious or violent felonies, as specified in Penal Code sections 1192.7(c) and 667.5(c), respectively.

As further required by Education Code section 45125.1, attached hereto as Attachment "A" is a list of the names of the employees of the undersigned who may come in contact with pupils.

OR

- Pursuant to Education Code section 45125.2, Contractor will ensure the safety of pupils by one or more of the following methods:
 - **1**. The installation of a physical barrier at the worksite to limit contact with pupils.
 - □ 2. Continual supervision and monitoring of all employees of the entity by an employee of the entity whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Date_____, 20____

[Name of Contractor/Consultant]

By its:

ATTACHMENT A:

(INSERT NAMES OF EMPLOYEES WHO MAY COME IN CONTACT WITH PUPILS)

GENERAL CONDITIONS

ARTICLE 1 DEFINITIONS

- 1. <u>Action of the Governing Board</u> is a vote of a majority of the District's governing board.
- 2. <u>Approval</u> means written authorization through action of the governing board unless specific delegation of approval authority is delegated to a District representative.

(ALTERNATE CLAUSE – This clause may only be used if the District has already delegated the authority to the Assistant Superintendent of Business prior to the commencement of the Project.)

<u>Approval</u> means written authorization through action of the governing board. The governing board has delegated to the Assistant Superintendent the authority to approve certain modifications and Construction Change Documents where the aggregate sum of the Construction Change Documents do not exceed \$15,000 and each individual item of the Construction Change Documents or modification does not exceed \$10,000. In no case shall the Assistant Superintendent have authority to approve total Construction Change Documents or modifications to the Project exceeding 10% of the contract sum.)

- 3. <u>As shown, as indicated, as detailed</u> refers to drawings accompanying this specification.
- 4. <u>Contract, Contract Documents</u> includes all contract documents to wit: Notice inviting Bids, Instructions to Bidders, Bid Form, Designation of Subcontractors, Performance Bond, Payment Bond, Certificates of Insurance, Insurance Policies, General Conditions, Supplementary or Special Conditions (if any), Drawings, Plans, Specifications, the Agreement and all modifications, addenda, and amendments thereto.
- 5. <u>Contractor, District and Architect</u> are those mentioned as such in the Agreement. They are treated throughout the contract as if they are of singular number and neuter gender.
- 6. <u>Locality in which the work is performed</u> means the county in which the public work is done.
- 7. <u>Project</u> is the planned undertaking as provided for in the contract documents by District and Contractor.
- 8. <u>Provide</u> shall include "provide complete in place", that is, "furnish & install".
- 9. <u>Safety Orders</u> are those issued by the Division of Industrial Safety and OSHA Safety and Health Standards for construction.
- 10. <u>Standards, Rules and Regulations</u> referred to are recognized printed standards and shall be considered as one and a part of these specifications within limits specified.
- 11. <u>Subcontractor</u>, as used herein, includes those having direct contract with Contractor and one who furnishes material worked to a special design according to plans, drawings, and specifications for this work, but does not include one who merely furnishes material not so worked.
- 12. <u>Surety</u> is the person, firm, or corporation that executes as surety the Contractor's Performance Bond and Payment Bond.
- 13. <u>Work of the Contractor or subcontractor</u> includes labor or materials (including, without installation, equipment and appliances) or both, incorporated in, or to be incorporated in the construction covered by the complete Contract.
- 14. <u>Workers</u> include laborer, worker or mechanic.

ARTICLE 2 LAWS CONCERNING THE DISTRICT A PART HEREOF

Contract is subject to all provision of the Constitution of Laws of California governing, controlling or effecting District, or the property, funds operations, or powers of District, and such provisions are by his reference made a part hereof and of Contract.

ARTICLE 3 SITE INVESTIGATION

Before bidding on this work, Contractor shall make a careful investigation of the site and thoroughly familiarize himself with the requirement of the Contract. By the act of submitting a bid for the work included in this Contract, Contractor shall be deemed to have made such study and investigation and that Contractor is familiar with and accepts the conditions of the site.

ARTICLE 4 STATUS OF CONTRACTOR

A. Contractor is and shall at all times be deemed to be an independent Contractor and shall be wholly responsible for the manner in which it performs the services required of it by the terms of this contract. Nothing herein contained shall be construed as creating the relationship of employer and employee, or principal and agent, between the District, or any of the District's employees or agents, and Contractor or any of Contractor's agents or employees. Contractor assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its agents and employees shall not be entitled to any rights or privileges of District employees. District shall be permitted to monitor the activities to determine compliance with the terms of this Contract. Contractor and subcontractors are required by law to be licensed and regulated by the Contractors State License Board.

B. Strict compliance with all DIR registration requirements in accordance with Labor Code sections 1725.5 and 1771.1 is a material obligation of the Contractor and all of its Subcontractors (of any tier) under the Contract Documents. The foregoing includes, without limitation, compliance with DIR registration requirements at all times during performance of the work by the Contractor and all of its Subcontractors of any tier. The failure of the Contractor and all Subcontractors of any tier to be properly registered with DIR at all times during performance of the work is a material breach of the Contract and subject to termination for cause.

C. An affirmative and ongoing obligation of the Contractor under the Contract Documents is the verification that all Subcontractors of any tier are at all times during performance of the work are in full and strict compliance with the DIR registration requirements. The Contractor shall not permit or allow any Subcontractor of any tier to perform any work without the Contractor's verification that all Subcontractors are in full and strict compliance with the DIR registration requirements. Any Subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1. Contractor or its Subcontractors of any tier shall not be entitled to any additional costs or time arising from or in any way related to compliance with the DIR registration requirements.

ARTICLE 5 CONTRACTOR'S SUPERVISION

A. During progress of the work, Contractor shall keep on the premises (including both the site and the plant) a superintendent satisfactory to District and, if applicable, Architect. Before commencing the work herein, Contractor shall give written notice to District and Architect of the name and a Statement of Qualifications of such superintendent. Superintendent shall not be changed except with written consent of District, unless a superintendent proves to be unsatisfactory to Contractor and ceases to be in its employ, in which case, Contractor shall notify District in writing. Superintendent shall represent Contractor and all directions given to Superintendent shall be as binding as if given to Contractor.

B. The Contractor shall verify all indicated dimensions before ordering materials or equipment, or before performing work. The Contractor shall take field measurements, verify field conditions, and shall carefully compare such field measurements and conditions and other information known to the Contractor with the contract documents before commencing activities. Errors, inconsistencies, or omissions discovered shall be reported to the Architect at once. Upon commencement of any item of work, the Contractor shall be responsible for dimensions related to such item of work and shall make any corrections necessary to make work properly fit at no additional cost to District. This responsibility for verification of dimensions is a non-delegable duty and may not be delegated to subcontractors or agents.

C. Omissions from the drawings or specifications, or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed work, but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

D. Contractor shall establish a protocol for requesting inspection with Inspector so as to not delay the work and provide adequate time for the Inspector to perform inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. DSA requirements under PR 13-01 specifically give the Special Inspector fourteen (14) days to post to the DSA website. Contractor is responsible for delays and for failure to plan.

E. For some Projects, there may be a need to incrementally install certain assemblies. It is up to Contractor to identify areas and assemblies that may be constructed incrementally. Contractor must identify and establish incremental areas of construction and establish protocols with Inspector for DSA 152 approvals so they may be presented to DSA. See PR-13-01 for further discussion.

ARTICLE 6 SUBCONTRACTORS

A. Contractor agrees to bind every subcontractor by terms of Contract as far as such terms are applicable to subcontractor's work. If Contractor shall subcontract any part of this Contract, Contractor shall be as fully responsible to District for acts and omissions of any subcontractor and of persons either directly or indirectly employed by any subcontractor, as it is for acts and omissions of persons directly employed by Contractor. Nothing contained in the contract documents shall create any contractual relation between any subcontractor and District, nor shall this Contract be construed to be for the benefit of any subcontractor. The Contractor shall be responsible for the coordination of the trades, subcontractors and materialmen engaged upon his work.

B. All subcontractors (of any tier) performing any portion of the work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. No portion of the work is permitted to be performed by a subcontractor of any tier unless the subcontractor is properly registered with DIR. Any subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1.

ARTICLE 7 DISTRICT'S INSPECTOR

One or more Project Inspectors employed by the District and approved by the Division of the State Architect will be assigned to the work in accordance with the requirements of Title 24 of the California Code of Regulations. The Inspector(s) duties are as specifically defined in Title 24 Section 4-333 and 4-342 and in DSA IR A-8. No work shall be carried on except with the knowledge and under the inspection of said Inspector(s). He shall have free access to any or all parts of work at any time. The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall reimburse District for inspection and testing outside the normal eight-hour day or for any retests caused by the Contractor.

ARTICLE 8 ARCHITECT'S STATUS

A. The Architect shall be the District's representative during construction period and shall observe the progress and quality of the work on behalf of the District. Architect shall have the authority to act on behalf of District only to the extent expressly provided in the contract documents. Architect shall have authority to stop work whenever such stoppage may be necessary in Architect's reasonable opinion to insure the proper execution of Contract.

B. The Architect shall be, in the first instance, the judge of the performance of this Contract. Architect shall side neither with District nor with Contractor, but shall exercise authority under Contract to enforce its faithful performance by both. Nothing herein authorizes Architect to act as arbitrator for the parties.

C. The Architect shall have all authority and responsibility established by law, including Title 24 of the California Code of Regulations.

D. The Architect shall be the final authority in determining the amount of work satisfactorily completed and the amount of money due during the progress of construction.

ARTICLE 9 ASSIGNMENT OF ANTITRUST ACTIONS

A. Pursuant to Government Code section 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with Section 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

Generator Infrastructure Project Thermalito Union Elementary School District General Conditions Page 62 B. Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

ARTICLE 10 OTHER CONTRACTS

A. District reserves the right to let other contracts in connection with this work. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly connect and coordinate its work with theirs.

B. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at the Project site. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on Project. If simultaneous execution of any Contract for Project is likely to cause interference with performance of some other contract or contracts, District shall decide which contractor shall cease work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously.

ARTICLE 11 OCCUPANCY

District reserves the right to occupy portions of the Project at any time before completion, and such occupancy shall constitute final acceptance of that portion only to the extent that the Contractor will not be subject to performing work or repairs caused by the District's use of the occupied areas. Such occupancy shall not extend the date specified for completion of the work. The Contractor will be required to complete punch list items documented by District, Architect, Inspector and Contractor prior to final payment. Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the work by the District shall not constitute acceptance of work not complying with the requirements of the Contract Documents.

ARTICLE 12 DISTRICT'S RIGHT TO DO WORK

Should the Contractor, at any time during the process of construction, fail or refuse to furnish enough materials or workmen to properly execute the work, unless prohibited from so doing through the action of District, Architect, or other authorized official agencies, District, after giving ten (10) days written notice to Contractor may, without prejudice to any other rights he may have, proceed to furnish the materials and/or workmen necessary to proceed with or complete the work, and may deduct the cost thereof, together with reasonable expenses arising from such procedure, from any amounts then due or which may thereafter become due to Contractor.

ARTICLE 13 DISTRICT'S RIGHT TO TERMINATE CONTRACT

A. **Grounds for Termination.** The Contractor may terminate the Contract if the work is stopped for a period of thirty (30) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the work for whom the Contractor is contractually responsible, for only the following reasons:

- (1) Issuance of an order of a court or other public authority having jurisdiction; or
- (2) An act of government, such as a declaration of national emergency.

B. **Notice of Termination.** If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for work executed and for reasonable costs verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

ARTICLE 14 TERMINATION BY THE DISTRICT FOR CAUSE

A. **Grounds for Termination.** The District may terminate the Contractor and/or this Contract for the following reasons:

- (1) Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- (2) Persistently or repeatedly is absent, without excuse, from the job site;
- (3) Fails to make payment to subcontractors, suppliers, materialmen, etc;
- (4) Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction;
- (5) Fails to provide a schedule or fails or refuses to update schedules required under the Contract;
- (6) Becomes bankrupt or insolvent, including the filing of a general assignment for the benefit of creditors;
- (7) If the Contractor has been debarred from performing work; or
- (8) Otherwise is in substantial breach of a provision of the Contract Documents.

B. **Notification of Termination.** When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Contractor and the Contractor's surety, if any, written notice of seven (7) days, terminate the Contract and may, subject to any prior rights of the surety:

- (1) Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- (2) Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept; and
- (3) Complete the work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors.

C. **Payments Withheld.** If the District terminates the Contract for one of the reasons stated in Article 14.A, the Contractor shall not be entitled to receive further payment until the work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Contractor and/or its surety.

D. **Payments Upon Completion.** If the unpaid balance of the Contract Sum exceeds costs of completing the work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the District. The amount to be paid to the Contractor, or District, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

E. **Remedies Other Than Termination.** If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14, do any of the following:

- (1) Permit the Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Contractor to the District on demand;
- (2) If the workmanship performed by the Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Contractor to remove the faulty workmanship or defective materials and to replace the same with work or materials that conform to the Contract Documents, in which event the Contractor, at its sole costs and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to the Contractor; or
- (3) Initiate procedures to declare the Contractor a non-responsible bidder for a period of two (2) to five (5) years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Contractor shall replace the same with new work or materials approved by the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the District shall direct, all work or material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Paragraph be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Contractor that the remedies set forth in this Paragraph are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

ARTICLE 15 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)

A. **Termination for Convenience.** District may terminate the Contract upon fifteen (15) calendar days of written notice to the Contractor and use any reasonable method the District deems expedient to complete the Project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Contractor make it impossible or against the District's interest to complete the Project. In such a case, the Contractor shall have no Claims against the District except for: (1) the actual cost for approved labor, materials, and services performed in accordance with the Contract Documents which have not otherwise been previously paid for and which are supported and documented through timesheets, invoices, receipts, or otherwise; and (2) profit and overhead of ten (10) percent of the approved costs in item (1); and (3) termination cost of five (5) percent of the approved costs in item (1). Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept.

B. **Non-Appropriation of Funds/Insufficient Funds.** In the event that sufficient funds are not appropriated to complete the Project or the District determines that sufficient funds are not available to complete the Project, District may terminate or suspend the completion of the Project at any time by giving written notice to the Contractor. In the event that the District exercises this option, the District shall pay for any and all work and materials completed or delivered onto the site for which value is received, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials not otherwise already paid for by the District up to the time of termination under this Paragraph shall include a factor of fifteen (15) percent for the Contractor's overhead and profit and there shall be no other costs or expenses paid to Contractor. All work, materials and orders paid for pursuant to this provision shall become the property of the District. District may, without cause, order Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as District may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.

ARTICLE 16 CONTRACT SECURITY - BONDS

Contractor shall furnish a surety bond in an amount equal to one hundred (100) percent of Contract price as security for faithful performance of this Contract and shall furnish a separate bond in an amount at least equal to one hundred (100) percent of the Contract price as security for payment of persons performing labor and furnishing materials in connection with this Contract. Aforementioned bonds shall be in the form set forth in these contract documents.

ARTICLE 17 SUBSTITUTION OF SECURITIES

Pursuant to the requirements of Public Contract Code section 22300, upon Contractor's request, District will make payment to Contractor of any funds withheld from payments under this Contract if Contractor deposits with the District or in escrow with a California or federally chartered bank acceptable to District, securities eligible for the investment of State Funds under Government Code section 16430 or bank or savings and loan certificates of deposit interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by the Contractor and the public agency.

ARTICLE 18 INSURANCE REQUIREMENTS

A. Before the commencement of the work, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California with a financial rating of at least an A-VIII status as rated in the most recent edition of Best's Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Contractor's work under the Contract and for which the Contractor may be legally liable, whether such work are by the Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Any required insurance shall not contain any exclusion that applies to the type of work performed by the Contractor under the Contract Documents:

(1) Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim;

(2) Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor or by another person;

Claims for damages because of injury or destruction of tangible property, (3) including loss of use resulting therefrom, arising from operations under the Contract Documents:

(4) Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the work;

Claims involving contractual liability applicable to the Contractor's obligations (5)under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors;

Claims involving Completed Operations, Independent Contractors' coverage, and (6) Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating (XCU); and

Claims involving sudden or accidental discharge of contaminants or pollutants. (7)

B. Specific Insurance Requirements. Contractor shall take out and maintain and shall require all subcontractors, if any, whether primary or secondary, to take out and maintain:

- (1) Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than \$2,000,000.00 or Commercial General Liability Insurance which provides limits of not less than:
 - Per occurrence (combined single limit) \$1,000,000.00 (a) (b) Project Specific Aggregate (for this project only) \$1,000.000.00 Products and Completed Operations (aggregate) \$1,000.000.00 (c)
 - Personal and Advertising Injury Limit \$1,000,000.00 (d)
- **Insurance Covering Special Hazards** (2)

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

- Automotive and truck where operated in amounts \$1,000,000.00 (a)
- Material Hoist where used in amounts \$1,000,000.00 (b)
- Explosion, Collapse and Underground (XCU) coverage \$1,000,000.00 (c) \$1,000,000.00
- Hazardous materials (d)
- In addition, provide Excess Liability Insurance coverage in the amount of Two (3) Million Dollars (\$2,000,000.00).

C. Subcontractor Insurance Requirements. The Contractor shall require its Subcontractors to take out and maintain public liability insurance and property damage insurance required under Article 18.A in like amounts. A "claims made" or modified "occurrence" policy shall not satisfy the requirements of Article 18.A without prior written approval of the District.

D. Additional Insured Endorsement Requirements. The Contractor shall name, on any policy of insurance required under Article 18.A, the District, Construction Manager (if any), Architect, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. Subcontractors shall name the Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the District in its sole discretion, and must state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor pursuant to Article 18.A must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer's liability shall not be reduced by the existence of such other insurance.

E. **Workers' Compensation Insurance.** During the term of this Contract, the Contractor shall provide workers' compensation insurance for all of the Contractor's employees engaged in work under this Contract on or at the Site of the Project and, in case any of the Contractor's work is subcontracted, the Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract on or at the Site of the Project is not protected under the Workers' Compensation laws, the Contractor shall provide or cause a Subcontractor to provide adequate insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the District certificates of insurance as required under Article 18.J and in compliance with Labor Code section 3700. Workers' compensation limits as required by the Labor Code, but not less than \$1,000,000 and employers' liability limits of \$1,000,000 per accident for bodily injury or disease.

F. **"Builder's Risk/All Risk" Insurance.** The Contractor, during the progress of the work and until final acceptance of the work by District upon completion of the entire Contract, shall maintain Builder's Risk, Course of Construction or similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind, lightning, smoke and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the Architect's and engineering services and expenses required as a result of any insured loss upon the work and Project which is the subject of the Contract Documents, including completed work and work in progress, to the full insurable value thereof. Such insurance shall include the District and the Architect as additional named insureds, and any other person with an insurable interest as designated by the District.

The Contractor shall submit to the District for its approval all items deemed to be uninsurable. The risk of the damage to the work due to the perils covered by the "Builder's Risk/All Risk" Insurance, as well as any other hazard which might result in damage to the work, is that of the Contractor and the Surety, and no Claims for such loss or damage shall be recognized by the District nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

G. **Fire Insurance.** Before the commencement of the work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor's expense, fire insurance on all work subject to loss or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the work is accepted by the District. This requirement may be waived upon confirmation by the District that such coverage is provided under the Builder's Risk Insurance being provided.

Automobile Liability. The District, Architect and Construction Manager (if any), H. Inspectors, their directors, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible. Such insurance coverage shall be primary and non-contributory insurance as respects the District, Architect, Construction Manager (if any), Project Inspector, their directors, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, Architect, Construction Manager (if any), Project Inspector, their directors, officers, employees, agents and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it. The insurer shall agree to waive all rights of subrogation against the District, Architect, Construction Manager (if any), Project Inspector, their directors, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy that arise from work performed by the Contractor. Insurance Services Office Business Auto Coverage Form Number CA 0001, Code 1 (any auto) is required. Comprehensive Automobile Liability insurance is to include all autos, owned, non-owned, and hired, with limits of \$1,000,000 per accident for bodily injury and property damage.

I. **Other Insurance.** The Contractor shall provide all other insurance required to be maintained under applicable laws, ordinances, rules, and regulations.

J. **Proof of Insurance.** The Contractor shall not commence work nor shall it allow any Subcontractor to commence work under this Contract until all required insurance and certificates have been obtained and delivered in duplicate to the District for approval subject to the following requirements:

(1) Certificates and insurance policies shall include the following clause:

"This policy and any coverage shall not be suspended, voided, non-renewed, canceled, or reduced in required limits of liability or amounts of insurance or coverage until notice has been mailed via certified mail to the District. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice."

(2) Certificates of insurance shall state in particular those insured, the extent of insurance, location and operation to which the insurance applies, the expiration date, and cancellation and reduction notices.

(3) Certificates of insurance shall clearly state that the District and the Architect are named as additional insureds under the policy described and that such insurance policy shall be primary to any insurance or self-insurance maintained by District.

(4) The Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the District.

K. **Compliance.** In the event of the failure of any contractor to furnish and maintain any insurance required by this Article, the Contractor shall be in default under the Contract. Compliance by Contractor with the requirement to carry insurance and furnish certificates or policies evidencing the same shall not relieve the Contractor from liability assumed under any provision of the Contract Documents, including, without limitation, the obligation to defend and indemnify the District and the Architect.

L. **Waiver of Subrogation.** Contractor waives (to the extent permitted by law) any right to recover against the District for damages to the work, any part thereof, or any and all claims arising by reason of any of the foregoing, but only to the extent that such damages and/or claims are covered by property insurance and only to the extent of such coverage (which shall exclude deductible amounts) by insurance actually carried by the District.

The provisions of this Section are intended to restrict each party to recovery against insurance carriers only to the extent of such coverage and waive fully and for the benefit of each, any rights and/or claims which might give rise to a right of subrogation in any insurance carrier. The District and the Contractor shall each obtain in all policies of insurance carried by either of them, a waiver by the insurance companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

ARTICLE 19 PERFORMANCE AND PAYMENT BONDS

A. **Bond Requirements.** Prior to commencing any portion of the work, the Contractor shall furnish separate payment and performance bonds for its portion of the work which shall cover 100% faithful performance of and payment of all obligations arising under the Contract Documents and/or guaranteeing the payment in full of all claims for labor performed and materials supplied for the work. All bonds shall be provided by a corporate surety authorized and admitted to transact business in California as sureties.

To the extent, if any, that the Contract Price is increased in accordance with the Contract Documents, the Contractor shall, upon request of the District, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the District. To the extent available, the bonds shall further provide that no change or alteration of the Contract Documents (including, without limitation, an increase in the Contract Price, as referred to above), extensions of time, or modifications of the time, terms, or conditions of payment to the Contractor will release the surety. If the Contractor fails to furnish the required bonds, the District may terminate the Contract for cause.

B. **Surety Qualifications.** Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure section 995.120 shall be accepted. Surety must be a California-admitted surety and listed by the U.S. Treasury with a bonding capacity in excess of the Project cost.

C. Alternate Surety Qualifications. If a California-admitted surety insurer issuing bonds does not meet these requirements, the insurer will be considered qualified if it is in conformance with section 995.660 of the California Code of Civil Procedure and proof of such is provided to the District.

ARTICLE 20 DRAWINGS AND SPECIFICATIONS

A. Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.

B. Materials or work described in words which so applied has a well known technical or trade meaning shall be deemed to refer to such recognized standards.

C. It is not the intention of the Contract to go into detailed descriptions of any materials and/or methods commonly known to the trade under the "trade name" or "trade term." The mere mention or notation of such "trade name" or "trade term" shall be considered a sufficient notice to Contractor that it will be required to complete the work so named with all its appurtenances according to the best practices of the trade.

D. The naming of any material and/or equipment shall mean furnishing and installing of same, including all incidentals and accessory items thereto and/or labor therefor, as per best practices of the trade(s) involved, unless specifically noted otherwise.

E. Figured dimensions on drawings shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Large scale details shall take precedence over smaller scale drawings as to shape and details of construction. Specifications shall govern as to materials, workmanship, and installations procedures. Drawings and specifications are intended to be fully cooperative and to agree. However, if Contractor observes that drawings and specifications are in conflict, Contractor shall promptly notify the District in writing, and any necessary changes shall be adjusted as provided in Article 46 entitled "Changes and Extra Work." The specification calling for the higher quality material or workmanship shall prevail.

F. Specifications and accompanying drawings are intended to delineate and describe the Project and its component parts to such a degree as to enable skilled and competent contractors to intelligently bid upon the work, and to carry said work to a successful conclusion.

G. Drawings and specifications are intended to comply with all laws, ordinances, rules, and regulations of constituted authorities having jurisdiction, and where referred to in the contract documents, said laws, ordinances, rules, and regulations shall be considered as a part of said Contract within the limits specified. The Contractor shall bear all expenses of correcting work done contrary to said laws, ordinances, rules, and regulations if the Contractor knew or should have known that the work as performed is contrary to said laws, ordinances, rules, and regulations and if the Contractor performed same (1) without first consulting the Architect for further instructions regarding said work or (2) disregarded the Architect's instructions regarding said work.

H. Questions regarding interpretation of drawings and specifications shall be clarified by the Architect. Should the Contractor commence work or any part thereof without seeking clarification, Contractor waives any claim for extra work or damages as a result of any ambiguity, conflict, or lack of information.

I. Contractor will be furnished, free of charge, bid sets of permitted documents and specifications. Contractor is to provide reproducible drawings and all additional copies which he requires for his operations at his own expense. He shall maintain an accurate record of all copies made and shall return or otherwise account for all copies at the end of the Project.

ARTICLE 21 OWNERSHIP OF DRAWINGS

Pursuant to Education Code section 17316, all plans, drawings, designs, specifications, and other incidental architectural and engineering work or materials and other contract documents and copies thereof furnished by District are its property. They are not to be used in other work and, with the exception of signed sets of the Contract, are to be returned to the District on request at completion of work.

ARTICLE 22 DETAIL DRAWINGS AND INSTRUCTIONS

A. In case of ambiguity, conflict, or lack of information, Architect shall furnish, with reasonable promptness, additional instructions by means of drawings or otherwise, necessary for proper execution of work. All such drawings and instructions shall be consistent with contract documents, true developments thereof, and reasonably inferable therefrom.

B. Work shall be executed in conformity therewith and Contractor shall do no work without proper drawings and instructions.

C. The Architect will furnish necessary details to more fully explain the work, which details shall be considered as part of the contract documents.

D. Should any details require work and costs beyond those which reasonably should have been included in the contract, Contractor shall give written notice thereof to the District within ten (10) working days of the receipt of same. In case no notice is given to the District within ten (10) working days, it will be assumed the details are reasonable development of the scale drawings. In case notice is given, then the claim will be considered and, if found justified, the District or Architect will either modify the drawings or shall recommend to District a Change Order/Construction Change Document for the extra work involved.

E. All parts of the described and shown construction shall be of the quality of their respective kinds shown in the Plans or as specified, and the Contractor is hereby advised to use all diligence to become fully informed as to the required construction and finish, and in no case to proceed with the different parts of the work without first obtaining from the Architect some directions and/or drawings as may be necessary for the proper performance of the work.

F. If it is found at any time, before or after completion of the work, that the Contractor has varied from the drawings and/or specifications, in materials, quality, form, or finish, or in the amount or value of the materials and labor used, the District shall issue an order to Contractor: (1) that all such improper work should be removed, remade, and replaced, and all work disturbed by these changes be made good at the Contractor's expense; or (2) that the District deduct from any amount due Contractor, the sum of money equivalent to the difference in value between the work performed and that called for by the drawings and specifications. District shall in its sole discretion determine such difference in value. The District, at its option, may pursue either course.

ARTICLE 23 TESTS AND INSPECTIONS

A. Tests and inspections will comply with California Code of Regulations Title 21, Chapter

Generator Infrastructure Project Thermalito Union Elementary School District General Conditions Page 72 4 and Section 42, and Title 24, Chapter 4, Part I. All work shall be under the observation of the Inspector. Contractor shall establish a protocol for requesting inspection with Inspector so as to not delay the work and provide adequate time for the Inspector to perform inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. The Inspector shall have free access to any or all parts of the work at any time. The Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the Drawings or Specifications nor shall the Inspector's approval of the work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

B. Inspector shall electronically post DSA required documents on the DSA electronic posting website. It is the Contractor's responsibility to determine the status of posting and determine if all the criteria for sign off of a category of work on the Project Inspection Card (Form DSA 152) as defined more thoroughly in the most current version of the DSA 152 manual posted on the DSA website. Inspector may collaborate with Contractor about approval of areas that may be constructed and approved incrementally under the DSA 152 card pursuant to the guidelines of PR-13. Inspector shall work with Contractor to present incremental approval proposals to DSA.

C. The Inspector shall have the authority to reject work whenever provisions of the Contract Documents are not being complied with, and Contractor shall instruct its Subcontractors and employees accordingly. In addition, the Inspector may stop any work that poses a probable risk of harm to persons or property. The Contractor shall instruct its employees, Subcontractors, material and equipment suppliers, etc., accordingly. The absence of any Stop Work Order or rejection of any portion of the work shall not relieve the Contractor from any of its obligations pursuant to the Contract Documents.

D. The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall provide adequate time for inspections so as to not delay the work. If the Contractor is behind schedule, it is incumbent on the Contractor to provide advance forecast through look ahead of the anticipated date for inspection so the Inspector may plan their activities so as to not delay the Project. Contractor shall reimburse District for any additional costs associated with inspection and testing (including re-inspection and re-testing) outside the normal eight-hour day and for any retests caused by the Contractor.

E. It is the Contractor's responsibility to request special inspections with sufficient time so all testing may be timely completed and posted so work may proceed and the Inspector's signature is attached to the Project Inspection Card (Form 152). Specifically, timely request for special inspection under the DSA Verified Report Forms 291 (laboratory), DSA Verified Report Form 292 (Special Inspection), and DSA Verified Report 293 (geotechnical) since DSA requirements under PR 13-01 specifically gives the Special Inspections 14 days to post to the DSA website.

F. If Contractor has a Subcontractor or supplier that requires in plant or special inspections, inspections or tests that are out of the country, out of the state or a distance of more than 200 miles from the Project Site, the District shall provide the Special Inspector or individual performing tests time for

inspection and testing during normal work hours. Contractor, however, is responsible for the cost of travel, housing, food, out of area premiums that may be in the Inspector/Testing Agreement with District, or other expenses necessary to ensure proper inspection, special inspection or testing is provided by a DSA Certified Inspector, Special Inspector, or individual performing tests. In some cases all three (DSA Inspector, Special Inspector, and Tester) may be required. In addition, if the DSA Certified Inspector, Special Inspector, or individual performing test has contractual travel clauses or special rates for out of town inspection, Contractor is responsible for all costs associated with the contractual travel costs in addition to all other costs. Arrangements for inspection and/or testing shall be made far enough in advance so as to not delay the work.

G. DSA may issue a Stop Work Order, or an Order to Comply, when either (1) the work proceeds without DSA approval; (2) the work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the work in the affected area shall cease until DSA withdraws the Stop Work Order. Pursuant to Education Code section 17307.5(b), the District shall not be held liable in any action filed against the District for any delays caused by compliance with the Stop Work Order, except to the extent that an error or omission by the District is the basis for the issuance of the Stop Work Order. Examples of Stop Work Orders that may be issued by DSA include DSA Bulletin 07-04 and Policy 10-

Examples of Stop Work Orders that may be issued by DSA include DSA Bulletin 07-04 and Policy 10-01, the installation of automatic fire sprinkler systems without approved Plans, covering work that has not been approved by Inspector on DSA Project Inspection Card (Form 152).

H. Contractor deviation or changes from approved Plans and Specifications may result in the issuance of a Notice of Non-Compliance (See DSA Form 154). Contractor is specifically notified that deviations from the Plans and Specifications, whether major or minor, may result in the requirement to obtain a DSA Construction Change Document ("CCD") to correct the Notice of Non-Compliance. In some cases, the lack of a DSA approved CCD AND verification from the Inspector that a Notice of Non-Compliance has been corrected may result in a critical path delay to the next stage of work on the Project. Specifically, a deviation from approved Plans and Specifications may prevent approval of the category of work listed in the DSA 152 Project Inspection Card. Any delays that are caused by the Contractor's deviation from approved Plans and Specifications shall be the Contractor's responsibility.

I. Where such inspection and testing are to be conducted by an independent laboratory or agency, such materials or samples of materials to be tested shall be selected by such laboratory or agency, or District's representative, and not by Contractor.

J. Contractor shall notify District, a sufficient time in advance, of manufacture of materials to be supplied by him under contract, which must by terms of contract be tested, in order that District may arrange for testing of same at source of supply. Any materials shipped by Contractor from source of supply prior to having satisfactorily passed such testing and inspection, or prior to receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated in work without prior approval of District and subsequent testing and inspection.

K. Work shall not be covered without the Inspector's review and the Architect's knowledge that the work conforms to the requirements of the approved Plans and Specifications. Inspector must be timely notified of inspections and of new areas so work can be inspected at least forty eight (48) hours before opening a new area (For example, see DSA Form 156 for Commencement/Completion of Work Notification which requires "at least 48 hour" advance notification of a new area). An Inspector must comply with DSA protocols for signing each category or phase of work under DSA Form 152 (in

compliance with the Form 152 Manual) or a Notice of Deviation (DSA Form 154) will be issued requiring the work that was not inspected be uncovered for inspection. Thus, if a portion of the work is covered without inspection or Architect approval, is subject to a Notice of Non-Compliance for being undertaken without inspection, or otherwise not in compliance with the Contract Documents, after issuance of a Written Notice of Non-Compliance (Form 154) or a written notice to uncover work, Contractor shall promptly uncover all work (which includes furnishing all necessary facilities, labor, and material) for the Inspector's or the Architect's observation and be replaced at the Contractor's expense without change in the Contract Sum or Time.

L. If a portion of the work has been covered is believed to be Non-Conforming to the Plans and Specifications, even if the Form 152 for the category of work has been signed by the Inspector, the Inspector or the Architect may request to see such work, and it shall be promptly uncovered by the Contractor. If such work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order/Construction Change Document and shall, be charged to the District. If such work is not in accordance with Contract Documents, the Contractor shall be responsible for all costs to uncover the work, delays incurred to uncover the work, and Contractor shall pay all costs to correct the incorrectly construction condition unless the condition was caused by the District or a separate contractor, in which event the District shall be responsible for payment of such costs to the Contractor.

M. The District will pay costs for all tests and inspections and shall be reimbursed by the Contractor for such costs under the following conditions:

- (1) When such costs are stipulated in the provisions of the Contract documents to be borne by the Contractor;
- (2) When a material is tested or inspected and fails to meet the requirements of the specifications and/or drawings;
- (3) When the source of the material is changed after the original test or inspection has been made and approved.

N. If, in the opinion of the District, subsequent delivery of a tested material seems inferior to, or differs from, the original, said material shall be retested upon written order from the District and, should the material fail to meet the requirements of the specifications and/or drawings, the Contractor shall pay all costs of such tests, but where the material does pass the requirements, the District will pay the cost.

O. All tests and inspections specified for each material shall be made in accordance with the detailed specifications for tests or inspections of the material as specified.

P. If a material is not required to be tested, the District may require the Contractor to furnish a certificate bearing the official and legal signature of the supplier, with each delivery of such material, stating that the material complies with the specifications.

ARTICLE 24 STATE AUDIT

Pursuant to and in accordance with the provisions of Government section 10532, or any amendments thereto, all books, records, and files of District, Contractor, or any subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the

examination and audit of the Office of the Auditor General of the State of California for a period of three (3) years after final payment is made under this Contract. Contractor shall preserve and cause to be preserved such books, records and files for the audit period.

ARTICLE 25 PREFERENCE FOR MATERIALS AND SUBSTITUTIONS

A. **One Product Specified.** Unless the plans and specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, construction or any specific name, make, trade name, or catalog number, with or without the words "or equal," such specification shall be deemed to be used for the purpose of facilitating the description of the material, process, or article desired shall be deemed to be followed by the words or equal.

B. **Request for Substitution.** Bidder may, unless otherwise stated, offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Document. If bidder desires to offer a substitution for a Specified Item, such bidder must make a request in writing on District's Substitution Request form ("Request Form") and submit the completed Request Form with their bid. The Request Form must be accompanied by evidence as to whether the proposed substitution:

- (1) Is equal in quality service ability to the Specified Item;
- (2) Will entail no changes in detail, construction and scheduling of related work;
- (3) Will be acceptable in consideration of the required design and artistic effect;
- (4) Will provide no cost disadvantage to District;
- (5) Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
- (6) Will require no change of the construction schedule.

In completing the Request Form, bidder must state with respect to each requested substitution whether bidder will agree to provide the Specified Item in the event that District denies bidder's request for substitution of a Specified Item. In the event that bidder does not agree in the Request Form to provide the Specified Item and the District denies the requested substitution, the bidder's bid shall be considered non-responsive and the District may award the contract to the next lowest bidder or in its sole discretion release all bidders. In the event that bidder has agreed in the Request Form to provide the Specified Item and the District denies bidder's requested substitution for a Specified Item, bidder shall execute the Agreement and provide the Specified Item without any additional cost or charges to the District, and if bidder fails to execute the Agreement with the Specified Item(s), bidder's bid bond will be a forfeited.

After the bids are opened, the apparent lowest bidder shall provide within five (5) days of opening such bids, any and all drawings, specification, samples, performance data, calculations, and other information as may be required to assist the Architect and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

After the District's receipt of such evidence by bidder, District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be the sole discretion of District. Any request for substitution which is granted by the District shall be documented and processed through a Change Order/Construction Change Document. The District may condition its approval of any

substitution upon delivery to District of an extended warranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to DSA, or any other governmental agency having jurisdiction shall be on the bidder.

ARTICLE 26 SAMPLES

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

B. Unless specified otherwise, sampling, preparation of samples and tests shall be in accordance with the latest standards of the American Society for Testing and Materials.

C. Samples of materials and/or articles shall, upon demand of District, be submitted for tests or examinations and consideration before incorporation of same if work is started. Contractor shall be solely responsible for delays due to samples not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples which are of value after testing will remain the property of Contractor.

ARTICLE 27 PROGRESS SCHEDULE

A. Time limits stated in the Contract Documents are of the essence to the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the work.

B. Baseline Schedule Requirements.

(1) Timing. Within ten (10) calendar days after Notice to Proceed, Contractor shall submit a practical schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the salient categories of the work. This first schedule which outlines the Contractor's view of the practical way in which the work will be accomplished is the Baseline Schedule. If the Contractor fails to submit the Baseline Schedule with the ten (10) days noted then the District may withhold processing and approval of progress payments.

(2) Schedule Must Be Within the Given Contract Time. The Baseline Schedule shall not exceed time limits set forth in the Contract Documents and shall comply with all of the scheduling requirements as set forth in the Specifications.

(3) Submittals Must Be Incorporated. Contractor shall include submittals as line items in the Baseline Schedule. Submittals shall not delay the work, milestones, or the completion date. Failure to include submittals in the Baseline Schedule shall be deemed a material breach by the Contractor.

(4) No Early Completion. Contractor shall not submit a schedule showing early completion without indicating float time through the date set for Project completion by the

District. Contractor's Baseline Schedule shall account for all days past early completion as float which belongs to the Project. Usage of float shall not entitle Contractor to any delay claim or damages due to delay.

(5) Use of Schedule Provided in Bid Documents. In some cases, the Bid will include a preliminary schedule indicating milestones and construction sequences for the Project along with general timing for the Project. The preliminary schedule is not intended to serve as the Baseline Schedule utilized for construction. It is up to the Contractor to study and develop a Baseline Schedule to address the actual durations and sequences of work that is anticipated while maintaining the milestones provided by the District. Contract shall obtain information from Contractor's subcontractors and vendors on the planning, progress, delivery of equipment, coordination, and timing of availability of subcontractors so a practical plan of work is fully developed and represented in the Baseline Schedule.

(6) Incorrect Logic, Durations, Sequences, or Critical Path. The District may reject or indicate durations, sequences, critical path or logic are not acceptable and request changes. The electronic copy of the Baseline Schedule shall have adequate information so logic ties, duration, sequences and critical path may be reviewed electronically. Contractor is to diligently rebuild and resubmit the Baseline Schedule to represent the Contractor's plan to complete the work and maintain milestones at the next Progress meeting, or before the next progress meeting. If Contractor is not able to build a schedule that is acceptable to the District or Architect, the District reserves the right to utilize the unapproved originally submitted Baseline Schedule (See Article 27.B (9)) and the comments submitted to hold Contractor accountable for timely delivery of work and maintenance of milestones. Furthermore, Contractor's representations in the Baseline Schedule, if unacceptable, may also be used as a basis for termination of the Contract if Contractor fails to adequately maintain the schedule and falls significantly behind without undertaking the efforts to either submit and follow a recovery schedule or fail to submit a recovery schedule and make no effort toward recovery on the Project.

(7) Contractor Responsibility Even if Schedule Issues Are Not Discovered. Failure on the part of the District to discover errors or omissions in schedules submitted shall not be construed to be an approval of the error or omission and a flawed schedule is not grounds for a time extension.

(8) Failure to Meet Requirements. Failure of the Contractor to provide proper schedules as required by this Article is a material breach of the Contract and grounds for termination. The District, at its sole discretion, may choose, instead, to withhold, in whole or in part, any progress payments or retention amounts otherwise payable to the Contractor.

(9) Use of an Unapproved Baseline Schedule. If Baseline Schedule submitted is unacceptable to the District (i.e. failing to meet the requirements of Article 27.B) and Contractor does not incorporate or address the written comments to the schedule and a Baseline Schedule is not approved, but due to extreme necessity, the District moves forward without an approved Baseline Schedule, Contractor shall diligently revise and meet schedule update requirements of this Article and incorporate all Article 27.B comments in all updates). However, for purposes of termination pursuant to Article 15, the schedule initially submitted shall be treated as a Baseline Schedule with durations shortened to accommodate all float and other mandatory schedule requirements under Article 27.B as well as incorporating all revisions from District or Architect that are noted.

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C. Update Schedules.

(1) Updates Shall Be Based on Approved Baseline Schedule. Except in the case where there has not been agreement as to a Baseline Schedule, after there has been agreement as to the Baseline Schedule, the Baseline Schedule shall be used to build future schedule updates. Schedule updates shall be a CPM based schedule consistent with the Baseline Schedule requirements of Article 27.B. In the case of utilization of Article 27.B(9) and no Baseline Schedule has been approved, schedule updates shall be provided monthly and each update shall incorporate all comments and revisions noted as not complying with the requirements of Article 27.B. Contractor shall be held to the Article 27.B(9) unapproved Baseline Schedule, inclusive of all milestones, adjusted for comments and all required Baseline Schedule inclusions under Article 27.B.

(2) Schedule Updates. Contractor shall update the schedule each month to address actual start dates and durations, the percent complete on activities, actual completion dates, estimated remaining duration for the work in progress, estimated start dates for work scheduled to start at future times and changes in duration of work items.

(3) Recovery Schedule. In addition to providing a schedule update every thirty (30) days, the Contractor, if requested by the Architect or District, shall take the steps necessary to improve Contractor's progress and demonstrate to the District and Architect that the Contractor has seriously considered how the lost time, the Completion Date, or the milestones that are required to be met within the terms of the Contract. Contractor shall immediately provide a recovery schedule showing how the Completion Date will be met. In no case, shall a recovery schedule be provided later than ten (10) days following the request for a recovery schedule from the Architect or District.

ARTICLE 28 MATERIALS AND WORK

A. Except as otherwise specifically stated in this Contract, Contractor shall provide and pay for all materials, labor, tools, equipment, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.

B. Unless otherwise specified, all materials shall be new and shall be of the respective kinds and grades as noted or specified.

C. Materials shall be furnished in ample quantities and at such times as to insure uninterrupted progress of work and shall be stored properly and protected as required. Contractor shall be entirely responsible for damages or loss by weather or other causes to materials or work under this Contract.

D. Contractor shall, after award of Contract by District, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the work. Contractor shall, upon demand from the District, furnish to the District documentary evidence showing that orders have been placed.

E. No material, supplies, or equipment for work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in work and agrees upon completion of all work to deliver premises, together with all improvements and appurtenances constructed or placed thereon by it, to District free from any claims, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any work covered by this Contract shall have any right to place a lien upon the premises or any improvement or appurtenance thereof, except that Contractor may install metering devices or other equipment of a utility company or political subdivision, title to which is commonly retained by the utility company or political subdivision. In event of installation of any such metering device or equipment, Contractor shall advise District as to its owner.

F. For all material and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems. Incidental items not indicated on the Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized here in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and specifications.

ARTICLE 29 OBTAINING OF PERMITS, LICENSES AND EASEMENTS

Permits, licenses, and certificates necessary for prosecution of work shall be secured and paid for by Contractor, unless otherwise specified. All such permits, licenses, and certificates shall be delivered to Architect before demand is made for the certificates of final payment. Contractor shall, and shall require subcontractors to, maintain Contractor's licenses in effect as required by law.

ARTICLE 30 ACCESS TO WORK

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

ARTICLE 31 SANITARY FACILITIES

If applicable, Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law.

ARTICLE 32 CLEANING UP

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

ARTICLE 33 GUARANTEE

A. In addition to guarantees required elsewhere, Contractor shall, and hereby does guarantee all work furnished on the job against all defects for a period of one (1) year after date of acceptance of work by District and shall repair or replace any and all such work, together with any other work, which may be displaced in so doing that may prove defective in workmanship and/or materials within one (1) year period from date of acceptance without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects to Contractor and Surety with reasonable promptness. Contractor shall notify District upon completion of such repairs or replacement.

B. Contractor Warrants that the WORK (which includes any equipment furnished by Contractor as a part of the materials) shall: (a) Be free from defects in workmanship and material; (b) Be free from defects in any design performed by Contractor; (c) Be new, and conform and perform to the requirements stated in the Specifications, and where detail requirements are not so stated, shall conform to applicable industry standards; and (d) Be suitable for the use stated in the Specifications.

C. The warranty period for discovery of DEFECTIVE WORK shall commence on the date stamped on the Notice of Completion verifying County registration and continue for the period set forth in the Specifications or for one year if not so specified. If, during the warranty period, the WORK is not available for use due to DEFECTIVE WORK, such time of unavailability shall not be counted as part of the warranty period. The warranty period for corrected DEFECTIVE WORK shall continue for a duration equivalent to the original warranty period.

ARTICLE 34 DUTY TO PROVIDE FIT WORKERS

A. Contractor and Subcontractors shall at all times enforce strict discipline and good order among their employees and shall not employ on any person not skilled in the work assigned to such person. It shall be the responsibility of Contractor to ensure compliance with this Article.

B. Any person in the employ of the Contractor or subcontractors whom District may deem unfit shall be excluded from the work site and shall not again be employed on it except with written consent of District. As used in this Article, "unfit" means any person who the District concludes is either not, or improperly, skilled for the task assigned to that person, who fails to comply with the requirements of this Article, or who creates safety hazards which jeopardize other persons and/or property.

C. Contractor shall take all reasonable steps necessary to insure that any employees of Contractor or any of its subcontractors employees do not use, consume, or work under the influence of any alcohol or illegal drugs while on the Project. Contractor shall further prevent any of its employees or its subcontractor employees from playing any recorded music devices or radios or wearing any radio headphone devices for entertainment while working on the Project. Likewise, Contractor shall preclude any of its employees or subcontractor's employees from bringing any animal onto the Project.

ARTICLE 35 FINGERPRINTING

If applicable, Contractor shall comply with all provisions of either Education Code section 45125.1 or 45125.2. Pursuant to Education Code section 45125.1, Contractor shall conduct criminal background checks of all employees of Contractor assigned to the District, and shall certify that no

employees who have been convicted of serious or violent felonies, as specified in Education Code section 45125.1, will have contact with pupils, by utilizing the certification set forth in the bid documents. As part of such certification, Contractor must provide the District with a list of all employees providing services pursuant to this Agreement, and designate which sites such employees will be assigned. In performing the services set forth in this Agreement, Contractor shall not utilize any employees who are not included on the above-referenced list. At District's sole discretion, District may make a finding, as authorized under Education Code section 45125.1, that Contractor's employees will have only "limited contact" with pupils. Contractor's failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at District's sole discretion, without any further compensation to Contractor.

Pursuant to Section 45125.2 Contractor shall ensure the safety of pupils by the installation of a physical barrier at the worksite and by continual supervision and monitoring of all these employees by an employee of Contractor whom the Department of Justice has ascertained has not been convicted of a serious or violent felony, as defined in Education Code section 45125.2 (c).

ARTICLE 36 WAGE RATES, TRAVEL AND SUBSISTENCE

A. **Wage Rates.** Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public works project is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations ("Director"). These rates are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

Any worker employed to perform work on the Project, but such work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

B. Holiday and Overtime Pay. Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half $(1\frac{1}{2})$ times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the contract documents or authorized by law.

C. **Wage Rates Not Affected by Subcontracts.** The Contractor shall pay and shall cause to be paid each worker engaged in the execution of the work on the Project not less than the general prevailing rate of per diem wages determined by the Director, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such workers.

D. **Per Diem Wages.** The Contractor shall pay and shall cause to be paid to each worker needed to execute the work on the Project per diem wages including employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

E. Forfeiture and Payments. Pursuant to Labor Code §1775, the Contractor shall forfeit to the District, not more than Two Hundred Dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any work done under the Agreement by the Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of: (1) whether the Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of the Contractor or Subcontractor; and (2) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations.

F. **Monitoring and Enforcement by Labor Commissioner**. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/Department of Labor Standards Enforcement (DLSE). The Contractor and all Subcontractors shall be required to furnish, at least monthly, certified payroll records directly to the Labor Commissioner in accordance with Labor Code section 1771.4. All payroll records shall be furnished in a format required by the Labor Commissioner. The Contractor and all Subcontractors must sign up for, and utilize, the Labor Commissioner's electronic certified payroll records submission system. The District will have direct and immediate access to all CPRs for the Project that are submitted through the Labor Commissioner's system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.

The Labor Commissioner and DLSE may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with Labor Code section 226, and conducting random in-person inspections of the Project site ("On-Site Visits"). On-Site Visits may include inspections of records, inspections of the work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the Labor Commissioner/DLSE to ensure compliance with prevailing wage requirements. The Labor Commissioner/DLSE shall have free access to any construction site or other place of labor and may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner/DLSE.

Any lawful activities conducted or any requests made by the Labor Commissioner/DLSE shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by the Contractor. Contractor and all Subcontractors shall cooperate and comply with any lawful requests by the Labor Commissioner/DLSE. The failure of the Labor Commissioner, DLSE, or any other entity related to the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.

Prior to commencing any work on the Project, the Contractor shall post the required notice/poster required under the California Code of Regulations and Labor Code section 1771.4 in both English and Spanish at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the Labor Commissioner's website.

ARTICLE 37 PAYROLL RECORDS

A. Pursuant to §1776 of the Labor Code, each Contractor and Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification and 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 him or her in connection with the Project.

B. All payroll records as specified in Labor Code §1776 of the Contractor and all Subcontractors of any tier shall be certified and furnished directly to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3) on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. Payroll records as specified in Labor Code §1776 shall be certified and submitted to the District with each application for payment. All payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of District, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations.

(3) A certified copy of all payroll records shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs of the preparation by the Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.

C. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division.

D. The Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within ten (10) days after receipt of a written request.

E. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329

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F. The Contractor shall inform the District of the location of all payroll records, including the street address, city and county, and shall, within five (5) working days, provide a notice of a change of location and address.

G. The Contractor or Subcontractor(s) shall have ten (10) days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Contractor or Subcontractor(s) fails to comply within the 10-day period, the Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit One Hundred Dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. The Contractor is not subject to a penalty due to the failure of a Subcontractor to comply with this section.

The responsibility for compliance with this Article shall rest upon the Contractor.

ARTICLE 38 WITHHOLDING OF CONTRACT PAYMENTS & PENALTIES

The District may withhold or delay contract payments to the Contractor and/or any Subcontractor if:

- (1) The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or
- (2) The Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or
- (3) The Contractor or Subcontractor(s) submit incomplete or inadequate payroll records; or
- (4) The Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or
- (5) The Contractor or Subcontractor(s) fail to comply with any applicable state laws governing labor on public works projects.

ARTICLE 39 APPRENTICES

A. **Apprentice Wages and Definitions.** All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the work of the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under

which he or she is training or in accordance with the rules and regulations of the California Apprenticeship Council.

B. Employment of Apprentices. Contractor agrees to comply with the requirements of Labor Code §1777.5. The Contractor awarded the Project, or any Subcontractor under him or her, in performing any of the work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5 and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the Contractor or Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor. The Contractor or Subcontractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

C. **Submission of Contract Information.** Prior to commencing work on the Project, the Contractor and Subcontractors shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contact, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District if requested. Within sixty (60) days after concluding work on the Project, the Contractor and Subcontractors shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

D. **Apprentice Fund.** The Contractor or any Subcontractor under him or her, who, in performing any of the work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. The Contractor and Subcontractors may take as a credit for payments to the Council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

E. **Prime Contractor Compliance.** The responsibility of compliance with this Article and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7.

ARTICLE 40 PROTECTION OF PERSONS AND PROPERTY

A. The Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and

work performed until completion and final acceptance by the District. All work shall be solely at the Contractor's risk, with the exception of damage to the work caused by "acts of God" as defined in Government Code section 4151(b). Contractor's liability for any injury or damage proximately caused by any "act of God" shall be limited to five (5) percent of the Contract price pursuant to Government Code section 4150.

Contractor shall take, and require subcontractor to take, all necessary precautions for the B. safety of workers on the work and shall comply with all applicable federal, state, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where work is being performed and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Contractor shall furnish, erect and properly maintain at all times, as directed by District or Architect or required by conditions and progress of work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public and shall post danger signs warning against hazards created by such features in the course of construction. Contractor shall designate a responsible member of its organization on the work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. Name and position of person so designated shall be reported to District by Contractor. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

C. In an emergency affecting safety of life, of work, or of adjoining property, Contractor, without special instruction or authorization from Architect or District, is hereby permitted to act, at its discretion, to prevent such threatened loss or injury; and Contractor shall so act if so authorized or instructed by Architect or District. District will not hold Contractor liable for damages proximately caused by Contractor's actions if such actions were reasonably necessary to prevent loss of life or injury to person or damage to work or adjoining property. Any compensation claimed by Contractor on account of emergency work shall be determined by agreement.

D. Contractor shall provide such heat, cooling, covering, and enclosures as are necessary to protect all work, materials, equipment, appliances, and tools against damage by weather conditions.

E. Contractor shall take adequate precautions to protect existing roads, sidewalks, curbs, pavements, utilities, adjoining property and structures (including, without limitation, protection from settlement or loss of lateral support), and to avoid damage thereto, and repair any damage thereto caused by construction operations. All permits, licenses, or inspection fees required for such repair work shall be obtained and paid for by Contractor.

F. Contractor shall (unless waived by the District in writing):

(1) When performing new construction on existing sites, become informed and take into specific account the maturity of the students on the site; and perform work which may interfere with school routine before or after school hours, enclose working area with a substantial barricade, and arrange work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities. The Contractor shall

comply with specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with school functioning.

(2) Provide substantial barricades around any shrubs or trees indicated to be preserved.

- (3) Deliver materials to building area over route designated by Architect of District.
- (4) Take preventive measures to eliminate objectionable dust.

(5) Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of Architect; and shall not interfere with the work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on construction site.

(6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Contractor.

ARTICLE 41 NON-DISCRIMINATION

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

ARTICLE 42 COST BREAKDOWN AND PERIODICAL ESTIMATES

A. If applicable, Contractor shall furnish on forms approved by District:

(1) Within ten (10) days of award of Contract a detailed estimate giving complete breakdown of Contract price for each Project or site; and (2) A periodical itemized estimate of work done for purpose of making partial payments thereon. (3) Within ten (10) days of request of District, a schedule of estimated monthly payments which shall be due Contractor under Contract.

B. Values employed in making up any of these schedules will be used only for determining basis of partial payments and will not be considered as fixing a basis for additions to or deductions from Contract price.

C. Contractor shall include in any breakdown or estimate the cost of final Project record documents, guarantees, warranties, O & M Manuals, photographs, etc.

ARTICLE 43 CONTRACTOR CLAIMS & DISPUTES

A. **Decision of Architect.** "Disputes" or "Claims" as defined in Article 44 between District and Contractor involving money or time, including those alleging an error or omission by the Architect shall be referred initially to the Architect for action as provided in Article 43.B within ten (10) days after Contractor's Article 46 request for change or extra work is denied. If there is a construction manager (CM), the CM shall receive the Dispute and may review and also assemble opinions and documents to assist the Architect. A decision by the Architect, as provided in Article 43.B, shall be required as a condition precedent to proceeding with remedies set forth in Article 44 as to all such matters arising prior to the date Retention Payment Application is due, regardless of whether such matters relate to execution and progress of the work, or the extent to which the work has reached Completion. The condition precedent of an Architect decision shall be waived if: (1) the position of Architect is vacant; (2) the Architect has failed to take action required under Article 43.E within the time periods required therein; or (3) the Dispute or Claim relates to a stop notice claim not arising from any extra Change Order/Construction Change Document or directive for which approval has not been provided.

B. Architect's Review. The Architect (and CM) will review the Dispute and take one or more of the following preliminary actions upon receipt of a Dispute: (1) request additional supporting data from the claimant; (2) submit a schedule to the parties indicating when the Architect expects to take action; (3) reject the Dispute in whole or in part, stating reasons for rejection; (4) recommend approval of the Dispute; or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety of the nature and amount of the Dispute. Architect review of Disputes and Claims shall be impartial and meant to resolve Disputes and Claims. Pursuant to the case, <u>Huber, Hunt & Nichols, Inc. v.</u> <u>Moore</u> (1977) 67 Cal.App.3d 278, the Architect is provided a quasi-judicial immunity for interpreting and deciding Disputes and Claims between the District and Contractor

C. **Documentation if Resolved.** If a Dispute has been resolved, the Architect (and/or CM) will prepare a Change Order or obtain appropriate documentation to document the terms for Board approval.

D. Actions if Not Resolved. If a Dispute has not been resolved pursuant to Article 43.B, the Contractor shall, within ten (10) days after the Architect's initial response, assemble all the documents involved in the Dispute including copies of all back-up documentation of costs and the basis for the Dispute and take one or more of the following actions: (1) modify the initial Dispute; (2) notify the Architect that the initial Dispute stands; or (3) supplement with additional supporting data and re-submit to the Architect under Article 43.B.

E. Architect's Written Decision. If a Dispute has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the Architect, the Architect (or Architect through CM) shall provide a written decision twenty (20) days after compliance with Article 43.D. Upon expiration of such time period, the Architect (or Architect through CM) will render to the parties its written decision relative to the Dispute, including any change in the Contract Sum or Contract Time or both. The Architect may also request reasonable additional time to complete Architect's written decision. If the resolution of the Dispute by the Architect is not satisfactory to the Contractor and copies of all back-up documentation of costs and the basis for the Dispute is fully articulated in a package of material that is complete, the Contractor may then submit a Claim to the District under Article 44.

F. **Continuing Contract Performance.** Pending final resolution of a Dispute or Claim, including, negotiation, mediation, arbitration, or litigation, the Contractor shall proceed diligently with

performance of the Contract, and the District shall continue to make any undisputed payments in accordance with the Contract (less any withholdings or offsets). If the Claim is not resolved, Contractor agrees it will neither rescind the Contract nor stop the progress of the work, but Contractor's sole remedy shall be to submit such controversy to determination by a court of competent jurisdiction in the county where the Project is located, after the Project has been completed, and not before.

G. **Claims for Extension of Time.** If Contractor and District cannot agree upon an extension of time, whether compensable or not, then Contractor must have first completed the procedures set forth in Article 50. Upon completion of the procedures set forth under Article 50, Contractor must then comply with the requirements in this Article including those set forth under Article 44.

ARTICLE 44 CLAIMS PROCEDURES & REQUIREMENTS

Pursuant to the remedies under Public Contract Code section 9201 and Government Code section 930.2, Contractor, through execution of this Agreement, also agrees to comply with the Claims requirements of this Article to quickly and efficiently resolve Disputes and Claims. Further, to provide a level of accuracy to the records submitted, the District shall have the right to audit books and records based on the actual costs incurred and to reduce the uncertainty in resolving Disputes and Claims with limited information.

A. **Procedures and Requirements Applicable to all Claims.**

(1) <u>Definition of Claim</u>: A "Claim" is where a Dispute between the parties rises to the level where backup documentation is assembled and provided to the District as a separate demand by the Contractor for: (a) a time extension, including, without limitation, for relief from damages or penalties for delay assessed by the District under the Contract; (b) payment by the District of money or damages arising from work done by, or on behalf of, the Contractor pursuant to the Contract and payment for which is not otherwise expressly provided for or to which the Contractor is not otherwise entitled to; or (3) an amount of payment disputed by the District.

(2) <u>Filing Claim is Not Basis To Discontinue Work</u>: The Contractor shall promptly comply with work under the Contract or work requested by the District even though a written Claim has been filed. The Contractor and the District shall make good faith efforts to resolve any and all Claims that may arise during the performance of the work covered by this Contract.

(3) <u>Claim Notification</u>: The Contractor shall within seven (7) calendar days after the written decision of the Architect, or if the time period for Architect's decision has passed under Article 43.E, submit a notification in writing sent by registered mail or certified mail with return receipt requested, with the District (and the District's CM) stating clearly the basis for the Claim and including all relevant and required documents. If the notification is not submitted within seven (7) days after the written decision of the Architect or the passage of time under Article 43.E, the Contractor shall be deemed to have waived all right to assert the Claim, and the Claim shall be denied. Claims submitted after the Retention Payment date shall also be considered null and void by the District. All Claims shall be reviewed pursuant to Articles 43.A through 43.E.

The Formal Notification of Claim must be presented as follows:

- a. The term "Claim" must be at the top of the page in no smaller than twenty (20) point writing.
- b. All documentation submitted pursuant to this Article to the Architect shall be submitted with the "Claim."
- c. A stack of documents, copy of all Project documents, or the submission of random documents shall not constitute an adequate reference to supporting documentation.
- d. Any additional or supporting documentation that Contractor believes is relevant should be submitted at this time.

(4) <u>Reasonable Documents to Support Claim</u>: The Contractor shall furnish reasonable documentation to support the Claim. The Contractor shall provide all written detailed documentation which supports the Claim, including but not limited to: arguments, justifications, cost, estimates, Schedule analysis and detailed documentation. The format of the required reasonable documentation to support the Claim shall include, without limitation:

- a. Cover letter.
- b. Summary of factual basis of Claim and amount of Claim.
- c. Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made.
- d. Documents relating to the Claim, including:
 - (i) Specifications sections in question.
 - (ii) Relevant portions of the plans/drawings.
 - (iii) Applicable Clarifications (RFI's).
 - (iv) Other relevant information, including responses that were received.
 - (v) Contractor Analysis of Claim merit including Contractor's analysis of any Subcontractor Claims that are being passed through, any analysis performed by outside consultants, and any legal analysis that Contractor deems relevant.
 - (vi) Break down of all costs associated with the Claim. For Claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path in conformance with the requirements of Article 50 shall be included along with a chronology of events and related correspondence.
 - (vii) Applicable daily reports and logs. If the daily reports or logs are not available, lost or destroyed, there shall be a presumption that the lost documentation was unfavorable to the Contractor. See California Civil Jury Instruction 204.
 - (viii) For Claims involving overhead, cost escalation, acceleration, disruption or increased costs, a full version of job costs reports organized by category of work or Schedule of Values with budget information tracked against actual costs. Any and all supporting back-up data, including the original bid (and associated original unaltered metadata). The metadata and bid

information shall be provided confidentially and subject to a protective order to prevent dissemination to other contractors or to the public. However, the bid documentation should remain intact and available for review and inspection in case of this type of increased cost Claim. This data on the bid shall be made available to any District attorneys or experts and shall also be utilized as evidence for any legal proceedings. If the bid documentation is not available, lost or destroyed, there shall be a presumption that the lost bid documentation was unfavorable to the Contractor. See California Civil Jury Instruction 204.

(6) <u>Certification</u>: The Contractor (and Subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:

- a. That the Contractor has reviewed the Claim and that such Claim is made in good faith;
- b. Supporting data are accurate and complete to the best of the Contractor's knowledge and belief;
- c. The amount requested accurately reflects the amount of compensation for which the Contractor believes the District is liable; and
- d. That the Contractor is familiar with Government Code section 12650 *et seq.* and Penal Code section 72, and that false claims can lead to substantial fines and/or imprisonment.

(7) <u>Signature of Certification</u>: If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

(8) Upon receipt of a Claim and all supporting documents as required above, the District shall conduct a reasonable review of the Claim and, within a period not to exceed forty five (45) days, shall provide the Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Upon receipt of a Claim, the District and Contractor may, by mutual agreement, extend the time period provided in this paragraph.

(9) If the District needs approval from its governing Board to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim, and the governing Board does not meet within the forty five (45) days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the District shall have up to three days following the next duly publicly noticed meeting of the governing Board after the forty five (45) day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

(10) 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. If the District fails to issue a written statement, paragraph 11 below shall apply.

(11) If the Contractor disputes the District's written response, or if the District fails to respond to a Claim issued pursuant to this Article within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the District shall schedule a meet and confer conference within thirty (30) days for settlement of the Claim.

Within ten (10) business days following the conclusion of the meet and confer (12)conference, if the Claim or any portion of the Claim remains in dispute, the District shall provide the Contractor 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 Contractor in writing, shall be submitted to nonbinding mediation, with the District and the Contractor sharing the associated costs equally. The District and Contractor 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. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to applicable procedures in Article 44.D.

(13) For purposes of this Article, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(14) Unless otherwise agreed to by the District and the Contractor in writing, the mediation conducted pursuant to this Article shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(15) This Claims process does not preclude the District from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this Article does not resolve the parties' Claim. This Claims process does not preclude the District from submitting individual Disputes or Claims to binding arbitration pursuant to Article 44.C below.

(16) Failure by the District to respond to a Claim from the Contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this Article shall result in the Claim being deemed rejected in its entirety. A Claim that is denied by reason of the District's failure to have responded to a Claim, or its failure to otherwise meet the time requirements of this Article, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Contractor.

(17) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a Claim against a District because privity of contract does not exist, the Contractor may

present to the District a Claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Contractor present 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 presented to the District shall furnish reasonable documentation to support the Claim. Within forty five (45) days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented the Claim to the District and, if the Contractor did not present the Claim, provide the subcontractor with a statement of the reasons for not having done so.

(18) Upon receipt of a Claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable.

(19) The Contractor's Claim shall be denied if it fails to follow the requirements of this Article

(20) Within thirty (30) days of receipt of the Claim and the information under this Article, the District may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim which the District may assert. If additional documents are required, the time in which the Claim is evaluated may be extended by a reasonable time so the Claim and additional documents may be reviewed.

B. **Claims Procedures in Addition to Government Code Claim.** Nothing in the Disputes and Claims procedures set forth in Articles 43 and 44 or other provisions in the General Conditions shall act to waive or relieve the Contractor from meeting the requirements set forth in Government Code section 900 *et seq*.

C. **Binding Arbitration of Individual Claim Issues.** At the District's sole option, the District may submit individual disputes, or claims, to binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized, such resolution is a full and final resolution of the particular claim or dispute. Under no circumstances may the Contractor stop work, rescind its contract or otherwise slow the progress of work during resolution of individual claims in binding Arbitration. This individual dispute arbitration process is not an arbitration clause and shall not be construed as an agreement to arbitrate. This individual disputes arbitration process is for the sole purpose of streamlining and resolving disputes or claims during construction and shall be requested on specific individual items by the District prior to Completion of the Project.

D. **Resolution of Disputes in Court of Competent Jurisdiction.** If Claims are not resolved under the procedure set forth and pursuant to Articles 43 and 44, such Claim or controversy shall be submitted to a court in the county of competent jurisdiction after the Project has been completed, and not before.

E. **Warranties, Guarantees and Obligations.** The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon Contractor by the General Conditions and amendments thereto; and all of the rights and remedies available to District and Architect thereunder, are in addition to, and are not to be construed in any way as a limitation of, any

Generator Infrastructure Project Thermalito Union Elementary School District General Conditions Page 94 rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this Article will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

ARTICLE 45 PAYMENTS TO CONTRACTOR

A. Unless otherwise specified, each month within thirty (30) days after approval of the Request for Payment, Contractor shall be paid a sum equal to ninety-five (95) percent of the value of the work performed (as certified by Architect and Inspector and verified by Contractor) up to the last day of the previous month, less the aggregate of previous payments. The value of the work completed shall be the Contractor's best estimate. Work completed as estimated shall be an approximation or estimate only and no mistake, inaccuracy, error or falsification in said any approved estimate shall operate to release the Contractor, or any surety upon any bond, from damages arising from such work, or from the District's enforcement of each and every provision of this Contract including but not limited to the Performance Bond and Payment Bond. The District shall have the right to subsequently to correct any mistake, inaccuracy, error or falsification made or otherwise set forth in any approved Request for Payment and such correction may occur in any future Payment Application or in the final payment to the Contractor. No Surety upon any bond shall be relieved, released or exonerated of its obligations under this Contract or any applicable bond when the District is unable to correct an overpayment to the Contractor due to any abandonment by the Contractor or termination by the District.

B. Before payment is made hereunder, the District will review the request for progress payment with District and Inspector for verification that the work for which payment is requested has been performed in accordance with the Terms of the Contract.

C. District and Inspector shall sign the request for payment as verification that the work has been performed. It is understood moreover, that signature of the Inspector and Architect shall not be conclusive upon District, but merely advisory.

D. Upon request by the District, Contractor shall provide lien releases or partial lien releases for payments previously made. Contractor shall not be entitled to any payment for WORK performed if Contractor has not complied with any lawful direction from the District or has failed to provide lien releases as requested.

E. Prior to final payment, Contractor and each Subcontractor shall certify that the Project does not contain any asbestos containing materials.

F. After completion of the WORK, Contractor shall make a demand for final payment. The demand for final payment shall identify all disputed and undisputed amounts due under the CONTACT and, all claims for compensation under or arising out of this CONTRACT. The Contractor's negotiation of the payment of the final amount shall constitute a waiver of all amounts due under the CONTRACT and all claims against District under or arising out of this CONTRACT except those identified by Contractor in writing, and unsettled before Contractor's negotiation of final payment. The final payment, if unencumbered, shall be made thirty-five (35) calendar days after recordation of the Notice of Completion by the County Registrar. Acceptance will be made only by ACTION OF THE GOVERNING BOARD.

G. In accordance with Public Contract Code section 7100, payments by the District to the Contractor for any and all undisputed amounts is contingent upon the Contractor furnishing the District with a release of all claims against the District related to such undisputed amounts. Disputed contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the release. If, however, the Contractor specifically excludes any claims, the Contractor shall provide details such as a specific number of disputed days or costs of any such exclusion in accordance with Articles 44 and 46.

H. No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the WORK.

ARTICLE 46 CHANGES AND EXTRA WORK

A. District may, as provided by law and without affecting the validity of this Contract, order changes, modifications, deletions and extra work by issuance of written Change Orders/Construction Change Documents from time to time during the progress of the Project, Contract sum being adjusted accordingly. All such work shall be executed under conditions of original Contract except that any claim for an extension of time caused thereby shall be adjusted at time of ordering such change.

B. In giving instructions, Architect shall have authority to make minor changes in work, not involving change in cost, and not inconsistent with purposes of the building. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from District, authorized by action of the Governing Board and no claim for addition to Contract sum shall be valid unless so ordered.

C. The following format shall be used as applicable by the District and the Contractor to communicate proposed additions and deductions to the Contract:

		<u>EXTRA</u>	<u>CREDIT</u>
(a)	Material (attach itemized quantity and unit cost plus sales tax)		
(b)	Labor Not to Exceed Applicable Prevailing Wage Rates (attach itemized hours and rates)		
(c)	Equipment (attach invoices)		
(d)	Subtotal		
(e)	If Subcontractor performed work, add Subcontractor's overhead and profit to portions performed by Sub-contractor, not to exceed fifteen percent (15%) of item (d).		
(f)	Subtotal		
(g)	Contractor's Overhead and Profit: Not to exceed ten (10) percent of Item (d) if Contractor performed the work. No more than five (5) of Item (d) if Subcontractor performed the work. If work was performed		

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	by Contractor and Subcontractors, portions performed by Contractor shall not exceed ten (10) of Item (d), and portions performed by Subcontractor shall not exceed ten (10) of Item (d)	<u>EXTRA</u>	<u>CREDIT</u>
(h)	Subtotal		
(i)	Bond not to exceed one (1) percent of Item (h)		
(j)	TOTAL		
(k)	Time/Days		

D. If the Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligates the District to pay additional compensation to the Contractor or to grant an extension of time for the compensation of the Contract, or constitutes a waiver of any provision in the Contract, Contractor shall notify the District, in writing, of such claim within ten (10) calendar days from the date Contractor has actual or constructive notice of the factual basis supporting the claim. The Contractor's failure to notify the District within such ten (10) calendars day period shall be deemed a waiver and relinquishment of such a claim against the District. If such notice be given within the specified time, the procedure for its consideration shall be as stated above in this Article.

E. If Contractor does not remove such work within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal within ten (10) calendar days time thereafter, District may, upon ten (10) calendar days written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

ARTICLE 47 COMPLETION

A. The Project will be considered complete when all required contract work is completed, all punch list items have been completed and a Notice of Completion has been recorded for the Project. The work may only be accepted as complete by action of the Governing Board.

ARTICLE 48 ADJUSTMENTS TO CONTRACT PRICE

A. If Contractor defaults or neglects to carry out the work in accordance with the contract documents or fails to perform any provision thereof, District may, after ten (10) days written notice to Contractor and without prejudice to any other remedy it may have, make good such deficiencies.

B. District shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct work injured or not done in accordance with Contract provisions, an equitable reduction in Contract price shall be made therefore.

ARTICLE 49 CORRECTION OF WORK

A. Should it be considered necessary or advisable by the District at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the same, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of the Contractor or his subcontractor, he shall defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and material necessarily involved in the examination and replacement shall be allowed the Contractor.

B. Contractor shall promptly remove from premises all work identified by District as failing to conform to Contract, whether incorporated or not. Contractor shall promptly replace and re-execute its own work to comply with entrant documents without additional expense to District and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

C. If Contractor does not remove such work within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal within ten (10) days' time thereafter, District may, upon ten (10) days' written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

ARTICLE 50 EXTENSION OF TIME - LIQUIDATED DAMAGES

A. The Contractor and District hereby agree that the exact amount of damages for failure to complete the work within the time specified is extremely difficult or impossible to determine. It is expressly understood that time is of the essence and that the Contractor must complete the Project within the Contract Time specified in the Agreement. Contractor shall be assessed the sum (set forth in the Agreement Form) per day as liquidated damages for each and every day the work required under this contract remains unfinished past the time for completion, as set forth in the Agreement, and any extensions of time granted by the District to the Contractor under the terms of the contract documents and pursuant to Section 53069.85 of the Government Code. For purposes of this Article, the work shall be considered "complete" in accordance with the provisions of Article 47, "COMPLETION", except that the work may be considered complete without formal acceptance by the Governing Board so long as the board, at its next regularly scheduled meeting, accepts the work.

B. Contractor shall not be charged for liquidated damages, as set forth above, because of any delays in completion of work which are not the fault or negligence of Contractor, including but not restricted to: acts of God as defined in Public Contract Code section 7105, acts of public enemy, fires, floods, epidemics and quarantine restrictions. Contractor shall, within ten (10) calendar days of beginning of any such delay (unless District grants in writing a further period of time to file such notice prior to date of final settlement of the Contract), notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay and grant extension of time for completing work when, in its judgment, the findings of fact justify such an extension. The District's finding of fact thereon shall be final and conclusive on the parties hereto. Extensions of time shall apply only to that portion of work affected by delay, and shall not apply to other portions of work not so affected.

ARTICLE 51 PAYMENTS WITHHELD

A. In addition to amount which District may retain under Article 47 entitled "COMPLETION" and Article 45 entitled "PAYMENTS TO CONTRACTOR", District may withhold a sufficient amount or amounts of any payment or payments otherwise due to Contractor, as in its judgment may be necessary to cover:

- (1) Payments which may be past due and payable for just claims against Contractor or any subcontractors, or against and about the performance of work on the Project under this Contract, including, without limitation, payments made pursuant to the Article 45 entitled "PAYMENTS BY CONTRACTOR";
- (2) The cost of defective work which Contractor has not remedied;
- (3) Liquidated damages assessed against Contractor;
- (4) Penalties for violation of labor laws;
- (5) The cost of materials ordered by the District pursuant to the Article 28 entitled "MATERIALS AND WORK";
- (6) The cost of completion of this Contract if there is reasonable doubt that this Contract can be completed for the balance then unpaid to Contractor;
- (7) Site clean-up as provided in Article 32 entitled "CLEANING UP";
- (8) Amount necessary to satisfy any and all liens against District. Contractor shall provide release of all liens prior to final payment;
- (9) Damages to another Contractor;
- (10) Payments to indemnify, defend, or hold harmless the District;
- (11) Any payments due to the District including but not limited to payments for failed tests, utilities or imperfections; or
- (12) Inspector sign-off of each item in the DSA 152 Project Inspection Card.

B. If the Contractor, at its own expense, removes the reason for withholding, then payment shall be made for amount withheld.

C. District may apply such withheld amount or amounts to payment of such claims or obligations at its discretion. In so doing, District shall make such payments on behalf of Contractor. If any payment is so made by District, then such amount shall be considered as a payment made under Contract by District to Contractor and District shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligation. District will render Contractor an accounting of such funds disbursed on behalf of Contractor.

D. As an alternative to payment of such claims or obligations, District, in its sole discretion, may reduce the total Contract price as provided in Article 48 entitled "ADJUSTMENTS TO CONTRACT PRICE."

E. Payment by the District shall be without prejudice to any other action by the District to recover damages.

ARTICLE 52 EXCISE TAXES

If under Federal Excise Tax Law any transaction hereunder constitutes a sale on which a Federal Excise Tax is imposed and the sale is exempt from such Federal Excise Tax because it is a sale to a State or Local Government for its exclusive use, District, upon request, will execute documents necessary to

show (1) that District is a political subdivision of the State for the purposes of such exemption and (2) that the sale is for the exclusive use of District. No Federal Excise Tax for such materials shall be included in any bid price.

ARTICLE 53 TAXES

Bid price is to include any and all applicable sales taxes or other taxes that may be due in accordance with Section 7051 of the Revenue and Taxation Code; Regulation 1521 of the State Board of Equalization or any other tax codes that may be applicable.

ARTICLE 54 NO ASSIGNMENT

Contractor shall not assign this Contract or any part thereof.

ARTICLE 55 NOTICE AND SERVICE THEREOF

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

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

ARTICLE 56 NO WAIVER

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

ARTICLE 57 HAZARDOUS MATERIALS

In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) which has not been rendered harmless, the Contractor shall immediately stop work in the area affected and report the condition to the District and Architect in writing. The work in the affected area shall not thereafter be resumed except by written agreement of the District and Contractor if in fact the material is asbestos or PCB and has not been rendered harmless. The work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB), or when it

Generator Infrastructure Project Thermalito Union Elementary School District General Conditions Page 100 has been rendered harmless, by written agreement of the District and Contractor, or in accordance with final determination by the Architect.

ARTICLE 58 DISTRICT'S RIGHT TO CARRY OUT THE WORK

If Contractor defaults or neglects to carry out the work in accordance with the contract documents or fails to perform any provision of this Contract, the District may, after ten (10) calendar days' written notice to Contractor and without prejudice to any other remedy he may have, made good such deficiencies. In such case an appropriate Change Order/Construction Change Document shall be issued deducting from the payments then or thereafter due Contractor the cost of correcting such deficiencies, including the cost of the Architect's additional service made necessary by such default, neglect or failure. If the payments then or thereafter due Contractor are not sufficient to cover such amount, then Contractor shall pay the difference to the District within ten (10) calendar days.

ARTICLE 59 INDEMNIFICATION

See Article 5 of the Agreement Form.

ARTICLE 60 NON-UTILIZATION OF ASBESTOS MATERIAL

NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE USED IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one (1) percent asbestos shall be defined as asbestos-containing material. All work or materials found to contain asbestos or work or material installed with asbestos-containing equipment will be immediately rejected and this work will be removed at no additional cost to the District.

ARTICLE 61 LIEN RELEASES

Contractor shall, at its own cost, defend, indemnify and hold harmless the District, its officers, agents, employees, assigns, and successors in interest, from and against any and all liability, damages, losses, claims, demands, actions, causes of action, and costs including attorney's fees and expenses, or any of them, arising from or attributable to a lien or stop notice filed and/or served in connection with the work.

SUPPLEMENTARY GENERAL CONDITIONS

(ATTACHED)

Generator Infrastructure Project Thermalito Union Elementary School District Supplementary General Conditions Page 102

Scope of Work

Project # TUESD22-001

The scope of work for the Thermalito Unified School Generator projects consists of providing associated docking stations for portable generators at Sierra Avenue Elementary School, Poplar Avenue Elementary School, Plumas Avenue Elementary School, and Nelson Avenue Middle School.

The mobile generators docking stations shall be equipped with a circuit breaker, a kirkkey interlock system intertwined with the main switchboard main breaker, and cam lock receptacles for the mobile generator connections. New conduit and conductors shall be provided from the main switchboard to the docking stations and routed as required per electrical drawings. See Electrical drawings for specific details pertaining to each school.

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CATIONS



OR SPECIFICATIONS

CTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL OF THE THIS SECTION. NT CONTAINED HEREIN.

PONSIBILITY FOR THE COMPLETE OPERATING SYSTEM.

ECIFIED, THE APPLICABLE RULES, REGULATIONS, AND WING ORGANIZATIONS SHALL BE CONSIDERED AS

- ratories (3UL).
- CODE (NEC).
- CTION ASSOCIATION (NFPA).
- AL AND ELECTRONICS ENGINEERS (IEEE). ICAL MANUFACTURERS ASSOCIATION (NEMA).
- . STANDARDS INSTITUTE (ANSI)
- FACTURERS ASSOCIATION (DEMA).
- on engine institute.
- OF MECHANICAL ENGINEERS (ASME). CONTRACTOR'S ASSOCIATION (NECA).

RATOR SETS SHALL BE THE STANDARD OF THE AS NOTED. THE ENGINE GENERATOR UNIT SHALL CONSIST INECTED TO AN ALTERNATING CURRENT GENERATOR WITH SYSTEM MOUNTED ON A STEEL SUB-BASE AND PROVIDED CESSORIES AND ANCILLARY SYSTEMS RESULTING IN A IED, TRAILER-MOUNTED UNIT.

INT SPECIFIED IN THIS SECTION SHALL BE PRODUCTS OF:

- BE CAPABLE OF CONTINUOUS OPERATION AT RATED RATION OF ANY INTERRUPTION OR OUTAGE OF THE THE GENERATOR SET SHALL BE RATED AS FOLLOWS:
- ARDS OF THE VARIOUS MANUFACTURERS, EXCEPT WHERE EQUIREMENTS OF THESE SPECIFICATIONS. PROVIDE ALL PARTS FOR THE SPECIFIED DUTY.
- R WITH CLEANABLE PARTICLE TRAP AND SERVICE
- R WITH EXTERNAL DISCHARGE.
- FII TFR FII TER
- MUM) FULL LOAD FUEL TANK CONTAINED WITHIN GENSET

- 7. FAN (BLOWER TYPE) WITH FAN DRIVE.
- 8. ENGINE COOLANT WATER PUMP. ELECTRIC STARTING MOTOR, 24 OR 12 VOLT D.C., WITH SAFETY CIRCUIT (WILL
- NOT REENGAGE IF ENGINE IS RUNNING).
- 10. BATTERY CHARGING GENERATOR.
- 11. GLOW PLUGS.

2.4 CONDUCTORS

- 2.5 CONTROL PANEL A. PROVIDE A GENERATOR-SET CONTROL PANEL MOUNTED ON THE GENERATOR AND EQUIPPED WITH THE FOLLOWING:
 - 1. VOLTMETER, 2.5 PERCENT MINIMUM ACCURACY. 2. AC VOLTMETER CHANGE OVER SWITCH: FOUR POSITION SWITCH TO VERIFY OUTPUT VOLTAGE BETWEEN PHASES.
 - 3. AMMETER: WITH AN ACCURACY OF 2.5% OF FULL SCALE. 4. AC AMMETER CHANGE OVER SWITCH : FOUR POSITION SWITCH TO VERIFY
 - CURRENT OF EACH PHASE. 5. AVAILABLE SELECTABLE VOLTAGES: 3-PHASE: 120/208V.
 - PILOT LAMP FOR AC POWER
 - FREQUENCY METER: 1% ACCURACY,
 - 8. ELAPSED TIME METER.
 - 9. ENGINE TACHOMETER. 10. ENGINE COOLANT TEMPERATURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL AND ABNORMAL CONDITIONS.
 - 11. ENGINE OIL PRESSURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL AND ABNORMAL CONDITIONS. 12. CHARGING AMMETER FOR CHARGING GENERATOR.
 - 13. KEY OPERATED PRE-HEAT, OFF, RUN, START SWITCH.
 - 14. TWO STAGE THROTTLE CONTROL RUN AND IDLE POSITIONS.
 - 15. AUTOMATIC SHUTDOWNS WITH FAULT INDICATION LIGHTS FOR HIGH WATER TEMPERATURE, LOW OIL PRESSURE, GLOW PLUG INDICATOR. 16. PANEL LIGHT WITH SWITCH.
- 2.6 GENERATOR OUTPUT CIRCUIT BREAKER
- A. MAIN LINE MOLDED CASE THERMAL MAGNETIC CIRCUIT BREAKER WITH A SHUNT TRIP SHALL BE MOUNTED TO ALLOW OPERATION FROM OUTSIDE THE CONTROL PANEL. PROVIDE A CURRENT SENSING RELAY THAT IS SET TO ADEQUATELY PROTECT THE GENERATOR.
- 2.7 GOVERNOR
- A. GOVERNING SYSTEM SHALL BE SUITABLE FOR CONTROLLING THE SPEED OF THE GENERATOR SET WITHIN THE REQUIREMENTS SPECIFIED WITHOUT THE INTERMEDIATE ADJUSTMENT AND SHALL MAINTAIN THE SPECIFIED STABILITY WITHOUT HUNTING OR CYCLING.
- 2.8 OUTPUT TERMINALS: A. THE MAIN GENERATOR OUTPUT TERMINALS WILL BE LOCATED WITHIN THE GENSET ENCLOSURE. POSITIONING SHOULD PROVIDE BOTH EASY ACCESSIBILITY FOR WIRING AND A CABLE ENTRANCE SO WIRING CAN RUN FROM THE CONNECTED LOAD TO THE OUTPUT TERMINALS WITH ALL GENSET ENCLOSURE DOORS LOCKED.
- 2.9 COOLING SYSTEM
- A. THE RADIATOR FAN SHALL DIRECT THE AIR FLOW FROM THE ENGINE OUTWARD THROUGH THE RADIATOR, WITH VERTICAL AIR DISCHARGE. THE FAN SHALL BE DRIVE 2.14 RECEPTACLE ENCLOSURE DIRECTLY FROM THE ENGINE CRANKSHAFT OR THROUGH V-BELT DRIVE. THE RADIATOR SHALL HAVE SUFFICIENT CAPACITY TO DISSIPATE NOT LESS THAN THE TOTAL BTU PER HOUR REJECTED BY THE ENGINE TO THE COOLING SYSTEM AT 110% RATED LOAD IN 104F AMBIENT, AND AGAINST A STATIC RESTRICTION OF 0.5 INCHES OF WATER AS MAYBE IMPOSED BY ENCLOSURE. THE RADIATOR SHALL BE PROTECTED BY A STRONG GRILL
- B. THE RADIATOR SHALL BE PROVIDED WITH COOLANT RESERVE TANK WHICH IS CAPABLE OF COOLANT LEVEL CHECKING.
- 2. (2) NEMA 5-20R, 120V RECEPTACLES 3. RECEPTACLES SHALL BE CLAMP COVER, RAINTIGHT. 5. MANUFACTURERS: a. CROUSE-HINDS b. APPLETON.

2.10 BATTERIES

2.11 EXHAUST SYSTEM

2.12 ENCLOSURE

OF 100 AMP-HOUR RATED.

THE EXHAUST SYSTEM.

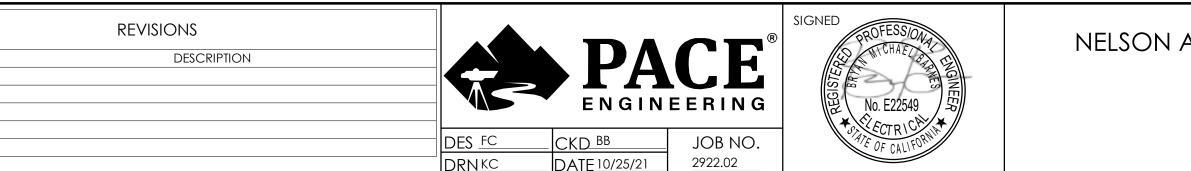
DBA AT 50 FEET (FULL LOAD)

LUBRICATING OIL, AND FUEL.

DOOR IS LOCKED.

2.13 VIBRATION ISOLATORS

c. OR EQUAL.



A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC APPROVAL OF THE ENGINEER. FOLLOWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW

A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH. UPON COMPLETION OF WORK, REMOVE MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM THE INTERIOR AND EXTERIOR OF ALL DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO

A. UNLESS OTHERWISE SPECIFIED OR INDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS

3.4 CUTTING AND PATCHING

- A. CONDUIT AND TUBING SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS.
- C. FOLLOW STRUCTURAL SURFACE CONTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO . INSTALL WATERTIGHT FITTINGS IN OUTDOOR, UNDERGROUND, OR WET LOCATIONS.
- INSTALL CONCEALED, EMBEDDED, AND BURIED RACEWAYS SO THAT THEY EMERGE AT RIGHT ANGLES
- C. FIRE-RATED WALLS, FLOORS, OR CEILINGS: FIRE-STOP OPENINGS AROUND PENETRATIONS TO
- D. CONCRETE WALLS, FLOORS, OR CEILINGS (ABOVEGROUND): PROVIDE NONSHRINK GROUT DRY-
- 1. SEAL RACEWAY AT THE FIRST BOX WITH CONDUIT SEALING BUSHING TO PREVENT THE ENTRANCE
- A. SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, AND IN ANY CASE NOT EXCEEDING 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR
- B. WALL BRACKETS AND ASSOCIATED HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE STAINLESS STEEL. PROVIDE GALVANIZED STEEL AT ALL OTHER LOCATIONS. STRAP HANGERS AND C. PROVIDE AND ATTACH WALL BRACKETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS:
- 3. CONCRETE OR BRICK: EXPANSION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER
- A. INSTALL CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE. B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY OR BENDING MACHINE. DO NOT HEAT METAL RACEWAYS TO FACILITATE BENDING.
- 2. 90° BENDS: PROVIDE GALVANIZED RIGID STEEL ELBOWS; EXCEPT ON UTILITY SERVICE RUNS IF NOT
- PROVIDE MANUFACTURER RECOMMENDED SOLVENT; APPLY TO ALL JOINTS.

FOR ENGINE-RADIATED HEAT. SUBMIT STANDARD PUBLISHED CURVES SHOWING

C. BELLED END CONDUIT: BEVEL THE UNBELLED END OF THE JOINT PRIOR TO JOINING.

- GALVANIZED RIGID STEEL CONDUIT: a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
- INSTALL GROUNDING BUSHING. c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR
- GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE
- d. INSTALL INSULATED BUSHING ON ENDS OF CONDUIT WHERE GROUNDING IS NOT REQUIRED. e. PROVIDE INSULATED THROAT WHEN CONDUIT TERMINATES IN SHEET METAL BOXES HAVING THREADED HUBS.
- 3.13 CONDUCTORS A. DO NOT SPLICE INCOMING SERVICE CONDUCTORS AND BRANCH POWER DISTRIBUTION CONDUCTORS NO. 6 AWG AND LARGER UNLESS SPECIFICALLY INDICATED OR APPROVED BY ENGINEER
- B. CONNECTIONS AND TERMINATIONS: 1. INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG 2. INSTALL UNINSULATED, BOLTED, TWO-WAY CONNECTORS AND TERMINATORS FOR CIRCUIT
- CONDUCTORS NO. 4/0 AWG AND LARGER.
- 3. TAPE INSULATE ALL UNINSULATED CONNECTIONS. 4. PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER.
- COMPRESSION LUGS: a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE. b. TOOL SHALL PROVIDE COMPLETE, CONTROLLED CRIMP AND SHALL NOT RELEASE UNTIL CRIMP IS COMPLETE.
- c. DO NOT USE PLIER TYPE CRIMPERS. C. SPLICES AND TERMINATIONS:
- INDOORS: USE GENERAL PURPOSE, FLAME RETARDANT TAPE. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.
- D. CABINETS AND PANELS: . REMOVE SURPLUS WIRE, BRIDLE AND SECURE. WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING MATERIAL TO PROTECT THE CONDUCTORS.
- 3.14 GROUNDING A. UNLESS OTHERWISE INDICATED, GROUND ALL EXPOSED NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, AND THE NEUTRAL OF ALL WIRING SYSTEMS IN ACCORDANCE WITH THE CEC, STATE, AND OTHER APPLICABLE LAWS AND REGULATIONS.
- 3.15 OPERATIONAL READINESS TEST (ORT) A. TESTING, TEST PLANS, AND TEST REPORTS SHALL BE PROVIDED BY THE CONTRACTOR AS SPECIFIED HEREIN. THE CONTRACTOR SHALL PROVIDE LABOR, INSTRUMENTS, AND OTHER MATERIAL TO COMPLETE THE TEST
- B. THE ENTIRE INSTALLED ELECTRICAL SYSTEM SHALL BE CERTIFIED (INSPECTED, TESTED, AND DOCUMENTED) THAT IT IS READY FOR OPERATION. THE OBJECTIVE OF THIS TEST IS TO DEMONSTRATE THAT THE ELECTRICAL SYSTEM IS COMPLETE AND READY FOR USE. 1. GROUNDING SYSTEM:
- a. VERIFY GROUND SYSTEM IS IN COMPLIANCE WITH THE PLANS. C. PANELBOARD DIRECTORIES SHALL MEET MINIMUM CEC 408.4 REQUIREMENTS. THE CONTRACTOR
- SHALL IDENTIFY EACH CIRCUIT WITH ROOM NUMBER, ROOM NAME AND EQUIPMENT SERVED. STANDARD ABBREVIATIONS FROM THE NEC AND WEBSTER'S DICTIONARY ARE ALLOWED. (E.G., "207 JANITOR WH" OR "102,103 RR RCPT".
- D. LABELS SHALL BE MELAMINE, FLEXI-BRASS, OR EQUAL MATERIAL, 1.5"HX3"L, WITH 3/8"H TIMES NEW ROMAN LETTERING 1. BACKGROUND/LETTERING COLOR SHALL BE AS FOLLOWS: a. BLACK/WHITE (NORMAL BRANCHES)
- 2. EQUIPMENT LABELING (FOR ALL PROJECT TYPES) SHALL FOLLOW AFTER THE EXAMPLES SHOWN BELOW (FOR GENERATOR/ATS, PANELBOARDS, DISCONNECTS, LIGHTING CONTROL PANELS, ETC.): **DISCONNECT B1** PANEL A2 FED FROM PNI B1 FED FROM PNI M 60A/15F, 208V/3Ø
 - 400A, 120/208V, 3Ø

C. FILLER CAPS SHALL BE DESIGNED FOR PRESSURE RELIEF PRIOR TO REMOVAL. A THERMOSTATIC CONTROL VALVE SHALL BE INSTALLED IN THE JACKET WATER SYSTEM OF THE ENGINE TO MAINTAIN THE WATER SYSTEM TEMPERATURE OF THE ENGINE. THE THERMOSTATIC VALVE SHALL BE STANDARD MODULATING TYPE UTILIZING SELF-CONTAINED THERMOSTATS. THE VALVE SHALL BE CAPABLE OF PASSING THE WATER 2.16 GENERATOR TRAILER FLOW AS DETERMINED BY THE MANUFACTURER WITHOUT EXCESSIVE PRESSURE DROP ACROSS THE VALVE. THE THERMOSTATIC ELEMENTS SHALL BE NON-ADJUSTABLE TYPI AND THE OPERATING TEMPERATURE SHALL BE SET AT THE TEMPERATURE RECOMMENDED BY THE ENGINE MANUFACTURER. THE RADIATOR WILL BE SIZED TO INCLUDE A 50% SOLUTION OF ETHYLENE GLYCOL AND A COMPENSATION FACTOR

ATTITUDE AND AMBIENT TEMPERATURE DERATING. A. THE ENGINE CRANKING BATTERY SHALL BE SAE TYPE D, DIESEL ENGINE STARTING TYPE, AND OF SUFFICIENT SIZE AND CAPACITY IN A FULLY CHARGED CONDITION TO START THE ENGINE-GENERATOR SET SIX CONSECUTIVE TIMES. BATTERIES SHALL BE MINIMUM

- A. EXHAUST SILENCER: PROVIDE AND MOUNT A CRITICAL-TYPE EXHAUST SILENCER, MOUNTED WITHIN ENCLOSURE AND INSULATED AS REQUIRED TO MAINTAIN TEMPERATURE RISE WITHIN ENCLOSURE TO 15F.
- B. PROVIDE AND MOUNT AN EXHAUST FLEX CONNECTOR TO ALLOW FOR VIBRATION IN
- C. PROVIDE AND MOUNT A RAIN CAP ON THE EXHAUST OUTLET OR OTHER DEVICE TO PREVENT ENTRY OF RAIN INTO MUFFLER.
- A. THE COMPLETE ENGINE-GENERATOR SET AND ALL COMPONENTS WILL BE MOUNTED IN A WEATHERPROOF, COMPLETELY LOCKABLE ENCLOSURE DESIGNED SO THE UNIT CAN OPERATE WITH ALL DOORS CLOSED AT FULL LOAD WITHOUT OVERHEATING. THE ENCLOSURE MUST BE SOUND ATTENUATED TO 66 DBA AT 23 FEET (FULL LOAD) AND 60
- B. THE ENCLOSURE WILL BE DESIGNED SO THAT THE MUFFLER WILL MOUNT INSIDE AND RADIATOR AIR WILL EXHAUST VERTICALLY.
- C. THE ENCLOSURE WILL BE PAINTED, HAVE HINGED DOORS, AND BE CONSTRUCTED OF A MINIMUM 13 GAUGE SHEET METAL. ALL AIR INLETS SHALL BE SOUND ATTENUATED. D. THE ENCLOSURE SHOULD BE PROVIDED WITH A WINDOW FOR UNOBSTRUCTED VIEWING OF ENGINE AND GENERATOR CONTROL PANEL WHILE CONTROL PANEL
- E. THE ENCLOSURE SHOULD BE CAPABLE OF ONE-POINT LIFTING.
- F. THE ENCLOSURE WILL INCLUDE EXTERNAL DRAIN EXTENSIONS FOR COOLANT,
- A. THE ENTIRE ENGINE-GENERATOR SET SHALL BE MOUNTED ON VIBRATION ISOLATORS, WHICH ISOLATE ENGINE-GENERATOR VIBRATION FROM THE STEEL BASE. B. THE COMPLETE ENGINE-GENERATOR WITH ENCLOSURE SHALL BE CAPABLE OF BEING MOUNTED DIRECTLY TO A TRAILER FRAME WITHOUT ADDITIONAL VIBRATION ISOLATORS NECESSARY FOR OPERATION
- A. PROVIDE (3) NEMA 5-20R 120V RECEPTACLES.
- B. MOUNT AND LABEL THE FOLLOWING RECEPTACLE IN THE RECEPTACLE ENCLOSURE: 1. CAMLOCK RECEPTACLES RATED FOR 208V, 3Ø, 4W, 600A POWER SYSTEM.
- 4. EACH RECEPTACLE SHALL BE HARDWIRED TO THE GENERATOR.

- 2 15 CORD AND PLUG
- A. PROVIDE 100 FT LONG, 4#700 SO CORD FOR CONNECTION FROM THE GENERATOR RECEPTACLE TO THE RECEPTACLE ON THE BUILDING. PLUG ON BOTH ENDS OF CABLE SHALL BE CAMLOCK. STORE COMPLETE CORD SET IN CABLE STORAGE BOX.
- A. PROVIDE A UNIT MOUNTED ON CALIFORNIA LEGAL DUAL AXLE TRAILER, TO INCLUDE THE FOLLOWING
- 7. PROVIDE ALL EQUIPMENT FOR LEGAL HIGHWAY TRANSPORT.
- 8. SPARE TIRE AND LUG NUT WRENCH,
- 10. CABLE STORAGE BOX: PROVIDE A NEMA 3R PADLOCKABLE CABLE STORAGE BOX FOR STORAGE OF PORTABLE CABLES. BOX MINIMUM SIZE SHALL BE 2 FEET LONG, 3

PART 3 – EXECUTION

- A. ALL EQUIPMENT WILL BE TESTED AT THE MANUFACTURER REPRESENTATIVE'S FACILITY. TESTS WILL INCLUDE A MINIMUM OF 100% LOADING FOR A PERIOD OF TWO HOURS. TEST DATA WILL BE RECORDED AND INCLUDED IN THE MAINTENANCE MANUAL.
- THE FOLLOWING TEST DATA SHALL BE RECORDED IN 15 MINUTE INTERVALS AT 100% LOAD: 1. VOLTAGE
- 2. CURRENT
- 3. FREQUENCY. 4. ARMATURE, FIELD WINDING, AND SHAFT BEARING TEMPERATURE RISE.
- C. THE FOLLOWING TEST DATA SHALL BE RECORDED AT 0%, 25%, 50%, 75%, AND 100% LOADS IN LOW AND HIGH VOLTAGE SETTINGS:
- a. VOLTAGE.
- b. CURRENT c. EXCITING CURRENT.
- d. FREQUENCY.
- D. THE GENERATOR SHALL HAVE THE FUEL TANK FILLED TO FULL AFTER TESTING AND PRIOR TO DELIVERY TO THE OWNER.
- 3.2 SPARE PARTS
- A. SPARE PARTS SHALL BE FURNISHED WITH THE EQUIPMENT AS FOLLOWS: a. 5 LAMPS FOR EACH TYPE OF INDICATING LIGHT.
- b. 2 SETS OF LUBE OIL FILTER ELEMENT.
- c. 2 SETS OF FUEL FILTER ELEMENT
- d. 1 SET OF AIR CLEANER ELEMENT. e. 1 SET OF V-BELTS (COMPLETE SET).
- f. 1 SET OF EACH SIZE FUSE.
- 3.3 TRAINING A. THE EQUIPMENT SUPPLIER SHALL PROVIDE A MINIMUM OF 4 HOURS OF TRAINING PRIOR TO THE DELIVERY OF THE GENERATOR TO THE OWNER. TRAVEL TIME AND FROM SITE SHALL BE EXCLUDED FROM TRAINING TIME. TRAINING SHALL INCLUDE ROUTINE MAINTENANCE AND OPERATION OF GENERATOR. PROVIDE EQUIPMENT O&M MANUALS AT TIME OF TRAINING. IN ADDITION, PROVIDE A MAINTENANCE SCHEDULE FOR ROUTINE MAINTENANCE OF GENERATOR.

NELSON AVENUE MIDDLE SCHOOL GENERATOR DOCKING STATION 2255 6TH STREET OROVILLE, CA.

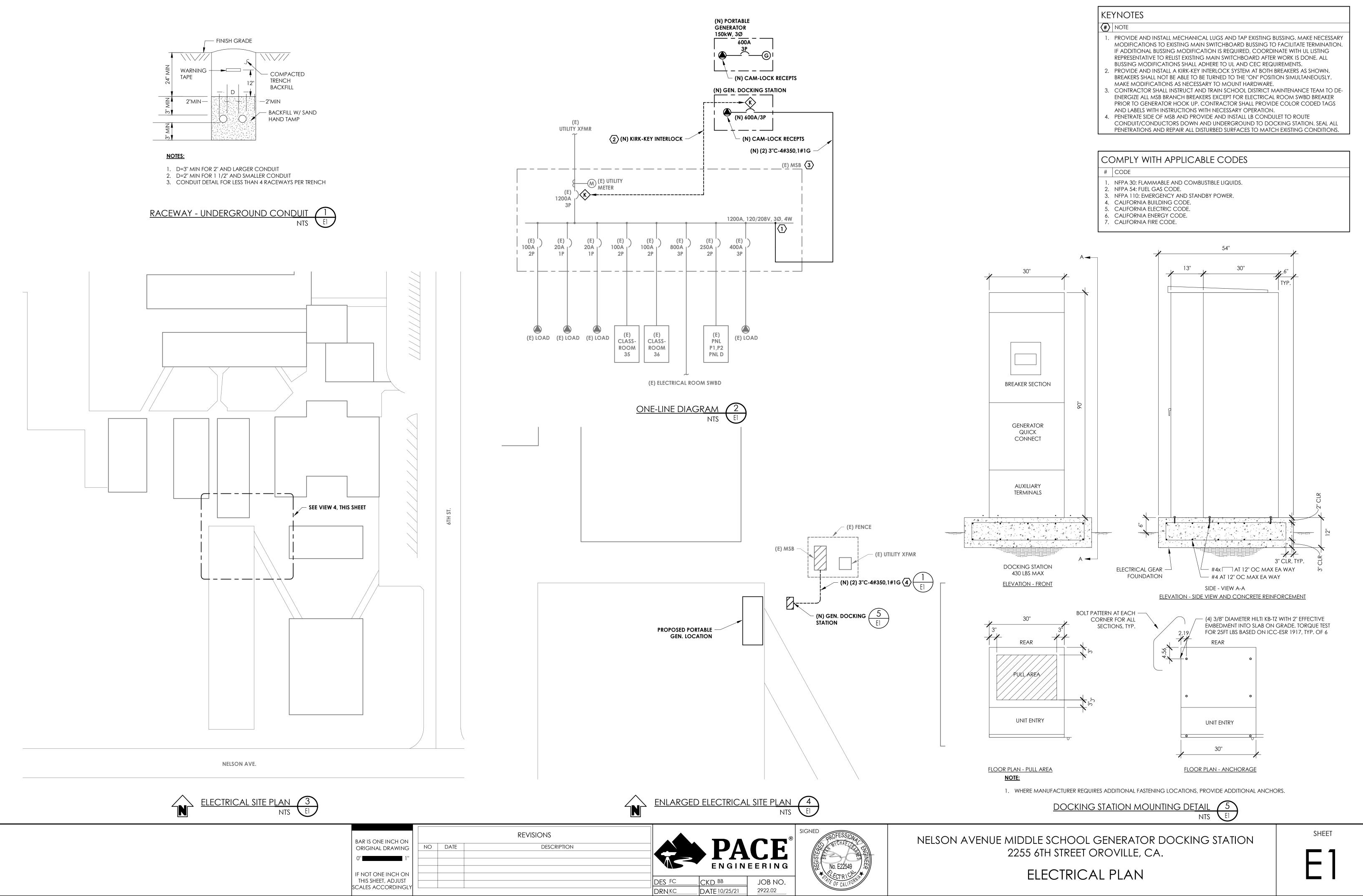
ELECTRICAL SPECIFICATIONS



- 1. ENCLOSED FEEDERS. 2. 2-5/16-INCH BALL HITCH. 3. ADJUSTABLE REAR STABILIZERS. 4. CABLE BOX. 5. SURGE BRAKES. 26-INCH BED TIGHT.
- 9. LEVELING JACK, 10,000 POUND RATED. FEET WIDE AND 2 FEET TALL.

3.1 TESTING

5. WATER TEMPERATURE. 6. OIL TEMPERATURE. 7. AMBIENT TEMPERATURE



		CONDUIT EXPOSED				
		CONDUIT CONCEALED or BL	JRIED			
		INDICATES FIRE RATED WALL				
		CONDUIT UP				
	<u> </u>	CONDUIT DOWN				
	➡ LA-2	HOME RUN-DESTINATION SH	NWC			
2	-11]	TICK MARKS W/BARS INDICA	TES NUMBE	R OF #10 C	ONDUCTORS WITH #10 GROUND	
		TICK MARKS WITHOUT BARS I	NDICATES N	UMBER OF	#12 CONDUCTORS WITH #12 GROUND	
۲ ۲	J	JUNCTION BOX				
		CONNECTION POINT (CONT	RACTOR SH	IALL DETERM	INE CONNECTION CONFIGURATION)	
2	+	DUPLEX RECEPTACLE				DEVICE BOXES
	=\$	QUADRUPLEX RECEPTACLE				
	€	SINGLE OR THREE PHASE REC	EPTACLE, S	ee plan She	EETS TYPE PER LOCATION	OTHERWISE NOTED
		PULLBOX				
	Æ	FUSED DISCONNECT	XXA/XXF XX	60AS/20F WP	60A DISCONNECT / 20A FUSE NEMA 3R	
EQUIP	-	NON-FUSED DISCONNECT	XX XX	60AS/20F WP	60A DISCONNECT NEMA 3R	
		MAJOR ELECTRICAL COMPO IDENTIFYING SYMBOL AS SHO		DEVICE NAM	IE OR	
		SURFACE MOUNT PANELBOA	RD			
		FLUSH MOUNT PANELBOARD				
	↑	EXOTHERMIC WELD, TERMIN	ation or s	PLICE POIN	Г	
	•	GROUND ROD				
	=	GROUNDING ELECTRODE				
	<u> </u>	CIRCUIT BREAKER				
	\rightarrow	CURRENT TRANSFORMER, NU	MBER INDI	CATED		
5	<#>	KEYNOTE				
ANNOTATION (Y)	: B)				/OR CONDUCTORS, E.G., 4"C-4#500,1#3G ROM THE MAIN SWITCHBOARD TO PANELE	· ·

Ą	- AMMETER, AMPERE
AC	- ANIMEIER, AMFERE - ALTERNATING CURRENT
ACH	
	- ABOVE COUNTER HEIGHT
AFF	- ABOVE FINISHED FLOOR OR GRADE
AIC	- AMPS INTERRUPTING CAPACITY
AL	- ALUMINUM
ATS	- AUTOMATIC TRANSFER SWITCH
BGES	
BRKR	- BREAKER
BOD	- BOTTOM OF DEVICE
C or COND	- CONDUIT
CAB	- CABINET
CEC	- CALIFORNIA ELECTRIC CODE
CKT	- CIRCUIT
COD	- CENTER OF DEVICE
CT	- CURRENT TRANSFORMER
DC	- DIRECT CURRENT
(E) or EXIST	
EEOR	- ELECTRICAL ENGINEER OF RECORD
EGC	
ENC	- ENCLOSURE
(F)	- FUTURE
G	- EQUIPMENT GROUNDING CONDUCTOR
GEC	
GFCI	- GROUND FAULT CIRCUIT INTERRUPT
GND	
J	
LFEB	- LIFE SAFETY EMERGENCY BRANCH
MBJ	- MAIN BONDING JUMPER
MCB	- MAIN CIRCUIT BREAKER
MFR	- MANUFACTURER
MLO	- MAIN LUG ONLY
MOCP	- MAXIMUM OVERCURRENT PROTECTION
MSB	- MAIN SWITCH BOARD
MTS	- MANUAL TRANSFER SWITCH
NEC	- NATIONAL ELECTRIC CODE
NEMA	- NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
Ν	- NEUTRAL
(N)	- NEW
NB	- NORMAL BRANCH
OFCI	- OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED, OWNER INSTALLED
PB	- PULLBOX
PNL	- PANELBOARD
RCPT	- RECEPTACLE
RM	- ROOM
SWBD	- SWITCHBOARD
SBJ	- SYSTEM BONDING JUMPER
SSBJ	- SUPPLY SIDE BONDING JUMPER
JOD	- TOP OF DEVICE
TR	
TYP	
V	- VOLTMETER, VOLT
W	- WATT
WW	- WIREWAY
WP	- WEATHERPROOF (NEMA 3R)

PO	RTABLE GENERA
PART 1	-GENERAL
A. 1.2 REF	ORK INCLUDED THE ELECTRICAL CONTRAC EQUIPMENT SPECIFIED IN 1. SUPPLY ALL EQUIPMEN 2. ASSUME OVERALL RES ERENCES EXCEPT AS OTHERWISE SP STANDARDS OF THE FOLLO MINIMUM REQUIREMENTS 1. UNDERWRITERS LABON 2. NATIONAL ELECTRICA 3. NATIONAL FIRE PROTE 4. INSTITUTE OF ELECTRIC 5. THE NATIONAL ELECTRIC 5. THE NATIONAL ELECTRIC 6. AMERICAN NATIONAL 7. DIESEL ENGINE MANU 8. INTERNAL COMBUSTIO 9. AMERICAN SOCIETY O 10. NATIONAL ELECTRICA
PART 2	- PRODUCTS
A. 2.2 MA A.	MANUFACTURER, EXCEPT OF A DIESEL ENGINE CON A BRUSHLESS EXCITATION WITH ALL NECESSARY ACC COMPLETE SELF-CONTAIN NUFACTURERS MATERIALS AND EQUIPME 1. GENERAC. 2. CUMMINGS. 3. BLUE STAR, OR EQUAL FORMANCE THE GENERATOR SET SHAL CONDITIONS FOR THE DU NORMAL POWER SUPPLY. 1. KILOWATTS: 150kW. 2. VOLTAGE: 120/208V. 3. POWER FACTOR: 0.8. 4. PHASE: 3. 5. FREQUENCY: 60HZ.

BAR IS ONE INCH ON ORIGINAL DRAWING 0"	NO	DATE	
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY			

SPECIFICATIONS

MEET REQUIREMENTS

TYPE: PVC, SLIP-ON.

	2.4 CONDUCTORS A. ELECTRICAL TERMINALS AND TERMINATIONS: IT IS ASSUMED THAT ALL TERMINATIONS IN THE FIELD SHALL	3.4 CUTTING AND PATCHING A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEM
AN DRAWINGS SHOW ONLY GENERAL LOCATIONS OF EQUIPMENT, DEVICES, AND LESS SPECIFICALLY DIMENSIONED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER CACEWAY, SUBJECT TO THE APPROVAL OF THE ENGINEER. MAKE ADJUSTMENTS AS WIRING, CONDUIT, DISCONNECTS, BRANCH CIRCUIT PROTECTION, AND OTHER TERIAL OR EQUIPMENT TO ACCOMMODATE ACTUAL EQUIPMENT SUPPLIED FOR THIS	 HAVE MINIMUM RATED 75°C RATED TERMINALS. THE CONTRACTOR SHALL FIELD VERIFY ALL TERMINALS FOR CONNECTION IN COMPLIANCE WITH CEC 110.14. THE CONTRACTOR SHALL INFORM THE ENGINEER OF RECORD OF ANY TERMINALS DEVIATING FROM A RATING OF 75°C. 1. ALL CONDUCTORS ARE RATED FOR 75°C ON PLANS UNLESS OTHERWISE NOTED. B. ALL CONDUCTORS SHOWN SHALL BE NEW UNLESS OTHERWISE INDICATED. C. CONDUCTOR TYPE: 1. ALL OTHER CIRCUITS: STRANDED. 	APPROVAL OF THE ENGINEER. FOLLOWING SUC CONDITION USING SKILLED CRAFTSMEN OF THE 1 3.5 CLEANING AND TOUCH-UP PAINTING A. KEEP THE PREMISES FREE FROM ACCUMULATION COMPLETION OF WORK, REMOVE MATERIALS, SO THE INTERIOR AND EXTERIOR OF ALL DEVICES AN NEW CONDITION USING SKILLED CRAFTSMEN OF
ND REGULATIONS AND INSTALL PRODUCTS IN ACCORDANCE WITH APPLICABLE NECA REQUIREMENTS, THE S OF APPLICABLE STATE AND LOCAL LAWS, CODES AND ORDINANCES. THE SHALL ADHERE TO THE SPECIFIC PRODUCT AND INSTALLATION REQUIREMENTS OF THE ANIES. CONFLICTS, IF ANY, WILL BE RESOLVED AT THE DISCRETION OF THE ENGINEER. MOST IMPORTANCE THAT THE INSTALLING CONTRACTOR HAVE A MASTERY OF THE CIFIC REQUIREMENTS SHOWN IN SPECIFICATIONS AND PLANS. IT IS STRONGLY ADVISED TRACTOR CONTACT THE EEOR FOR CLARIFICATION OR RFI THE EEOR IF FURTHER IS REQUIRED. THE EEOR SHALL REQUIRE REVISIONS TO BE MADE IN THE FIELD IF THE DOES NOT FALL WITHIN THESE PROJECT-SPECIFIC GUIDELINES. NO ALLOWANCE SHALL BE ITALLATIONS NOT ADHERING TO THESE REQUIREMENTS.	 INSULATION: TYPE THHN/THWN, 90°C DRY OR 75°C WET. COPPER BUILDING WIRE: DESCRIPTION: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN COPPER CURRENT-CARRYING CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600 VAC OR LESS.	 3.6 RACEWAY SYSTEM A. UNLESS OTHERWISE SPECIFIED OR INDICATED, WI INSTALLED IN RACEWAYS OF THE TYPES INDICATE B. EXTERIOR, EXPOSED: GALVANIZED RIGID STEEL. C. DIRECT EARTH BURIAL: PVC SCHEDULE 40. D. UNDER SLABS-ON-GRADE: PVC SCHEDULE 40. 3.7 RACEWAY INSTALLATION A. CONDUIT AND TUBING SIZES SHOWN ARE BASED B. MAINTAIN RACEWAY ENTIRELY FREE OF OBSTRUCC C. FOLLOW STRUCTURAL SURFACE CONTOURS WHE OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED WALLS, STRUCTURAL MEMBERS, OR INTERSECTION
NY MATERIAL IS FABRICATED OR SHIPPED, FURNISH TO THE ENGINEER FULL DETAILS, SHOP SS, DIMENSIONS, CATALOG CUTS, SCHEMATIC (ELEMENTARY) DIAGRAMS, AND OTHER IVE MATTER AS REQUIRED TO FULLY DESCRIBE THE EQUIPMENT SPECIFIED. JBMITTALS	 B. CABLE TIES: 1. NYLON, ADJUSTABLE, AND SELF-LOCKING. 2. COMPLY WITH UL 20 AND FS W-S-896. 2.6 GENERATOR DOCKING STATION A. ACCEPTABLE MANUFACTURER'S FOR THE WORK SHALL BE AS FOLLOWS: 	 D. INSTALL WATERTIGHT FITTINGS IN OUTDOOR, UNE E. ALL METAL CONDUIT TO BE REAMED, BURRS REM CONDUCTORS, WIRES, OR CABLES. F. INSTALL CONCEALED, EMBEDDED, AND BURIED I TO SURFACE AND HAVE NO CURVED PORTION E
RES: SUBMIT THE PROCEDURES TO BE FOLLOWED DURING THE OPERATIONAL READINESS URES SHALL INCLUDE TEST DESCRIPTIONS, FORMS, AND CHECKLISTS TO BE USED TO D DOCUMENT THE REQUIRED TESTS. UPON COMPLETION OF EACH REQUIRED TEST, HE TEST BY SUBMITTING A COPY OF THE SIGNED OFF TEST PROCEDURES. CES ONTRACTOR SHALL PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES FOR OF THIS PROJECT. PROVIDE AND INSTALL TEMPORARY PANELBOARDS, SPYDER BOXES, ITING OR OTHER ELECTRICAL ITEMS AS NEEDED. COORDINATE WITH THE GENERAL	 EATON SIEMENS. OR EQUAL. GENERATOR DOCKING STATION: a. ENCLOSURE: NEMA 3R (NONWALK-WIN) FLAT ROOF. b. BUS MATERIAL : TIN-PLATED ALUMINUM. c. GROUND BUS MATERIAL: COPPER. d. CAM STYLE MALE CONNECTORS AND GROUNDING TERMINALS. e. PAD-LOCKABLE ENCLOSURE. 	 3.8 RACEWAY PENETRATIONS A. MAKE AT RIGHT ANGLES, UNLESS OTHERWISE SHC B. NOTCHING OR PENETRATION OF STRUCTURAL M PERMITTED. C. FIRE-RATED WALLS, FLOORS, OR CEILINGS: FIRE-S MAINTAIN FIRE-RESISTANCE RATING. D. CONCRETE WALLS, FLOORS, OR CEILINGS (ABON PACK, OR USE WATERTIGHT SEAL DEVICE. E. ENTERING STRUCTURES:
WISE INDICATED, PROVIDE ALL FIRST-QUALITY NEW MATERIALS, FREE FROM ANY DEFECTS, FOR THE INTENDED USE AND THE SPACE PROVIDED. PROVIDE MATERIALS APPROVED BY STANDARDS HAVE BEEN ESTABLISHED BY THAT ORGANIZATION. FURNISH AND INSTALL ALL EMS NOT SPECIFICALLY SHOWN OR SPECIFIED WHICH ARE REQUIRED TO PROVIDE THE STEMS SPECIFIED HEREIN. WHERE TWO OR MORE UNITS OF THE SAME CLASS OF MATERIAL T ARE REQUIRED, PROVIDE PRODUCTS OF A SINGLE MANUFACTURER. COMPONENT ERIALS OR EQUIPMENT NEED NOT BE PRODUCTS OF THE SAME MANUFACTURER. WISE INDICATED, FINISH FOR ELECTRICAL EQUIPMENT AND ENCLOSURES SHALL BE ER'S STANDARD GRAY OR ANSI 61 GRAY OVER A PRIMER AND RUST INHIBITOR. NDUIT FITTINGS: RIGID STEEL CONDUIT (GRS):	 f. GENERATOR INCOMING POWER QUICK CONNECT RECEPTACLES. g. HINGED ACCESS PANEL FOR GENERATOR CAM TYPE CONNECTOR FEEDER CABLES. NONE OF THE CAM TYPE INLETS SHALL BE ACCESSIBLE UNLESS THE HINGED ACCESS PANEL DOOR IS OPEN. h. UNIT SHALL HAVE STAINLESS STEEL HINGES. i. ANSI-61 GRAY POWDERCOAT INSIDE AND OUT. C. CIRCUIT BREAKERS: NEMA AB 1 AND UL 489. IO0% RATED THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, MOLDED CASE, OF THE INDICATING TYPE SHOWING ON/OFF AND TRIPPED POSITIONS OF OPERATING HANDLE. NONINTERCHANGEABLE, IN ACCORDANCE WITH CEC. PROVISIONS FOR HANDLE PADLOCKING, UNLESS OTHERWISE SHOWN. MULTI-POLE CIRCUIT BREAKERS DESIGNED TO AUTOMATICALLY OPEN ALL POLES WHEN AN OVERLOAD OCCURS ON ONE POLE. KIRK KEY INTERLOCK SYSTEM. D. GENERATOR DOCKING STATION SHALL BE SUITABLE FOR 600A RATING, 120/208V, 3Ø, 4W CONNECTION, 65kAIC. 	 SEAL RACEWAY AT THE FIRST BOX WITH CON OF GASES OR LIQUIDS FROM ONE AREA TO RACEWAY SUPPORT SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT AND IN ANY CASE NOT EXCEEDING 10 FEET. DO OTHER RACEWAYS. WALL BRACKETS AND ASSOCIATED HARDWARE IN STAINLESS STEEL. PROVIDE GALVANIZED STEEL AT CEILING TRAPEZE INCLUDING HARDWARE, SHALL PROVIDE AND ATTACH WALL BRACKETS, STRAP H. WOOD: WOOD SCREWS. HOLLOW MASONRY UNITS: TOGGLE BOLTS. CONCRETE OR BRICK: EXPANSION SHIELDS, CHARGE, WITH LOCK WASHERS AND NUTS. STEELWORK: MACHINE SCREWS. INSTALL CONCEALED RACEWAYS WITH A MINIMULANT.
REQUIREMENTS OF ANSI C80.1 AND UL 6. FRIAL: HOT-DIP GALVANIZED, WITH CHROMATED PROTECTIVE LAYER.	PART 3 – EXECUTION	B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WE OR BENDING MACHINE. DO NOT HEAT METAL R.
REQUIREMENTS OF UL 514B. THREADED, GALVANIZED. SETSCREW FITTINGS NOT PERMITTED. ERIAL: MALLEABLE IRON WITH INSULATED THROAT. E 40 CONDUIT: REQUIREMENTS OF NEMA TC2 AND UL 651. STED FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR STED FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR STEL FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR STEL FOR CONCRETE ENCASEMENT, UNDERGROUND DIRECT BURIAL, CONCEALED OR	 3.1 NOTE: A. COORDINATE ELECTRICAL WORK WITH THE OWNER AND THE WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, DELAYS, AND UNNECESSARY INTERFERENCE DURING CONSTRUCTION. 3.2 PROTECTION DURING CONSTRUCTION A. FOLLOWING INSTALLATION, PROTECT MATERIALS, EQUIPMENT, AND INSULATION FROM CORROSION, PHYSICAL DAMAGE, AND MOISTURE. CAP CONDUIT RUNS DURING CONSTRUCTION WITH MANUFACTURED SEALS. KEEP OPENINGS IN BOXES OR EQUIPMENT CLOSED DURING CONSTRUCTION. 3.3 MATERIAL AND EQUIPMENT INSTALLATION 	 C. PVC CONDUIT: BENDS 30° AND LARGER: PROVIDE FACTOR 90° BENDS: PROVIDE GALVANIZED RIGID ST ALLOWED BY THE UTILITY. 3.11 PVC CONDUIT SOLVENT WELDING: PROVIDE MANUFACTURER RECOMMENDED INSTALL SUCH THAT JOINT IS WATERTIGHT.
ct sunlight exposure, and 90°C insulated conductors. Requirements of nema tc-3 and ul 514b. PVC, Slip-on.	A. FOLLOW THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS UNLESS OTHERWISE INDICATED. FOLLOW THE ENGINEER'S DECISION, WHEREVER ANY CONFLICT ARISES. KEEP COPY OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AVAILABLE ON THE JOBSITE FOR REVIEW AT ALL TIMES.	 B. ADAPTERS: 1. PVC TO METALLIC FITTINGS: PVC TERMINAL 2. PVC TO RIGID METAL CONDUIT: PVC FEMA C. BELLED END CONDUIT: BEVEL THE UNBELLED END

TOR SPECIFICATIONS

ACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL OF THE THIS SECTION. ENT CONTAINED HEREIN.

PONSIBILITY FOR THE COMPLETE OPERATING SYSTEM.

PECIFIED, THE APPLICABLE RULES, REGULATIONS, AND OWING ORGANIZATIONS SHALL BE CONSIDERED AS

- DRATORIES (3UL).
- AL CODE (NEC). ECTION ASSOCIATION (NFPA).
- CAL AND ELECTRONICS ENGINEERS (IEEE).
- RICAL MANUFACTURERS ASSOCIATION (NEMA).
- . STANDARDS INSTITUTE (ANSI). JFACTURERS ASSOCIATION (DEMA).
- ON ENGINE INSTITUTE.
- OF MECHANICAL ENGINEERS (ASME).
- AL CONTRACTOR'S ASSOCIATION (NECA).

IERATOR SETS SHALL BE THE STANDARD OF THE TAS NOTED. THE ENGINE GENERATOR UNIT SHALL CONSIST NNECTED TO AN ALTERNATING CURRENT GENERATOR WITH SYSTEM MOUNTED ON A STEEL SUB-BASE AND PROVIDED

CESSORIES AND ANCILLARY SYSTEMS RESULTING IN A NED, TRAILER-MOUNTED UNIT.

ENT SPECIFIED IN THIS SECTION SHALL BE PRODUCTS OF:

LL BE CAPABLE OF CONTINUOUS OPERATION AT RATED URATION OF ANY INTERRUPTION OR OUTAGE OF THE THE GENERATOR SET SHALL BE RATED AS FOLLOWS:

DARDS OF THE VARIOUS MANUFACTURERS, EXCEPT WHERE REQUIREMENTS OF THESE SPECIFICATIONS. PROVIDE ALL PARTS FOR THE SPECIFIED DUTY.

ER WITH CLEANABLE PARTICLE TRAP AND SERVICE

- ER WITH EXTERNAL DISCHARGE. FILTER.
- FILTER.
- IMUM) FULL LOAD FUEL TANK CONTAINED WITHIN GENSET

- 7. FAN (BLOWER TYPE) WITH FAN DRIVE. 8. ENGINE COOLANT WATER PUMP.
- 9. ELECTRIC STARTING MOTOR, 24 OR 12 VOLT D.C, WITH SAFETY CIRCUIT (WILL
- NOT REENGAGE IF ENGINE IS RUNNING).
- 10. BATTERY CHARGING GENERATOR.
- 11. GLOW PLUGS. 2.5 CONTROL PANEL
- A. PROVIDE A GENERATOR-SET CONTROL PANEL MOUNTED ON THE GENERATOR AND EQUIPPED WITH THE FOLLOWING:
- 1. VOLTMETER, 2.5 PERCENT MINIMUM ACCURACY.
- 2. AC VOLTMETER CHANGE OVER SWITCH: FOUR POSITION SWITCH TO VERIFY OUTPUT VOLTAGE BETWEEN PHASES. 3. AMMETER: WITH AN ACCURACY OF 2.5% OF FULL SCALE.
- 4. AC AMMETER CHANGE OVER SWITCH : FOUR POSITION SWITCH TO VERIFY CURRENT OF EACH PHASE.
- 5. AVAILABLE SELECTABLE VOLTAGES: 3-PHASE: 120/208V. 6. PILOT LAMP FOR AC POWER.
- 7. FREQUENCY METER: 1% ACCURACY,
- 8. ELAPSED TIME METER.
- 9. ENGINE TACHOMETER.
- 10. ENGINE COOLANT TEMPERATURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL AND ABNORMAL CONDITIONS. 11. ENGINE OIL PRESSURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL
- AND ABNORMAL CONDITIONS. 12. CHARGING AMMETER FOR CHARGING GENERATOR.
- 13. KEY OPERATED PRE-HEAT, OFF, RUN, START SWITCH.
- 14. TWO STAGE THROTTLE CONTROL RUN AND IDLE POSITIONS.
- 15. AUTOMATIC SHUTDOWNS WITH FAULT INDICATION LIGHTS FOR HIGH WATER TEMPERATURE, LOW OIL PRESSURE, GLOW PLUG INDICATOR. 16. PANEL LIGHT WITH SWITCH.
- 2.6 GENERATOR OUTPUT CIRCUIT BREAKER
- A. MAIN LINE MOLDED CASE THERMAL MAGNETIC CIRCUIT BREAKER WITH A SHUNT TRIP SHALL BE MOUNTED TO ALLOW OPERATION FROM OUTSIDE THE CONTROL PANEL. PROVIDE A CURRENT SENSING RELAY THAT IS SET TO ADEQUATELY PROTECT THE GENERATOR.
- 2.7 GOVERNOR
- A. GOVERNING SYSTEM SHALL BE SUITABLE FOR CONTROLLING THE SPEED OF THE GENERATOR SET WITHIN THE REQUIREMENTS SPECIFIED WITHOUT THE INTERMEDIATE ADJUSTMENT AND SHALL MAINTAIN THE SPECIFIED STABILITY WITHOUT HUNTING OR CYCLING.
- 2.8 OUTPUT TERMINALS: A. THE MAIN GENERATOR OUTPUT TERMINALS WILL BE LOCATED WITHIN THE GENSET 2.13 VIBRATION ISOLATORS ENCLOSURE. POSITIONING SHOULD PROVIDE BOTH EASY ACCESSIBILITY FOR WIRING AND A CABLE ENTRANCE SO WIRING CAN RUN FROM THE CONNECTED LOAD TO THE OUTPUT TERMINALS WITH ALL GENSET ENCLOSURE DOORS LOCKED.
- 2.9 COOLING SYSTEM: A. THE RADIATOR FAN SHALL DIRECT THE AIR FLOW FROM THE ENGINE OUTWARD THROUGH THE RADIATOR, WITH VERTICAL AIR DISCHARGE. THE FAN SHALL BE DRIVE 2.14 RECEPTACLE ENCLOSURE DIRECTLY FROM THE ENGINE CRANKSHAFT OR THROUGH V-BELT DRIVE. THE RADIATOR SHALL HAVE SUFFICIENT CAPACITY TO DISSIPATE NOT LESS THAN THE TOTAL BTU PER HOUR REJECTED BY THE ENGINE TO THE COOLING SYSTEM AT 110% RATED LOAD IN 104F AMBIENT, AND AGAINST A STATIC RESTRICTION OF 0.5 INCHES OF WATER AS MAYBE IMPOSED BY ENCLOSURE. THE RADIATOR SHALL BE PROTECTED BY A STRONG GRILL
- B. THE RADIATOR SHALL BE PROVIDED WITH COOLANT RESERVE TANK WHICH IS CAPABLE OF COOLANT LEVEL CHECKING.
- 3. RECEPTACLES SHALL BE CLAMP COVER, RAINTIGHT. 5. MANUFACTURERS: a. CROUSE-HINDS b. APPLETON.

DOOR IS LOCKED.

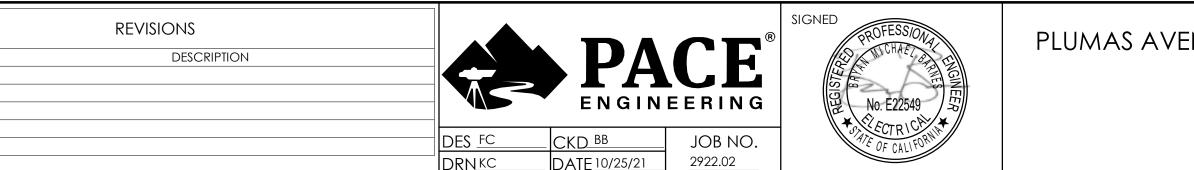
LUBRICATING OIL, AND FUEL.

2.10 BATTERIES

2.11 EXHAUST SYSTEM

2.12 ENCLOSURE

c. OR EQUAL.



CTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC OWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW MEN OF THE TRADES INVOLVED.

CUMULATION OF WASTE MATERIAL OR RUBBISH. UPON MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO RAFTSMEN OF THE TRADES INVOLVED.

IDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS PES INDICATED: RIGID STEEL.

- ULE 40. HEDULE 40.
- N ARE BASED ON THE USE OF COPPER CONDUCTORS. OF OBSTRUCTIONS AND MOISTURE NTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID
- RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO INTERSECTIONS OF VERTICAL PLANES. JTDOOR, UNDERGROUND, OR WET LOCATIONS. , BURRS REMOVED, AND CLEANED BEFORE INSTALLATION OF
- AND BURIED RACEWAYS SO THAT THEY EMERGE AT RIGHT ANGLES D PORTION EXPOSED.
- HERWISE SHOWN. RUCTURAL MEMBERS, INCLUDING FOOTINGS AND BEAMS, NOT LINGS: FIRE-STOP OPENINGS AROUND PENETRATIONS TO
- ILINGS (ABOVEGROUND): PROVIDE NONSHRINK GROUT DRY
- DX WITH CONDUIT SEALING BUSHING TO PREVENT THE ENTRANCE ONE AREA TO ANOTHER.
- ERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR
- HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE IZED STEEL AT ALL OTHER LOCATIONS. STRAP HANGERS AND WARE SHALL BE GALVANIZED STEE KETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS:
- GGLE BOLTS. SION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER s and nuts.
- /ITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE. FSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY IEAT METAL RACEWAYS TO FACILITATE BENDING.
- VIDE FACTORY-MADE ELBOWS. IZED RIGID STEEL ELBOWS; EXCEPT ON UTILITY SERVICE RUNS IF NOT
- COMMENDED SOLVENT; APPLY TO ALL JOINTS.
- C TERMINAL TYPE
- T: PVC FEMALE ADAPTER. C. BELLED END CONDUIT: BEVEL THE UNBELLED END OF THE JOINT PRIOR TO JOINING

- 3.12 TERMINATION AT ENCLOSURES A. SHEET METAL BOXES, CABINETS, AND ENCLOSURES:
 - GALVANIZED RIGID STEEL CONDUIT: a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
 - INSTALL GROUNDING BUSHING. c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR
 - GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE d. INSTALL INSULATED BUSHING ON ENDS OF CONDUIT WHERE GROUNDING IS NOT REQUIRED.
 - e. PROVIDE INSULATED THROAT WHEN CONDUIT TERMINATES IN SHEET METAL BOXES HAVING THREADED HUBS.
- 3.13 CONDUCTORS A. DO NOT SPLICE INCOMING SERVICE CONDUCTORS AND BRANCH POWER DISTRIBUTION CONDUCTORS NO. 6 AWG AND LARGER UNLESS SPECIFICALLY INDICATED OR APPROVED BY ENGINEER
- B. CONNECTIONS AND TERMINATIONS: INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG 2. INSTALL UNINSULATED, BOLTED, TWO-WAY CONNECTORS AND TERMINATORS FOR CIRCUIT
- CONDUCTORS NO. 4/0 AWG AND LARGER.
- 3. TAPE INSULATE ALL UNINSULATED CONNECTIONS 4. PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER.
- COMPRESSION LUGS: a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE. b. TOOL SHALL PROVIDE COMPLETE, CONTROLLED CRIMP AND SHALL NOT RELEASE UNTIL CRIMP IS COMPLETE.
- c. DO NOT USE PLIER TYPE CRIMPERS. C. SPLICES AND TERMINATIONS:
- INDOORS: USE GENERAL PURPOSE, FLAME RETARDANT TAPE. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.
- D. CABINETS AND PANELS: REMOVE SURPLUS WIRE, BRIDLE AND SECURE. WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE
- BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING MATERIAL TO PROTECT THE CONDUCTORS. 3.14 GROUNDING
- A. UNLESS OTHERWISE INDICATED, GROUND ALL EXPOSED NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, AND THE NEUTRAL OF ALL WIRING SYSTEMS IN ACCORDANCE WITH THE CEC, STATE, AND OTHER APPLICABLE LAWS AND REGULATIONS. 3.15 OPERATIONAL READINESS TEST (ORT)
- A. TESTING, TEST PLANS, AND TEST REPORTS SHALL BE PROVIDED BY THE CONTRACTOR AS SPECIFIED HEREIN. THE CONTRACTOR SHALL PROVIDE LABOR, INSTRUMENTS, AND OTHER MATERIAL TO COMPLETE THE TEST
- B. THE ENTIRE INSTALLED ELECTRICAL SYSTEM SHALL BE CERTIFIED (INSPECTED, TESTED, AND DOCUMENTED) THAT IT IS READY FOR OPERATION. THE OBJECTIVE OF THIS TEST IS TO DEMONSTRATE THAT THE ELECTRICAL SYSTEM IS COMPLETE AND READY FOR USE. 1. GROUNDING SYSTEM:
- a. VERIFY GROUND SYSTEM IS IN COMPLIANCE WITH THE PLANS. C. PANELBOARD DIRECTORIES SHALL MEET MINIMUM CEC 408.4 REQUIREMENTS. THE CONTRACTOR
- SHALL IDENTIFY EACH CIRCUIT WITH ROOM NUMBER, ROOM NAME AND EQUIPMENT SERVED. STANDARD ABBREVIATIONS FROM THE NEC AND WEBSTER'S DICTIONARY ARE ALLOWED. (E.G., "207 JANITOR WH" OR "102,103 RR RCPT".)
- D. LABELS SHALL BE MELAMINE, FLEXI-BRASS, OR EQUAL MATERIAL, 1.5"HX3"L, WITH 3/8"H TIMES NEW ROMAN LETTERING. 1. BACKGROUND/LETTERING COLOR SHALL BE AS FOLLOWS: a. BLACK/WHITE (NORMAL BRANCHES)
- 2. EQUIPMENT LABELING (FOR ALL PROJECT TYPES) SHALL FOLLOW AFTER THE EXAMPLES SHOWN BELOW (FOR GENERATOR/ATS, PANELBOARDS, DISCONNECTS, LIGHTING CONTROL PANELS, ETC.): PANEL A2 **DISCONNECT B1** FED FROM PNI B1 FED FROM PNI M1 60A/15F, 208V/3Ø

400A, 120/208V, 3Ø

- C. FILLER CAPS SHALL BE DESIGNED FOR PRESSURE RELIEF PRIOR TO REMOVAL. A 2.15 CORD AND PLUG THERMOSTATIC CONTROL VALVE SHALL BE INSTALLED IN THE JACKET WATER SYSTEM OF THE ENGINE TO MAINTAIN THE WATER SYSTEM TEMPERATURE OF THE ENGINE. THE THERMOSTATIC VALVE SHALL BE STANDARD MODULATING TYPE UTILIZING SELF-CONTAINED THERMOSTATS. THE VALVE SHALL BE CAPABLE OF PASSING THE WATER 2.16 GENERATOR TRAILER FLOW AS DETERMINED BY THE MANUFACTURER WITHOUT EXCESSIVE PRESSURE DROP ACROSS THE VALVE. THE THERMOSTATIC ELEMENTS SHALL BE NON-ADJUSTABLE TYPE THE FOLLOWING AND THE OPERATING TEMPERATURE SHALL BE SET AT THE TEMPERATURE 1. ENCLOSED FEEDERS. RECOMMENDED BY THE ENGINE MANUFACTURER. THE RADIATOR WILL BE SIZED TO 2. 2-5/16 INCH BALL HITCH. 3. ADJUSTABLE REAR STABILIZERS. INCLUDE A 50% SOLUTION OF ETHYLENE GLYCOL AND A COMPENSATION FACTOR FOR ENGINE-RADIATED HEAT. SUBMIT STANDARD PUBLISHED CURVES SHOWING 4. CABLE BOX. ATTITUDE AND AMBIENT TEMPERATURE DERATING. 5. SURGE BRAKES. 6. 26-INCH BED TIGHT. A. THE ENGINE CRANKING BATTERY SHALL BE SAE TYPE D, DIESEL ENGINE STARTING TYPE, AND OF SUFFICIENT SIZE AND CAPACITY IN A FULLY CHARGED CONDITION TO START 8. SPARE TIRE AND LUG NUT WRENCH, THE ENGINE-GENERATOR SET SIX CONSECUTIVE TIMES. BATTERIES SHALL BE MINIMUM 9. LEVELING JACK, 10,000 POUND RATED. OF 100 AMP-HOUR RATED. A. EXHAUST SILENCER: PROVIDE AND MOUNT A CRITICAL-TYPE EXHAUST SILENCER, FEET WIDE AND 2 FEET TALL. MOUNTED WITHIN ENCLOSURE AND INSULATED AS REQUIRED TO MAINTAIN TEMPERATURE RISE WITHIN ENCLOSURE TO 15F PART 3 – EXECUTION B. PROVIDE AND MOUNT AN EXHAUST FLEX CONNECTOR TO ALLOW FOR VIBRATION IN THE EXHAUST SYSTEM. 3.1 TESTING C. PROVIDE AND MOUNT A RAIN CAP ON THE EXHAUST OUTLET OR OTHER DEVICE TO PREVENT ENTRY OF RAIN INTO MUFFLER. A. THE COMPLETE ENGINE-GENERATOR SET AND ALL COMPONENTS WILL BE MOUNTED IN A WEATHERPROOF, COMPLETELY LOCKABLE ENCLOSURE DESIGNED SO THE UNIT CAN LOAD: OPERATE WITH ALL DOORS CLOSED AT FULL LOAD WITHOUT OVERHEATING. THE 1. VOLTAGE ENCLOSURE MUST BE SOUND ATTENUATED TO 66 DBA AT 23 FEET (FULL LOAD) AND 60 2. CURRENT DBA AT 50 FEET (FULL LOAD). 3. FREQUENCY. B. THE ENCLOSURE WILL BE DESIGNED SO THAT THE MUFFLER WILL MOUNT INSIDE AND RADIATOR AIR WILL EXHAUST VERTICALLY. 5. WATER TEMPERATURE. C. THE ENCLOSURE WILL BE PAINTED, HAVE HINGED DOORS, AND BE CONSTRUCTED OF 6. OIL TEMPERATURE. A MINIMUM 13 GAUGE SHEET METAL. ALL AIR INLETS SHALL BE SOUND ATTENUATED. 7. AMBIENT TEMPERATURE. D. THE ENCLOSURE SHOULD BE PROVIDED WITH A WINDOW FOR UNOBSTRUCTED
- VIEWING OF ENGINE AND GENERATOR CONTROL PANEL WHILE CONTROL PANEL
- E. THE ENCLOSURE SHOULD BE CAPABLE OF ONE-POINT LIFTING.
- F. THE ENCLOSURE WILL INCLUDE EXTERNAL DRAIN EXTENSIONS FOR COOLANT,
- A. THE ENTIRE ENGINE-GENERATOR SET SHALL BE MOUNTED ON VIBRATION ISOLATORS, WHICH ISOLATE ENGINE-GENERATOR VIBRATION FROM THE STEEL BASE. B. THE COMPLETE ENGINE-GENERATOR WITH ENCLOSURE SHALL BE CAPABLE OF BEING MOUNTED DIRECTLY TO A TRAILER FRAME WITHOUT ADDITIONAL VIBRATION ISOLATORS NECESSARY FOR OPERATION
- A. PROVIDE (3) NEMA 5-20R 120V RECEPTACLES. B. MOUNT AND LABEL THE FOLLOWING RECEPTACLE IN THE RECEPTACLE ENCLOSURE: CAMLOCK RECEPTACLES RATED FOR 208V, 3Ø, 4W, 600A POWER SYSTEM. 2. (2) NEMA 5-20R, 120V RECEPTACLES
- 4. EACH RECEPTACLE SHALL BE HARDWIRED TO THE GENERATOR.

- A. PROVIDE 100 FT LONG, 4#700 SO CORD FOR CONNECTION FROM THE GENERATOR RECEPTACLE TO THE RECEPTACLE ON THE BUILDING. PLUG ON BOTH ENDS OF CABLE SHALL BE CAMLOCK. STORE COMPLETE CORD SET IN CABLE STORAGE BOX.
- A. PROVIDE A UNIT MOUNTED ON CALIFORNIA LEGAL DUAL AXLE TRAILER, TO INCLUDE
- 7. PROVIDE ALL EQUIPMENT FOR LEGAL HIGHWAY TRANSPORT.
- 10. CABLE STORAGE BOX: PROVIDE A NEMA 3R PADLOCKABLE CABLE STORAGE BOX FOR STORAGE OF PORTABLE CABLES. BOX MINIMUM SIZE SHALL BE 2 FEET LONG, 3
- A. ALL EQUIPMENT WILL BE TESTED AT THE MANUFACTURER REPRESENTATIVE'S FACILITY. TESTS WILL INCLUDE A MINIMUM OF 100% LOADING FOR A PERIOD OF TWO HOURS. TEST DATA WILL BE RECORDED AND INCLUDED IN THE MAINTENANCE MANUAL. THE FOLLOWING TEST DATA SHALL BE RECORDED IN 15 MINUTE INTERVALS AT 100%
- 4. ARMATURE, FIELD WINDING, AND SHAFT BEARING TEMPERATURE RISE.
- C. THE FOLLOWING TEST DATA SHALL BE RECORDED AT 0%, 25%, 50%, 75%, AND 100% LOADS IN LOW AND HIGH VOLTAGE SETTINGS:
- c. EXCITING CURRENT.
- D. THE GENERATOR SHALL HAVE THE FUEL TANK FILLED TO FULL AFTER TESTING AND PRIOR TO DELIVERY TO THE OWNER.
- 3.2 SPARE PARTS
- A. SPARE PARTS SHALL BE FURNISHED WITH THE EQUIPMENT AS FOLLOWS:
- b. 2 SETS OF LUBE OIL FILTER ELEMENT.
- c. 2 SETS OF FUEL FILTER ELEMENT.
- f. 1 SET OF EACH SIZE FUSE.
- A. THE EQUIPMENT SUPPLIER SHALL PROVIDE A MINIMUM OF 4 HOURS OF TRAINING PRIOR TO THE DELIVERY OF THE GENERATOR TO THE OWNER. TRAVEL TIME AND FROM SITE SHALL BE EXCLUDED FROM TRAINING TIME. TRAINING SHALL INCLUDE ROUTINE MAINTENANCE AND OPERATION OF GENERATOR. PROVIDE EQUIPMENT O&M MANUALS AT TIME OF TRAINING. IN ADDITION, PROVIDE A MAINTENANCE SCHEDULE

PLUMAS AVENUE ELEMENTARY SCHOOL GENERATOR DOCKING STATION 440 PLUMAS AVENUE OROVILLE, CA

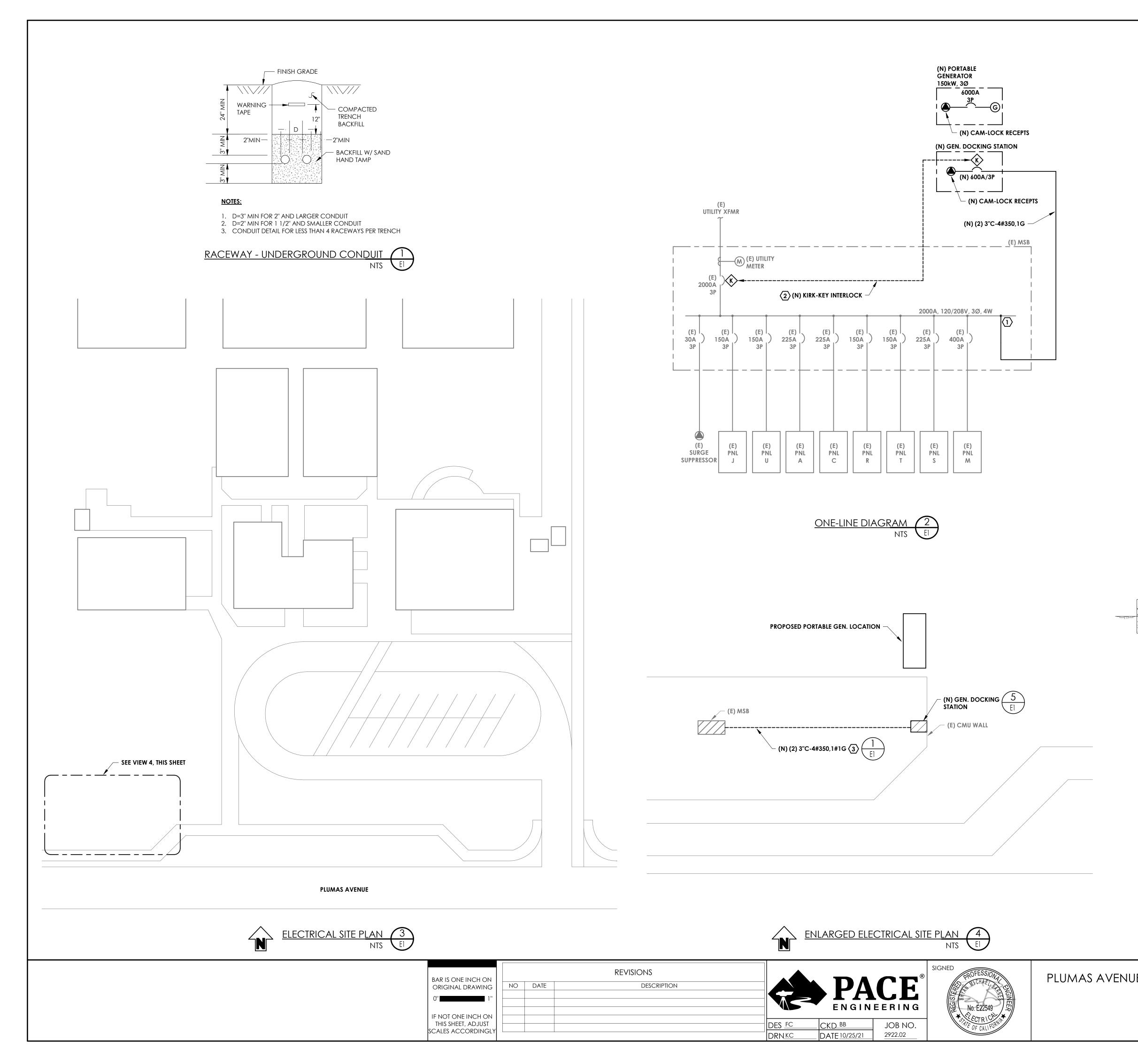
ELECTRICAL SPECIFICATIONS



- a. VOLTAGE.
- b. CURRENT
- d. FREQUENCY.

- a. 5 LAMPS FOR EACH TYPE OF INDICATING LIGHT.
- d. 1 SET OF AIR CLEANER ELEMENT.
- e. 1 SET OF V-BELTS (COMPLETE SET).
- 3.3 TRAINING
 - FOR ROUTINE MAINTENANCE OF GENERATOR.

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KEYNOTES

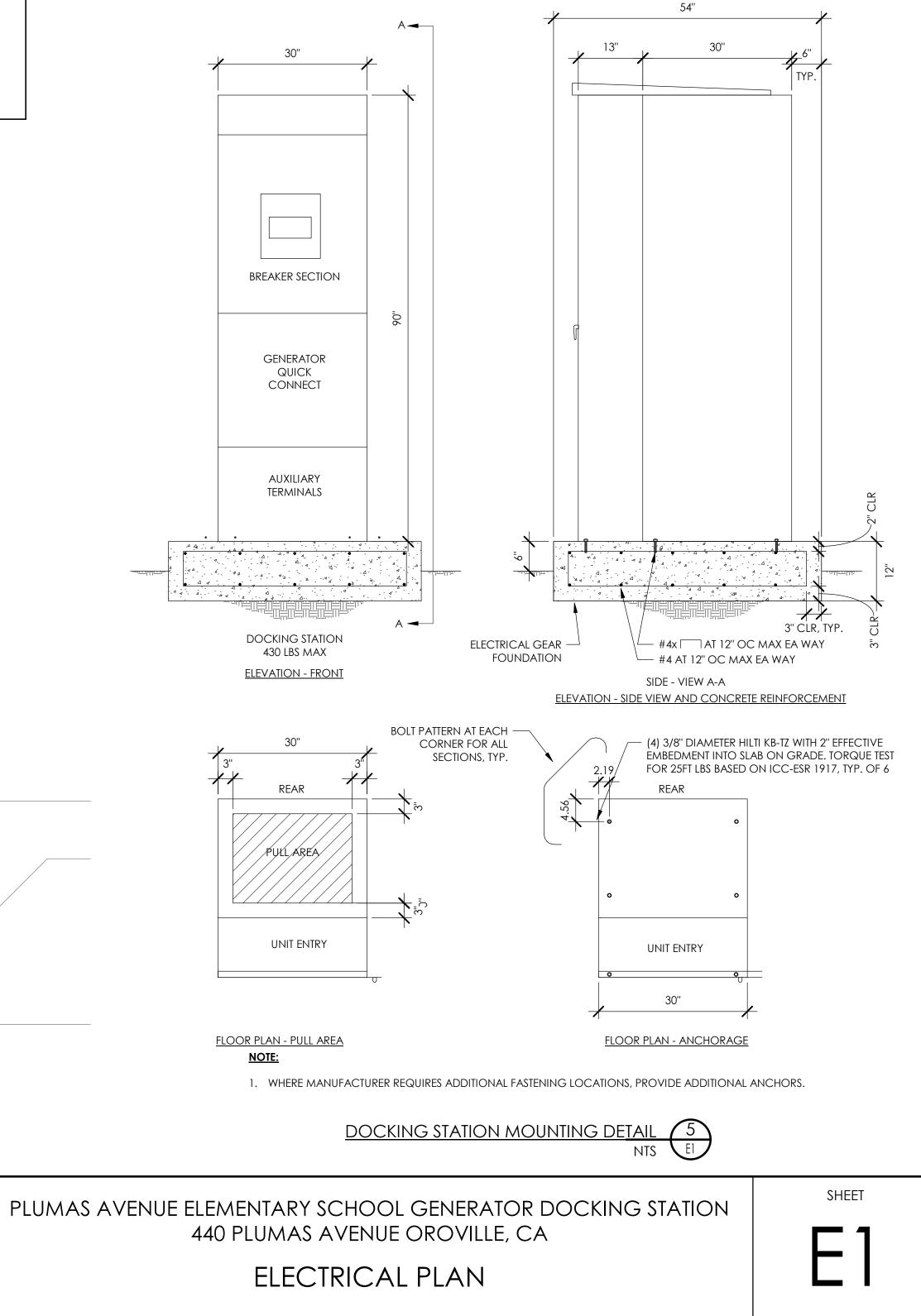
(#) NOTE

- PROVIDE AND INSTALL MECHANICAL LUGS AND TAP EXISTING BUSSING. MAKE NECESSARY MODIFICATIONS TO EXISTING MAIN SWITCHBOARD BUSSING TO FACILITATE TERMINATION. IF ADDITIONAL BUSSING MODIFICATION IS REQUIRED, COORDINATE WITH UL LISTING REPRESENTATIVE TO RELIST EXISTING MAIN SWITCHBOARD AFTER WORK IS DONE. ALL
- BUSSING MODIFICATIONS SHALL ADHERE TO UL AND CEC REQUIREMENTS. 2. PROVIDE AND INSTALL A KIRK-KEY INTERLOCK SYSTEM AT BOTH BREAKERS AS SHOWN.
- BREAKERS SHALL NOT BE ABLE TO BE TURNED TO THE "ON" POSITION SIMULTANEOUSLY. MAKE MODIFICATIONS AS NECESSARY TO MOUNT HARDWARE. PENETRATE SIDE OF MAIN SWITCH BOARD AND PROVIDE AND INSTALL IB CONDULET TO
- PENETRATE SIDE OF MAIN SWITCH BOARD AND PROVIDE AND INSTALL LB CONDULET TO ROUTE CONDUIT/CONDUCTORS DOWN AND UNDERGROUND TO DOCKING STATION. SEAL ALL PENETRATIONS AND REPAIR ALL DISTURBED SURFACES TO MATCH EXISTING CONDITIONS.

COMPLY WITH APPLICABLE CODES

CODE

- 1. NFPA 30: FLAMMABLE AND COMBUSTIBLE LIQUIDS.
- NFPA 54: FUEL GAS CODE.
 NFPA 110: EMERGENCY AND STANDBY POWER.
- CALIFORNIA BUILDING CODE.
 CALIFORNIA ELECTRIC CODE.
- CALIFORNIA ELECTRIC CODE.
 CALIFORNIA ENERGY CODE.
- 7. CALIFORNIA FIRE CODE.



	CONDUIT EXPOSED					
	CONDUIT CONCEALED or BL					
	INDICATES FIRE RATED WALL					 1.1 INTENT OF PLANS A. ELECTRICAL PLAN DRAWINGS SHOW ONLY GE RACEWAY UNLESS SPECIFICALLY DIMENSIONE
Ð	CONDUIT UP					ROUTING OF RACEWAY, SUBJECT TO THE APPE NECESSARY TO WIRING, CONDUIT, DISCONNE
 O	CONDUIT DOWN					AFFECTED MATERIAL OR EQUIPMENT TO ACCO PROJECT.
──► LA-2	HOME RUN-DESTINATION SH	OWN				1.2 CODES, PERMITS, AND REGULATIONS A. DO ALL WORK AND INSTALL PRODUCTS IN ACC DECUMPERATIVE OF ADDILICATIONS STATE AND LO
	TICK MARKS W/BARS INDICA	TES NUMBE	R OF #10 C	ONDUCTORS WITH #10 GROUND		REQUIREMENTS OF APPLICABLE STATE AND LO CONTRACTOR SHALL ADHERE TO THE SPECIFIC UTILITY COMPANIES. CONFLICTS, IF ANY, WILL
	TICK MARKS WITHOUT BARS I	NDICATES I	NUMBER OF	#12 CONDUCTORS WITH #12 GROUND		B. IT IS OF THE UTMOST IMPORTANCE THAT THE IN PROJECT-SPECIFIC REQUIREMENTS SHOWN IN
Û	JUNCTION BOX					THAT THE CONTRACTOR CONTACT THE EEOR F INFORMATION IS REQUIRED. THE EEOR SHALL F
٢	CONNECTION POINT (CONT	RACTOR SH		AINE CONNECTION CONFIGURATION)		INSTALLATION DOES NOT FALL WITHIN THESE PI MADE FOR INSTALLATIONS NOT ADHERING TO
 ŧ	DUPLEX RECEPTACLE				DEVICE BOXES SHALL BE 18"	 1.3 SUBMITTALS A. GENERAL: 1. BEFORE ANY MATERIAL IS FABRICATED OF
-#	QUADRUPLEX RECEPTACLE				COD UNLESS	DRAWINGS, DIMENSIONS, CATALOG CUT DESCRIPTIVE MATTER AS REQUIRED TO FU
€	SINGLE OR THREE PHASE REC	CEPTACLE, S	ee plan Sh	EETS TYPE PER LOCATION	OTHERWISE NOTED	1.4 TESTING RELATED SUBMITTALS A. TEST PROCEDURES: SUBMIT THE PROCEDURES
	PULLBOX	_				TEST. PROCEDURES SHALL INCLUDE TEST DESC CONTROL AND DOCUMENT THE REQUIRED TEST
٢E	FUSED DISCONNECT	XXA/XXF XX	60AS/20F WP	60A DISCONNECT / 20A FUSE NEMA 3R		DOCUMENT THE TEST BY SUBMITTING A COPY 1.5 ADDITIONAL SERVICES A. ELECTRICAL CONTRACTOR SHALL PROVIDE TEL THE DURATION OF THIS PROJECT, PROVIDE AN
÷	NON-FUSED DISCONNECT	XX XX	60AS/20F WP	60A DISCONNECT NEMA 3R		THE DURATION OF THIS PROJECT. PROVIDE AN FESTOON LIGHTING OR OTHER ELECTRICAL ITE CONTRACTOR.
	MAJOR ELECTRICAL COMPO IDENTIFYING SYMBOL AS SHO		DEVICE NAN	NE OR		PART 2 – PRODUCTS 2.1 NOTE
	SURFACE MOUNT PANELBOA	ARD				A. UNLESS OTHERWISE INDICATED, PROVIDE ALL I AND SUITABLE FOR THE INTENDED USE AND THI
	FLUSH MOUNT PANELBOARD)				UL WHEREVER STANDARDS HAVE BEEN ESTABLI INCIDENTAL ITEMS NOT SPECIFICALLY SHOWN COMPLETE SYSTEMS SPECIFIED HEREIN, WHER
	EXOTHERMIC WELD, TERMIN,	ation or s	PLICE POIN	Т		OR EQUIPMENT ARE REQUIRED, PROVIDE PRO PARTS OF MATERIALS OR EQUIPMENT NEED NO
•	GROUND ROD					2.2 EQUIPMENT FINISH A. UNLESS OTHERWISE INDICATED, FINISH FOR ELI
=	GROUNDING ELECTRODE					MANUFACTURER'S STANDARD GRAY OR ANSI & 2.3 CONDUIT AND CONDUIT FITTINGS:
	CIRCUIT BREAKER					 A. GALVANIZED RIGID STEEL CONDUIT (GRS): 1. CONDUIT: A. MEET REQUIREMENTS OF ANSI C80.1
}	CURRENT TRANSFORMER, NU	JMBER INDI	CATED			A. MEET REQUIREMENTS OF ANSI C80.T B. MATERIAL: HOT-DIP GALVANIZED, W 2. FITTINGS:
(#)	KEYNOTE					A. MEET REQUIREMENTS OF UL 514B. B. TYPE: THREADED, GALVANIZED. SETS
(A : B)				/OR CONDUCTORS, E.G., 4"C-4#500,1#30 FROM THE MAIN SWITCHBOARD TO PANEL		C. MATERIAL: MALLEABLE IRON WITH IN

A AC	- AMMETER, AMPERE - ALTERNATING CURRENT
ACH	- ABOVE COUNTER HEIGHT
AFF	- ABOVE COUNTER HEIGHT - ABOVE FINISHED FLOOR OR GRADE
AFF	- AMPS INTERRUPTING CAPACITY
AL	- AMES INTERROFTING CAFACITY - ALUMINUM
	- AUTOMATIC TRANSFER SWITCH
ATS	
BGES	- BUILDING GROUND ELECTRODE SYSTEM
BRKR	- BREAKER
BOD	- BOTTOM OF DEVICE
C or COND	
CAB	
CEC	- CALIFORNIA ELECTRIC CODE
CKT	
COD	
CT	- CURRENT TRANSFORMER
DC	- DIRECT CURRENT
(E) or EXIST	
EEOR	- ELECTRICAL ENGINEER OF RECORD
EGC	- EQUIPMENT GROUNDING CONDUCTOR
ENC	- ENCLOSURE
(F)	- FUTURE
G	- EQUIPMENT GROUNDING CONDUCTOR
GEC	- GROUNDING ELECTRODE CONDUCTOR
GFCI	- GROUND FAULT CIRCUIT INTERRUPT
GND	- GROUND
J	- JUNCTION BOX
LFEB	- LIFE SAFETY EMERGENCY BRANCH
MBJ	- MAIN BONDING JUMPER
мсв	- MAIN CIRCUIT BREAKER
MFR	- MANUFACTURER
MLO	- MAIN LUG ONLY
MOCP	- MAXIMUM OVERCURRENT PROTECTION
MSB	- MAIN SWITCH BOARD
MTS	- MANUAL TRANSFER SWITCH
NEC	- NATIONAL ELECTRIC CODE
NEMA	- NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION
N	- NEUTRAL
(N)	- NEW
NB	- NORMAL BRANCH
OFCI	- OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	- OWNER FURNISHED, OWNER INSTALLED
PB	- PULLBOX
PNL	- PANELBOARD
RCPT	- RECEPTACLE
RM	- ROOM
SWBD	- SWITCHBOARD
SBJ	- SYSTEM BONDING JUMPER
SSBJ TOD	- SUPPLY SIDE BONDING JUMPER
TR	
TYP	- TYPICAL
V	- VOLTMETER, VOLT
W	- WATT
WW	- WIREWAY
WP	- WEATHERPROOF (NEMA 3R)

PORTABLE GENERA						
PART 1 –GENERAL						
 1.1 WORK INCLUDED A. THE ELECTRICAL CONTRAGEQUIPMENT SPECIFIED IN 1. SUPPLY ALL EQUIPMENT 2. ASSUME OVERALL RES 1.2 REFERENCES A. EXCEPT AS OTHERWISE SPECT STANDARDS OF THE FOLLOR MINIMUM REQUIREMENTS 1. UNDERWRITERS LABOR 2. NATIONAL ELECTRICA 3. NATIONAL FIRE PROTE 4. INSTITUTE OF ELECTRICA 5. THE NATIONAL ELECTRICA 5. THE NATIONAL ELECTRICA 6. AMERICAN NATIONAL 7. DIESEL ENGINE MANU 8. INTERNAL COMBUSTION 9. AMERICAN SOCIETY OF 						
PART 2 – PRODUCTS						
 2.1 STANDARD DESIGN A. THE DESIGN OF THE GENE MANUFACTURER, EXCEPT OF A DIESEL ENGINE CON A BRUSHLESS EXCITATION WITH ALL NECESSARY ACC COMPLETE SELF-CONTAIN 2.2 MANUFACTURERS A. MATERIALS AND EQUIPME I. GENERAC. 2. CUMMINGS. 3. BLUE STAR, OR EQUAL 2.3 PERFORMANCE A. THE GENERATOR SET SHAL CONDITIONS FOR THE DU NORMAL POWER SUPPLY. I. KILOWATTS: 150kW. 2. VOLTAGE: 120/208V. 3. POWER FACTOR: 0.8. 4. PHASE: 3. 5. FREQUENCY: 60HZ. 						
 THESE DIFFER FROM THE RI ADEQUATE STRENGTH OF B. ENGINE: FOUR-CYCLE DIESEL T DRY TYPE AIR CLEANE INDICATOR WITH RESE CRANKCASE BREATHE CARTRIDGE TYPE OIL F CARTRIDGE TYPE FUEL TWENTY HOURS (MINI/ HOUSING. 						

BAR IS ONE INCH ON ORIGINAL DRAWING 0" 1"	NO	DATE	
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY			

IFICATIONS

2.4 CONDUCTORS 3.4 CUTTING AND PATCHING A. ELECTRICAL TERMINALS AND TERMINATIONS: IT IS ASSUMED THAT ALL TERMINATIONS IN THE FIELD SHALL A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC HAVE MINIMUM RATED 75°C RATED TERMINALS. THE CONTRACTOR SHALL FIELD VERIFY ALL TERMINALS APPROVAL OF THE ENGINEER. FOLLOWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW GS SHOW ONLY GENERAL LOCATIONS OF EQUIPMENT, DEVICES, AND FOR CONNECTION IN COMPLIANCE WITH CEC 110.14. THE CONTRACTOR SHALL INFORM THE CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED CALLY DIMENSIONED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER ENGINEER OF RECORD OF ANY TERMINALS DEVIATING FROM A RATING OF 75°C. 3.5 CLEANING AND TOUCH-UP PAINTING B JECT TO THE APPROVAL OF THE ENGINEER. MAKE AD JUSTMENTS AS 1. ALL CONDUCTORS ARE RATED FOR 75°C ON PLANS UNLESS OTHERWISE NOTED. A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH. UPON DNDUIT, DISCONNECTS, BRANCH CIRCUIT PROTECTION, AND OTHER COMPLETION OF WORK, REMOVE MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM B. ALL CONDUCTORS SHOWN SHALL BE NEW UNLESS OTHERWISE INDICATED. QUIPMENT TO ACCOMMODATE ACTUAL EQUIPMENT SUPPLIED FOR THIS THE INTERIOR AND EXTERIOR OF ALL DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO C. CONDUCTOR TYPE: ALL OTHER CIRCUITS: STRANDED. NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED. INSULATION: TYPE THHN/THWN, 90°C DRY OR 75°C WET. 3.6 RACEWAY SYSTEM PRODUCTS IN ACCORDANCE WITH APPLICABLE NECA REQUIREMENTS, THE A. UNLESS OTHERWISE SPECIFIED OR INDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS D. COPPER BUILDING WIRE: ABLE STATE AND LOCAL LAWS, CODES AND ORDINANCES. THE 1. DESCRIPTION: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN COPPER CURRENT-CARRYING INSTALLED IN RACEWAYS OF THE TYPES INDICATED: RE TO THE SPECIFIC PRODUCT AND INSTALLATION REQUIREMENTS OF THE CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600 VAC OR B. EXTERIOR, EXPOSED: GALVANIZED RIGID STEEL. FLICTS, IF ANY, WILL BE RESOLVED AT THE DISCRETION OF THE ENGINEER. 3.7 RACEWAY INSTALLATION TANCE THAT THE INSTALLING CONTRACTOR HAVE A MASTERY OF THE a. INSULATION: A. CONDUIT AND TUBING SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS. MENTS SHOWN IN SPECIFICATIONS AND PLANS. IT IS STRONGLY ADVISED • TYPE THHN AND TYPE THWN-2: COMPLY WITH UL 83. MAINTAIN RACEWAY ENTIRELY FREE OF OBSTRUCTIONS AND MOISTURE ONTACT THE EEOR FOR CLARIFICATION OR RFI THE EEOR IF FURTHER 2.5 CONDUCTOR ACCESSORIES FOLLOW STRUCTURAL SURFACE CONTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID . THE EEOR SHALL REQUIRE REVISIONS TO BE MADE IN THE FIELD IF THE A. CABLE TIES OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO ALL WITHIN THESE PROJECT-SPECIFIC GUIDELINES. NO ALLOWANCE SHALL BE NYLON, ADJUSTABLE, AND SELF-LOCKING. WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES. NOT ADHERING TO THESE REQUIREMENTS. 2. COMPLY WITH UL 20 AND FS W-S-896. D. INSTALL WATERTIGHT FITTINGS IN OUTDOOR, UNDERGROUND, OR WET LOCATIONS. E. ALL METAL CONDUIT TO BE REAMED, BURRS REMOVED, AND CLEANED BEFORE INSTALLATION OF 2.6 GENERATOR DOCKING STATION A. ACCEPTABLE MANUFACTURER'S FOR THE WORK SHALL BE AS FOLLOWS: CONDUCTORS, WIRES, OR CABLES. IS FABRICATED OR SHIPPED, FURNISH TO THE ENGINEER FULL DETAILS, SHOP INSTALL CONCEALED, EMBEDDED, AND BURIED RACEWAYS SO THAT THEY EMERGE AT RIGHT ANGLES 1. EATON NS, CATALOG CUTS, SCHEMATIC (ELEMENTARY) DIAGRAMS, AND OTHER TO SURFACE AND HAVE NO CURVED PORTION EXPOSED. SIEMENS AS REQUIRED TO FULLY DESCRIBE THE EQUIPMENT SPECIFIED. 3.8 RACEWAY PENETRATIONS OR EQUAL B. GENERATOR DOCKING STATION: A. MAKE AT RIGHT ANGLES, UNLESS OTHERWISE SHOWN. THE PROCEDURES TO BE FOLLOWED DURING THE OPERATIONAL READINESS a. ENCLOSURE: NEMA 3R (NONWALK-WIN) FLAT ROOF. B. NOTCHING OR PENETRATION OF STRUCTURAL MEMBERS, INCLUDING FOOTINGS AND BEAMS, NOT NCLUDE TEST DESCRIPTIONS, FORMS, AND CHECKLISTS TO BE USED TO b. BUS MATERIAL : TIN-PLATED ALUMINUM PFRMITTED THE REQUIRED TESTS. UPON COMPLETION OF EACH REQUIRED TEST, C. FIRE-RATED WALLS, FLOORS, OR CEILINGS: FIRE-STOP OPENINGS AROUND PENETRATIONS TO GROUND BUS MATERIAL: COPPER BMITTING A COPY OF THE SIGNED OFF TEST PROCEDURES CAM STYLE MALE CONNECTORS AND GROUNDING TERMINALS. MAINTAIN FIRE-RESISTANCE RATING. D. CONCRETE WALLS, FLOORS, OR CEILINGS (ABOVEGROUND): PROVIDE NONSHRINK GROUT DRYe. PAD-LOCKABLE ENCLOSURE. SHALL PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES FOR GENERATOR INCOMING POWER QUICK CONNECT RECEPTACLES. PACK, OR USE WATERTIGHT SEAL DEVICE. JECT. PROVIDE AND INSTALL TEMPORARY PANELBOARDS, SPYDER BOXES, g. HINGED ACCESS PANEL FOR GENERATOR CAM TYPE CONNECTOR FEEDER CABLES. NONE OF THE E. ENTERING STRUCTURES: HER ELECTRICAL ITEMS AS NEEDED. COORDINATE WITH THE GENERAL SEAL RACEWAY AT THE FIRST BOX WITH CONDUIT SEALING BUSHING TO PREVENT THE ENTRANCE CAM TYPE INLETS SHALL BE ACCESSIBLE UNLESS THE HINGED ACCESS PANEL DOOR IS OPEN. UNIT SHALL HAVE STAINLESS STEEL HINGES. OF GASES OR LIQUIDS FROM ONE AREA TO ANOTHER. i. ANSI-61 GRAY POWDERCOAT INSIDE AND OUT. 3.9 RACEWAY SUPPORT A. SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, C. CIRCUIT BREAKERS NEMA AB 1 AND UL 489. AND IN ANY CASE NOT EXCEEDING 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR 100% RATED THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, MOLDED CASE, OF THE OTHER RACEWAYS. TED, PROVIDE ALL FIRST-QUALITY NEW MATERIALS, FREE FROM ANY DEFECTS, INDICATING TYPE SHOWING ON/OFF AND TRIPPED POSITIONS OF OPERATING HANDLE. B. WALL BRACKETS AND ASSOCIATED HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE NDED USE AND THE SPACE PROVIDED. PROVIDE MATERIALS APPROVED BY STAINLESS STEEL, PROVIDE GALVANIZED STEEL AT ALL OTHER LOCATIONS, STRAP HANGERS AND 3. NONINTERCHANGEABLE, IN ACCORDANCE WITH CEC HAVE BEEN ESTABLISHED BY THAT ORGANIZATION. FURNISH AND INSTALL ALL 4. PROVISIONS FOR HANDLE PADLOCKING, UNLESS OTHERWISE SHOWN. CEILING TRAPEZE INCLUDING HARDWARE, SHALL BE GALVANIZED STEE CIFICALLY SHOWN OR SPECIFIED WHICH ARE REQUIRED TO PROVIDE THE 5. MULTI-POLE CIRCUIT BREAKERS DESIGNED TO AUTOMATICALLY OPEN ALL POLES WHEN AN C. PROVIDE AND ATTACH WALL BRACKETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS: ED HEREIN. WHERE TWO OR MORE UNITS OF THE SAME CLASS OF MATERIAL OVERLOAD OCCURS ON ONE POLE. WOOD: WOOD SCREWS. RED. PROVIDE PRODUCTS OF A SINGLE MANUFACTURER. COMPONENT KIRK KEY INTERLOCK SYSTEM. HOLLOW MASONRY UNITS: TOGGLE BOLTS. QUIPMENT NEED NOT BE PRODUCTS OF THE SAME MANUFACTURER. 3. CONCRETE OR BRICK: EXPANSION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER D. GENERATOR DOCKING STATION SHALL BE SUITABLE FOR 600A RATING, 120/208V, 3Ø, 4W CONNECTION, 65kAIC. CHARGE, WITH LOCK WASHERS AND NUTS. TED, FINISH FOR ELECTRICAL EQUIPMENT AND ENCLOSURES SHALL BE 4. STEELWORK: MACHINE SCREWS. RD GRAY OR ANSI 61 GRAY OVER A PRIMER AND RUST INHIBITOR. PART 3 – EXECUTION 3.10 RACEWAY BENDS A. INSTALL CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE. CONDUIT (GRS): B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY 3.1 NOTE A. COORDINATE ELECTRICAL WORK WITH THE OWNER AND THE WORK OF OTHER TRADES TO AVOID OR BENDING MACHINE. DO NOT HEAT METAL RACEWAYS TO FACILITATE BENDING. NTS OF ANSI C80.1 AND UL 6. CONFLICTS, ERRORS, DELAYS, AND UNNECESSARY INTERFERENCE DURING CONSTRUCTION. IP GALVANIZED, WITH CHROMATED PROTECTIVE LAYER. 3.2 PROTECTION DURING CONSTRUCTION A. FOLLOWING INSTALLATION, PROTECT MATERIALS, EQUIPMENT, AND INSULATION FROM CORROSION, NTS OF UL 514B. PHYSICAL DAMAGE, AND MOISTURE. CAP CONDUIT RUNS DURING CONSTRUCTION WITH GALVANIZED. SETSCREW FITTINGS NOT PERMITTED.

3.3 MATERIAL AND EQUIPMENT INSTALLATION FOLLOW THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS UNLESS OTHERWISE INDICATED. FOLLOW THE ENGINEER'S DECISION, WHEREVER ANY CONFLICT ARISES. KEEP COPY OF THE

TOR SPECIFICATIONS

- ACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL OF THE THIS SECTION. ENT CONTAINED HEREIN.
- PONSIBILITY FOR THE COMPLETE OPERATING SYSTEM.
- PECIFIED, THE APPLICABLE RULES, REGULATIONS, AND OWING ORGANIZATIONS SHALL BE CONSIDERED AS
- DRATORIES (3UL).
- AL CODE (NEC). ECTION ASSOCIATION (NFPA).
- CAL AND ELECTRONICS ENGINEERS (IEEE).
- RICAL MANUFACTURERS ASSOCIATION (NEMA).
- . STANDARDS INSTITUTE (ANSI). JFACTURERS ASSOCIATION (DEMA).
- ON ENGINE INSTITUTE.
- OF MECHANICAL ENGINEERS (ASME).
- AL CONTRACTOR'S ASSOCIATION (NECA).

IERATOR SETS SHALL BE THE STANDARD OF THE I AS NOTED. THE ENGINE GENERATOR UNIT SHALL CONSIST

NNECTED TO AN ALTERNATING CURRENT GENERATOR WITH I SYSTEM MOUNTED ON A STEEL SUB-BASE AND PROVIDED CESSORIES AND ANCILLARY SYSTEMS RESULTING IN A NED, TRAILER-MOUNTED UNIT.

ENT SPECIFIED IN THIS SECTION SHALL BE PRODUCTS OF:

- LL BE CAPABLE OF CONTINUOUS OPERATION AT RATED URATION OF ANY INTERRUPTION OR OUTAGE OF THE THE GENERATOR SET SHALL BE RATED AS FOLLOWS:
- DARDS OF THE VARIOUS MANUFACTURERS, EXCEPT WHERE REQUIREMENTS OF THESE SPECIFICATIONS. PROVIDE ALL PARTS FOR THE SPECIFIED DUTY.
- ER WITH CLEANABLE PARTICLE TRAP AND SERVICE
- ER WITH EXTERNAL DISCHARGE.
- FILTER. FILTER.
- IMUM) FULL LOAD FUEL TANK CONTAINED WITHIN GENSET

- 9. ELECTRIC STARTING MOTOR, 24 OR 12 VOLT D.C, WITH SAFETY CIRCUIT (WILL
- NOT REENGAGE IF ENGINE IS RUNNING).
- 10. BATTERY CHARGING GENERATOR.
- 11. GLOW PLUGS. 2.5 CONTROL PANEL
- A. PROVIDE A GENERATOR-SET CONTROL PANEL MOUNTED ON THE GENERATOR AND EQUIPPED WITH THE FOLLOWING:
- 1. VOLTMETER, 2.5 PERCENT MINIMUM ACCURACY. 2. AC VOLTMETER CHANGE OVER SWITCH: FOUR POSITION SWITCH TO VERIFY
- OUTPUT VOLTAGE BETWEEN PHASES. 3. AMMETER: WITH AN ACCURACY OF 2.5% OF FULL SCALE. 4. AC AMMETER CHANGE OVER SWITCH : FOUR POSITION SWITCH TO VERIFY
- CURRENT OF EACH PHASE. 5. AVAILABLE SELECTABLE VOLTAGES: 3-PHASE: 120/208V.
- PILOT LAMP FOR AC POWER.
- FREQUENCY METER: 1% ACCURACY,
- 8. ELAPSED TIME METER. 9. ENGINE TACHOMETER.
- 10. ENGINE COOLANT TEMPERATURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL AND ABNORMAL CONDITIONS.
- 11. ENGINE OIL PRESSURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL AND ABNORMAL CONDITIONS. 12. CHARGING AMMETER FOR CHARGING GENERATOR.
- 13. KEY OPERATED PRE-HEAT, OFF, RUN, START SWITCH.
- 14. TWO STAGE THROTTLE CONTROL RUN AND IDLE POSITIONS.
- 15. AUTOMATIC SHUTDOWNS WITH FAULT INDICATION LIGHTS FOR HIGH WATER TEMPERATURE, LOW OIL PRESSURE, GLOW PLUG INDICATOR. 16. PANEL LIGHT WITH SWITCH.
- 2.6 GENERATOR OUTPUT CIRCUIT BREAKER
- A. MAIN LINE MOLDED CASE THERMAL MAGNETIC CIRCUIT BREAKER WITH A SHUNT TRIP SHALL BE MOUNTED TO ALLOW OPERATION FROM OUTSIDE THE CONTROL PANEL. PROVIDE A CURRENT SENSING RELAY THAT IS SET TO ADEQUATELY PROTECT THE GENERATOR.
- 2.7 GOVERNOR
- A. GOVERNING SYSTEM SHALL BE SUITABLE FOR CONTROLLING THE SPEED OF THE GENERATOR SET WITHIN THE REQUIREMENTS SPECIFIED WITHOUT THE INTERMEDIATE ADJUSTMENT AND SHALL MAINTAIN THE SPECIFIED STABILITY WITHOUT HUNTING OR CYCLING. 2.8 OUTPUT TERMINALS:
- A. THE MAIN GENERATOR OUTPUT TERMINALS WILL BE LOCATED WITHIN THE GENSET ENCLOSURE. POSITIONING SHOULD PROVIDE BOTH EASY ACCESSIBILITY FOR WIRING AND A CABLE ENTRANCE SO WIRING CAN RUN FROM THE CONNECTED LOAD TO THE OUTPUT TERMINALS WITH ALL GENSET ENCLOSURE DOORS LOCKED.
- 2.9 COOLING SYSTEM A. THE RADIATOR FAN SHALL DIRECT THE AIR FLOW FROM THE ENGINE OUTWARD THROUGH THE RADIATOR, WITH VERTICAL AIR DISCHARGE. THE FAN SHALL BE DRIVE 2.14 RECEPTACLE ENCLOSURE DIRECTLY FROM THE ENGINE CRANKSHAFT OR THROUGH V-BELT DRIVE. THE RADIATOR SHALL HAVE SUFFICIENT CAPACITY TO DISSIPATE NOT LESS THAN THE TOTAL BTU PER HOUR REJECTED BY THE ENGINE TO THE COOLING SYSTEM AT 110% RATED LOAD IN 104F AMBIENT, AND AGAINST A STATIC RESTRICTION OF 0.5 INCHES OF WATER AS MAYBE IMPOSED BY ENCLOSURE. THE RADIATOR SHALL BE PROTECTED

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- BY A STRONG GRILL B. THE RADIATOR SHALL BE PROVIDED WITH COOLANT RESERVE TANK WHICH IS CAPABLE OF COOLANT LEVEL CHECKING.
- 2. (2) NEMA 5-20R, 120V RECEPTACLES 3. RECEPTACLES SHALL BE CLAMP COVER, RAINTIGHT. 4. EACH RECEPTACLE SHALL BE HARDWIRED TO THE GENERATOR. 5. MANUFACTURERS: a. CROUSE-HINDS b. APPLETON.
 - c. OR EQUAL.

2.10 BATTERIES

2.11 EXHAUST SYSTEM

2.12 ENCLOSURE

OF 100 AMP-HOUR RATED.

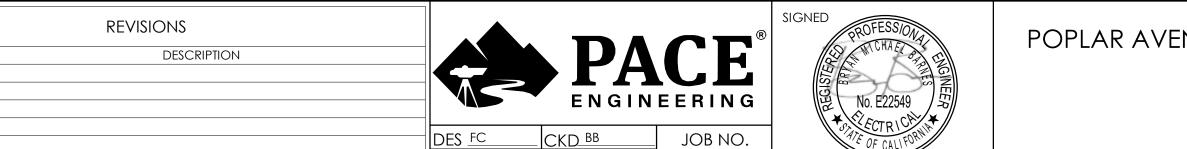
DBA AT 50 FEET (FULL LOAD).

LUBRICATING OIL, AND FUEL.

DOOR IS LOCKED.

2.13 VIBRATION ISOLATORS

THE EXHAUST SYSTEM



DATE 10/25/21

DRNKC

- MANUFACTURED SEALS. KEEP OPENINGS IN BOXES OR EQUIPMENT CLOSED DURING CONSTRUCTION.
- MANUFACTURER'S INSTALLATION INSTRUCTIONS AVAILABLE ON THE JOBSITE FOR REVIEW AT ALL TIMES.
- 7. FAN (BLOWER TYPE) WITH FAN DRIVE. 8. ENGINE COOLANT WATER PUMP.

- 3.11 TERMINATION AT ENCLOSURES A. SHEET METAL BOXES, CABINETS, AND ENCLOSURES:
 - GALVANIZED RIGID STEEL CONDUIT: a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
 - INSTALL GROUNDING BUSHING c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR
 - GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE
 - d. INSTALL INSULATED BUSHING ON ENDS OF CONDUIT WHERE GROUNDING IS NOT REQUIRED. e. PROVIDE INSULATED THROAT WHEN CONDUIT TERMINATES IN SHEET METAL BOXES HAVING THREADED HUBS.
- 3.12 CONDUCTORS A. DO NOT SPLICE INCOMING SERVICE CONDUCTORS AND BRANCH POWER DISTRIBUTION CONDUCTORS NO. 6 AWG AND LARGER UNLESS SPECIFICALLY INDICATED OR APPROVED BY ENGINEER
- B. CONNECTIONS AND TERMINATIONS: 1. INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG INSTALL UNINSULATED, BOLTED, TWO-WAY CONNECTORS AND TERMINATORS FOR CIRCUIT
- CONDUCTORS NO. 4/0 AWG AND LARGER. 3. TAPE INSULATE ALL UNINSULATED CONNECTIONS
- PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER. COMPRESSION LUGS:
- a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE. b. TOOL SHALL PROVIDE COMPLETE, CONTROLLED CRIMP AND SHALL NOT RELEASE UNTIL CRIMP IS COMPLETE.
- c. DO NOT USE PLIER TYPE CRIMPERS. C. SPLICES AND TERMINATIONS:
- INDOORS: USE GENERAL PURPOSE, FLAME RETARDANT TAPE. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.
- D. CABINETS AND PANELS: REMOVE SURPLUS WIRE, BRIDLE AND SECURE WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING
- MATERIAL TO PROTECT THE CONDUCTORS. 3.13 GROUNDING A. UNLESS OTHERWISE INDICATED, GROUND ALL EXPOSED NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, AND THE NEUTRAL OF ALL WIRING SYSTEMS IN
- ACCORDANCE WITH THE CEC, STATE, AND OTHER APPLICABLE LAWS AND REGULATIONS. 3.14 OPERATIONAL READINESS TEST (ORT) A. TESTING, TEST PLANS, AND TEST REPORTS SHALL BE PROVIDED BY THE CONTRACTOR AS SPECIFIED
- HEREIN. THE CONTRACTOR SHALL PROVIDE LABOR, INSTRUMENTS, AND OTHER MATERIAL TO COMPLETE THE TEST B. THE ENTIRE INSTALLED ELECTRICAL SYSTEM SHALL BE CERTIFIED (INSPECTED, TESTED, AND
- DOCUMENTED) THAT IT IS READY FOR OPERATION. THE OBJECTIVE OF THIS TEST IS TO DEMONSTRATE THAT THE ELECTRICAL SYSTEM IS COMPLETE AND READY FOR USE. 1. GROUNDING SYSTEM:
- a. VERIFY GROUND SYSTEM IS IN COMPLIANCE WITH THE PLANS. PANELBOARD DIRECTORIES SHALL MEET MINIMUM CEC 408.4 REQUIREMENTS. THE CONTRACTOR SHALL IDENTIFY EACH CIRCUIT WITH ROOM NUMBER, ROOM NAME AND EQUIPMENT SERVED. STANDARD ABBREVIATIONS FROM THE NEC AND WEBSTER'S DICTIONARY ARE ALLOWED. (E.G., "207
- JANITOR WH" OR "102,103 RR RCPT". D. LABELS SHALL BE MELAMINE, FLEXI-BRASS, OR EQUAL MATERIAL, 1.5"HX3"L, WITH 3/8"H TIMES NEW ROMAN LETTERING
- 1. BACKGROUND/LETTERING COLOR SHALL BE AS FOLLOWS: a. BLACK/WHITE (NORMAL BRANCHES) 2. EQUIPMENT LABELING (FOR ALL PROJECT TYPES) SHALL FOLLOW AFTER THE EXAMPLES SHOWN BELOW (FOR GENERATOR/ATS, PANELBOARDS, DISCONNECTS, LIGHTING CONTROL PANELS, ETC.): PANEL A2 **DISCONNECT B1**

FED FROM PNI M1 60A/15F, 208V/3Ø

- C. FILLER CAPS SHALL BE DESIGNED FOR PRESSURE RELIEF PRIOR TO REMOVAL. A THERMOSTATIC CONTROL VALVE SHALL BE INSTALLED IN THE JACKET WATER SYSTEM OF THE ENGINE TO MAINTAIN THE WATER SYSTEM TEMPERATURE OF THE ENGINE. THE THERMOSTATIC VALVE SHALL BE STANDARD MODULATING TYPE UTILIZING SELF-CONTAINED THERMOSTATS. THE VALVE SHALL BE CAPABLE OF PASSING THE WATER 2.16 GENERATOR TRAILER FLOW AS DETERMINED BY THE MANUFACTURER WITHOUT EXCESSIVE PRESSURE DROP ACROSS THE VALVE. THE THERMOSTATIC ELEMENTS SHALL BE NON-ADJUSTABLE TYPI AND THE OPERATING TEMPERATURE SHALL BE SET AT THE TEMPERATURE RECOMMENDED BY THE ENGINE MANUFACTURER. THE RADIATOR WILL BE SIZED TO INCLUDE A 50% SOLUTION OF ETHYLENE GLYCOL AND A COMPENSATION FACTOR FOR ENGINE-RADIATED HEAT. SUBMIT STANDARD PUBLISHED CURVES SHOWING ATTITUDE AND AMBIENT TEMPERATURE DERATING.
- A. THE ENGINE CRANKING BATTERY SHALL BE SAE TYPE D, DIESEL ENGINE STARTING TYPE, AND OF SUFFICIENT SIZE AND CAPACITY IN A FULLY CHARGED CONDITION TO START THE ENGINE-GENERATOR SET SIX CONSECUTIVE TIMES. BATTERIES SHALL BE MINIMUM
- A. EXHAUST SILENCER: PROVIDE AND MOUNT A CRITICAL-TYPE EXHAUST SILENCER, MOUNTED WITHIN ENCLOSURE AND INSULATED AS REQUIRED TO MAINTAIN TEMPERATURE RISE WITHIN ENCLOSURE TO 15F
- B. PROVIDE AND MOUNT AN EXHAUST FLEX CONNECTOR TO ALLOW FOR VIBRATION IN C. PROVIDE AND MOUNT A RAIN CAP ON THE EXHAUST OUTLET OR OTHER DEVICE TO PREVENT ENTRY OF RAIN INTO MUFFLER.
- A. THE COMPLETE ENGINE-GENERATOR SET AND ALL COMPONENTS WILL BE MOUNTED IN A WEATHERPROOF, COMPLETELY LOCKABLE ENCLOSURE DESIGNED SO THE UNIT CAN OPERATE WITH ALL DOORS CLOSED AT FULL LOAD WITHOUT OVERHEATING. THE ENCLOSURE MUST BE SOUND ATTENUATED TO 66 DBA AT 23 FEET (FULL LOAD) AND 60
- B. THE ENCLOSURE WILL BE DESIGNED SO THAT THE MUFFLER WILL MOUNT INSIDE AND RADIATOR AIR WILL EXHAUST VERTICALLY.
- C. THE ENCLOSURE WILL BE PAINTED, HAVE HINGED DOORS, AND BE CONSTRUCTED OF A MINIMUM 13 GAUGE SHEET METAL. ALL AIR INLETS SHALL BE SOUND ATTENUATED. D. THE ENCLOSURE SHOULD BE PROVIDED WITH A WINDOW FOR UNOBSTRUCTED VIEWING OF ENGINE AND GENERATOR CONTROL PANEL WHILE CONTROL PANEL
- E. THE ENCLOSURE SHOULD BE CAPABLE OF ONE-POINT LIFTING. F. THE ENCLOSURE WILL INCLUDE EXTERNAL DRAIN EXTENSIONS FOR COOLANT,
- THE ENTIRE ENGINE-GENERATOR SET SHALL BE MOUNTED ON VIBRATION ISOLATORS, WHICH ISOLATE ENGINE-GENERATOR VIBRATION FROM THE STEEL BASE. B. THE COMPLETE ENGINE-GENERATOR WITH ENCLOSURE SHALL BE CAPABLE OF BEING
- MOUNTED DIRECTLY TO A TRAILER FRAME WITHOUT ADDITIONAL VIBRATION ISOLATORS NECESSARY FOR OPERATION A. PROVIDE (3) NEMA 5-20R 120V RECEPTACLES.
- B. MOUNT AND LABEL THE FOLLOWING RECEPTACLE IN THE RECEPTACLE ENCLOSURE: 1. CAMLOCK RECEPTACLES RATED FOR 208V, 3Ø, 4W, 600A POWER SYSTEM.

- 2.15 CORD AND PLUG
- A. PROVIDE 100 FT LONG, 4#700 SO CORD FOR CONNECTION FROM THE GENERATOR RECEPTACLE TO THE RECEPTACLE ON THE BUILDING. PLUG ON BOTH ENDS OF CABLE SHALL BE CAMLOCK. STORE COMPLETE CORD SET IN CABLE STORAGE BOX.
- A. PROVIDE A UNIT MOUNTED ON CALIFORNIA LEGAL DUAL AXLE TRAILER, TO INCLUDE THE FOLLOWING
- 1. ENCLOSED FEEDERS.
- 2. 2-5/16 INCH BALL HITCH. 3. ADJUSTABLE REAR STABILIZERS.
- 4. CABLE BOX.
- 5. SURGE BRAKES.
- 6. 26-INCH BED TIGHT. 7. PROVIDE ALL EQUIPMENT FOR LEGAL HIGHWAY TRANSPORT.
- 8. SPARE TIRE AND LUG NUT WRENCH,

FED FROM PNI B1

400A, 120/208V, 3Ø

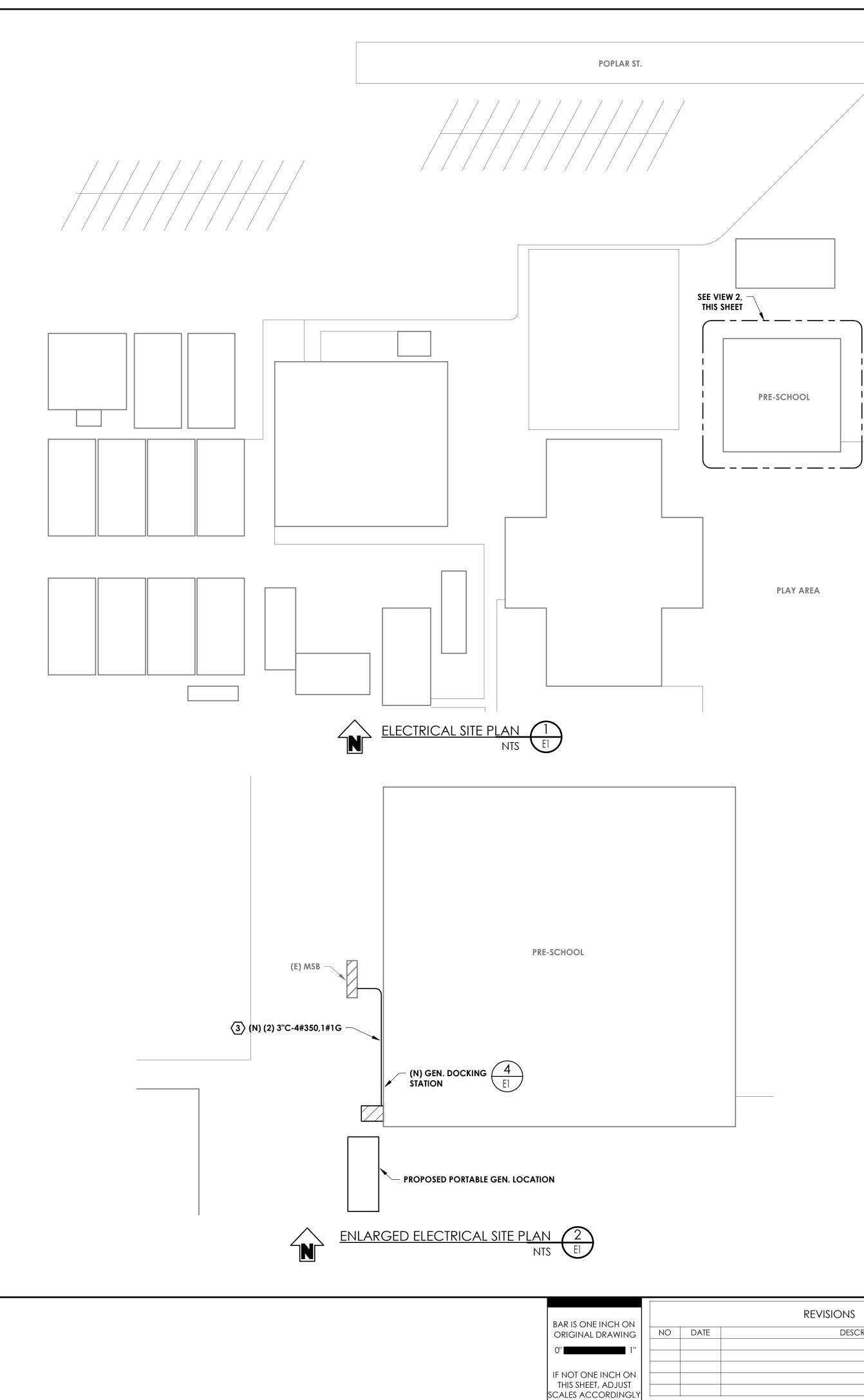
- 9. LEVELING JACK, 10,000 POUND RATED. 10. CABLE STORAGE BOX: PROVIDE A NEMA 3R PADLOCKABLE CABLE STORAGE BOX FOR STORAGE OF PORTABLE CABLES. BOX MINIMUM SIZE SHALL BE 2 FEET LONG, 3 FEET WIDE AND 2 FEET TALL.
- PART 3 EXECUTION
- 3.1 TESTING
- A. ALL EQUIPMENT WILL BE TESTED AT THE MANUFACTURER REPRESENTATIVE'S FACILITY. TESTS WILL INCLUDE A MINIMUM OF 100% LOADING FOR A PERIOD OF TWO HOURS. TEST DATA WILL BE RECORDED AND INCLUDED IN THE MAINTENANCE MANUAL. THE FOLLOWING TEST DATA SHALL BE RECORDED IN 15 MINUTE INTERVALS AT 100%
- LOAD:
- 1. VOLTAGE 2. CURRENT
- 3. FREQUENCY.
- 4. ARMATURE, FIELD WINDING, AND SHAFT BEARING TEMPERATURE RISE.
- 5. WATER TEMPERATURE. 6. OIL TEMPERATURE.
- 7. AMBIENT TEMPERATURE.
- C. THE FOLLOWING TEST DATA SHALL BE RECORDED AT 0%, 25%, 50%, 75%, AND 100% LOADS IN LOW AND HIGH VOLTAGE SETTINGS:
- a. VOLTAGE. b. CURRENT
- c. EXCITING CURRENT.
- d. FREQUENCY. D. THE GENERATOR SHALL HAVE THE FUEL TANK FILLED TO FULL AFTER TESTING AND PRIOR TO DELIVERY TO THE OWNER.
- 3.2 SPARE PARTS
- A. SPARE PARTS SHALL BE FURNISHED WITH THE EQUIPMENT AS FOLLOWS:
- a. 5 LAMPS FOR EACH TYPE OF INDICATING LIGHT. b. 2 SETS OF LUBE OIL FILTER ELEMENT.
- c. 2 SETS OF FUEL FILTER ELEMENT
- d. 1 SET OF AIR CLEANER ELEMENT.
- e. 1 SET OF V-BELTS (COMPLETE SET) f. 1 SET OF EACH SIZE FUSE.
- 3.3 TRAINING
 - A. THE EQUIPMENT SUPPLIER SHALL PROVIDE A MINIMUM OF 4 HOURS OF TRAINING PRIOR TO THE DELIVERY OF THE GENERATOR TO THE OWNER. TRAVEL TIME AND FROM SITE SHALL BE EXCLUDED FROM TRAINING TIME. TRAINING SHALL INCLUDE ROUTINE MAINTENANCE AND OPERATION OF GENERATOR. PROVIDE EQUIPMENT O&M MANUALS AT TIME OF TRAINING. IN ADDITION, PROVIDE A MAINTENANCE SCHEDULE FOR ROUTINE MAINTENANCE OF GENERATOR.

POPLAR AVENUE ELEMENTARY SCHOOL GENERATOR DOCKING STATION 2075 POPLAR STREET, OROVILLE, CA.

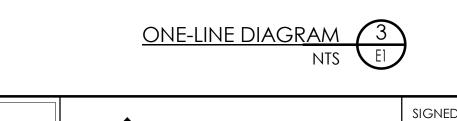
ELECTRICAL SPECIFICATIONS

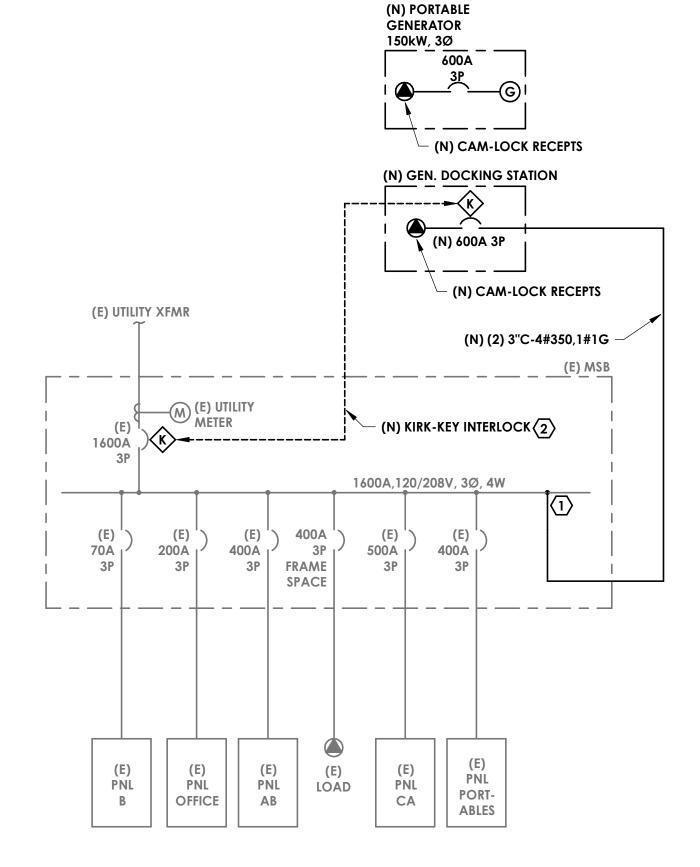


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REVISIONS DESCRIPTION			CE E E R I N G	SIGNED PROFESSION CHAEF OTHER No. E22549	POPLAR AVE			
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KEYNOTES

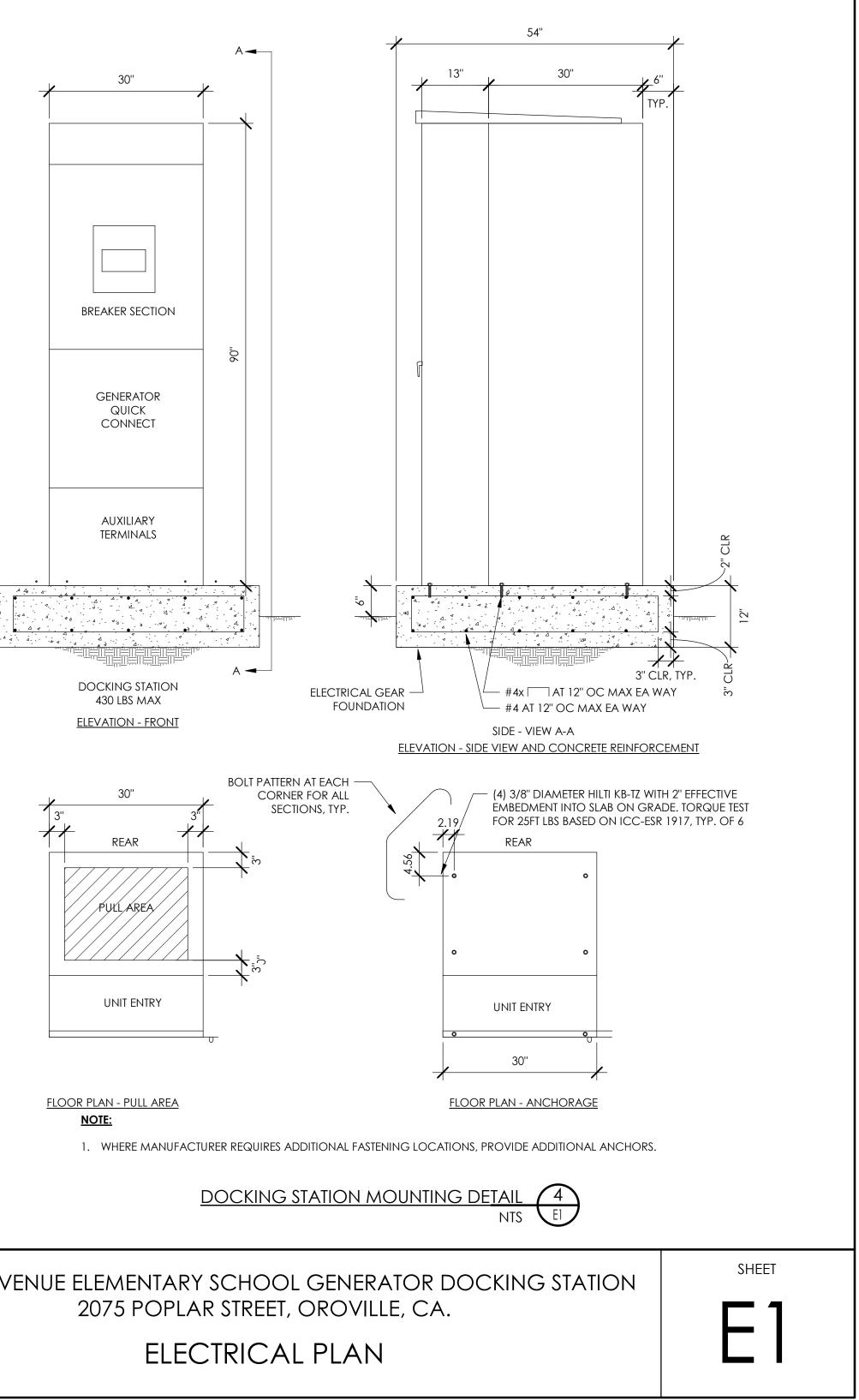
(#) NOTE

- 1. PROVIDE AND INSTALL MECHANICAL LUGS AND TAP EXISTING BUSSING. MAKE NECESSARY MODIFICATIONS TO EXISTING MAIN SWITCHBOARD BUSSING TO FACILITATE TERMINATION. IF ADDITIONAL BUSSING MODIFICATION IS REQUIRED, COORDINATE WITH UL LISTING REPRESENTATIVE TO RELIST EXISTING MAIN SWITCHBOARD AFTER WORK IS DONE. ALL BUSSING MODIFICATIONS SHALL ADHERE TO UL AND CEC REQUIREMENTS.
- 2. PROVIDE AND INSTALL A KIRK-KEY INTERLOCK SYSTEM AT BOTH BREAKERS AS SHOWN. BREAKERS SHALL NOT BE ABLE TO BE TURNED TO THE "ON" POSITION SIMULTANEOUSLY. MAKE MODIFICATIONS AS NECESSARY TO MOUNT HARDWARE.
- 3. STUB CONDUIT/CONDUCTORS OUT OF THE BACK PORTION OF THE MAIN SWITCH BOARD TO EXISTING WALL AS SHOWN. ROUTE CONDUIT/CONDUCTORS ALONG THE BUILDING EXTERIOR WALL AND TO THE DOCKING STATION. SUPPORT AND SECURE CONDUIT IN ACCORDANCE WITH CEC ARTICLE 344. PAINT CONDUIT TO MATCH EXISTING CONDITIONS.

COMPLY WITH APPLICABLE CODES

CODE

- 1. NFPA 30: FLAMMABLE AND COMBUSTIBLE LIQUIDS.
- 2. NFPA 54: FUEL GAS CODE. 3. NFPA 110: EMERGENCY AND STANDBY POWER.
- 4. CALIFORNIA BUILDING CODE.
- 5. CALIFORNIA ELECTRIC CODE. 6. CALIFORNIA ENERGY CODE.
- 7. CALIFORNIA FIRE CODE.



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		CONDUIT EXPOSED					ELECTRICAL			
		CONDUIT CONCEALED or BU								
		INDICATES FIRE RATED WALL		1.1 INTENT OF PLANS A. ELECTRICAL PLAN RACEWAY UNLES						
	0	CONDUIT UP					ROUTING OF RAC NECESSARY TO V			
-	0						AFFECTED MATER PROJECT.			
				1.2 CODES, PERMITS, AND A. DO ALL WORK A						
				R OF #10 C	ONDUCTORS WITH #10 GROUND		REQUIREMENTS C CONTRACTOR SH UTILITY COMPAN			
			TCK MARKS W/BARS INDICATES NUMBER OF #10 CONDUCTORS WITH #10 GROUND							
		JUNCTION BOX		PROJECT-SPECIF THAT THE CONTR INFORMATION IS						
			RACTOR SH	ALL DETERM	(INE CONNECTION CONFIGURATION)		INFORMATION IS INSTALLATION DO MADE FOR INSTA			
	 ₽	DUPLEX RECEPTACLE	DEVICE BOXES	1.3 SUBMITTALS A. GENERAL:						
		QUADRUPLEX RECEPTACLE		1. BEFORE AN DRAWINGS,						
	₩ =	SINGLE OR THREE PHASE REC	EPTACLE S	FE PI AN SHI	EETS TYPE PER LOCATION	OTHERWISE NOTED	DESCRIPTIV 1.4 TESTING RELATED SUB			
	 	PULLBOX	A. TEST PROCEDURI TEST. PROCEDUR							
	<u> </u>		XXA/XXF XX	60AS/20F WP	60A DISCONNECT / 20A FUSE NEMA 3R		CONTROL AND I DOCUMENT THE 1.5 ADDITIONAL SERVICE A. ELECTRICAL COI			
	Ч С	NON-FUSED DISCONNECT	XX XX	60AS/20F WP	60A DISCONNECT NEMA 3R		THE DURATION C FESTOON LIGHTI CONTRACTOR.			
		MAJOR ELECTRICAL COMPO IDENTIFYING SYMBOL AS SHO		PART 2 – PRODUCTS 2.1 NOTE						
		SURFACE MOUNT PANELBOA	RD				A. UNLESS OTHERW AND SUITABLE FC			
		FLUSH MOUNT PANELBOARD								
		EXOTHERMIC WELD, TERMINA		COMPLETE SYSTE OR EQUIPMENT / PARTS OF MATER						
	0	GROUND ROD		2.2 EQUIPMENT FINISH A. UNLESS OTHERW						
	—	GROUNDING ELECTRODE		2.3 CONDUIT AND CONE						
		CIRCUIT BREAKER		A. GALVANIZED RIC 1. CONDUIT:						
		CURRENT TRANSFORMER, NU		A. MEET R B. MATER						
	(#)	KEYNOTE		2. FITTINGS: A. MEET R						
	(A : B)	INDICATES INTERCONNECTIC INDICATES CONDUIT AND CO		B. TYPE: T C. MATERI						
ANS	. SEE LIGHTING C	BBREVIATIONS		SOME SYMI	BOLS MAY APPEAR ON THIS LEGEND AND	D NOT ON THE	PORTABLE G			
	- ALTER	ETER, AMPERE NATING CURRENT								
CH F	- ABOV	e counter height E finished floor or grade					PART 1 -GENERAL			
AB EC SD SD () or E OR SC IC	- Alum - Auto - Build - Break - Botto - Cone - Cabin - Calif - Calif - Circu - Cente - Curr - Curr - Direo Exist - Elect - Equif - Enclo - Futur	MATIC TRANSFER SWITCH ING GROUND ELECTRODE SYST (ER DM OF DEVICE DUIT VET ORNIA ELECTRIC CODE JIT ER OF DEVICE ENT TRANSFORMER TT CURRENT NG RICAL ENGINEER OF RECORD MENT GROUNDING CONDUC DSURE	TOR				1.1 WORK INCLUDED A. THE ELECTRIC, EQUIPMENT SI 1. SUPPLY AL 2. ASSUME C 1.2 REFERENCES A. EXCEPT AS OT STANDARDS C MINIMUM REC 1. UNDERWR 2. NATIONAL 3. NATIONAL 4. INSTITUTE C 5. THE NATIC 6. AMERICAL 7. DIESEL ENC 8. INTERNAL 9. AMERICAL 10. NATIONAL			
)	- F()[]]F									
; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	- GROL	INDING ELECTRODE CONDUC IND FAULT CIRCUIT INTERRUPT					PART 2 – PRODUCTS 2.1 STANDARD DESIG			

LFEB

MBI

MCB

MFR

MIO

MSB

MTS

NEC

OFCI

OFOI

RCPT

SWBD

SBJ

SSB.1

TOD

NEMA

MOCP

- LIFE SAFETY EMERGENCY BRANCH

- MAXIMUM OVERCURRENT PROTECTION

- NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION

- OWNER FURNISHED, CONTRACTOR INSTALLED

- OWNER FURNISHED, OWNER INSTALLED

- MAIN BONDING JUMPER

- MAIN CIRCUIT BREAKER

- MAIN SWITCH BOARD

- NORMAL BRANCH

- MANUAL TRANSFER SWITCH

- NATIONAL ELECTRIC CODE

- SYSTEM BONDING JUMPER

- WEATHERPROOF (NEMA 3R)

- SUPPLY SIDE BONDING JUMPER

- MANUFACTURER

MAIN LUG ONLY

- NEUTRAL

- PULLBOX

- ROOM

- TAMPER

- TYPICAL

- WIREWAY

- WATT

- PANELBOARD

- RECEPTACLE

- SWITCHBOARD

- TOP OF DEVICE

- VOLTMETER, VOLT

- NEW

2. I	SIA	NDA	ARD DESIGN
	Α.	THE	DESIGN OF THE GENERATOR S
		MA	NUFACTURER, EXCEPT AS NOT
		OF	A DIESEL ENGINE CONNECTED
		ΑB	RUSHLESS EXCITATION SYSTEM
		WIT	H ALL NECESSARY ACCESSOR
		СС	MPLETE SELF-CONTAINED, TRA
2.2	MA	NUF	ACTURERS
	Α.	MA	TERIALS AND EQUIPMENT SPEC
		1.	GENERAC.
		2.	CUMMINGS.
		3.	BLUE STAR, OR EQUAL.
2.3	PER	FOR	MANCE
	Α.	THE	GENERATOR SET SHALL BE CA
		СС	NDITIONS FOR THE DURATION
		NO	RMAL POWER SUPPLY. THE GE
		1.	KILOWATTS: 150kW.
			VOLTAGE: 120/208V.
		3.	POWER FACTOR: 0.8.
			PHASE: 3.
		5.	FREQUENCY: 60HZ.
2.4		SINE	-
	Α.		NERAL DESIGN: STANDARDS C
			SE DIFFER FROM THE REQUIRE
			EQUATE STRENGTH OF ALL PAR
	Β.		GINE:
			FOUR-CYCLE DIESEL TYPE.
		2.	DRY TYPE AIR CLEANER WITH
			INDICATOR WITH RESET.
			CRANKCASE BREATHER WITH
			CARTRIDGE TYPE OIL FILTER.
		5.	CARTRIDGE TYPE FUEL FILTER.

HOUSING.

BAR IS ONE INCH ON ORIGINAL DRAWING	-	NO	DATE	
0"	-			
IF NOT ONE INCH ON THIS SHEET, ADJUST				

SCALES ACCORDINGLY

2.4 CONDUCTORS 3.4 CUTTING AND PATCHING A. ELECTRICAL TERMINALS AND TERMINATIONS: IT IS ASSUMED THAT ALL TERMINATIONS IN THE FIELD SHALL A. DO NOT CUT OR NOTCH ANY STRUCTURAL MEMBER OR BUILDING SURFACE WITHOUT SPECIFIC HAVE MINIMUM RATED 75°C RATED TERMINALS. THE CONTRACTOR SHALL FIELD VERIFY ALL TERMINALS APPROVAL OF THE ENGINEER. FOLLOWING SUCH WORK, RESTORE SURFACES NEATLY TO NEW SHOW ONLY GENERAL LOCATIONS OF EQUIPMENT, DEVICES, AND FOR CONNECTION IN COMPLIANCE WITH CEC 110.14. THE CONTRACTOR SHALL INFORM THE CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED. LY DIMENSIONED. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER ENGINEER OF RECORD OF ANY TERMINALS DEVIATING FROM A RATING OF 75°C. 3.5 CLEANING AND TOUCH-UP PAINTING ECT TO THE APPROVAL OF THE ENGINEER. MAKE AD JUSTMENTS AS ALL CONDUCTORS ARE RATED FOR 75°C ON PLANS UNLESS OTHERWISE NOTED. A. KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIAL OR RUBBISH. UPON DUIT, DISCONNECTS, BRANCH CIRCUIT PROTECTION, AND OTHER B. ALL CONDUCTORS SHOWN SHALL BE NEW UNLESS OTHERWISE INDICATED. COMPLETION OF WORK, REMOVE MATERIALS, SCRAPS, AND DEBRIS FROM THE PREMISES AND FROM MENT TO ACCOMMODATE ACTUAL EQUIPMENT SUPPLIED FOR THIS C. CONDUCTOR TYPE THE INTERIOR AND EXTERIOR OF ALL DEVICES AND EQUIPMENT. REFINISH DAMAGED SURFACES TO ALL OTHER CIRCUITS: STRANDED. NEW CONDITION USING SKILLED CRAFTSMEN OF THE TRADES INVOLVED. INSULATION: TYPE THHN/THWN, 90°C DRY OR 75°C WET. 3.6 RACEWAY SYSTEM ODUCTS IN ACCORDANCE WITH APPLICABLE NECA REQUIREMENTS, THE A. UNLESS OTHERWISE SPECIFIED OR INDICATED, WIRING SHALL CONSIST OF INSULATED CONDUCTORS D. COPPER BUILDING WIRE: STATE AND LOCAL LAWS, CODES AND ORDINANCES. THE 1. DESCRIPTION: FLEXIBLE, INSULATED AND UNINSULATED, DRAWN COPPER CURRENT-CARRYING INSTALLED IN RACEWAYS OF THE TYPES INDICATED: TO THE SPECIFIC PRODUCT AND INSTALLATION REQUIREMENTS OF THE CONDUCTOR WITH AN OVERALL INSULATION LAYER OR JACKET, OR BOTH, RATED 600 VAC OR B. EXTERIOR, EXPOSED: GALVANIZED RIGID STEEL. CTS, IF ANY, WILL BE RESOLVED AT THE DISCRETION OF THE ENGINEER. 3.7 RACEWAY INSTALLATION NCE THAT THE INSTALLING CONTRACTOR HAVE A MASTERY OF THE a. INSULATION: A. CONDUIT AND TUBING SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS. ENTS SHOWN IN SPECIFICATIONS AND PLANS. IT IS STRONGLY ADVISED • TYPE THHN AND TYPE THWN-2: COMPLY WITH UL 83. MAINTAIN RACEWAY ENTIRELY FREE OF OBSTRUCTIONS AND MOISTURE TACT THE EEOR FOR CLARIFICATION OR RFI THE EEOR IF FURTHER 2.5 CONDUCTOR ACCESSORIES E. FOLLOW STRUCTURAL SURFACE CONTOURS WHEN INSTALLING EXPOSED RACEWAYS. AVOID HE EEOR SHALL REQUIRE REVISIONS TO BE MADE IN THE FIELD IF THE A. CABLE TIES OBSTRUCTION OF PASSAGEWAYS. RUN EXPOSED RACEWAYS PARALLEL OR PERPENDICULAR TO WITHIN THESE PROJECT-SPECIFIC GUIDELINES. NO ALLOWANCE SHALL BE NYLON, ADJUSTABLE, AND SELF-LOCKING. WALLS, STRUCTURAL MEMBERS, OR INTERSECTIONS OF VERTICAL PLANES. ADHERING TO THESE REQUIREMENTS. 2. COMPLY WITH UL 20 AND FS W-S-896. D. INSTALL WATERTIGHT FITTINGS IN OUTDOOR, UNDERGROUND, OR WET LOCATIONS. E. ALL METAL CONDUIT TO BE REAMED, BURRS REMOVED, AND CLEANED BEFORE INSTALLATION OF 2.6 GENERATOR DOCKING STATION A. ACCEPTABLE MANUFACTURER'S FOR THE WORK SHALL BE AS FOLLOWS: CONDUCTORS, WIRES, OR CABLES. FABRICATED OR SHIPPED, FURNISH TO THE ENGINEER FULL DETAILS, SHOP INSTALL CONCEALED, EMBEDDED, AND BURIED RACEWAYS SO THAT THEY EMERGE AT RIGHT ANGLES 1. EATON CATALOG CUTS, SCHEMATIC (ELEMENTARY) DIAGRAMS, AND OTHER TO SURFACE AND HAVE NO CURVED PORTION EXPOSED. SIEMENS REQUIRED TO FULLY DESCRIBE THE EQUIPMENT SPECIFIED. 3.8 RACEWAY PENETRATIONS OR EQUAL B. GENERATOR DOCKING STATION: A. MAKE AT RIGHT ANGLES, UNLESS OTHERWISE SHOWN. E PROCEDURES TO BE FOLLOWED DURING THE OPERATIONAL READINESS a. ENCLOSURE: NEMA 3R (NONWALK-WIN) FLAT ROOF. B. NOTCHING OR PENETRATION OF STRUCTURAL MEMBERS, INCLUDING FOOTINGS AND BEAMS, NOT LUDE TEST DESCRIPTIONS, FORMS, AND CHECKLISTS TO BE USED TO b. BUS MATERIAL : TIN-PLATED ALUMINUM PFRMITTED HE REQUIRED TESTS. UPON COMPLETION OF EACH REQUIRED TEST, C. FIRE-RATED WALLS, FLOORS, OR CEILINGS: FIRE-STOP OPENINGS AROUND PENETRATIONS TO GROUND BUS MATERIAL: COPPER TTING A COPY OF THE SIGNED OFF TEST PROCEDURES CAM STYLE MALE CONNECTORS AND GROUNDING TERMINALS. MAINTAIN FIRE-RESISTANCE RATING. D. CONCRETE WALLS, FLOORS, OR CEILINGS (ABOVEGROUND): PROVIDE NONSHRINK GROUT DRYe. PAD-LOCKABLE ENCLOSURE. ALL PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES FOR GENERATOR INCOMING POWER QUICK CONNECT RECEPTACLES. PACK, OR USE WATERTIGHT SEAL DEVICE. CT. PROVIDE AND INSTALL TEMPORARY PANELBOARDS, SPYDER BOXES, g. HINGED ACCESS PANEL FOR GENERATOR CAM TYPE CONNECTOR FEEDER CABLES. NONE OF THE E. ENTERING STRUCTURES: RELECTRICAL ITEMS AS NEEDED. COORDINATE WITH THE GENERAL SEAL RACEWAY AT THE FIRST BOX WITH CONDUIT SEALING BUSHING TO PREVENT THE ENTRANCE CAM TYPE INLETS SHALL BE ACCESSIBLE UNLESS THE HINGED ACCESS PANEL DOOR IS OPEN. UNIT SHALL HAVE STAINLESS STEEL HINGES. OF GASES OR LIQUIDS FROM ONE AREA TO ANOTHER. ANSI-61 GRAY POWDERCOAT INSIDE AND OUT. 3.9 RACEWAY SUPPORT A. SUPPORT FROM STRUCTURAL MEMBERS ONLY, AT INTERVALS NOT EXCEEDING CEC REQUIREMENTS, C. CIRCUIT BREAKERS NEMA AB 1 AND UL 489. AND IN ANY CASE NOT EXCEEDING 10 FEET. DO NOT SUPPORT FROM PIPING, PIPE SUPPORTS, OR 100% RATED THERMAL-MAGNETIC, QUICK-MAKE, QUICK-BREAK, MOLDED CASE, OF THE OTHER RACEWAYS. PROVIDE ALL FIRST-QUALITY NEW MATERIALS, FREE FROM ANY DEFECTS, INDICATING TYPE SHOWING ON/OFF AND TRIPPED POSITIONS OF OPERATING HANDLE. B. WALL BRACKETS AND ASSOCIATED HARDWARE IN CONTACT WITH CONCRETE OR MASONRY SHALL BE DED LISE AND THE SPACE PROVIDED PROVIDE MATERIALS APPROVED BY STAINLESS STEEL, PROVIDE GALVANIZED STEEL AT ALL OTHER LOCATIONS, STRAP HANGERS AND 3. NONINTERCHANGEABLE, IN ACCORDANCE WITH CEC /E BEEN ESTABLISHED BY THAT ORGANIZATION. FURNISH AND INSTALL ALL 4. PROVISIONS FOR HANDLE PADLOCKING, UNLESS OTHERWISE SHOWN. CEILING TRAPEZE INCLUDING HARDWARE, SHALL BE GALVANIZED STEE ICALLY SHOWN OR SPECIFIED WHICH ARE REQUIRED TO PROVIDE THE 5. MULTI-POLE CIRCUIT BREAKERS DESIGNED TO AUTOMATICALLY OPEN ALL POLES WHEN AN C. PROVIDE AND ATTACH WALL BRACKETS, STRAP HANGERS, OR CEILING TRAPEZE AS FOLLOWS:) HEREIN, WHERE TWO OR MORE UNITS OF THE SAME CLASS OF MATERIAL OVERLOAD OCCURS ON ONE POLE. WOOD: WOOD SCREWS.). PROVIDE PRODUCTS OF A SINGLE MANUFACTURER. COMPONENT HOLLOW MASONRY UNITS: TOGGLE BOLTS. KIRK KEY INTERLOCK SYSTEM. PMENT NEED NOT BE PRODUCTS OF THE SAME MANUFACTURER. 3. CONCRETE OR BRICK: EXPANSION SHIELDS, OR THREADED STUDS DRIVEN IN BY POWDER D. GENERATOR DOCKING STATION SHALL BE SUITABLE FOR 600A RATING, 120/208V, 3Ø, 4W CONNECTION, 65kAIC. CHARGE, WITH LOCK WASHERS AND NUTS. , FINISH FOR ELECTRICAL EQUIPMENT AND ENCLOSURES SHALL BE 4. STEELWORK: MACHINE SCREWS. GRAY OR ANSI 61 GRAY OVER A PRIMER AND RUST INHIBITOR. PART 3 – EXECUTION 3.10 RACEWAY BENDS A. INSTALL CONCEALED RACEWAYS WITH A MINIMUM OF BENDS IN THE SHORTEST PRACTICAL DISTANCE. VDUIT (GRS): B. AVOID FIELD-MADE BENDS AND OFFSETS, BUT WHERE NECESSARY, MAKE WITH ACCEPTABLE HICKEY 3.1 NOTE A. COORDINATE ELECTRICAL WORK WITH THE OWNER AND THE WORK OF OTHER TRADES TO AVOID OR BENDING MACHINE. DO NOT HEAT METAL RACEWAYS TO FACILITATE BENDING. S OF ANSI C80.1 AND UL 6. CONFLICTS, ERRORS, DELAYS, AND UNNECESSARY INTERFERENCE DURING CONSTRUCTION. GALVANIZED, WITH CHROMATED PROTECTIVE LAYER. 3.2 PROTECTION DURING CONSTRUCTION A. FOLLOWING INSTALLATION, PROTECT MATERIALS, EQUIPMENT, AND INSULATION FROM CORROSION, S OF UL 514B. PHYSICAL DAMAGE, AND MOISTURE. CAP CONDUIT RUNS DURING CONSTRUCTION WITH

LVANIZED. SETSCREW FITTINGS NOT PERMITTED. MANUFACTURED SEALS. KEEP OPENINGS IN BOXES OR EQUIPMENT CLOSED DURING CONSTRUCTION. LE IRON WITH INSULATED THROAT. 3.3 MATERIAL AND EQUIPMENT INSTALLATION FOLLOW THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS UNLESS OTHERWISE INDICATED.

MANUFACTURER'S INSTALLATION INSTRUCTIONS AVAILABLE ON THE JOBSITE FOR REVIEW AT ALL TIMES.

FOLLOW THE ENGINEER'S DECISION, WHEREVER ANY CONFLICT ARISES. KEEP COPY OF THE

ATOR SPECIFICATIONS

- 7. FAN (BLOWER TYPE) WITH FAN DRIVE. C. FILLER CAPS SHALL BE DESIGNED FOR PRESSURE RELIEF PRIOR TO REMOVAL. A 2.15 CORD AND PLUG 8. ENGINE COOLANT WATER PUMP. A. PROVIDE 100 FT LONG, 4#700 SO CORD FOR CONNECTION FROM THE GENERATOR THERMOSTATIC CONTROL VALVE SHALL BE INSTALLED IN THE JACKET WATER SYSTEM RECEPTACLE TO THE RECEPTACLE ON THE BUILDING. PLUG ON BOTH ENDS OF CABLE 9. ELECTRIC STARTING MOTOR, 24 OR 12 VOLT D.C, WITH SAFETY CIRCUIT (WILL OF THE ENGINE TO MAINTAIN THE WATER SYSTEM TEMPERATURE OF THE ENGINE. THE SHALL BE CAMLOCK. STORE COMPLETE CORD SET IN CABLE STORAGE BOX. ACTOR SHALL BE RESPONSIBLE FOR SUPPLYING ALL OF THE NOT REENGAGE IF ENGINE IS RUNNING). THERMOSTATIC VALVE SHALL BE STANDARD MODULATING TYPE UTILIZING SELF-THIS SECTION. 10. BATTERY CHARGING GENERATOR. CONTAINED THERMOSTATS. THE VALVE SHALL BE CAPABLE OF PASSING THE WATER 2.16 GENERATOR TRAILER A. PROVIDE A UNIT MOUNTED ON CALIFORNIA LEGAL DUAL AXLE TRAILER, TO INCLUDE ENT CONTAINED HEREIN. 11. GLOW PLUGS. FLOW AS DETERMINED BY THE MANUFACTURER WITHOUT EXCESSIVE PRESSURE DROP SPONSIBILITY FOR THE COMPLETE OPERATING SYSTEM. 2.5 CONTROL PANEL ACROSS THE VALVE. THE THERMOSTATIC ELEMENTS SHALL BE NON-ADJUSTABLE TYPE THE FOLLOWING: A. PROVIDE A GENERATOR-SET CONTROL PANEL MOUNTED ON THE GENERATOR AND AND THE OPERATING TEMPERATURE SHALL BE SET AT THE TEMPERATURE . ENCLOSED FEEDERS. PECIFIED, THE APPLICABLE RULES, REGULATIONS, AND EQUIPPED WITH THE FOLLOWING: RECOMMENDED BY THE ENGINE MANUFACTURER. THE RADIATOR WILL BE SIZED TO 2. 2-5/16 INCH BALL HITCH. OWING ORGANIZATIONS SHALL BE CONSIDERED AS 1. VOLTMETER, 2.5 PERCENT MINIMUM ACCURACY. INCLUDE A 50% SOLUTION OF ETHYLENE GLYCOL AND A COMPENSATION FACTOR 3. ADJUSTABLE REAR STABILIZERS. 2. AC VOLTMETER CHANGE OVER SWITCH: FOUR POSITION SWITCH TO VERIFY FOR ENGINE-RADIATED HEAT. SUBMIT STANDARD PUBLISHED CURVES SHOWING 4. CABLE BOX. ATTITUDE AND AMBIENT TEMPERATURE DERATING. Oratories (3UL). OUTPUT VOLTAGE BETWEEN PHASES. 5. SURGE BRAKES. AL CODE (NEC). 3. AMMETER: WITH AN ACCURACY OF 2.5% OF FULL SCALE. 2.10 BATTERIES 6. 26-INCH BED TIGHT. ECTION ASSOCIATION (NFPA). 4. AC AMMETER CHANGE OVER SWITCH : FOUR POSITION SWITCH TO VERIFY A. THE ENGINE CRANKING BATTERY SHALL BE SAE TYPE D, DIESEL ENGINE STARTING TYPE, 7. PROVIDE ALL EQUIPMENT FOR LEGAL HIGHWAY TRANSPORT. CAL AND ELECTRONICS ENGINEERS (IEEE) CURRENT OF EACH PHASE. AND OF SUFFICIENT SIZE AND CAPACITY IN A FULLY CHARGED CONDITION TO START 8. SPARE TIRE AND LUG NUT WRENCH, RICAL MANUFACTURERS ASSOCIATION (NEMA). 5. AVAILABLE SELECTABLE VOLTAGES: 3-PHASE: 120/208V. THE ENGINE-GENERATOR SET SIX CONSECUTIVE TIMES. BATTERIES SHALL BE MINIMUM 9. LEVELING JACK, 10,000 POUND RATED. 6. PILOT LAMP FOR AC POWER. L STANDARDS INSTITUTE (ANSI) OF 100 AMP-HOUR RATED. 10. CABLE STORAGE BOX: PROVIDE A NEMA 3R PADLOCKABLE CABLE STORAGE BOX UFACTURERS ASSOCIATION (DEMA). 7. FREQUENCY METER: 1% ACCURACY, 2.11 EXHAUST SYSTEM FOR STORAGE OF PORTABLE CABLES. BOX MINIMUM SIZE SHALL BE 2 FEET LONG, 3 A. EXHAUST SILENCER: PROVIDE AND MOUNT A CRITICAL-TYPE EXHAUST SILENCER, ON ENGINE INSTITUTE 8. ELAPSED TIME METER. FEET WIDE AND 2 FEET TALL OF MECHANICAL ENGINEERS (ASME). 9. ENGINE TACHOMETER MOUNTED WITHIN ENCLOSURE AND INSULATED AS REQUIRED TO MAINTAIN AL CONTRACTOR'S ASSOCIATION (NECA). 10. ENGINE COOLANT TEMPERATURE GAUGE: 5% ACCURACY, COLOR CODED FOR TEMPERATURE RISE WITHIN ENCLOSURE TO 15F. PART 3 – EXECUTION B. PROVIDE AND MOUNT AN EXHAUST FLEX CONNECTOR TO ALLOW FOR VIBRATION IN NORMAL AND ABNORMAL CONDITIONS. 11. ENGINE OIL PRESSURE GAUGE: 5% ACCURACY, COLOR CODED FOR NORMAL THE EXHAUST SYSTEM 3.1 TESTING C. PROVIDE AND MOUNT A RAIN CAP ON THE EXHAUST OUTLET OR OTHER DEVICE TO AND ABNORMAL CONDITIONS. A. ALL EQUIPMENT WILL BE TESTED AT THE MANUFACTURER REPRESENTATIVE'S FACILITY. 12. CHARGING AMMETER FOR CHARGING GENERATOR. PREVENT ENTRY OF RAIN INTO MUFFLER. TESTS WILL INCLUDE A MINIMUM OF 100% LOADING FOR A PERIOD OF TWO HOURS. 13. KEY OPERATED PRE-HEAT, OFF, RUN, START SWITCH. TEST DATA WILL BE RECORDED AND INCLUDED IN THE MAINTENANCE MANUAL. IERATOR SETS SHALL BE THE STANDARD OF THE 2.12 ENCLOSURE A. THE COMPLETE ENGINE-GENERATOR SET AND ALL COMPONENTS WILL BE MOUNTED IN T AS NOTED. THE ENGINE GENERATOR UNIT SHALL CONSIST 14. TWO STAGE THROTTLE CONTROL - RUN AND IDLE POSITIONS THE FOLLOWING TEST DATA SHALL BE RECORDED IN 15 MINUTE INTERVALS AT 100% NNECTED TO AN ALTERNATING CURRENT GENERATOR WITH 15. AUTOMATIC SHUTDOWNS WITH FAULT INDICATION LIGHTS FOR HIGH WATER A WEATHERPROOF, COMPLETELY LOCKABLE ENCLOSURE DESIGNED SO THE UNIT CAN LOAD: OPERATE WITH ALL DOORS CLOSED AT FULL LOAD WITHOUT OVERHEATING. THE N SYSTEM MOUNTED ON A STEEL SUB-BASE AND PROVIDED TEMPERATURE, LOW OIL PRESSURE, GLOW PLUG INDICATOR. 1. VOLTAGE. CCESSORIES AND ANCILLARY SYSTEMS RESULTING IN A 16. PANEL LIGHT WITH SWITCH. ENCLOSURE MUST BE SOUND ATTENUATED TO 66 DBA AT 23 FEET (FULL LOAD) AND 60 2. CURRENT NED, TRAILER-MOUNTED UNIT. 2.6 GENERATOR OUTPUT CIRCUIT BREAKER DBA AT 50 FEET (FULL LOAD). 3. FREQUENCY. A. MAIN LINE MOLDED CASE THERMAL MAGNETIC CIRCUIT BREAKER WITH A SHUNT TRIP B. THE ENCLOSURE WILL BE DESIGNED SO THAT THE MUFFLER WILL MOUNT INSIDE AND 4. ARMATURE, FIELD WINDING, AND SHAFT BEARING TEMPERATURE RISE. MENT SPECIFIED IN THIS SECTION SHALL BE PRODUCTS OF: SHALL BE MOUNTED TO ALLOW OPERATION FROM OUTSIDE THE CONTROL PANEL. RADIATOR AIR WILL EXHAUST VERTICALLY. 5. WATER TEMPERATURE. PROVIDE A CURRENT SENSING RELAY THAT IS SET TO ADEQUATELY PROTECT THE C. THE ENCLOSURE WILL BE PAINTED, HAVE HINGED DOORS, AND BE CONSTRUCTED OF 6. OIL TEMPERATURE. GENERATOR. A MINIMUM 13 GAUGE SHEET METAL. ALL AIR INLETS SHALL BE SOUND ATTENUATED. AMBIENT TEMPERATURE. 2.7 GOVERNOR D. THE ENCLOSURE SHOULD BE PROVIDED WITH A WINDOW FOR UNOBSTRUCTED C. THE FOLLOWING TEST DATA SHALL BE RECORDED AT 0%, 25%, 50%, 75%, AND 100% A. GOVERNING SYSTEM SHALL BE SUITABLE FOR CONTROLLING THE SPEED OF THE LOADS IN LOW AND HIGH VOLTAGE SETTINGS: VIEWING OF ENGINE AND GENERATOR CONTROL PANEL WHILE CONTROL PANEL LL BE CAPABLE OF CONTINUOUS OPERATION AT RATED GENERATOR SET WITHIN THE REQUIREMENTS SPECIFIED WITHOUT THE INTERMEDIATE DOOR IS LOCKED. a. VOLTAGE. E. THE ENCLOSURE SHOULD BE CAPABLE OF ONE-POINT LIFTING. b. CURRENT URATION OF ANY INTERRUPTION OR OUTAGE OF THE ADJUSTMENT AND SHALL MAINTAIN THE SPECIFIED STABILITY WITHOUT HUNTING OR . THE GENERATOR SET SHALL BE RATED AS FOLLOWS: CYCLING. F. THE ENCLOSURE WILL INCLUDE EXTERNAL DRAIN EXTENSIONS FOR COOLANT, c. EXCITING CURRENT. 2.8 OUTPUT TERMINALS: LUBRICATING OIL, AND FUEL. d. FREQUENCY. D. THE GENERATOR SHALL HAVE THE FUEL TANK FILLED TO FULL AFTER TESTING AND PRIOR A. THE MAIN GENERATOR OUTPUT TERMINALS WILL BE LOCATED WITHIN THE GENSET 2.13 VIBRATION ISOLATORS ENCLOSURE. POSITIONING SHOULD PROVIDE BOTH EASY ACCESSIBILITY FOR WIRING A. THE ENTIRE ENGINE-GENERATOR SET SHALL BE MOUNTED ON VIBRATION ISOLATORS, TO DELIVERY TO THE OWNER. 3.2 SPARE PARTS AND A CABLE ENTRANCE SO WIRING CAN RUN FROM THE CONNECTED LOAD TO WHICH ISOLATE ENGINE-GENERATOR VIBRATION FROM THE STEEL BASE. THE OUTPUT TERMINALS WITH ALL GENSET ENCLOSURE DOORS LOCKED. B. THE COMPLETE ENGINE-GENERATOR WITH ENCLOSURE SHALL BE CAPABLE OF BEING A. SPARE PARTS SHALL BE FURNISHED WITH THE EQUIPMENT AS FOLLOWS: a. 5 LAMPS FOR EACH TYPE OF INDICATING LIGHT. 2.9 COOLING SYSTEM: MOUNTED DIRECTLY TO A TRAILER FRAME WITHOUT ADDITIONAL VIBRATION DARDS OF THE VARIOUS MANUFACTURERS, EXCEPT WHERE A. THE RADIATOR FAN SHALL DIRECT THE AIR FLOW FROM THE ENGINE OUTWARD ISOLATORS NECESSARY FOR OPERATION b. 2 SETS OF LUBE OIL FILTER ELEMENT. REQUIREMENTS OF THESE SPECIFICATIONS. PROVIDE THROUGH THE RADIATOR, WITH VERTICAL AIR DISCHARGE. THE FAN SHALL BE DRIVE c. 2 SETS OF FUEL FILTER ELEMENT. 2.14 RECEPTACLE ENCLOSURE ALL PARTS FOR THE SPECIFIED DUTY. DIRECTLY FROM THE ENGINE CRANKSHAFT OR THROUGH V-BELT DRIVE. THE A. PROVIDE (3) NEMA 5-20R 120V RECEPTACLES. d. 1 SET OF AIR CLEANER ELEMENT. RADIATOR SHALL HAVE SUFFICIENT CAPACITY TO DISSIPATE NOT LESS THAN THE B. MOUNT AND LABEL THE FOLLOWING RECEPTACLE IN THE RECEPTACLE ENCLOSURE: e. 1 SET OF V-BELTS (COMPLETE SET) TOTAL BTU PER HOUR REJECTED BY THE ENGINE TO THE COOLING SYSTEM AT 110% 1. CAMLOCK RECEPTACLES RATED FOR 208V, 3Ø, 4W, 600A POWER SYSTEM. f. 1 SET OF EACH SIZE FUSE. IER WITH CLEANABLE PARTICLE TRAP AND SERVICE RATED LOAD IN 104F AMBIENT, AND AGAINST A STATIC RESTRICTION OF 0.5 INCHES 2. (2) NEMA 5-20R, 120V RECEPTACLES 3.3 TRAINING
- HER WITH EXTERNAL DISCHARGE. FILTER.
- 6. TWENTY HOURS (MINIMUM) FULL LOAD FUEL TANK CONTAINED WITHIN GENSET
- OF WATER AS MAYBE IMPOSED BY ENCLOSURE. THE RADIATOR SHALL BE PROTECTED
- BY A STRONG GRILL B. THE RADIATOR SHALL BE PROVIDED WITH COOLANT RESERVE TANK WHICH IS CAPABLE OF COOLANT LEVEL CHECKING.

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5. MANUFACTURERS: a. CROUSE-HINDS b. APPLETON. c. OR EQUAL.

IGNED REVISIONS DESCRIPTION ENGINEERING No. E22549 N S ECTRIS des <u>fc</u> CKD BB JOB NO.

DATE 10/25/21

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3.11 TERMINATION AT ENCLOSURES A. SHEET METAL BOXES, CABINETS, AND ENCLOSURES:

- GALVANIZED RIGID STEEL CONDUIT: a. PROVIDE ONE LOCK NUT EACH ON INSIDE AND OUTSIDE OF ENCLOSURE.
- INSTALL GROUNDING BUSHING c. PROVIDE BONDING JUMPER FROM GROUNDING BUSHING TO EQUIPMENT GROUND BUS OR
- GROUND PAD; IF NEITHER GROUND BUS NOR PAD EXISTS, CONNECT JUMPER TO LAG BOLT ATTACHED TO METAL ENCLOSURE d. INSTALL INSULATED BUSHING ON ENDS OF CONDUIT WHERE GROUNDING IS NOT REQUIRED.
- e. PROVIDE INSULATED THROAT WHEN CONDUIT TERMINATES IN SHEET METAL BOXES HAVING THREADED HUBS.
- 3.12 CONDUCTORS A. DO NOT SPLICE INCOMING SERVICE CONDUCTORS AND BRANCH POWER DISTRIBUTION CONDUCTORS NO. 6 AWG AND LARGER UNLESS SPECIFICALLY INDICATED OR APPROVED BY ENGINEER
- B. CONNECTIONS AND TERMINATIONS: 1. INSTALL UNINSULATED CRIMP CONNECTORS AND TERMINATORS FOR CIRCUIT CONDUCTORS NO. 4 AWG THROUGH NO. 2/0 AWG INSTALL UNINSULATED, BOLTED, TWO-WAY CONNECTORS AND TERMINATORS FOR CIRCUIT
- CONDUCTORS NO. 4/0 AWG AND LARGER. 3. TAPE INSULATE ALL UNINSULATED CONNECTIONS
- PLACE NO MORE THAN ONE CONDUCTOR IN ANY SINGLE-BARREL PRESSURE CONNECTION. INSTALL CRIMP CONNECTORS WITH TOOLS APPROVED BY CONNECTOR MANUFACTURER.
- COMPRESSION LUGS: a. ATTACH WITH A TOOL SPECIFICALLY DESIGNED FOR PURPOSE. b. TOOL SHALL PROVIDE COMPLETE, CONTROLLED CRIMP AND SHALL NOT RELEASE UNTIL CRIMP IS COMPLETE.
- c. DO NOT USE PLIER TYPE CRIMPERS. C. SPLICES AND TERMINATIONS:
- INDOORS: USE GENERAL PURPOSE, FLAME RETARDANT TAPE. OUTDOORS: USE FLAME RETARDANT, COLD- AND WEATHER-RESISTANT TAPE.
- D. CABINETS AND PANELS: REMOVE SURPLUS WIRE, BRIDLE AND SECURE WHERE CONDUCTORS PASS THROUGH OPENINGS OR OVER EDGES IN SHEET METAL, REMOVE BURRS CHAMFER EDGES, AND INSTALL BUSHINGS AND PROTECTIVE STRIPS OF INSULATING

MATERIAL TO PROTECT THE CONDUCTORS. 3.13 GROUNDING A. UNLESS OTHERWISE INDICATED, GROUND ALL EXPOSED NON-CURRENT-CARRYING METALLIC PARTS OF

- ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, AND THE NEUTRAL OF ALL WIRING SYSTEMS IN ACCORDANCE WITH THE CEC, STATE, AND OTHER APPLICABLE LAWS AND REGULATIONS. 3 14 OPERATIONAL READINESS TEST (ORT)
- A. TESTING, TEST PLANS, AND TEST REPORTS SHALL BE PROVIDED BY THE CONTRACTOR AS SPECIFIED HEREIN. THE CONTRACTOR SHALL PROVIDE LABOR, INSTRUMENTS, AND OTHER MATERIAL TO COMPLETE THE TEST B. THE ENTIRE INSTALLED ELECTRICAL SYSTEM SHALL BE CERTIFIED (INSPECTED, TESTED, AND
- DOCUMENTED) THAT IT IS READY FOR OPERATION. THE OBJECTIVE OF THIS TEST IS TO DEMONSTRATE THAT THE ELECTRICAL SYSTEM IS COMPLETE AND READY FOR USE. 1. GROUNDING SYSTEM:
- a. VERIFY GROUND SYSTEM IS IN COMPLIANCE WITH THE PLANS
- PANELBOARD DIRECTORIES SHALL MEET MINIMUM CEC 408.4 REQUIREMENTS. THE CONTRACTOR SHALL IDENTIFY EACH CIRCUIT WITH ROOM NUMBER, ROOM NAME AND EQUIPMENT SERVED. STANDARD ABBREVIATIONS FROM THE NEC AND WEBSTER'S DICTIONARY ARE ALLOWED. (E.G., "207 JANITOR WH" OR "102,103 RR RCPT".
- D. LABELS SHALL BE MELAMINE, FLEXI-BRASS, OR EQUAL MATERIAL, 1.5"HX3"L, WITH 3/8"H TIMES NEW ROMAN LETTERING 1. BACKGROUND/LETTERING COLOR SHALL BE AS FOLLOWS: a. BLACK/WHITE (NORMAL BRANCHES)
- 2. EQUIPMENT LABELING (FOR ALL PROJECT TYPES) SHALL FOLLOW AFTER THE EXAMPLES SHOWN BELOW (FOR GENERATOR/ATS, PANELBOARDS, DISCONNECTS, LIGHTING CONTROL PANELS, ETC.): PANEL A2 **DISCONNECT B1** FED FROM PNI B1 FED FROM PNI M1 60A/15F, 208V/3Ø

400A, 120/208V, 3Ø

- 3. RECEPTACLES SHALL BE CLAMP COVER, RAINTIGHT.
- 4. EACH RECEPTACLE SHALL BE HARDWIRED TO THE GENERATOR.

A. THE EQUIPMENT SUPPLIER SHALL PROVIDE A MINIMUM OF 4 HOURS OF TRAINING PRIOR TO THE DELIVERY OF THE GENERATOR TO THE OWNER. TRAVEL TIME AND FROM SITE SHALL BE EXCLUDED FROM TRAINING TIME. TRAINING SHALL INCLUDE ROUTINE MAINTENANCE AND OPERATION OF GENERATOR. PROVIDE EQUIPMENT O&M MANUALS AT TIME OF TRAINING. IN ADDITION, PROVIDE A MAINTENANCE SCHEDULE FOR ROUTINE MAINTENANCE OF GENERATOR.

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