

# Switchgear Replacement and Generator Repair Project San Quentin State Prison

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## Project Manual

Introductory Information  
Bidding Requirements  
Contracting Requirements  
Specifications  
Drawings

May 5, 2011

**VANIR**  
CONSTRUCTION  
MANAGEMENT, INC.

**C**ALIFORNIA  
**P**RISON HEALTH CARE  
**R**ECEIVERSHIP CORP.



**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 000101**

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**PROJECT TITLE PAGE**

Title: Switchgear Replacement and Generator Repair Project  
San Quentin, CA

Location: San Quentin State Prison  
San Quentin, California 94954

Client Agency: California Prison Health Care Receivership Corporation ("CPR Corp")

Client Representative: Vanir Construction Management, Inc.  
[Program Manager] 4540 Duckhorn Drive, Suite 300  
Sacramento, CA 95834

Project Manager: Lisa Millar

Telephone: 916-255-5602

FAX: 916- 255-5601

Email: [Lisa.Millar@vanir.com](mailto:Lisa.Millar@vanir.com)

Project Number: TO58

END OF DOCUMENT

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**TABLE OF CONTENTS**

**INTRODUCTORY INFORMATION**

Document	000001	Project Manual Cover
	000101	Project Title Page
	000110	Table of Contents

**BIDDING REQUIREMENTS**

Document	001000	Notice to Design-Build Entities
	002000	Instructions to Bidders
	003000	Bid Proposal
	003001	Non-Collusion Declaration
	003003	Qualification/Information Form
	004313	Bid Security Form

**CONTRACTING REQUIREMENTS**

Document	005213	Agreement for Design Build Services
	006113	Performance Bond Form
	006114	Payment Bond Form
	007300	Supplementary Conditions

**SPECIFICATIONS**

DIVISION 01		GENERAL REQUIREMENTS
Section	011113	Summary of Work
	013119	Project Meetings
	013323	Submittals
	013513	Project Security Procedures
	013543	Environmental Protection Procedures
	014100	Regulatory Requirements
	014500	Quality Control
	015000	Construction Facilities and Temporary Controls
	017123	Field Engineering
	017823	Operation and Maintenance Manuals

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 000110**

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DIVISION 02	EXISTING CONDITIONS – NOT USED
DIVISION 03	CONCRETE – NOT USED
DIVISION 04	MASONARY – NOT USED
DIVISION 05	METALS – NOT USED
DIVISION 06	WOOD AND PLASTICS – NOT USED
DIVISION 07	THERMAL AND MOISTURE PROTECTION – NOT USED
DIVISION 08	DOORS AND WINDOWS - NOT USED
DIVISION 09	FINISHES – NOT USED
DIVISION 10	SPECIALTIES - NOT USED
DIVISION 11	EQUIPMENT – NOT USED
DIVISION 12	FURNISHINGS - NOT USED
DIVISION 13	SPECIAL CONSTRUCTION - NOT USED
DIVISION 14	CONVEYING SYSTEMS – NOT USED
DIVISION 21	FIRE SUPPRESSION - NOT USED
DIVISION 22	PLUMBING - NOT USED
DIVISION 23	HEATING VENTILATING AND AIR CONDITIONING – NOT USED
DIVISION 26	ELECTRICAL
Section 260010	Basic Electrical Requirements
260513	Medium – Voltage Cables
260553	Identification for Electrical Systems
260573	Overcurrent Protective Device Coordination Study
261300	Medium – Voltage Metal-Clad Switchgear
263214	Diesel Engine Generators
263215	Medium – Voltage Generator Paralleling Switchgear
DIVISION 28	ELECTRONIC SAFETIES AND SECURITY – NOT USED
DIVISION 31	EARTHWORK – NOT USED
DIVISION 32	EXTERIOR IMPROVEMENTS –NOT USED
DIVISION 33	UTILITIES – NOT USED

**DRAWINGS**

Sheet A-1.0	Aerial Photos and Map
Sheet A-2.0	Power House Floor Plan
Sheet E.1.00	Demolition Single Line Diagram
Sheet E 1.01	Remodel Single Line Diagram

END OF DOCUMENT

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 001000**

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**NOTICE TO DESIGN-BUILD ENTITIES**

CALIFORNIA PRISON HEALTH CARE RECEIVERSHIP CORPORATION

Switchgear Replacement and Generator Repair Project  
San Quentin State Prison, San Quentin, CA 94954

**Invitation to bid**

The California Prison Health Care Receivership Corporation ("CPR Corp") invites qualified Design-Build Entities to submit their design and construction capabilities, and fixed price bids for design and construction of the above named Project.

The services sought by this Notice include all customary services normally provided under the umbrella of the design-build method of project delivery. This includes full design phase services, scheduling, estimating, value engineering, general contracting during the construction phase, project closeout and building commissioning. The completed Project is to be a fully functioning facility as described in these Bid Documents.

The selected Design-Build Entity shall function in such a manner as to achieve full and satisfactory completion of the Project in accordance with: 1) the prescriptive and performance requirements contained in these Bid Documents, 2) approved design and construction documents, 3) agency approvals, 4) the agreed Contract Sum, and 5) the Contract Documents.

Bids are to be submitted to the CPR Corp c/o Vanir Construction Management, Inc., 4540 Duckhorn Drive, Suite 300, Sacramento, California 95834, **prior to 3:00 p.m. PST on June 15, 2011.**

Selection of the Design-Build Entity will be based on "Best Value" to the CPR Corp. Best Value will be determined by the CPR Corp at its sole discretion, and will include consideration of both qualification and cost. Bids will not be opened publicly.

**Design-Build Entity Requirements**

The Design-Build Entity may be comprised of companies, firms or individuals who are qualified to provide all design and construction services for this Project. The legal form of the Entity may be a corporation, partnership, or contractor-subcontractor relationship, providing that the Entity is properly licensed to provide the services and work of the Project.

A California Contractors License Classification "B" and Specialty Classification "C-10, Electrical" is required to be the prime contractor with the CPR Corp.

A California registered Architect or Engineer is a required member of the Entity and will serve as the Architect of Record/Engineer of Record for the Project. All other design professionals that may be required to perform the design services, shall have applicable California registration.

### **Design-Build Bid Documents**

The Bid Documents for this Project are of the nature of what is commonly known as Criteria Documents and consist of:

1. Bid Proposal Form and Contractor Information/Qualification Form
2. Prescriptive Contract and Agreement for Design-Build Services
3. Definitive Design Criteria, drawings including site location and existing conditions documentation, and Technical Specifications portions of which are prescriptive and portions of which set forth the required levels of performance. Bidders designs are to adhere to the intent of these documents as closely as practicable.

The Design-Build Bid Documents for this Project can be obtained from Signature Reprographic, 620 Sunbeam Av, Sacramento, California 95811, 916-454-0800, fax 916-736-3053, [www.signaturerepro.com](http://www.signaturerepro.com) and may be seen at their office and at builders exchanges in the Project area.

### **Work of the Contract**

The Work of this Design-Build Contract consists of furnishing all labor, materials, equipment, services, expertise and licenses necessary to design and construct the Work described in the Design-Build Bid Documents.

The Work generally includes, but is not limited to the following:

#### **PROJECT DESCRIPTION**

##### **A. General**

1. The Project includes replacement of the existing 15KV main service switchgear with new 15KV metal-clad switchgear inside the expanded existing Power House Building. New 15KV switchgear will replace existing switchgear at the same location so that all existing incoming and outgoing feeder cables will be reconnected to the new switchgear breakers.
2. The Project includes replacement of the existing 15KV generator paralleling switchgear. New 15KV metal-clad paralleling switchgear will replace existing outdoor pad mounted 15KV paralleling switchgear at the same location within the Building Expansion footprint.
3. The Project includes two new 15KV main service switchgears located at the top of the Hill for the incoming PG&E services. There are two existing PG&E services: one 12KV overhead line from San Rafael and one 12KV overhead line from Greenbrae. Each new 15KV metal-clad main service switchgear will be outdoor pad mounted and will include provisions for PG&E metering. One

# Switchgear Replacement and Generator Repair Project San Quentin State Prison

Document 001000

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feeder section will include breaker for existing feeder serving main switchboard in the Power House Building. Second feeder section will include provisions for future breaker and conduit stub-outs for future feeder. The Project includes all necessary infrastructure and site improvements to accommodate the new main service switchgears.

4. The Project includes selective removal of the existing main service switchgear and generator paralleling switchgear to make room for the new switchgears and all necessary infrastructure required for installation of new switchgears to replace existing switchgears.
5. The Project includes repairs of two existing diesel-engine generators, each rated 1,500KW, 12KV, 3-phase, standby.
6. The Project includes relocation and extension of existing underground electric utilities located at the generator paralleling switchgear. These utilities include underground 12KV emergency distribution feeders to and from paralleling switchgear breakers, generator controls, and signal wiring in conduits.
7. The Project includes temporary electrical construction required for temporary electrical service and distribution to all buildings during construction. The scope of temporary electrical construction will include 12KV cables to accommodate all required connections, rerouting, and reconnection of the existing feeders for temporary power service of the entire facility distribution system during construction.
8. The Project also includes relocation of existing items located inside existing Power House Building and rerouting of associated conduits and wiring which may impact construction work under this Project.
9. All work shall meet the established California Department of Corrections and Rehabilitation Design Criteria Guidelines.
10. The project includes all associated site improvement work including, but not limited to:
  - a. Demolition of existing site features required to allow completed Work.
  - b. Protections and re-use of selected materials as indicated.
11. The project includes expansion of the existing Power House Building to include, but not limited to, Design, approval and construction of the expansion of the existing Power House Building to accommodate replacement of the 15 KV main service switchgear and meet code requirements. Expansion of building shall be complete, including but not limited to, foundations, floor slab, housekeeping slab for generator power leveling switchgear, building structure, enclosure roofing, lighting, and

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 001000**

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ventilation.

**Schedule for the Work**

The schedule for the Work of the Project, from the date of the Notice to Proceed to Final Completion is:

MILESTONE ACTIVITIES	CALANDER DAYS
A. Complete Switchgear Replacement	180
B. Complete All Work	210
<b>TOTAL DESIGN-BUILD PHASE DURATION</b>	<b>210</b>

**Maximum Cost of the Work**

The CPR Corp's Total Design and Construction Budget for the Work of the Project is \$2,000,000. This is the maximum amount considered by the Owner as responsive to this Bid.

1. The Design-Build Entity's Bid shall be considered non-responsive and shall not be considered if the cost proposal is in excess of that amount.
2. If the Entity finds that the Project cannot be designed and constructed, to achieve the objectives described in the Bid Documents, within the Owner's Design and Construction Budget for the Work of the Project, the Entity shall notify the Owner regarding the following options:
  - a. Propose a design that is within the Owner's Budget but shall not achieve all criteria. In this option, the Entity shall list what criteria cannot be achieved as part of their Bid. The list shall be presented in two parts: 1) all items that are absolutely not provided, and 2) any items that are provided but at a significantly lower performance level than requested. The Bid shall be evaluated as submitted.
  - b. Withdraw from the Bid competition.

**Pre-Bid Conference**

A mandatory Pre-Bid Conference is scheduled for **10:00 a.m. PST on May 24, 2011** at the Warden's Conference Room at San Quentin State Prison, San Quentin, CA. On-site inspections will be conducted after the pre-bid conference. Prospective Bidders attending the pre-bid conference should park in the visitor's parking and enter the San Quentin State Prison at the east gate for direction to the Administration Building, Warden's Conference Room.

**Security Clearance required for all Site Visits**

Security clearance is required for all Site Visits including the Pre-Bid Conference.

Bidders planning on attending the Pre-bid Conference must submit the Gate Clearance form to Vanir Construction Management, **no later than 3:00 May 17, 2011**, to receive security clearance for entry into the Prison. The form is included at the end of this section. Fax or e-mail the form to Ms. Lisa Millar at 916-255-5601 or [lisa.millar@vanir.com](mailto:lisa.millar@vanir.com) Provide all information required by the form for

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 001000**

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each individual arriving in the same vehicle. Prospective bidders not providing the above information by the deadline stated may not be permitted into the Institution.

**The following items will not be allowed on site:**

- blue clothing and jeans;
- cameras and recording devices;
- firearms, knives (including pocket knives), or weapons of any kind;
- narcotics, drugs, intoxicants.

Questions will be answered by addendum if received prior to 5:00 p.m. PST on June 08, 2011. Questions should be faxed to Vanir Construction Management, Inc., 916-255-5601, or emailed to [lisa.millar@vanir.com](mailto:lisa.millar@vanir.com). Questions received after this time may not be answered or addressed by addenda.

The successful Bidder shall furnish bonds, insurance, and other documents as specified in the Instructions to Bidders.

Pursuant to Section 1773 of the California Labor Code, the general prevailing rate of wages in the county in which the work is to be done, as determined by the Director of the Department of Industrial Relations, must be paid to all workers on Public Works projects such as this one. Prevailing wage rates are available from Vanir Construction Management, Inc., 4540 Duckhorn Drive, Suite 300, Sacramento, California 95834, 916.575.8888, or on the Internet at: <http://www.dir.ca.gov>.

END OF SECTION

[Gate Clearance Form follows.]

# CONFIDENTIAL GATE CLEARANCE

**DATE:** \_\_\_\_\_

<b>DATE OF VISIT:</b> <u>May 24, 2011</u>						
<b>TIME OF VISIT:</b> <u>10:00 AM</u>						
<b>DATE OF EXPIRATION:</b>						
NAME				Cal. Driver Lic / I.D.		
LAST	FIRST	MIDDLE	D.O.B.	Number	Exp.	S.S.N.

Organization: CPR

Destination: Administration Building, Warden's Conference Room

Department: \_\_\_\_\_

Prison Contact: Andy Crump Ext. \_\_\_\_\_

Or \_\_\_\_\_

Escort In/Out By: Andy Crump Ext. \_\_\_\_\_

Vehicle License #: NA

Purpose: Site Visit – Pre-Bid Meeting

Equipment: \_\_\_\_\_

Parking: \_\_\_\_\_

Comments: \_\_\_\_\_

*I certify that, as the maker of this document, I will inform the persons appearing above of the necessary rules and regulations, and digest of State laws, and assume responsibility for their conduct.*

Submitted By: \_\_\_\_\_

Reviewed By: \_\_\_\_\_

Approved By: \_\_\_\_\_

## **INSTRUCTIONS TO BIDDERS**

### **I. SECURING DOCUMENTS**

Copies of the Bid Documents including Design Criteria drawings and specifications will be provided as specified in the Notice to Design-Build Entities.

### **II. EXAMINATION OF BID DOCUMENTS AND SITE OF WORK**

- A. The terms "bid" and "proposal," as well as "Bid Form" and "Proposal," are used interchangeably throughout this and other Bid Documents.
- B. Before submitting a proposal, bidders shall examine the Bid Documents and fully inform themselves as to the total extent of the Work, shall visit the site of the Work, and shall examine all existing site conditions and use limitations. The Owner will make no allowance to any bidder because of lack of knowledge of existing conditions. The submission of the Proposal shall be conclusive evidence that each bidder has made a complete and thorough examination of the Bid Documents and of the site of the Work.
- C. The "Bid Documents" shall include the Notice to Design-Build Entities, Instructions to Bidders, Bid Proposal, Non-Collusion Declaration, List of Subcontractors, Bid Security, Qualification/Information Form, Agreement for Design Build Services, Supplemental Conditions, Contracting Requirements, the Design Criteria, Drawings and Specifications for the Project, and all duly issued Addenda.
  - 1. Information regarding obtaining the Bid Documents is found in the Notice to Design-Build Entities.
  - 2. Bidders shall use complete sets of Bid Documents in preparing the Proposal. Bidders are responsible for ascertaining that the Bid Documents, upon which their Proposals are based, are complete sets.
  - 3. Bid Documents are provided to bidders for bidding only. No other use is permitted.
  - 4. Should a bidder find discrepancies, ambiguities, inconsistencies, errors, or omissions in the Bid Documents and/or applicable federal, state, or local regulations or requirements, the bidder should at once notify the Project Manager in writing. Bidder's questions shall be submitted no later than five (5) working days before the bid opening. The Project Manager will consult with the architect/engineer who is solely responsible for clarification and interpretation.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 002000**

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D. Definitions of bidding terms:

1. Bids are sums stipulated in Proposals for which bidders propose to perform the Work.
2. Bidders are qualified Design-Build Entities that submit Proposals to the Owner for work as prime contractors on the Project.
3. Subcontractors are those who will perform work of labor or render service to the bidder.
4. Prior to bid time, the bidder shall notify the Construction Manager of any items that are obsolete or unavailable for use in the Project.
5. Base bids are sums stipulated in Proposals for which bidders offer to perform the Work, and from which alternate bids may be added or deleted.
6. Alternate bids are sums that may be added to or deleted from base bids for the performance of alternate Work, as delineated in the Bid Documents.
7. Unit prices are sums included in Proposals as bids per unit measure of materials and/or services, as required in the Bid Documents.
8. Proposals are complete, properly executed forms including base bids, alternate bids, unit prices, allowances, and other information requested by the Owner.

III. ADDENDA

- A. The Project Manager will forward written clarifications to all bidders in the form of addenda (faxed and/or mailed) for receipt by the plan holders no later than seventy-two (72) hours before the bid opening.
- B. Prior to submitting a Proposal, each bidder shall ascertain that every addendum issued prior to the bid date has been considered and shall acknowledge receipt of each addendum on the Bid Form. Each addendum will become a part of the Agreement for construction.
- C. All addenda issued by the Owner shall become a part of the Contract. Any clarification, interpretation, or correction of the Bid Documents made prior to the bid date shall be made only by addenda. All bidders are responsible to obtain all copies of addenda issued by the Owner.

IV. BIDS

- A. Bids shall be submitted upon the Bid Form provided therefor, properly executed and with all items filled in. No person, firm or corporation shall be allowed to file more than one Proposal for the Work of this project. The signatures of all persons signing shall be in

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 002000**

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longhand and executed by the principal duly authorized to make contracts. The bidder's legal name shall be fully stated.

- B. All blank spaces in the Proposal shall be properly filled in. Bidders shall observe in the Proposal that provisions are made for certain bid items and they shall be required to submit these bid items in full. The Proposal shall be submitted without interlineations, alterations, or erasures to the bid items or alternates listed therein. Any unauthorized additions, limitations, conditions, or provisions attached to the Proposal will not be considered. Bids shall not contain any recapitulation of the Work to be done. No telegraphic or telephonic proposals or modifications of bid items will be considered. No bids received after the time for receiving them will be considered and if so received they will be returned to the bidders unopened.
- C. List of Subcontractors: Pursuant to the provisions of Sections 4100 to 4114, inclusive, of the California Public Contracts Code, every bidder shall in his or her bid set forth:
1. The name and location of the place of business of each subcontractor.
  2. The portion of the Work that will be done by each subcontractor. If the bidder fails to specify a subcontractor for any portion of the Work to be performed under the Contract in excess of one-half (1/2) of one percent (1%) of the bidder's total bid, the bidder agrees to perform that portion of the Work. For more details, refer to the Agreement for Design-Build Services. The successful bidder shall not, without the written consent of the Owner, either:
    - a. Substitute any person as subcontractor in place of the subcontractor designated in the original bid.
    - b. Permit any subcontract to be assigned or transferred or allow the Work to be performed by anyone other than the original subcontractor listed in the bid.
    - c. Sublet or subcontract any portion of the Work in excess of one half (1/2) of one percent (1%) of the total bid as to which his original bid did not designate a subcontractor.
- D. Each bid shall be addressed and delivered to Vanir Construction Management, Inc., Attention: Lisa Millar, 4540 Duckhorn Drive, Suite 300, Sacramento, California 95834, on or before the day and hour set for the opening of bids in the Notice to Design-Build Entities. The bid must be enclosed in a sealed envelope bearing the title of the Work, the name of the bidder, and the date and hour of the opening. It is the sole responsibility of the bidder to see that his or her bid is received prior to the scheduled time for the opening of bids.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 002000**

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V. BID SECURITY

- A. Each bid shall be accompanied by Bid Security on the form provided in the Bid Documents, duly executed by the bidder as principal and a corporation authorized to do business in the State of California as an admitted Surety, naming the California Prison Health Care Receivership Corporation as obligee; or a cashier's check drawn on a solvent bank of the State of California, in the amount of ten percent (10%) of amount bid and made payable to the California Prison Health Care Receivership Corporation.
- B. The Bid Security shall guarantee payment of actual damages in case the successful bidder fails to file satisfactory bonds as required by the Bid Documents or fails or refuses to enter into a Contract within the specified time. If the Owner does not accept the bid within ninety (90) days after the date set for the opening of bids or if the bidder to whom the Contract is awarded executes and delivers to the Owner the required Bid Documents, the Bid Security or the amount of the cashier's check will be returned to the bidder.
- C. Bid security for the next two responsive, responsible bidders will be returned to bidders within ten (10) days after construction Contracts have been signed. If the successful bidder withdraws his or her bid within the period specified therein for acceptance, or upon acceptance thereof by the Owner, and fails to enter into the Contract and provide bonds within the time specified after the forms are presented to him or her, the bidder shall be liable for any difference by which the cost of securing the supplies or services exceeds the amount of bid, and the bid security shall be available toward offsetting such difference.

VI. WITHDRAWAL OF BID

- A. Any bidder may withdraw his or her bid either personally or by written request at any time prior to the scheduled time for the opening of bids.
- B. No bidder may withdraw his bid for a period of ninety (90) days after the bid opening. The bid shall be subject to acceptance by the Owner during this period.

VII. BID PROTESTS

- A. Any bid protest(s) must be submitted in writing to the Project Manager before 5 p.m. of the fifth day following the bid opening. The procedure and time limits set forth herein are mandatory and are the bidder's sole and exclusive remedy in the event of bid protest, and failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code Claim or legal proceedings.
- B. The initial protest document must contain a complete statement of the basis for the protest, and must refer to the specific portions of all documents that form the basis thereof. The protest must include the name, address, and telephone number of the person representing the protesting party. The protesting party must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct

financial interest that may be affected by the outcome of the protest. Such parties shall include all other bidders who appear to have a reasonable prospect of receiving an award, depending upon the outcome of the protest.

- C. The Owner will issue a decision regarding the protest. If the Owner determines that a protest is frivolous, the party originating the protest may be determined to be irresponsible and that party may be deemed ineligible for future contract award.

**VIII. AWARD OR REJECTION OF BIDS**

- A. Promptly following the Bid Opening, CPR (Owner) or Project Manager will review the bids and may, at its option, select one or more, responsible bidders whose Project Manager and Project Superintendent should be available and prepared to be interviewed within one week after the Bid Opening. The bidders selected for interviews, if any, will be notified by telephone and facsimile of the date and time of the interviews, which will take place either in person or via telephone. It is anticipated that each interview will not exceed thirty (30) minutes in length.
- B. The Contract, if awarded, will be awarded based on a "best value" selection criteria determined exclusively by the Owner, to the responsive, responsible bidder whose bid is received in compliance with these instructions and the Notice to Design-Build Entities inviting bids, provided his or her bid is responsive and it is in the interest of the Owner to accept it. The competence and the responsibility of bidders and of their proposed subcontractors will be considered in making the award of Contract. Any bidder before being awarded a Contract may be required to furnish evidence satisfactory to the Owner that he and his proposed subcontractors have sufficient means and experience in the type of work called for to assure completion of the Contract in satisfactory manner. The Owner reserves the right to reject the bid of any bidder who has previously failed to perform properly or to complete on time contracts with the Owner of a nature similar to this project. The Owner reserves the right to reject any or all bids or alternates and waive any informality in the bids or in the bidding.

**VII. BONDS REQUIRED BY THE AGREEMENT**

- A. Simultaneously with the execution of the Agreement, the successful bidder will be required to furnish a Performance Bond and a Payment Bond in an amount equal to one hundred percent (100%) of the Contract Price, each secured from an admitted Surety satisfactory to the Owner.
- B. The Payment and Performance Bonds required by these specifications will neither be accepted nor approved by the Owner unless the bonds are underwritten by an admitted Surety and the requirements of California Code of Civil Procedure Section 995.630(a) and (b) are met and the bonds are accompanied by the County Clerk's certificate as provided for in California Code of Civil Procedure Section 995.640(b).

X. COMMENCEMENT OF WORK

The successful bidder shall be required to begin work within five (5) calendar days after the date on the Notice to Proceed, and complete the Work in accordance with the specifications hereto attached to the entire satisfaction of the Owner and completed according to project schedule with due allowance being made for delays beyond the Contractor's control as outlined elsewhere.

XI. ANTI-DISCRIMINATION

The successful bidder shall not discriminate against any employee or applicant for employment because of race, creed, gender, color, or national origin. The Design-Build Entity will comply with all provisions of Executive Order No. 10925 of March 6, 1961, as amended, and all rules, regulations and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

XII. COMPENSATION

A. **Prevailing Wage:** The Design-Build Entity and all its subcontractors shall pay all workers not less than the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work as determined by the Director of the Department of Industrial Relations, State of California, for the type of work performed and the locality in which the work is to be performed within the boundaries of the District. Prevailing wage rates are available from the Project Manager or on the Internet at: <http://www.dir.ca.gov>. If the Project is funded at least in part with State bond funds, the Owner and/or its designee will be operating a labor compliance program on this Project pursuant to Labor Code section 1771.7.

B. **Workers' Compensation:** Each Design-Build Entity to whom a public works contract is awarded certifies, in the act of executing the Agreement, that he or she is aware of the provisions of Section 3700 of the Labor Code that require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with provisions of that code, and that he or she will comply with such provisions and submit proof of insurance to the Project Manager before commencing the performance of the Work on the Contract.

END OF SECTION

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 003000**

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**DOCUMENT 003000  
BID PROPOSAL**

PROPOSAL TO: California Prison Health Care Receivership Corporation  
c/o Vanir Construction Management, Inc.

ON OR BEFORE: **3:00 p.m., PST, June 15, 2011**

DELIVER TO: Vanir Construction Management, Inc.  
4540 Duckhorn Drive, Suite 300  
Sacramento, CA 95834  
Attention: Lisa Millar

FOR: Switchgear Replacement and Generator Repair Project  
San Quentin, CA

The undersigned hereby proposes and agrees to furnish everything required to complete the project in the manner and time prescribed in the above entitled contract documents and in accordance with the prevailing wage rates as determined by the Department of Industrial Relations and as required by the Agreement for Design-Build Services for the quotation set forth in the space provided herein.

If awarded the contract, the undersigned agrees to sign the contract and to furnish the bonds and Certificate of Liability Insurance and other documents as required in the Instructions to Bidders and to start the work when notified.

Bidder's security of bid bond, cash, cashier's check, or certified check in the amount of at least 10 percent of the bid price must accompany this proposal. If bid bond is used as security, it is to be executed on the appropriate form attached to this proposal. The bond must be executed by an admitted surety insurer. **Faxed, emailed, or telephoned proposals will not be accepted.**

Proposal must be submitted under sealed cover and should be returned in the preprinted envelope (if enclosed), otherwise return in an envelope plainly identified as a proposal for the work being bid upon and addressed as directed in the Notice to Contractors.

This proposal must be signed in the same name style in which the bidder is licensed. Bidder bidding jointly or as a combination of several business organizations is specifically cautioned that the bidder must be jointly licensed in the same form and style in which this proposal is executed.

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Date

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 003000**

DESCRIPTION	TOTAL BID PRICE
Complete The Work.	\$

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Date

Award of this contract, if it is awarded, will be to the lowest responsible bidder whose proposal complies with all requirements prescribed herein.

The Total Bid Price is based on a review of the documents listed below. Failure by the bidder to acknowledge receipt of any document could result in the rejection of the bid.

DOCUMENTS

SIGNATURE

DATE

Initially Issued Design Criteria,  
Drawings and Specifications

\_\_\_\_\_

\_\_\_\_\_

Addendum No. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Additional Requirements**

1. As a part of this Bid Proposal, the Contractor shall submit the following information for review by the CPR:
  - A. Product Compliance Confirmation
  - B. Statement of Qualifications
  - C. Project Approach
  
2. After evaluating the additional requirements, award of this contract, if it is awarded, will be based on a "best value" selection criteria determined exclusively by Owner, to the responsive, responsible bidder whose proposal complies with all requirements prescribed.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 003000**

**A. Product Compliance Confirmation**

1. Provide a signed statement that confirms product compliance with the Bid Documents.
2. If any deviations are proposed, list all proposed deviations in numerical order with a complete description of each item.
3. If no deviations are proposed, write "None Proposed" in the description column.
4. The CPR will evaluate all proposed deviations and will make the final determination if the proposed deviations will materially affect the quality or functionality of the Project.
5. Final acceptance of any product, plan or specification deviations will be based on achieving best value for the CRP.

The undersigned hereby proposes and agrees to furnish everything required to complete the Project in strict accordance with the Contract Documents. There are no product, plan or specification deviations proposed other than those listed below.

Signed: \_\_\_\_\_ Dated: \_\_\_\_\_

ITEM NUMBER	DESCRIPTION
Item 1	
Item 2	
Item 3	
Item 4	
Item 5	
Item 6	
Item 7	
Item 8	
Item 9	
Item 10	

**B. Statement of Qualifications**

1. Attach to this Bid Proposal a Statement of Qualifications of the Prime Contractor AND the Electrical Contractor, if other than the Prime.
2. Provide an overview of each company's history, noting the date of formation, years of experience, annual volume of work, number of employees and other pertinent information.
3. Provide an overview of each company's experience, noting the largest projects completed and the types of projects completed in the last three years.
4. Provide an overview of each company's specific experience building healthcare and? correctional projects.
5. The CPR will evaluate the Statement of Qualifications and determine if the Contractor is qualified to construct this Project.

**C. Project Approach**

1. Attach to this Bid Proposal a Project Approach statement.
2. Provide an overview of the contractor's proposed approach to sequencing the work.
  - a. Time is of the essence on this project thus the contract is required to address in the sections there approach to the procurement at the new equipment, expression of the Power House, generator assessment and repair for PG7E work within the 7 months total construction time.
3. Provide an overview of the contractor's proposed approach to delivering and completing the Switchgear Replacement and Emergency Generator Repairs per the Contract Documents.
4. Provide an overview of the contractor's proposed approach to quality control, subcontractor management and management of construction.
5. Provide an overview of the contractor's proposed approach to working within a fully operational prison.
6. The CPR will evaluate the Project Approach statement and determine the merits of the approach for this Project.



**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 003000**

LIST OF SUBCONTRACTORS FOR \_\_\_\_\_,  
CONTRACTOR

PROJECT: Switchgear Replacement and Generator Repair Project – San Quentin State Prison, CA

The above named Contractor hereby designates below the names and locations of the place of business of each subcontractor identified as required for listing. Please check one of the boxes and sign below:

We are not using any Subcontractors.

All of our Subcontractors are listed below.

<u>WORK TO BE DONE</u>	<u>NAME OF SUBCONTRACTOR</u>	<u>PLACE OF BUSINESS</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Date

END OF DOCUMENT

**NON-COLLUSION DECLARATION**

TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID

STATE OF \_\_\_\_\_ )  
 ) ss.  
County of \_\_\_\_\_ )

I, \_\_\_\_\_, declare that I am \_\_\_\_\_ of the party making the foregoing bid, that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true, and further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

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

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Date

END OF DOCUMENT

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Switchgear Replacement and Generator Repair Project  
San Quentin State Prison

Document 003003

**CONTRACTOR QUALIFICATION/INFORMATION FORM**  
TO BE SUBMITTED WITH BID

CONTRACTOR LICENSE No.: \_\_\_\_\_ CLASS: \_\_\_ FEDERAL I.D. No.: \_\_\_\_\_

FULL LEGAL NAME OF COMPANY: \_\_\_\_\_

STREET ADDRESS: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

NAME AND TITLE OF PRINCIPAL CONTACT: \_\_\_\_\_

TYPE OF BUSINESS: \_\_\_\_\_ Sole Proprietorship \_\_\_\_\_ Partnership  
\_\_\_\_\_ Non-Profit 501C3 \_\_\_\_\_ Corporation

WORKERS' COMPENSATION INSURANCE CARRIER: \_\_\_\_\_

\_\_\_\_\_ POLICY NO.: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

GENERAL LIABILITY INSURANCE CARRIER: \_\_\_\_\_

\_\_\_\_\_ POLICY NO.: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

The following statements and information of Bidder are submitted with the Bid, as a part thereof, and the truthfulness and accuracy of the information are guaranteed by the Bidder.

1. Bidder's organization has been in business as a contractor under its present business name for \_\_\_\_\_ years, from \_\_\_\_\_ to present.
2. Bidder's organization has had experience in work comparable to that required under the proposed contract: As a general contractor, \_\_\_\_\_ years; as a subcontractor, \_\_\_\_\_ years.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 003003**

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3. Work similar in character to that required in the proposed contract, which bidder's organization has completed:

	<u>YEAR</u>	<u>CLASS OF WORK, &amp; NAME OF OWNER</u>	<u>CONTRACT AMOUNT</u>
a.	_____	_____	\$ _____
b.	_____	_____	\$ _____
c.	_____	_____	\$ _____

4. Bidder refers to the following information concerning work listed in item 3 above:

	<u>CONTACT NAME</u>	<u>TITLE</u>	<u>CITY AND STATE</u>	<u>PHONE NO.</u>
a.	_____	_____	_____	_____
b.	_____	_____	_____	_____
c.	_____	_____	_____	_____

5. Bidder refers to the following bank(s) as to financial responsibility of Bidder:

<u>NAME OF BANK</u>	<u>ADDRESS</u>
_____	_____
_____	_____
_____	_____

6. Bidder refers to the following surety company(ies) as to the financial responsibility and general reliability of the Bidder:

<u>NAME OF SURETY COMPANY</u>	<u>ADDRESS</u>
_____	_____
_____	_____

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 003003**

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7. SAFETY EXPERIENCE

a. List your firm's interstate Experience Modification Rate for the last three years:

20\_\_ : \_\_\_\_\_ 20\_\_ : \_\_\_\_\_ 20\_\_ : \_\_\_\_\_

b. Use your last year's Cal-OSHA 200 Log to fill in the following number of injuries and illnesses:

i. Number of lost workday cases: \_\_\_\_\_

ii. Number of medical treatment cases: \_\_\_\_\_

iii. Number of fatalities: \_\_\_\_\_

iv. Employee hours worked last year: \_\_\_\_\_

v. Name of your firm's safety engineer/manager: \_\_\_\_\_

(Attach a resume or outline of this individual's safety and health qualifications and experience.)

8. DISPUTE RESOLUTION

a. In the last five (5) years, has your firm ever been assessed liquidated damages? \_\_\_ Yes \_\_\_ No

b. Has your firm ever been involved with mediation or litigation with an owner regarding a dispute? \_\_\_ Yes \_\_\_ No

c. Has an owner ever begun or completed termination of a contract with your firm? \_\_\_ Yes \_\_\_ No

d. In the last five (5) years, has your firm ever been assessed penalties or forfeitures for non-compliance with state public contract laws and/or labor laws, codes, and regulations? \_\_\_ Yes \_\_\_ No

**I certify, under penalty of perjury, that the foregoing information is current and accurate and I authorize the Owner to obtain a credit report and/or verify any of the above information.**

\_\_\_\_\_  
Authorized Signer

\_\_\_\_\_  
Date

END OF DOCUMENT

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**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 004313**

**BID BOND**

TO ACCOMPANY BID PROPOSAL

KNOW ALL BY THESE PRESENTS:

That the undersigned \_\_\_\_\_  
as PRINCIPAL, and the undersigned \_\_\_\_\_,  
a Corporation organized and existing under and by virtue of the laws of the state of \_\_\_\_\_, and  
authorized to do business in the State of California as an admitted SURETY, are held and firmly bound unto the California  
Prison Health Care Receivership Corporation ("CPR"), a public entity, as OBLIGEE, in the sum of \_\_\_\_\_  
DOLLARS

(\$ \_\_\_\_\_), which sum represents 10% of the base bid amount, in lawful money of the United States of America,  
for the payment of which sum will and truly to be made, we and each of us, bind ourselves, our heirs, executors,  
administrators, successors and assigns, jointly and severally firmly by these presents.

WHEREAS, the Principal is submitting a bid to CPR c/o Vanir Construction Management, Inc., County of Sacramento, State  
of California, for the Work specifically described in the accompanying bid for the **Switchgear Replacement and Generator  
Repair Project**

THE CONDITION OF THIS OBLIGATION IS SUCH that if the aforesaid Principal is awarded the Contract, and, within the  
time and manner described in the Instructions to Bidders submits the prescribed documents including the required Labor  
and Material Payment Bonds, enters into a written Contract, in the prescribed form, or if the said Principal shall fully  
reimburse and save harmless the Obligee from any damages sustained by the Obligee through the failure of the Principal to  
enter into the written Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

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

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_ day of 20\_\_\_\_.

\_\_\_\_\_  
Principal

(Corporate Seal of Principal)

\_\_\_\_\_  
Surety

(Corporate Seal of Surety)

END OF DOCUMENT

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# Agreement for Design-Build Services

---

## AGREEMENT

made as of the \_\_\_\_ day of \_\_\_\_\_ in the year Two Thousand and \_\_\_\_\_,

## BETWEEN

### "CPR":

California Prison Health Care Receivership Corporation  
P.O. Box 4038  
Sacramento, CA 95812-4038  
Telephone: (916) 323-1221  
Facsimile: (916) 323-1257

### and the "Design-Builder":

[Insert Design-Builder Name]  
[Address]  
[City, State ZIP]  
Telephone:  
Facsimile:  
Authorized Representative:

### The "Project" is:

Design and Construction of [Insert Project Description and Location]

### The "Program Manager" is:

Vanir Construction Management, Inc.  
4540 Duckhorn Drive, Suite 300  
Sacramento, CA 95834  
Telephone: (916) 575-8888  
Facsimile: (916) 575-8887  
Authorized Representative:

The Design-Build Team consists of: [Insert Architect Name]  
CPR [Address]  
Program Manager [City, State ZIP]  
Design-Builder Telephone:  
**"Architect":** Facsimile:  
Authorized Representative: \_\_\_\_\_

**"General Contractor":** [Insert General Contractor Name]  
(if different from Design-Builder) [Address]  
[City, State ZIP]  
Telephone:  
Facsimile:  
Authorized Representative: \_\_\_\_\_

**Contract Time:** \_\_\_\_\_ calendar days from the date of Notice to Proceed.

**Contract Sum:** \$ \_\_\_\_\_ ( \_\_\_\_\_ Dollars)

**Change Order OH&P:** Self-performed work: \_\_\_\_\_%  
Subcontract work: \_\_\_\_\_%

**Liquidated Damages for Delay:** \$ \_\_\_\_\_ ( \_\_\_\_\_ dollars) per calendar day

## TABLE OF CONTENTS

	<u>Page</u>
ARTICLE 1 GENERAL PROVISIONS .....	1
1.1 CPR; Design-Builder.....	1
1.2 The Design-Build Team .....	1
1.3 Relationship of Parties .....	2
1.4 Extent of Agreement.....	2
1.5 Design Responsibility .....	2
1.6 Definitions.....	2
ARTICLE 2 DESIGN-BUILDER'S RESPONSIBILITIES.....	5
2.1 General.....	5
2.2 Design Phase .....	6
2.3 Construction Phase .....	7
ARTICLE 3 CPR'S RESPONSIBILITIES .....	8
3.1 Information and Services .....	8
3.2 Program Manager's Authority .....	9
ARTICLE 4 COMPENSATION.....	9
4.1 Contract Sum.....	9
4.2 CPR Allowances .....	9
ARTICLE 5 PROGRESS PAYMENTS.....	9
5.1 Schedule of Values.....	9
5.2 Payment Application .....	10
5.3 Payment for Stored Materials .....	10
5.4 Other Payment Terms .....	10
5.5 Withholding Additional Amounts; Grounds.....	11
5.6 Disbursement of Withheld Amounts.....	11
5.7 Correction of Statement and Withholding of Payment.....	11
5.8 Effect of Progress Payments .....	12
ARTICLE 6 PERMITS, LICENSES AND LEGAL REQUIREMENTS.....	12
6.1 Basic Standard .....	12
6.2 Permits .....	12
6.3 Compliance with Laws and Regulations .....	12
6.4 Compliance with Labor Code.....	12
6.5 Air Pollution Control .....	13
6.6 Antitrust Claims .....	13
6.7 Protection of Underground Infrastructure.....	14
6.8 Underground Service Alert (USA).....	14
ARTICLE 7 SUBCONTRACTORS.....	14
7.1 Subcontracts.....	14
7.2 Termination.....	14
ARTICLE 8 HAZARDOUS MATERIALS .....	14
8.1 Material Safety Data Sheets .....	14
8.2 Definition .....	14
8.3 Notice of Hazardous Materials.....	14
8.4 Indemnification .....	15
8.5 Existing Hazardous Material .....	15
ARTICLE 9 SUPERVISION AND LABOR.....	15
9.1 Quality Review.....	15
9.2 Supervision Procedures.....	15
9.3 Skilled Labor.....	15

9.4	Dismissal of Unsatisfactory Employees .....	15
9.5	Personal Attention and Superintendence; Design-Builder's Agent.....	15
9.6	Inspection of the Work of Other Contractors.....	16
9.7	Design-Builder's Coordination of Work .....	16
9.8	Daily Reports .....	16
9.9	Record Drawings .....	16
9.10	Submittals.....	17
ARTICLE 10	INSPECTION AND TESTING.....	17
10.1	Inspection .....	17
10.2	Stop Work Notices .....	17
10.3	Effect of Inspections .....	17
10.4	Inspection of Completed Work.....	17
10.5	Notice to CPR of Inspection.....	18
10.6	Testing.....	18
10.7	Selection of Samples.....	18
10.8	Damage Due to Testing.....	18
ARTICLE 11	PROTECTION OF WORKERS, PUBLIC, AND PROPERTY .....	18
11.1	Safety Precautions and Programs .....	18
11.2	Protection of Persons and Property .....	18
11.3	Protection and Repair of Work.....	18
11.4	Protection of Workers .....	19
11.5	Working Limits and Regulations .....	19
11.6	Protection of Existing Improvements.....	19
11.7	Emergency Safety Actions.....	19
ARTICLE 12	CONTRACT TIME/SCHEDULE .....	19
12.1	Preliminary Construction Schedule.....	19
12.2	Final Schedule.....	19
12.3	Float .....	20
12.4	Schedule Updates .....	20
12.5	Time of Essence.....	20
12.6	Date of Completion; Liquidated Damages .....	20
12.7	Responsibility for Completion .....	20
12.8	Commencement of Warranties .....	20
12.9	Delays in the Work.....	20
ARTICLE 13	INSURANCE, INDEMNITY AND PERFORMANCE SECURITY .....	21
13.1	Indemnification .....	21
13.2	Insurance.....	22
13.3	Adjustment of Loss .....	22
13.4	Waiver .....	22
13.5	No Limitation.....	22
13.6	Performance Security .....	22
ARTICLE 14	CHANGES IN THE WORK .....	22
14.1	Change Orders .....	22
14.2	Change Orders Regarding Time for Completion.....	23
14.3	Construction Change Directive .....	23
14.4	Pricing of Changes .....	23
14.5	Basis of calculation for changes .....	23
14.6	Response to a Construction Change Directive .....	24
14.7	Time and Material Costs Recordkeeping.....	24
14.8	Unforeseen Site Conditions .....	24
14.9	Exclusions from Change Orders.....	25
14.10	Changes in Law.....	25

ARTICLE 15	SUBSTANTIAL COMPLETION, INSPECTION, AND OCCUPANCY .....	25
15.1	Notice of Substantial Completion Inspection.....	25
15.2	Final Punch List.....	25
15.3	Use of Work Prior to Acceptance.....	25
15.4	Effect of Occupancy.....	26
15.5	Coordination with Other Activities .....	26
ARTICLE 16	CONTRACT CLOSE-OUT .....	26
16.1	Design-Builder's Request for Final Payment.....	26
16.2	Additional Submissions.....	26
16.3	Withholding From Final Payment.....	26
16.4	Waiver at Final Payment.....	26
16.5	Accounting Records.....	27
ARTICLE 17	WARRANTY .....	27
17.1	Warranty of Work and Materials .....	27
ARTICLE 18	TERMINATION; CPR'S RIGHT TO PERFORM DESIGN-BUILDER'S OBLIGATIONS .....	28
18.1	Termination for Cause .....	28
18.2	Procedure for Termination .....	28
18.3	Termination for Convenience.....	29
18.4	Flow-down of Assignment Right .....	29
18.5	Suspension for Convenience.....	29
ARTICLE 19	ASSIGNMENT AND GOVERNING LAW .....	30
19.1	Assignment.....	30
19.2	Governing Law .....	30
ARTICLE 20	MISCELLANEOUS PROVISIONS .....	30
20.1	Ownership and Use of Contract Documents.....	30
20.2	Notices .....	31
20.3	Integrated Agreement; Modification .....	31
20.4	No Joint Venture.....	31
20.5	Waiver .....	31
20.6	Attorneys' Fees.....	31
20.7	Severability.....	31
20.8	Procurement Requirements .....	31
ARTICLE 21	DISPUTE RESOLUTION.....	33
21.1	Scope .....	33
21.2	Continued Performance.....	33
21.3	Notice .....	33
21.4	Time Limits on Claims .....	33
21.5	Informal Dispute Resolution.....	33
21.6	Independent Expert .....	34
21.7	Non-Binding Mediation .....	34
21.8	Confidentiality .....	34
21.9	Unresolved Impasse.....	34
21.10	Application of Procedures.....	34

EXHIBITS

Exhibit A -	Project Description; Scope of Work
Exhibit B -	State Required Terms and Conditions
Exhibit C -	Insurance
Exhibit D -	Cost of the Work
Exhibit E -	<i>Reserved</i>
Exhibit F -	<i>Reserved</i>

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## DESIGN-BUILD AGREEMENT

This AGREEMENT, effective as of the date set forth above, is between CPR and Design-Builder who state and agree as follows.

### ARTICLE 1 GENERAL PROVISIONS

#### 1.1 CPR; Design-Builder

- .1 The United States District Court for the Northern District of California has established a Receivership to assume the executive management of the California state prison medical system and raise the level of care up to constitutional standards. On February 14, 2006, the Court appointed the Receiver and granted him, among other powers, the authority to exercise all powers vested by law in the Secretary of the California Department of Corrections and Rehabilitation ("CDCR") as they relate to the administration, control, management, operation, and financing of the California state prison medical health care system. The Receiver caused the formation of CPR, which provides staff and infrastructure to assist the Receiver in discharging his court-appointed function. CPR thereafter engaged Program Manager to serve as program manager for certain of CPR's capital projects. CPR has designated Program Manager as its representative to act on its behalf with respect to the Project.
- .2 By way of a written request for proposals ("RFP"), a copy of which is attached to **Exhibit A** and incorporated herein by this reference, CPR requested that a firm or firms with the qualifications to meet the requirements of the RFP submit proposals to provide services described in the RFP. After evaluating the respondents, CPR selected Design-Builder, and CPR now wishes to retain Design-Builder to provide services to CPR in connection with the Project. Design-Builder shall perform its services pursuant to this Agreement under the direction and management of Program Manager and for the benefit of CPR. Design-Builder is an independent contractor and not an agent, servant or representative of CPR or Program Manager. Design-Builder will have no authority legally to obligate CPR except as specified in this Agreement or as otherwise specified in writing by CPR from time to time. Design Builder's authorized representative for the Project is designated in the preamble. Design Builder's authorized representative shall be the primary contact with CPR and Program Manager, and is authorized to bind Design Builder for all matters pertaining to the Project and/or this Agreement. No person shall be substituted for such authorized representative without CPR's prior written consent.
- .3 By executing this Agreement, Design-Builder represents that it has carefully examined all of the Contract Documents and has fully acquainted itself with all the conditions under which the Work is to be performed, including without limitation, applicable laws, regulations, codes and other restrictions, local labor conditions, local weather patterns, access restrictions to and from the Project site, existing improvements, obstructions, subsurface and other conditions relevant to the Work, the site of the Work and its surroundings, and Design-Builder assumes the risk of any variance between the actual conditions discoverable upon such a review and the conditions shown or represented in the Contract Documents; that it has made all investigations essential to a full understanding of the difficulties which may be encountered in performing the Work; and that anything in this Agreement, or in any representations, statements or information made or furnished by CPR notwithstanding, Design-Builder will complete the Work for the Contract Sum, and assume full and complete responsibility for all conditions relating to the Work, the site of the Work or its surroundings, and all risks in connection therewith.

#### 1.2 The Design-Build Team

The Design-Build team members are those entities identified as such in the preamble to this Agreement. Design-Builder, General Contractor or Architect may engage other subcontractors or subconsultants necessary to complete the Work.

### 1.3 Relationship of Parties

CPR and Design-Builder agree to proceed with the Project on the basis of trust, good faith, and fair dealing, and agree to cooperate with each other in furthering the interests of the Project. Design-Builder shall furnish the design and construction and use Design-Builder's best efforts to perform the Work in an expeditious manner in accordance with the Contract Documents. CPR and Design-Builder shall endeavor to promote harmony, collaboration, and cooperation among CPR, Program Manager, Design-Builder and other persons or entities employed by CPR or Design-Builder for the Project.

### 1.4 Extent of Agreement

This Agreement represents the entire, integrated agreement between CPR and Design-Builder for the Work and supersedes all prior negotiations, representations, or agreements. This Agreement shall be superseded or amended only by written instrument signed by both CPR and Design-Builder.

### 1.5 Design Responsibility

Each of the parties acknowledges that CPR, not being skilled in such matters, is relying upon Design-Builder for the technical and professional adequacy of the architectural and engineering services to be provided hereunder. Neither CPR nor its consultants shall perform any duties of the Design-Builder, or assume any responsibility or liability for the professional or technical adequacy of the Design-Build Documents (defined below) prepared by Design-Builder's Design Professionals. Architectural and engineering services shall be procured from licensed, Design Professionals retained by Design-Builder or as permitted by the laws of California. The standard of care for architectural and engineering services performed under this Agreement shall be the care and skill ordinarily used by members of the architectural and engineering professions practicing in metropolitan areas of California experienced in providing services for facilities of this size, type, complexity, and construction process.

The liability of the Design Professionals shall be limited in connection with any and all claims by CPR, including claims for damages, attorney's fees, court costs, expert witness fees, and any other damages or expenses, based upon an alleged design defect, error, omission, or professional negligence in connection with performing the services required by the Project, whether alleged in negligence, breach of contract, breach of warranty, or on some alternative legal theory, to the insurance limits specified for Design-Builder as required by Article 13,

### 1.6 Definitions

- .1 *Architect* means the firm or individual retained as architect of record for the Project, and identified as "Architect" in the preamble .
- .2 *Compensable Delay* means an Excusable Delay to the extent caused by (a) the wrongful acts or omissions of CPR, Program Manager, or CPR's consultants; (b) issuance of CPR-initiated Change Orders or Construction Change Directives, or (c) directions to suspend the Work not attributable to the fault or neglect of Design-Builder or anyone for whom Design-Builder is responsible.
- .3 Contract Documents consist of:
  - (a) Written amendments to this Agreement including exhibits and appendices, if any, signed by both CPR and Design-Builder, fully executed Change Orders, and Construction Change Directives.
  - (b) This Agreement.
  - (c) Supplementary and other Conditions, Schedules, Performance Bond, Payment Bond, or other documents listed in the Agreement.
  - (d) Executed Work Authorizations.
  - (e) The final approved Construction Documents.

- (f) The RFP, including any addenda thereto.

In case of any inconsistency, conflict or ambiguity among the Contract Documents, the documents shall govern in the order in which they are listed above, except that if one of the Contract Documents imposes a stricter requirement on Design-Builder than another Contract Document, such stricter requirement shall control.

- .4 *Contract Sum* is the lump-sum price set forth in the preamble to this Agreement and further defined in Section 4.1.
- .5 *Contract Time* is the period of time allotted in the Contract Documents for Final Completion of the Work, and as modified pursuant to this Agreement.
- .6 *CPR* is identified as such in the preamble to this Agreement and is referred to throughout the Contract Documents as if singular in number.
- .7 *CPR's Program* is an initial description of CPR's objectives, that may include budget and time criteria, space requirements and relationships, flexibility and expandability requirements, special equipment and systems, and Site requirements, as expressed in the RFP Design-Builder shall promptly notify CPR, and obtain CPR's prior written approval, of any proposed changes to the design or construction of the Project that conflict with or deviate from CPR's Program.
- .8 *Day* shall mean calendar day, unless otherwise specifically defined.
- .9 *Defective Work* is any portion of the Work not in conformance with the Contract Documents as more fully described in Article 17.
- .10 *Delay* means any and every kind of delay, obstruction, hindrance, interference, loss of productivity, or inefficiency.
- .11 *Design-Build Documents* are those documents or other instruments of service (including those in electronic form) to be prepared by Design Professionals during the pre-construction phases, including:
- (a) *Concept Documents*, which may include the graphic and pictorial portions of the design, showing the general design, location and relationship of spaces, generally including plans, elevations and sections, included in the RFP.
  - (b) *Schematic Drawings* - the graphic and pictorial portions of the design showing the design, location, relationship of spaces, dimensions of the work, building systems proposed to be used, specifications of systems and materials proposed to be used generally including plans, elevations, sections, details and schedules prepared by the Design-Builder and submitted as part of its proposal.
  - (c) *Construction Documents* - the final set of drawings and specifications prepared by the Design-Builder for regulatory approval and construction.
- .12 *Design-Build Subcontractor* is an entity engaged to provide design and construction services for a portion of the Project, under contract with Design-Builder or a Subcontractor or Sub-subcontractor, and duly licensed by the State of California to provide such services.
- .13 *Design Professional(s)* includes Architect, Design-Build Subcontractors, and all other firms or individuals furnishing design services (including Architect's Consultants) in connection with the Project.
- .14 *Design Schedule* is the schedule developed by Design-Builder and reviewed and accepted by CPR showing the duration of all activities during the design phase, including all agreed upon durations for CPR and agency review and comment.

- .15 *Drawings* are the graphic and pictorial portions of the Design-Build Documents, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.
- .16 *Excusable Delay* means any delay in Final Completion of the Work beyond the expiration of the Contract Time caused by conditions beyond the control and without the fault or negligence of Design-Builder such as strikes, embargoes, fire, unavoidable casualties, unusual delays in transportation, national emergency, which were not and could not in the exercise of reasonable diligence have been foreseen by Design-Builder at the time the Contract Time is set. An Excusable Delay may also be due to adverse weather, provided Design-Builder satisfies the provisions of Article 12. The financial inability of Design-Builder, Design Professionals, or any Subcontractor, Sub-subcontractor or Material Supplier and any default of any of them, without limitation, shall not be deemed conditions beyond Design-Builder's control. An Excusable Delay may entitle Design-Builder to an extension of the Contract Time, in accordance with Article 12, but shall not entitle Design-Builder to any additional monetary compensation unless it is also a Compensable Delay.
- .17 *Final Completion* of the Work occurs on the date after Substantial Completion when the Project improvements under this Agreement are finally complete and accepted by CPR, and all close-out requirements have been satisfied. Design-Builder shall achieve Final Completion of the Work within fifteen (15) days after Substantial Completion.
- .18 *Indemnified Parties* are CPR, Program Manager, the State of California, and each of their venturers, parents, affiliates, subsidiaries and agents, and all shareholders, officers, directors, employees and managers of each.
- .19 *Inexcusable Delay* means any delay on the Project which is neither an Excusable Delay nor a Compensable Delay. An Inexcusable Delay shall not entitle Design-Builder to an extension of the Contract Time or additional monetary compensation,
- .20 *Legal Requirement* means each and every law, code (including building codes and standards), rule, regulation, requirement, order, judgment, decree, or ordinance of every kind issued by any government entity applicable to or affecting the Project, the Site, the Contract Documents, and/or the Work (including any of the foregoing which concern health, safety, environmental protection, and nondiscrimination).
- .21 *Material Supplier* is a person or entity retained by Design-Builder, its General Contractor, its Subcontractors or Sub-subcontractors to provide material or equipment for the Work.
- .22 *Program Manager* is identified as such in the preamble and will represent CPR throughout design and construction of the Project and may be changed by CPR by providing written notice. Program Manager shall have the authority described in Section 3.2.
- .23 *Project*, as identified in this Agreement, is the building, facility and/or other improvements for which Design-Builder is to perform the Work under this Agreement. It may also include improvements to be undertaken by CPR or separate contractors.
- .24 *Site* is the physical location where the Project is to be constructed, as well as adjacent property or facilities specifically identified for use in connection with the Project, as identified in the RFP.
- .25 *Specifications* are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.
- .26 *Subcontractor* is a person or entity who has a direct contract with Design-Builder or its General Contractor to perform a portion of the Work. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term

Subcontractor does not include Architect's consultants, or any separate contractor employed by CPR or any separate contractor's subcontractors.

- .27 *Substantial Completion* of the Work, or of a designated portion, is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so CPR can occupy or utilize the Work for its intended use, and only minor corrective Work remains to be performed, all required approvals, certificates of occupancy and other sign-off from any public agencies with jurisdiction have been obtained, and Design-Builder has cleaned up and removed all equipment, tools and other materials from the Work area which are not required for corrective Work. Design-Builder shall secure and deliver to CPR written warranties and guaranties from its General Contractor, Subcontractors, Sub-subcontractors and Material Suppliers bearing the date of Substantial Completion or some other date as may be agreed to by CPR and stating the period of warranty as required by the Contract Documents. Design-Builder is responsible for the warranty of all Work, whether performed by its General Contractor or its Subcontractors or Sub-subcontractors.
- .28 *Sub-subcontractor* is a party or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.
- .29 The *Work* means the development of design and construction of the Project, as described herein and elsewhere in the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by Design-Builder to fulfill Design-Builder's obligations under this Agreement. The Work may constitute the whole or a part of the Project.

## **ARTICLE 2 DESIGN-BUILDER'S RESPONSIBILITIES**

Design-Builder shall perform the services described in this Article.

### **2.1 General**

2.1.1 Design-Builder agrees to furnish, or cause to be furnished, the design (including structural, mechanical, electrical, plumbing and other applicable disciplines), and construction of the Project; to furnish efficient business administration and superintendence; and to complete the Work in a reasonable, expeditious manner consistent with the Contract Documents and the interests of CPR as expressed in this Agreement and the RFP.

2.1.2 Design-Builder shall implement a design and construction schedule to achieve Substantial Completion and Final Completion of the Work in accordance with the Contract Documents. Design-Builder shall coordinate the services of the Design Professionals. CPR shall be responsible for making prompt decisions and approvals so as to maintain the Schedule, within the time frames agreed upon in the approved Design Schedule.

2.1.3 Design-Builder shall participate in regular Project meetings or as required in the Contract Documents.

2.1.4 Each phase of the Project shall commence on the issuance of a Work Authorization/Notice to Proceed ("WA/NTP"). A Separate WA/NTP will be issued for each of (i) the Design Phase, (ii) the Construction Phase, and (iii) during the Construction Phase, those portions of the Work, if any, that are phased. No Work or services shall be performed in the design or construction phases except pursuant to a WA/NTP. The WA/NTP may include: (a) the specific scope of Work and services authorized, (b) the deliverables required in connection with such scope of Work and services, (c) the payment terms for such scope of Work and services, (d) date of commencement and the completion dates for authorized Work, or (e) any other matters CPR deems important. A Work Authorization may be issued for all or any portion of the Work.

## 2.2 Design Phase

2.2.1 Preliminary Schedule. Design-Builder shall prepare a preliminary schedule of the Work for CPR's review ("Schedule"), which includes a detailed Design Schedule. CPR shall provide comments and, once acceptable, written approval of milestone dates established in the preliminary schedule of the Work. The schedule shall show the activities of CPR, Design Professionals, and Design-Builder necessary to meet CPR's completion requirements. The schedule shall be updated periodically with the level of detail for each schedule update reflecting the information then available. If an update indicates a previously approved schedule will not be met, Design-Builder shall provide a written explanation and recommend corrective action to CPR.

.1 Design Schedule/Contents. The Design Schedule, shall be maintained in a format reasonably acceptable to CPR and shall describe:

- (a) Interrelationships of Design-Builder and CPR's activities;
- (b) Duration for all phases of Design which shall also indicate the time required by CPR to review and approve submissions and the time required to obtain approval of authorities having jurisdiction over the Project.
- (c) Projected dates for intermediate delivery to CPR for its review of design-in-progress documents for the Design Development and Construction Document phases and the projected time for review and approval of such documents by CPR after receipt; and
- (d) Critical dates by which CPR must furnish information or approvals in order to maintain the Design Schedule.

2.2.2 Schematic Design. The schematic design, if required by the RFP, will be submitted by the Design-Builder as part of its proposal to CPR. These schematics are the basis for the CPR in selecting the design-build team, along with other established criteria. The Schematic Design Documents shall include the deliverables and level of detail described in the RFP. Upon execution of this agreement, the Design-Builder will proceed with design development, considering the feed back and review from the CPR on the schematic design.

2.2.3 Design Development. Design-Builder shall prepare Design Development Documents that further develops and details the design and shall include the deliverables and level of detail consistent with CPR's requirements and design-build industry standards. Design-Builder shall submit the Design Development Documents to CPR for review and approval.

2.2.4 Construction Drawings and Specifications. Upon written approval of the Design Development Documents and written authorization from CPR, Design-Builder will prepare working Drawings and Specifications setting forth in detail the requirements for the construction of the Work, based upon applicable codes, laws, and regulations. These Construction Drawings and Specifications, upon approval by CPR and by the governing governmental authorities, will constitute a portion of the "Contract Documents" and will be used for construction. In case of discrepancies in quantity or quality between the other contract documents as defined in 1.5.2 and the construction drawings and specifications, the greater quantity and the more stringent quality shall prevail.

2.2.5 As the Construction Drawings and Specifications are being prepared, Design-Builder will keep CPR advised of the effects of any CPR-proposed changes on the Schedule and/or the Contract Sum. Design-Builder shall not incorporate any proposed changes into the Drawings and Specifications unless and until it receives direction to do so from CPR.

2.2.6 Design-Builder will assist CPR in securing permits necessary for construction and occupancy of the Work.

2.2.7 Ownership Of Documents. All plans, drawings, tracings, specifications, programs, calculations, reports, electronic data, BIM files, models and other work product (collectively, the "Documents") prepared and/or furnished by Design Builder under this Agreement or for the Project shall be the property of CPR at all times, whether the Project is completed or not, and shall be delivered to CPR on the earlier of (i) Final Completion of the Project, or (ii) the date of termination of this Agreement for any reason prior

to Final Completion of the Project. Design Builder and any applicable Design Professionals shall be deemed to have assigned any intellectual property rights (including copyright) in the Documents to CPR.

- .1 CPR grants a non-exclusive license to Design Builder and the Design Professionals to re-use portions of the Documents which represent less than the full design for a discrete building, provided that such licensee does not disclose any confidential information by such use. To the extent that Design Builder or any Design Professional or Subcontractor uses or reuses the Documents, such party shall defend, indemnify and hold CPR and the Indemnified Parties harmless from (and defend against) any and all liability, costs and expenses (including reasonable legal fees and disbursements), relative to claims arising out of or in connection with such use of the Documents by such other party.
- .2 CPR and its agents, employees, representatives and assigns may use (in whole or in part, or in modified form), reproduce and make derivative works from the Documents for all purposes CPR may deem advisable in connection with the Project, including without limitation the completion, as well as subsequent renovation and remodeling, of the Work, all without further employment of, or payment of any compensation to, Design Builder.
- .3 CPR's use of the Documents without Design-Builder's involvement or on other projects is at CPR's sole risk, and CPR shall defend, indemnify and hold harmless Design-Builder and Design Professionals from and against any and all claims, damages, losses, costs and expenses, including but not limited to attorney's fees, costs and expenses incurred in connection with any claim or dispute resolution process, arising out of or resulting from CPR's use of the Design-Build Documents, except to the extent directly caused by a party's negligent error or omission in preparing the document.
- .4 Design-Builder shall obtain from its Design Professionals, Architect, Subcontractors and consultants property rights and rights of use that correspond to the rights given by Design-Builder to CPR in this Agreement.

## **2.3 Construction Phase**

2.3.1 Design-Builder will provide all construction supervision, inspection, labor, materials, tools, and construction equipment necessary for the execution and completion of the Work.

2.3.2 Design-Builder shall establish and implement a program to monitor and inspect the Work in order to ensure that the Work satisfies the requirements of the Contract Documents and the applicable building codes and regulations. No action taken by CPR's Representative or Design Professionals shall relieve Design-Builder from its obligation to perform the Work in strict conformity with the Contract Documents and with all other applicable laws, rules and regulations.

2.3.3 Design-Builder shall develop a staging and storage plan which details the anticipated delivery of equipment and materials and the location of equipment yards and storage facilities. Upon review and approval of the staging and storage plan, Design-Builder shall schedule deliveries and store equipment and materials on-site only in accordance with the approved plan. It is agreed that storage and staging areas, from time to time at the direction of CPR, may be changed, and that Design Builder shall bear all costs for moving materials and equipment so stored, provided CPR's request is reasonably necessary to completion of the Project or operation of the facility.

Materials and equipment delivered and stored at the Site shall be limited to materials and equipment required to be incorporated into the Work, and then only to the extent that Site space restrictions can accommodate such storage. Such materials and equipment, once delivered, shall not be removed from the Site except that any excess materials shall be removed by Design-Builder upon completion of the Work. Design-Builder shall be responsible for proper storage and for any damage, defect, deficiency or theft of any material or equipment stored on the Project.

2.3.4 Periodically CPR's Representative shall schedule and conduct coordination meetings with Design-Builder and other team members. CPR's Representative shall record, transcribe and distribute minutes to all attendees.

2.3.5 Design-Builder will pay all sales, use, gross receipts, and similar taxes related to the Work which have been legally enacted at the time this Agreement is executed.

2.3.6 Design-Builder shall complete the Work in accordance with the Schedule. Design-Builder shall revise the Schedule as required by the conditions of the Work and those conditions and events which are beyond Design-Builder's control, as defined in Section 12.9.

2.3.7 Design-Builder shall, at all times, keep the premises reasonably free from the accumulation of waste materials or rubbish caused by its operations. After completion of the Work, Design-Builder shall remove all of its waste material and rubbish from and around the Work, as well as all tools, construction equipment, machinery, and surplus materials.

2.3.8 Design-Builder will comply with all laws and ordinances legally enacted and in effect which apply to Design-Builder's operations.

2.3.9 Design-Builder warrants to CPR that all materials and equipment furnished under this Agreement will be new, unless otherwise specified, and that all work will be of good quality, free from defects in workmanship and materials, and in conformance with the Contract Documents.

2.3.10 Design-Builder will secure all certificates of inspection, testing, or approval required for CPR's use and occupancy of the Work and deliver them to CPR promptly upon completion of the Work.

2.3.11 Design-Builder will collect all written warranties and equipment manuals and promptly deliver them to CPR upon the Work being completed and prior to final acceptance. Prior to such delivery, Design-Builder shall confirm that each warranty includes, at a minimum, the following information: Project name; Design-Builder's name; description of warranty, including without limitation, duration; name of manufacturer; name of Material Supplier; name and contact information of responsible person/entity in the event of a warranty claim; and instances that might affect the validity of the warranty.

2.3.12 Design-Builder will carry out the checkout of utilities and operations of systems and equipment for readiness, and initial startup and testing.

### **ARTICLE 3 CPR'S RESPONSIBILITIES**

#### **3.1 Information and Services**

3.1.1 CPR shall provide Design-Builder with full and timely information regarding the requirements of the Project.

3.1.2 CPR's "approval" of the Schedule, Design-Build Documents, or other materials prepared by Design-Builder in connection with the Project shall be limited to approval of the information for general consistency with CPR's Program for the Project and shall not constitute acceptance or direction of construction means or methods, including but not limited to sequencing, materials, techniques, or other details of the construction, nor shall such review or approval be deemed to transfer any design liability from Design-Builder to CPR. CPR's approval does not change the requirements of the Contract Documents except through written amendments to this Agreement signed by both parties or approved Change Order(s) or Construction Change Directive(s). CPR shall be entitled to rely on the accuracy of the information it receives from Design-Builder.

3.1.3 CPR shall furnish information, described below, to the extent available. Design-Builder shall, after reviewing the information with due care, be entitled to rely upon the accuracy of any such information, except to the extent that Design-Builder knows or Design Professionals, General Contractor and Subcontractors or Sub-subcontractors know or should know of any inaccuracy:

- .1 Reports, surveys, drawings, and tests concerning Site conditions.
- .2 Surveys describing physical characteristics, legal limitations, and utility locations for the Site. The surveys and legal information shall include, as applicable, grades and lines of streets, alleys, pavements, existing improvements, adjoining property and structures, and adjacent drainage. All information on the survey shall be referenced to a Project benchmark.
- .3 Report of geotechnical engineers. Such report may include, but are not limited to, test borings, test pits, determinations of soil bearing values, percolation tests, including

necessary operations for anticipating subsurface conditions, with reports and appropriate professional recommendations.

.4 Such other information as may be identified in the RFP.

3.1.4 If Design-Builder knows of, or suspects, any inaccuracy or inadequacy of the furnished information, it shall notify CPR in writing and propose such further investigation or action as Design-Builder recommends as prudent. If CPR agrees with such further action(s), Design-Builder shall proceed with such action(s) upon receipt of a Change Order for the cost and time extension (if any) related thereto.

### **3.2 Program Manager's Authority**

Program Manager shall have the authority to make decisions on behalf of CPR concerning design and construction, including approving design documents, estimates, schedules, and changes in the Work, and shall render such decisions promptly and furnish information expeditiously so as to avoid unreasonable delay in the services or Work of Design-Builder. Failure to provide same in a timely manner shall be remedied solely by an extension of time in accordance with Article 12. Design-Builder acknowledges that depending on the nature of the decision, Program Manager may need to coordinate with numerous stakeholders before providing direction or decisions. In preparing and updating its schedules, Design-Builder should advise Program Manager concerning upcoming issues or decisions and clarify with Program Manager the amount of time anticipated by the Program Manager to provide the necessary decisions or direction.

When the Contract Documents provide for documents or other information to be communicated to "CPR," Design-Builder shall send the documents or information to Program Manager, or such other individual as CPR may designate from time to time in writing.

## **ARTICLE 4 COMPENSATION**

### **4.1 Contract Sum**

CPR shall pay to Design-Builder, as full compensation for all the work and services on the Project, the Contract Sum consisting of the lump sum amount specified in the preamble, as may be adjusted by Change Order during the Project. The lump-sum price set forth above includes all general and administrative expenses, including both on-site and off-site overhead and direct job expenses, which Design-Builder may experience on the Project calculated through expiration of the Contract Time. Design-Builder will not be entitled to any increase in the Contract Sum for general and administrative expenses unless it is established that there has been a change in the scope of the Work or other events that entitle Design-Builder to a Change Order, and which also entitle Design-Builder to an extension of the Contract Time. The lump-sum price set forth above also includes all expenses incurred by Design-Builder for Architectural, Engineering, and Design services through expiration of the Contract Time.

### **4.2 CPR Allowances**

The amount, if any, paid to the Design-Builder under this line item will be calculated in accordance with Section 14.4, Pricing of Changes.

## **ARTICLE 5 PROGRESS PAYMENTS**

### **5.1 Schedule of Values**

5.1.1 At least fourteen (14) days prior to the first payment application submitted during the Design Phase, Design-Builder shall submit to CPR a schedule of values for Design Phase costs, in sufficient detail and supported by sufficient data to substantiate its accuracy, as CPR may require. This schedule of values will be derived from the Design-Builder's schedule, per Section 2.2.1. When approved, this schedule shall be used as a basis for Design-Builder's applications for payment during the Design Phase.

5.1.2 At least fourteen (14) days prior to the first payment application submitted during the Construction Phase, Design-Builder shall submit to CPR a separate schedule of values for Construction Phase costs in

sufficient detail to evaluate progress at any point in the Work. This schedule of values will be derived from the Design-Builder's schedule, per Section 12.2. The schedule of values shall include both design and construction services for the Construction Phase. This schedule, when approved, shall be used as a basis for Design-Builder's applications for payment during the Construction Phase. Once a month, Design-Builder and CPR will meet to estimate the percentage complete, projected through the end of the month, under each line item. Progress payments will be based upon actual progress of the Work, measured against the agreed-upon schedule of values.

## **5.2 Payment Application**

5.2.1 Design-Builder shall submit applications for payment to Program Manager for review. Prior to submitting a formal application for payment, Design-Builder shall submit to Program Manager a copy of the schedule of values, marked to show the value of the work completed and the payment proposed by Design-Builder for each line item. Within five (5) calendar days after receipt of each such "pencil draft" application, Program Manager and Design-Builder shall meet to verify the accuracy of the amounts shown on same, correct the value or values where appropriate, and agree upon the amounts to be paid. Any disagreements at such meeting regarding amounts due and owing shall be resolved pursuant to Article 21. Following such meeting, Design-Builder shall deliver to Program Manager a properly completed, documented application for payment. Payment of undisputed amounts will be due thirty (30) days from CPR's receipt of such payment application together with Program Manager's recommendation to CPR as to payment; if payment applications from Design-Builder are untimely, incomplete or improperly documented, then payment may be delayed until the thirtieth day after Program Manager receives a properly completed, documented application for payment.

5.2.2 Payment applications shall warrant that title to all work, labor, materials, and equipment covered by the payment application is free and clear of all liens, claims and security interests to the best of Design-Builder's knowledge and belief. Only if requested by CPR, Design-Builder shall also submit statutory conditional and unconditional waiver and release forms from Design-Builder, Subcontractors, Sub-subcontractors, Material Suppliers and/or Design Professionals.

5.2.3 The signing of an application for payment will constitute a representation by Design-Builder that, to the best of its knowledge, information, and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents (subject to any specific qualifications stated in the application for payment) and that Design-Builder is entitled to payment in the amount requested.

## **5.3 Payment for Stored Materials**

5.3.1 Materials Stored On-Site. Payments shall be made by CPR, on account of materials or equipment not incorporated in the Work but delivered to the Site and suitably stored by Design-Builder, only with CPR's prior permission when such deliveries are in the best interest of the Project. Payments for materials or equipment stored shall only be made upon submission by Design-Builder of satisfactory evidence that it has acquired title to such material, that it will be utilized on the Work, and that it is satisfactorily stored, protected, and insured, or such other procedures satisfactory to CPR.

5.3.2 Materials Stored Off-Site. Materials stored off-site to be considered for payment shall be, in addition to the above requirements, (i) stored in a bonded warehouse in a manner so as to be separate and identifiable from other stored materials, (ii) insured for the full replacement value of the Materials, and (iii) available and accessible to CPR for inspection. Design-Builder shall cooperate with CPR and, upon CPR's request, shall take such steps, without additional compensation, as CPR deems are reasonably necessary to ensure and protect CPR's interest in, and title to, any such stored Materials.

## **5.4 Other Payment Terms**

5.4.1 Pending Substantial Completion of the Work, CPR shall retain from each approved progress payment application the following amounts: Five percent (5%) of all amounts otherwise payable to Design-Builder.

5.4.2 If CPR fails to pay Design-Builder any undisputed amount at the time payment of that amount becomes due, then Design-Builder may stop the Work until payment of the amount owing has been received, provided Design-Builder must first provided CPR thirty (30) days' (i) written notice that the Work will be stopped, and (ii) opportunity to cure the non-payment. This right will not exist to the extent

payment is withheld (i) because of CPR's bona fide dispute over Design-Builder's right to payment or (ii) otherwise pursuant to this Agreement.

5.4.3 Payments due and unpaid under the Agreement shall bear interest from the date payment is due at ten percent (10%) per annum.

## **5.5 Withholding Additional Amounts; Grounds**

In addition to the amounts which CPR may retain as provided in paragraph 6.4.1, CPR may withhold a sufficient amount from any payment or payments otherwise due to Design-Builder as in CPR's good-faith determination may be necessary to protect CPR in the event of the following:

- .1 Design-Professional, Subcontractor, Sub-subcontractor or Material Supplier claims filed or reasonable evidence indicating probable filing of such claims for which CPR is entitled to indemnity;
- .2 Defective work not remedied;
- .3 Failure of Design-Builder to make proper payments to any of its Subcontractors or Material Suppliers for labor, materials, or equipment;
- .4 The occurrence of reasonable doubt that the Work can be completed for the balance of payments then unpaid to Design-Builder or in the time remaining until expiration of the Contract Time;
- .5 Damage to CPR or a separate contractor for which Design-Builder is potentially liable and for which an insurance company has not accepted responsibility;
- .6 Insufficient documentation, erroneous estimates of value of the Work performed or other incorrect statements in Design-Builder's payment application, but only to the extent of such insufficiency, erroneous estimates or other incorrect statements;
- .7 Failure of Design-Builder to comply with any lawful or proper direction concerning the Work given by any representative of CPR authorized to have given such instruction; or
- .8 Any reason specified elsewhere in the Contract Documents or under California law as grounds for a retention or withhold, or that would legally entitle CPR to a set-off or recoupment, or that would constitute a material breach of this Agreement.

In order to adequately protect CPR, Design-Builder agrees that the amount to be withheld pursuant to this section shall not be more than one hundred fifty percent (150%) of the amount claimed or the value of the work not done or defectively done.

## **5.6 Disbursement of Withheld Amounts**

CPR may apply any withheld amount to payment of third-party claimants. Prior to applying such amounts, CPR shall afford Design-Builder an opportunity to present good cause, if any, why the claim or claims in issue are not valid against Design-Builder. CPR then reserves the right to take such further steps as are appropriate, including, but not limited to, seeking a judicial resolution of the controversy or paying the claim. When and to the extent the reasons for withholding payment are removed, payments will be made for such amounts previously withheld, with no interest owed. Payments wrongfully withheld shall bear interest from the date the payment was originally due to the date paid at the rate set forth in Section 5.4.3.

## **5.7 Correction of Statement and Withholding of Payment**

No inaccuracy or error in any statement provided by Design-Builder shall operate to release Design-Builder from the error, or from damages arising from such work, or from any obligation imposed by the Contract Documents. CPR shall retain the right subsequently to correct any error made in any previously issued claim for progress payment, or progress payment issued, by adjustments to subsequent payments.

## 5.8 Effect of Progress Payments

Neither the payment, the withholding, nor the retention of all or any portion of any progress payment claimed to be due and owing to Design-Builder shall operate in any way to relieve Design-Builder from its obligations under this Agreement.

## ARTICLE 6 PERMITS, LICENSES AND LEGAL REQUIREMENTS

### 6.1 Basic Standard

Design-Builder shall conduct its operations in conformance with all Legal Requirements for the protection of the public and the workers. Design-Builder shall comply with the requirements of the California Contractors' State License Board and have a valid contractor's license, which is to be maintained in "good standing" throughout the Project. Similarly, design shall be provided only by properly licensed design professionals.

### 6.2 Permits

6.2.1 Unless otherwise provided in the Contract Documents, CPR shall secure and pay for any building permits and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Agreement and prior to commencement of construction, and which are legally required, and Design-Builder shall provide all necessary assistance to CPR in securing same. Design-Builder shall procure all required certificates of inspection, use, occupancy, and other permits and licenses; pay all charges and fees; and give all notices necessary and incidental to the due and lawful operation of its business and prosecution of the Work. Certificates of inspection, use, and occupancy, including permit cards, as applicable, shall be delivered to CPR upon completion of the Work. Design-Builder shall identify in the Schedule when such licenses, permits, fees and inspections shall be necessary.

6.2.2 CPR will reimburse Design-Builder for utility connection fees, encroachment permits, and utility service charges, if any, necessary for the completion of the Work. Design-Builder shall submit proper documentation of fee, permit, and utility service charges to CPR.

### 6.3 Compliance with Laws and Regulations

The State Required Terms and Conditions attached as **Exhibit B** (to the extent applicable to the Work) are incorporated by reference. Design-Builder shall perform the Work in full compliance with such terms and any other applicable federal, state and local laws and regulations in effect at the time the Work is performed. The Design Professionals shall use due care in identifying and determining the meaning and effect of all applicable building code provisions and other applicable building requirements and restrictions and take such measures as may be necessary to meet such requirements in the design. Among other things, Design-Builder shall: give all legally required notices; obtain all permits and licenses required of Design-Builder for performance of the Work; pay all local, state and federal taxes associated with the Work; and pay all benefits, insurance, taxes and contributions for Social Security and Unemployment which are measured by wages, salaries or other remunerations paid to Design-Builder's employees. Upon CPR's request, Design Builder shall furnish evidence satisfactory to CPR that any or all of the foregoing obligations have been fulfilled.

### 6.4 Compliance with Labor Code

The Project is a public work for purposes of Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 of the Labor Code. Accordingly, Design-Builder, General Contractor, Subcontractors and Sub-subcontractors shall comply with Chapter 1 of Part 7 of Division 2 of the Labor Code, including without limitation:

- .1 General. In accordance with the provisions of California Labor Code sections 1770, et seq., including but not limited to 1773, 1773.1, 1773.2, 1773.6 and 1773.7, the general prevailing rate of wages in the county in which the Work is to be done has been determined by the Director of the California Department of Industrial Relations. Design-Builder shall comply with the prevailing wage requirements of, and shall be subject to restrictions and penalties in accordance with, Section 1770 et seq., of the California

Labor Code. Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, Post Office Box 420603, San Francisco, CA 94142-0603, or on the web at [www.dir.ca.gov](http://www.dir.ca.gov). Copies of the general prevailing rate of wages in the county in which the work is to be done are also on file at offices of CPR's Representative and shall be made available on request. Copies of prevailing wages in effect for the contract shall also be posted at the job site and at the Design-Builder's main office.

- .2 Additional Classifications. If it becomes necessary to employ work classifications for which no rate has been determined, Design-Builder shall notify CPR's Representative immediately, who will obtain the additional prevailing rate which shall be applicable from the time of initial employment.
- .3 Payroll Records. Payroll records shall be prepared, certified and maintained by Design-Builder in accordance with California Labor Code Section 1776.
- .4 Travel and Subsistence Payments. Design-Builder shall make travel and subsistence payments to workers needed for performance of work in accordance with Section 1773.8 of the Labor Code.
- .5 Apprentices. Prior to commencement of work, Design-Builder shall contact the Division of Apprenticeship Standards and shall comply with Section 1777.5, 1777.6, and 1777.7 of the Labor Code and Title 8, Sections 200 et seq., of the CCR.
- .6 Hours of Labor. In accordance with California Labor Code Sections 1810, 1811, 1815, eight (8) hours labor constitutes a legal day's work in all cases where the same is performed under the authority of any law of this State, or under the direction, or control, or by the authority of an officer of this State acting in his official capacity, or under the direction, or control, or by the authority, of any municipal corporation, or any officer thereof.

## **6.5 Air Pollution Control**

Design-Builder shall comply with air pollution control rules, regulations, ordinances, and statutes applicable to performance of work, including those specified in Section 11017 of the Government Code.

## **6.6 Antitrust Claims**

Design-Builder's attention is directed to the following provisions of Public Contract Code 7103.5 and Government Code Sections 4553 and 4554, which shall be applicable to the Design-Builder, its General Contractor, Subcontractors, and Sub-subcontractors:

- .1 "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 the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties."
- .2 "If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery."
- .3 "Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been

or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action."

## **6.7 Protection of Underground Infrastructure**

Design-Builder confirms that it is familiar, and will comply, with all applicable laws relating to the protection of underground infrastructure, including without limitation the provisions of California Government Code Section 4216, et seq.

## **6.8 Underground Service Alert (USA)**

The telephone number for Northern California is 800-642-2444 and for Southern California is 800-422-4133.

# **ARTICLE 7 SUBCONTRACTORS**

## **7.1 Subcontracts**

Any subcontracting or material purchases shall be on the express condition that the subcontract or purchase order shall be subject to the terms and conditions of the Contract Documents, and Design-Builder shall incorporate, by appropriate reference, all terms and conditions of the Contract Documents applicable to that scope of work in any such subcontract or purchase order. The form(s) of subcontract and purchase order may be subject to CPR's review and approval. Design-Builder shall not engage subcontractors or material suppliers, or employ any laborers to which CPR has a reasonable objection.

## **7.2 Termination**

Design-Builder shall promptly remove from the Project any person or entity to which CPR objects. Design-Builder shall include provisions in its written subcontracts which permit such termination, as well as termination for convenience, in a manner substantially similar to Section 18.3.

# **ARTICLE 8 HAZARDOUS MATERIALS**

The terms of this Article are in addition to the requirements of Design-Builder's written safety program.

## **8.1 Material Safety Data Sheets**

Before transporting, storing, or using at the Project any Hazardous Materials, Design-Builder shall, upon request, furnish CPR with a copy of the Material Safety Data Sheet for such material or substance.

## **8.2 Definition**

The term "Hazardous Materials" as used herein shall mean any flammable materials, explosives, radioactive materials, hazardous wastes, toxic substances, or related materials, including, without limitation, asbestos, asbestos-containing materials, petroleum or any fractions thereof, petroleum-related products or any fractions thereof, polychlorinated biphenyl ("PCB") or PCB-containing materials, and any substances defined as or included in the definition of "hazardous substances," "hazardous wastes," "hazardous materials," or "toxic substances" under any applicable federal, state, or local Legal Requirement, now in effect or enacted prior to Substantial Completion of the Project.

## **8.3 Notice of Hazardous Materials**

Design-Builder shall immediately notify CPR in writing if Design-Builder becomes aware of the presence of any Hazardous Materials in, on, under, or about the Site or of any occurrence or condition on any real property adjoining or in the vicinity of the Site which could cause the Project or any portion of it to be classified as "border-zone property" under the provisions of California Health and Safety Code sections 25220, et seq., or any regulation adopted in accordance therewith.

#### **8.4 Indemnification**

In the event Hazardous Materials or contamination therefrom are brought onto the Site or adjacent property and are discharged or released by Design-Builder, General Contractor any Subcontractor, Sub-subcontractor, Material Supplier, or any person or entity under the direct or indirect control of any of them, and notwithstanding any other term or provision of this Agreement, Design-Builder agrees to defend, indemnify, and hold Indemnified Parties harmless from and against any and all claims, liability, fines, penalties, response costs, clean-up costs, damages, or judgments associated with the presence, discharge, release, or escape of such materials or contamination. Upon the request of CPR, Design-Builder shall take such steps, without additional compensation, as are reasonably necessary to remove the Hazardous Materials or contamination. Design-Builder shall not be responsible for preexisting Hazardous Materials, and the foregoing indemnity obligation shall not apply thereto, unless Design-Builder causes those materials to be discharged or fails to respond promptly and appropriately to the discovery or discharge of such materials.

#### **8.5 Existing Hazardous Material**

In the event Hazardous Materials or contamination therefrom, other than those identified in the Contract Documents, are found to exist at the Site, and notwithstanding any other term or provision of the Contract Documents, CPR agrees to indemnify, hold harmless, and defend Design-Builder from and against any and all claims, liability, fines, penalties, response costs, damages, or judgments, associated with the presence, discharge, release or escape of such materials of contamination; provided, however, that the provisions of this sentence shall be inapplicable to any Hazardous Materials or contamination brought onto the Site by Design-Builder, General Contractor, or any Subcontractor, Sub-subcontractor, Material Supplier, or any person or entity under the direct or indirect control of any of them, or as to which Design-Builder fails to give notice in accordance with the first paragraph of this section, to the extent that the failure to give such notice materially affects CPR's interest.

### **ARTICLE 9 SUPERVISION AND LABOR**

#### **9.1 Quality Review**

Design-Builder shall establish and implement a program to monitor and inspect the Work in order to ensure that the Work satisfies the requirements of the Contract Documents. Design-Builder shall also cooperate and coordinate with any independent inspector engaged by CPR.

#### **9.2 Supervision Procedures**

Design-Builder shall supervise and direct the Work using its best skill and attention. Design-Builder shall be solely responsible for all construction means, methods, techniques, and procedures and for coordinating all portions of the Work. Design-Builder shall be responsible to CPR for the acts and omissions of its employees, Subcontractors, Sub-subcontractors, Material Suppliers, and their agents and employees, and other persons performing any of the Work.

#### **9.3 Skilled Labor**

All labor shall be performed by individuals skilled for the kind of work required and shall be conducted under the direction of a competent first-line supervisor.

#### **9.4 Dismissal of Unsatisfactory Employees**

Design-Builder shall, at all times, enforce strict discipline and good order among its employees and shall not employ on the Work any unfit person or anyone not skilled in the assigned task. Design-Builder shall remove, or cause a Subcontractor to remove, from the Project any incompetent employee or any employee not skilled for the type of work required. CPR may, in writing, require Design-Builder to remove from the Work any employee for cause.

#### **9.5 Personal Attention and Superintendence; Design-Builder's Agent**

Design-Builder shall supervise the Work to the end that it shall be faithfully prosecuted in conformance with the Contract Documents. Design-Builder shall, at all times while the Work is in progress, keep a

project manager and full-time superintendent on the Project Site. Design-Builder shall advise CPR in writing of its superintendent and project manager, and shall further designate in writing which of these individuals shall be fully empowered to act as agent for Design-Builder. Design-Builder shall be responsible for the faithful performance of all instructions delivered by CPR to Design-Builder's authorized agent(s).

## **9.6 Inspection of the Work of Other Contractors**

It shall be the duty of Design-Builder, General Contractor, Subcontractors and Sub-subcontractors, before beginning any work, to examine all existing construction and the work of other contractors that may affect their work and to satisfy themselves that everything is in proper condition to receive such work. Design-Builder shall notify CPR in writing of any discrepancies or conditions that it discovers or are reasonably apparent which deviate from the Contract Documents or are otherwise unacceptable.

## **9.7 Design-Builder's Coordination of Work**

CPR reserves the right to do other work in connection with the Project, by contract or otherwise. Design-Builder shall, at all times, conduct its work so as to impose no hardship on CPR or others engaged in work on the Project. Design-Builder, where practicable, shall adjust, correct, and coordinate its work with the work of others so that no interference, delay, or disruption shall result in the Project.

## **9.8 Daily Reports**

Design-Builder shall prepare and maintain daily construction reports. The daily reports shall, at a minimum, address: construction activities and locations, construction crew sizes, start or completion of activities, progress on construction activities (including units or portions of work completed), tests or inspections performed, deliveries of material or equipment, delays or potential delays, visitors to the Site, weather conditions and impact on the Project (if any), construction equipment used, and personal injuries or damage to property.

## **9.9 Record Drawings**

9.9.1 Design-Builder shall prepare and maintain on a current basis an accurate and complete set of:

- (a) Record Drawings showing clearly all changes, revisions and substitutions during construction, including without limitation field changes and the final location of all mechanical equipment, utility lines, ducts, outlets, pipes, structural members, walls, partitions and other significant features; and
- (b) Annotated Specifications showing clearly all changes, revisions and substitutions during construction. In the event a specification allows Design-Builder, Subcontractor, Sub-subcontractor or Material Supplier to elect one of several brands, makes or types of material or equipment, the annotations shall show which of the allowable items was furnished.

These Record Drawings and Annotated Specifications shall be kept at the Project Site, and Design-Builder shall update them as often as necessary to keep them current, but no less often than every two (2) weeks. The Record Drawings and Annotated Specifications shall be available for inspection by CPR and any governmental or quasi-governmental authority with jurisdiction over the Work.

At the time of its final Application for Payment under Article 17, Design-Builder shall provide one (1) complete set of Record Drawings and Annotated Specifications to CPR, certifying them to be a complete and accurate reflection in all material respects of the actual construction conditions of the Work.

Design-Builder shall provide the Record Drawings and Annotated Specifications in an electronic format specified by CPR.

9.9.2 Design-Builder shall also maintain one (1) record copy of Change Orders and Construction Change Directives, and approved Shop Drawings, Product Data, Samples and similar required submittals ("Submittals"). Such items shall be maintained at Design-Builder's office, as set forth in this Agreement; provided that, duplicates of Change Orders, Construction Change Directives (to the extent required for efficient performance of the Work) and Submittals shall be maintained at the Project Site. These items

shall be available for inspection by CPR and any governmental or quasi-governmental authority with jurisdiction over the Work. Design-Builder shall provide to CPR a complete set of Submittals, in good condition and certifying them to be complete and accurate in all material respects, at the time of Design-Builder's final Application for Payment.

### **9.10 Submittals**

Contractor shall furnish submittals specified in the Contract Documents or directed by Program Manager. Submittals shall be in a form acceptable to Program Manager and may include, but not be limited to, cost breakdowns, contract schedules, shop drawings, trench excavating plans, product data and samples, purchase orders, operating and maintenance data, as-built documents, and submittals specified in other sections of the Specifications.

Submittals shall be subject to review by Program Manager for conformity with the Drawings and Specifications, provided however that neither the approval, review or lack of review of any Submittal shall waive any of the requirements of the Contract Documents, nor relieve Design Builder of any obligation hereunder.

Submittals shall be in English and numerical data shall be in the system of units used as shown and specified in the Drawings and Specifications.

## **ARTICLE 10 INSPECTION AND TESTING**

### **10.1 Inspection**

Third party inspections shall be provided as required in the Contract Documents, at CPR's expense. Notwithstanding the foregoing inspections, Design-Builder is responsible to develop and implement its own quality control/quality assurance program to ensure that the Work is being performed in accordance with the Drawings, Specifications, applicable laws, codes, and other relevant requirements.

### **10.2 Stop Work Notices**

CPR shall have the authority to order the work designated for inspection stopped if a determination is made that work is proceeding in violation of the Contract Documents or any orders issued to Design-Builder. Design-Builder shall comply with the instructions of CPR regarding corrections needed to cure the defect. The suspended work shall be resumed only when such instructions are fulfilled. Design-Builder shall not be entitled to an extension of time in the event of such suspension of work.

### **10.3 Effect of Inspections**

Neither the final inspection and payment, nor any interim inspection or progress payment, shall relieve Design-Builder of its obligation to fulfill the Contract or perform the Work as required by the Contract Documents. Any work, materials, or equipment not meeting the requirements and intent of the Contract Documents may be rejected, and unsuitable work or materials shall be made good, notwithstanding the fact that such work or materials may previously have been inspected and/or payment therefor may have been made.

### **10.4 Inspection of Completed Work**

Should CPR determine that it is necessary or advisable to make an inspection of work already completed, at any time before final inspection and acceptance of the Work, by removing or exposing any work, Design-Builder shall, upon instruction of CPR, promptly furnish all necessary facilities, labor, and materials to do so. If such work is found to be defective in any respect, Design-Builder shall bear all expenses of such inspection and examination. If, however, such work is found to meet the requirements of the Contract Documents, the additional cost of labor and material necessarily involved in the examination and replacement shall be allowed Design-Builder and a Change Order shall be issued.

## **10.5 Notice to CPR of Inspection**

When the Contract Documents, instructions by CPR, laws, ordinances, or any public authority having jurisdiction require work to be inspected, tested, or approved before the Work proceeds, such work shall not proceed, nor shall it be covered without inspection. All work shall be available for inspection, and CPR shall have full access to review all work during all working times. Design-Builder shall provide all necessary means of access (e.g., ladders) for inspections.

## **10.6 Testing**

The CPR shall engage an independent testing laboratory to conduct testing as deemed necessary by the CPR and CPR's inspectors. The services of this testing laboratory are not intended for the benefit of the Design-Builder to implement their quality control/quality assurance program, but Design-Builder shall be entitled to rely on information provided by CPR and CPR's inspectors.

At CPR's request, Design-Builder shall provide samples on any materials, articles, equipment, installations, or construction performed by Design-Builder, consistent with generally acceptable industry standards, at no additional cost to the CPR.

Design-Builder shall notify CPR of the need for off-site tests or inspections. Design-Builder will arrange such tests or inspections, but CPR shall bear the costs for the same.

## **10.7 Selection of Samples**

All samples and specimens for testing shall be selected by CPR, inspector, or the testing laboratory.

## **10.8 Damage Due to Testing**

Design-Builder shall, without increase in the Contract Sum, repair all damage resulting from testing specified in the Contract Documents. CPR shall issue a Change Order for repair of damage due to sampling or testing other than that specified in the Contract Documents.

# **ARTICLE 11 PROTECTION OF WORKERS, PUBLIC, AND PROPERTY**

## **11.1 Safety Precautions and Programs**

Design-Builder shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. CPR has no responsibility, either directly or indirectly, for the means, methods, techniques, sequences, or procedures utilized by Design-Builder or for safety precautions and programs used in connection with the Work. Design-Builder shall prepare a written safety program for the Project Site and designate a responsible member of its organization at the Site whose duty shall be the prevention of accidents.

## **11.2 Protection of Persons and Property**

Design-Builder shall, at all times until final acceptance, maintain reasonable protection against injury to persons, including employees, or damage to property on or near the Project or adjacent to the Site. Design-Builder shall attempt to provide a safe environment for all functions to be performed. The use of alcohol or drugs will not be permitted. Design-Builder shall comply with all occupational safety laws, rules, and regulations applicable to the Work. Design-Builder shall be solely responsible for the safety of the worksite and shall comply with accident prevention and safety ordinances, rules, and laws applicable to performance of work. During the performance of work, Design-Builder shall exercise precautions for the protection of persons and property, including timely installation of adequate guards and protective devices for equipment and machinery, whether used to perform work or incorporated into the Project.

## **11.3 Protection and Repair of Work**

Design-Builder shall maintain reasonable protection of the structures, facilities, equipment, tools, materials, and any other property on or adjacent to the Site against damage, loss, or theft. Design-Builder shall, until Final Completion, maintain reasonable protection of all of its work and work

performed by others under this Agreement from damage, loss, defacement, or vandalism. Design-Builder shall provide protection of completed work which may be subject to damage as a result of Design-Builder's unexcused failure to perform as scheduled. Design-Builder shall repair or replace any such damage and remove any damaged or defaced material or equipment from the Site at its own cost.

In the event of the Work herein being wholly or partially damaged or destroyed by war, fire, storm, lightning, flood, earthquake, tidal wave, mob violence, vandalism or other casualty not the fault of Design-Builder, before the Final Completion of the Work, Design-Builder, upon written instruction from CPR, shall proceed to replace and/or repair the Work in accordance with the plans. In this event, the provisions of this Agreement shall remain in full force and effect, except that the contract sum shall be increased by the total cost of removing and/or replacing all damaged and/or destroyed work and the time for completion shall be extended.

#### **11.4 Protection of Workers**

Design-Builder shall take reasonable precautions for the safety of all employees and others on the Site and comply with all applicable provisions of federal, state, and local safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Site. Design-Builder shall erect and properly maintain, at all times, as required by the conditions and progress of the Work, reasonable safeguards for the protection of workers and the public and shall post danger signs warning against the hazards created by construction.

#### **11.5 Working Limits and Regulations**

Design-Builder shall not unreasonably encumber the Site or adjacent areas with its materials or equipment. Design-Builder shall enforce any instructions from CPR concerning placement of signs regarding advertising, fires, danger signals, barricades, radios, noise, and smoking.

#### **11.6 Protection of Existing Improvements**

Design-Builder shall clean the portions of existing improvements and facilities which are used, traversed, or dirtied by the workers on the Work. All existing improvements and facilities shall be protected from any damage resulting from Design-Builder's operations, equipment, or workers during the course of the construction. All damaged improvements and facilities shall be replaced, repaired, and restored to their original condition without additional cost to CPR.

#### **11.7 Emergency Safety Actions**

In an emergency affecting the safety of life or property, including adjoining property, Design-Builder, without previous instructions or authorizations from CPR, is authorized to and shall act at Design-Builder's discretion to prevent such threatened loss or injury. Design-Builder shall immediately notify CPR of such actions and thereafter shall comply with any instructions issued by CPR.

### **ARTICLE 12 CONTRACT TIME/SCHEDULE**

#### **12.1 Preliminary Construction Schedule**

During the Design Phase, Design-Builder will prepare and periodically update a Preliminary Construction Schedule, which shows the major work activities included in the Work, the estimated duration for performing each activity, and the interrelationship and dependence of those activities. The Preliminary Construction Schedule shall be in sufficient detail to permit a realistic evaluation of the time needed for completion of the Work and the effect of changes or revisions in the Project design on timely completion of the Work or the Project.

#### **12.2 Final Schedule**

Prior to commencing construction and within sixty (60) days from the date of execution of the Agreement, Design-Builder shall submit a detailed Schedule showing the date each activity is expected to start and complete. Schedule activities shall be of sufficient detail to assure that adequate planning has been done for proper execution of the Work and provide an appropriate basis for monitoring progress of the Work. The schedule shall show the sequence, duration, and interdependence of activities required for the

complete performance of all work. The schedule shall be developed using the critical path method of scheduling. The schedule shall be cost-loaded and will, together with the Schedule of Values, become the basis for progress payments as outlined in Article 5. The schedule shall begin with the issuance of the notice to proceed, part 1, and conclude with Final Completion.

### **12.3 Float**

Float, slack time, or contingency within the schedule shall be shown as such, and the total float within the schedule is not for the exclusive use of either party, but is a jointly owned, expiring resource, which is available to and shared by the parties.

### **12.4 Schedule Updates**

Design-Builder shall submit updated schedules at intervals agreed to between CPR and Design-Builder during construction. For those activities started but not yet completed at the time of the submittal, the updated schedule shall reflect the percentage complete and an estimate of the remaining duration.

### **12.5 Time of Essence**

Time is of the essence of this Agreement. Design-Builder shall, to the fullest extent possible, carry on the various classes or parts of the Work concurrently and shall not defer construction of any portion of the Work in favor of any other portion of the Work, without the express approval of CPR.

### **12.6 Date of Completion; Liquidated Damages**

12.6.1 Design-Builder obligates itself to achieve Substantial and Final Completion of the Work within the Contract Time, as extended pursuant to Section 12.9 below. CPR and Design-Builder acknowledge and agree that if Design-Builder fails to achieve Substantial Completion of the Work within the Contract Time, CPR may suffer, as a result of such failure, substantial damages which are both extremely difficult and impracticable to ascertain. Therefore, having reasonably endeavored to ascertain an amount bearing a reasonable relationship to the actual damage that CPR may incur if Design-Builder fails to achieve Substantial Completion of the Work within the Contract Time, the parties agree that, in the event Design-Builder shall fail to achieve Substantial Completion within the Contract Time, Design-Builder agrees to pay the CPR as liquidated damages, and not as a penalty but as a reasonable estimate of the amount of damages CPR may suffer, per day for each calendar day occurring after the Contract Time during which Substantial Completion is not achieved, the amount specified in the preamble. Notwithstanding anything in this Agreement to the contrary, CPR and Design-Builder acknowledge and agree that this liquidated damages provision shall only apply to damages caused by Design-Builder's failure to achieve Substantial Completion within the Contract Time, and that CPR is entitled to any and all legal and equitable remedies CPR may have where CPR's damages are caused by any reason other than Design-Builder's failure to achieve Substantial Completion within the Contract Time.

### **12.7 Responsibility for Completion**

Design-Builder shall furnish such manpower, materials, facilities, and equipment and shall work such hours, including overtime operations, weekends, and holidays, as may be necessary to ensure the prosecution and completion of the Work in accordance with the approved and currently updated Schedule. If work on the critical path is fourteen (14) days or more behind the currently updated and approved Schedule (including extensions of time where such are warranted) and it becomes apparent from the current Schedule that the Work will not be completed within the Contract Time, Design-Builder shall implement whatever steps it deems necessary to recover all lost time for which a time extension is not granted.

### **12.8 Commencement of Warranties**

Warranties called for by the Contract Documents (including without limitation Article 17) shall commence on the date of Substantial Completion of the Work or designated portion thereof.

### **12.9 Delays in the Work**

12.9.1 If Design-Builder is delayed at any time in the progress of the critical path of the Work by an Excusable Delay, then the Contract Time shall be extended by Change Order for the period caused by

such delay. If the delay is caused exclusively by a Compensable Delay, as defined in Section 1.6, Design-Builder shall be entitled to a Change Order for Design-Builder's reasonable and documented additional costs resulting from such Compensable Delay. Design-Builder shall strive to mitigate any and all delays to the progress of the Work.

12.9.2 If Design-Builder contemplates making a claim for an extension of the Contract Time, Design-Builder shall give written notice of such claim to CPR. The notice shall include an estimate of probable effect of the delay on progress of the Work, justification of why the delay is an Excusable or Compensable Delay under this Agreement, and sufficient extraction and analysis of the Schedule as may be required to verify the claimed effect on the completion date. Such notice of claim must be initiated within fourteen (14) days after occurrence of the event giving rise to such claim or within seven (7) days after the claimant first recognizes the condition giving rise to the claim, whichever is later. Design-Builder's failure to deliver the notice of claim with its required documentation within the applicable time frame shall be deemed a waiver of the claim by Design-Builder.

12.9.3 Whenever it becomes apparent that Substantial Completion or Final Completion may extend beyond the Contract Time, as adjusted pursuant to this Agreement, Design-Builder shall re-plan the Work in order to achieve Substantial Completion and Final Completion within the Contract Time. Design-Builder shall prepare and submit the proposed revised Work plan, including updated schedules describing how Design-Builder intends to recover so as to complete the Work within the Contract Time, within the response time requested by CPR, which shall be at least seven (7) calendar days.

12.9.4 If the Excusable Delay is due to adverse weather, or the impact of weather on conditions of the Site, then the Contract Time shall be extended on a day-for-day basis only for those adverse weather delays which meet the following test:

- .1 The Work at the Site which was delayed must have involved an activity on the critical path of the most recently approved Schedule; and
  - (a) The adverse weather must have prevented at least twenty-five percent (25%) of the normal labor and equipment force for the critical path activity from proceeding with its work in a reasonable manner; or
  - (b) The adverse weather must have prevented the normal labor and equipment force for the critical path activity from working at least five (5) hours of a normal eight (8)-hour day; and
- .2 The adverse weather is documented on the Design-Builder's daily construction reports; and
- .3 The adverse weather is shown to have been abnormal for the particular period of time and could not reasonably have been anticipated by Design-Builder.

12.9.5 Upon request, Design-Builder shall provide a "Time Impact Analysis" for any delay to the critical path of the Work. The Time Impact Analysis shall be in form and content acceptable to CPR and Program Manager, and may include: (a) fragmentary Critical Path Method (CPM) type network (Fragnet) illustrating how Contractor proposes to incorporate the alleged delay into the current updated Schedule; (b) direct and indirect costs which may have resulted from the delay; and (c) identification of the preceding and succeeding activities in the current updated Schedule to which the Fragnet is to be connected.

## **ARTICLE 13 INSURANCE, INDEMNITY AND PERFORMANCE SECURITY**

### **13.1 Indemnification**

Design Builder shall, with respect to all Work which is covered by or incidental to this Agreement, indemnify, defend, and hold the Indemnified Parties harmless from and against any and claims, liability, loss, damage, costs or expenses, including reasonable attorneys' fees, expert witness fees, awards, fines or judgments, arising out of or resulting from (a) mechanic's liens, stop notices, bond claims, or similar claims for payment from Subcontractors, Sub-subcontractors, Material Suppliers or any other firm or person arising out of or relating to the Work, or claiming through Design-Builder, or (b) death or injury to

persons (including Design-Builder's employees) or property (including loss of use), or (c) design defects, or other loss, damage, claim or expense, to the extent caused by, contributed to or arising from actual or alleged breach of this Agreement, negligent errors or omissions in performance of this Agreement, or willful misconduct (whether performed by Design-Builder, Design Professionals, a Subcontractor, a Sub-subcontractor or any of their respective agents or consultants), provided however that Design-Builder shall not be obligated under this Agreement to indemnify any entity to the extent that the damage is caused by the active or sole negligence or willful misconduct of CPR or its agents or contractors other than Design-Builder. The "Indemnified Parties" are as defined in Section 1.6.18.

Moreover, Design Builder shall indemnify and hold the Indemnified Parties harmless against any claim, suit or action, or any alleged violation or infringement of patent rights, trademarks, copyrights or any other intellectual property right, which may be made against an Indemnified Party by reason of the use of any Design-Build Document which is now or may hereafter be covered by patent, copyright or trademark, and also against all expense, including attorneys' fees and expert witness' fees, which an Indemnified Party may incur in defending or adjusting any such claim, suit or action.

### **13.2 Insurance**

Design-Builder shall procure and maintain, at its sole cost and expense, all insurance required by this Agreement, including without limitation **Exhibit C**, attached hereto and incorporated herein.

### **13.3 Adjustment of Loss**

Any insured loss is to be adjusted by CPR and the insurance carrier, subject to Design-Builder's review and consent. Design-Builder shall pay each Subcontractor an equitable share of any insurance monies received by Design-Builder and, by appropriate agreement, written where legally required for validity, shall require each Subcontractor to make payments to its Sub-subcontractors in a similar manner.

### **13.4 Waiver**

Design-Builder waives, and shall require all its Subcontractors to waive, all rights of recovery against CPR (and such other persons or entities as required by the Contract Documents) for losses within the scope of Subcontractor's or Sub-subcontractor's insurance.

### **13.5 No Limitation**

13.5.1 The coverage of any insurance policy required hereunder or actually carried by CPR shall not limit the extent of Design-Builder's liability under this Contract. In the event CPR employs any separate contractor to work on the Site prior to Design-Builder's Final Completion, CPR shall endeavor to require the separate contractor to cause Design-Builder to be named an additional insured under its commercial general liability policy.

13.5.2 Nothing contained in these insurance provisions shall limit the indemnity obligations of Design-Builder under Section 13.1 or applicable law.

### **13.6 Performance Security**

Design-Builder shall provide CPR with assurances that Design-Builder and its team shall meet the performance and payment obligations under the Contract Documents, as more particularly set forth in the RFP.

## **ARTICLE 14 CHANGES IN THE WORK**

### **14.1 Change Orders**

CPR may require changes in, additions to, or deletions from the Work to be performed or the materials to be furnished pursuant to the Contract Documents. Changes may be made pursuant to a written Change Order, which shall state the agreement of CPR and Design-Builder upon all of the following:

- .1 The scope of the change in the Work;

- .2 The amount of the adjustment in the Contract Sum, if any; and
- .3 The extent of the adjustment in the Contract Time, if any.

#### **14.2 Change Orders Regarding Time for Completion**

Any time extension authorized by CPR pursuant to Article 12 shall be set forth in a Change Order signed by CPR and Design-Builder.

#### **14.3 Construction Change Directive**

Changes also may be made pursuant to a Construction Change Directive signed by CPR, which shall direct a change in the Work and state a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order or when time does not permit processing of a Change Order prior to implementation of the change.

#### **14.4 Pricing of Changes**

If a Change Order or a Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum adjustment to the Contract Sum, properly itemized and supported by sufficient substantiating data to permit evaluation. In the absence of mutual acceptance, CPR may issue a Construction Change Directive based on CPR's estimate.
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost of the Work based on daily approved time and material work sheets plus Design-Builder's mark up on such costs for overhead and profit, which shall not exceed the percentage(s) specified in the preamble to this Agreement.

#### **14.5 Basis of calculation for changes**

Adjustment in compensation for changes shall be based upon:

- .1 Labor. Compensation for labor shall include the necessary payroll cost for labor, including the first level supervisor directly engaged in performance of the changes. Wages shall not exceed current prevailing wages in the locality for performance of the changes. Use of a classification which would increase labor cost will not be permitted. Exceptions to the above will be permitted only where Design-Builder establishes the necessity for payment at higher rates or classifications to the satisfaction of the CPR.
- .2 Materials and Equipment. Cost of materials and equipment may include costs of transportation and delivery. If discounts by suppliers are available to Design-Builder, they shall be credited to CPR. CPR reserves the right to furnish materials and equipment required for performance of the changes and Design-Builder shall have no claim for costs or mark-ups on such materials and equipment.
- .3 Construction Equipment. Any use for less than 30 minutes shall be considered one-half hour. No costs will be allowed for time while construction equipment is inoperative, idle, or on standby, without CPR's prior approval. No allowance will be made for individual pieces of construction equipment and tools having a replacement value of \$500 or less. Rental charges for all necessary temporary facilities, machinery, and equipment, exclusive of hand tools, which are provided by Design-Builder at the site, including costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof, whether rented from Design-Builder or others, shall be consistent with those prevailing in the locality. Rates and quantities of equipment rented shall be subject to CPR's prior approval. Unless otherwise agreed by CPR, Design-Builder shall provide at least two (2) bona fide price quotations from reputable equipment suppliers to validate the reasonableness of the proposed rental rates.

- .4 A markup for Design-Builder's overhead and Profit, which shall not exceed the percentage(s) specified in the preamble.

#### **14.6 Response to a Construction Change Directive**

Upon receipt of a Construction Change Directive, Design-Builder shall promptly proceed with the change in the Work involved and advise CPR within fourteen (14) days of Design-Builder's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

A Construction Change Directive that is not responded to within fourteen (14) days, or is signed by Design-Builder, indicates Design-Builder's agreement therewith, including adjustment in the contract sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

If the net value of a change results in a credit from Design-Builder, the credit shall be the actual net cost. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase or decrease, if any, with respect to the change.

#### **14.7 Time and Material Costs Recordkeeping**

In the event that the pricing method selected is the "Cost of the Work plus" method described in paragraph 14.4.3, Design-Builder shall keep, in such form as CPR may prescribe, an itemized accounting of the labor, materials, and equipment used during each day, together with appropriate supporting data, to be submitted to Program Manager on a daily basis

#### **14.8 Unforeseen Site Conditions**

14.8.1 If subsurface or latent physical conditions are encountered at the Site during progress of the Work which differ materially from those indicated in the Contract Documents, or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work provided for in the Contract Documents, are encountered at the Site, Design-Builder shall promptly notify CPR, in writing, of the differing conditions before they are disturbed and before the affected Work is performed. Upon written notification, CPR will investigate the conditions, and if CPR determines that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any Work under this Agreement, an adjustment will be made and the Agreement modified in accordance with this Article.

14.8.2 Conditions will not be qualified as latent or unknown if they were (1) readily visible or reasonably accessible to an ordinary design-builder performing the site investigations required of Design-Builder under the Contract Documents; (2) disclosed in information or materials provided by CPR or CPR's consultants as described in Article 3 or included as part of the Contract Documents; or (3) reasonably inferable by an experienced construction professional from information discussed in (1) or (2) above.

14.8.3 In addition to the information required for other claims under this Agreement, a claim for adjustment of the Agreement due to differing Site conditions must include the following information:

- .1 A detailed description of the unknown or latent condition;
- .2 How the condition differs materially from those indicated or anticipated in the Contract Documents or is of an unusual nature;
- .3 A description of why the condition is not excluded under the provisions of Section 14.8.2; and
- .4 An estimate of any change in the scope of the Work required as a result of the condition, which estimate shall be based upon exploratory excavation, system trace out or other means immediately available.

#### **14.9 Exclusions from Change Orders**

Design-Builder shall not be entitled to a Change Order or additional compensation by reason of any matters resulting from or attributable to (a) the inclusion or exclusion of any item which should be included or excluded in accordance with good construction practice, whether or not shown or set forth in a Construction Document; (b) mistake, error, omission, or negligence of Design-Builder, Design Professionals, General Contractor, Subcontractors, Sub-subcontractors or Material Suppliers; or (c) Inexcusable Delay.

#### **14.10 Changes in Law**

Design-Builder shall comply with all applicable Legal Requirements in effect at the time the Work is constructed. In the event any changes in applicable Legal Requirements affecting the performance of the Work are enacted after the effective date of this Agreement, Design-Builder shall be entitled to a Change Order to the extent such changes affect the Contract Sum or the Contract Time.

### **ARTICLE 15 SUBSTANTIAL COMPLETION, INSPECTION, AND OCCUPANCY**

#### **15.1 Notice of Substantial Completion Inspection**

When Design-Builder believes that the Work has reached Substantial Completion, Design-Builder shall submit to CPR a written request for a Substantial Completion Inspection. Within five (5) days after receipt of Design-Builder's written request, Program Manager shall conduct the Substantial Completion Inspection, which shall also be attended by Design-Builder's superintendent and project manager, and such other individuals as Program Manager or Design-Builder deem appropriate. If Program Manager has determined that Design-Builder has achieved Substantial Completion, Design-Builder shall be so notified and CPR shall sign a "Certificate of Substantial Completion." If not, Program Manager shall identify the items which must be completed prior to Substantial Completion ("initial punch list"). Once Design-Builder has completed those items, the process for Substantial Completion Inspection shall be repeated.

#### **15.2 Final Punch List**

If the Project is Substantially Complete, Program Manager shall issue a "final punch list" of items which describes items of incomplete work that must be completed prior to CPR's final acceptance of the Project. CPR or Program Manager may add items to the final punch list that are discovered to be incomplete after the Substantial Completion Inspection.

After Design-Builder has completed all items properly listed on the final punch list and believes that it has achieved Final Completion, it shall submit its application for final payment and request final inspection. Program Manager shall, within five (5) days, conduct a Final Completion Inspection, which shall also be attended by Design-Builder's superintendent and project manager, and such other individuals as the parties deem appropriate. Design-Builder shall, prior to or along with its application for final payment, submit to CPR's Representative all applicable warranties, guaranties, maintenance and operations manuals, and the final Record Drawings showing the location and configuration of electrical, mechanical, plumbing, and HVAC systems. Once Program Manager determines that the Project has been finally completed in accordance with the Contract Documents, CPR shall cause to be signed and recorded a notice of completion. If corrective items are noted after the final punch list is published, they shall be considered warranty items and will be corrected promptly; they shall not, however, impact the determination of Final Completion.

#### **15.3 Use of Work Prior to Acceptance**

Whenever, in the opinion of CPR, the Work, or any part thereof, is in a condition suitable for use, and the best interests of CPR require such use, CPR may take possession of, connect to, or use that portion of the Work. If unscheduled early possession or use increases the cost of or time needed to complete the Work, or a part thereof, an appropriate Change Order shall be issued, provided, however, that no Change Order shall be issued if such early possession or use is due to Design-Builder's failure to timely perform its obligations hereunder.

## **15.4 Effect of Occupancy**

CPR's occupancy, as contemplated in this Article, shall not constitute acceptance by CPR of the Work, or any part thereof. Such use shall neither relieve Design-Builder of any of its responsibilities under the Contract Documents nor act as a waiver by CPR of any of the terms or conditions of the Contract Documents, except that warranties shall commence upon occupancy and Design-Builder shall not bear the risk of loss or damage to that portion of the Work occupied by CPR.

## **15.5 Coordination with Other Activities**

If any portion of the Work is occupied by CPR before Final Completion, Design-Builder shall, to the greatest extent practicable, conduct its operations so as not to interfere unreasonably with CPR's use of the occupied portions.

# **ARTICLE 16 CONTRACT CLOSE-OUT**

## **16.1 Design-Builder's Request for Final Payment**

Design-Builder shall submit its application for final payment as set forth in Section 15.2. The application for final payment shall include an accounting of the Cost of the Work for all Work performed on a Time and Materials cost basis and/or on an allowance basis. Design Builder shall also include only if requested by CPR, statutory forms of Conditional Lien Waiver and Release upon Final Payment from Design-Builder, each Design Professional, and all individuals and firms having mechanic's lien rights against the Work and having served preliminary 20-day notices.

## **16.2 Additional Submissions**

Prior to or simultaneously with Design-Builder's application for final payment, Design-Builder shall submit the following items to CPR:

- .1 The final Record Drawings as required by the Contract Documents showing, among other things, the location and configuration of electrical, mechanical, plumbing, and HVAC systems.
- .2 Three (3) sets of documentation completely covering the operation and maintenance of the mechanical and electrical installation, elevators, and all other equipment required by the technical specifications to be furnished with such manuals. The documentation shall include charts, diagrams, performance curves, catalog information, lubrication manuals, and details pertaining to the functioning of various items of equipment. The documentation shall be divided logically into "systems" on the basis of operation, without respect to trades, subcontractors, or arbitrary specifications sections. The relationship of the "systems" shall be clearly and concisely detailed.
- .3 All applicable warranties, guaranties, maintenance and operations manuals.
- .4 Such other documents from Design-Builder as may be required by the agencies having jurisdiction in order to accept the Work as complete and/or certify the Project for occupancy or operation.

## **16.3 Withholding From Final Payment**

CPR may withhold amounts from final payment for any of the reasons specified in Section 5.5 or any other provision of the Contract Documents or applicable law.

## **16.4 Waiver at Final Payment**

In accepting final payment Design-Builder waives all claims against CPR except for:

- .1 claims identified as outstanding at the time of final payment; and

.2 claims under indemnities provided hereunder arising out of future events after Final Completion.

## **16.5 Accounting Records**

16.5.1 Design-Builder shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under this Agreement; the accounting and control systems shall be satisfactory to CPR. CPR and CPR's accountants or consultants shall be afforded prompt access to Design-Builder's Project record keeping and accounting personnel of Design-Builder. Subject to Section 16.5.2 below, CPR may inspect and copy, from time to time and at reasonable times and places, any and all information, materials and data of every kind and character (hard copy, as well as computer readable data if it exists), including, without limitation, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other information and matters that may, in CPR's judgment, have any bearing on or pertain to any matters, rights, duties, or obligations under or covered by any Contract Document that are in Design-Builder's custody or under Design-Builder's control. Design-Builder shall preserve these Project records for a period of four (4) years after final payment, or for such longer period as may be required by law or appropriate under the circumstances.

16.5.2 This paragraph only applies to the extent that Work is performed on a Cost of the Work reimbursement basis. Design-Builder shall allow CPR or its authorized representative(s) to inspect, audit, or reproduce any records to the extent necessary for CPR to evaluate and verify the Cost of the Work, including direct and indirect costs such as overhead allocations. Design-Builder will make this material available promptly upon CPR's request. Such records shall include but not be limited to accounting records, job cost reports, job cost history, margin analysis, written policies and procedures, subcontract files (contracts, correspondence, change order files, including documentation covering negotiated settlements), backcharge logs and supporting documentation, general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends, and any other documents customarily maintained by contractors performing work on a cost plus a fee basis or that CPR otherwise deems necessary to substantiate charges related to this Agreement.

16.5.3 Design-Builder shall require that all payees (including General Contractor, Subcontractors, Sub-subcontractors, Design Professionals and Material Suppliers) comply with the provisions of this Article by incorporating these requirements in all written contracts. Such requirements to include flow down right-to-audit provisions in contracts with payees shall also apply to all lower-tier subcontractors and subconsultants.

## **ARTICLE 17 WARRANTY**

### **17.1 Warranty of Work and Materials**

Design-Builder warrants to CPR that materials and equipment furnished under the Agreement will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Design-Builder's warranty excludes remedy for damage or defect caused by abuse (other than by Design-Builder or those for whom it is responsible), modifications not executed by Design-Builder, improper or insufficient maintenance after Final Completion, improper operation, or normal wear and tear under normal usage after Final Completion. If required by CPR, Design-Builder shall promptly furnish satisfactory evidence as to the kind and quality of materials and equipment.

Upon receipt of written notice from CPR, Design-Builder shall promptly repair and make good in accordance with the Contract Documents any defect in workmanship and materials that may appear in the Work within one (1) year after Substantial Completion of the Project, or designated portion thereof (as determined in accordance with the Contract Documents), or within such longer period or as is required in the Contract Documents with respect to any specific aspect of the Work. Design-Builder shall also repair or replace any adjacent work or materials disturbed or damaged during or as a result of such corrective work. This obligation to repair and replace is in addition to all other warranties and contractual obligations provided elsewhere in the Contract Documents and all liability imposed by operation of law (e.g., tort or statutory claims).

**ARTICLE 18**  
**TERMINATION; CPR'S RIGHT TO PERFORM DESIGN-BUILDER'S OBLIGATIONS**

**18.1 Termination for Cause**

18.1.1 CPR may terminate this Agreement, pursuant to the provisions of this Article, for the following causes:

- .1 Design-Builder is insolvent or has made a general assignment for the benefit of creditors, or a receiver has been appointed on account of the insolvency of Design-Builder.
- .2 Design-Builder materially breaches any of the provisions of the Contract Documents or fails, without excuse, to perform the Work within Contract Time.
- .3 Design-Builder abandons the Work, or without justification fails to (a) prosecute promptly and diligently the Work, excluding all cases for which extension of time is provided hereunder, or (b) supply enough properly skilled workers or proper materials for the Work.
- .4 Design-Builder fails, without justification, to make prompt payment to Subcontractors or Material Suppliers for material or labor, and unless such failure arises from CPR's breach of its payment obligations under this Agreement.
- .5 Design-Builder disregards or fails to materially comply with Legal Requirements, or CPR's instructions.
- .6 Design-Builder fails to provide and keep in full force and effect all insurance required by Article 13 hereof or fails to cause General Contractor and all Design Professionals, Subcontractors and Sub-subcontractors to so comply.

18.1.2 To the extent that CPR elects to take legal assignment of subcontracts, agreements with Design Professionals and purchase orders (including rental agreements) following a termination of Design-Builder for cause, Design-Builder shall be deemed to have assigned such agreements to CPR without the need for further action to effectuate such assignment. Nevertheless, upon CPR's request, Design Builder shall execute and deliver all such documents and take all such steps as CPR may require for the purpose of fully vesting in CPR the rights and benefits of Design Builder under such subcontracts, rental agreements, agreements with Design Professionals, purchase orders, or other agreements, with CPR assuming full responsibility for the fulfillment only of those obligations subsequent to the date of the assignment.

**18.2 Procedure for Termination**

If the conditions stated in Section 18.1 exist, CPR may, without prejudice to any other right or remedy, give written notice to Design-Builder declaring a "Default" and advising of its intention to terminate this Agreement.

Unless within seven (7) days of the delivery of such notice Design-Builder shall cease such violation or otherwise make satisfactory arrangements for correction thereof, which arrangements are set forth in writing signed by Design-Builder and accepted by CPR, Design-Builder's right to complete the Work shall cease and terminate.

In the event of any such termination, CPR shall immediately give written notice thereof to Design-Builder. If CPR takes over the Work, it may prosecute the same to completion by contract or by any other method it may deem advisable, for the account and at the expense of Design-Builder, and Design-Builder shall be liable to CPR for those reasonable costs to prosecute the Work, including management, supervision, and design support, which exceed the Contract Sum. In such event, CPR may, without liability, take possession of, and utilize in completing the Work, materials and equipment previously paid for by CPR to be incorporated into the Work, whether stored at the Site or elsewhere. Whenever Design-Builder's right to proceed is terminated, Design-Builder shall not be entitled to receive any further payment until the Work is finished.

**18.3 Termination for Convenience** CPR shall have the right, upon ten (10) days' written notice, to terminate this Agreement, in whole or in part, for CPR's convenience. If CPR terminates this Agreement for convenience, Design-Builder shall be paid in accordance with Article 5 an amount calculated as follows:

- .1 The Cost of the Work incurred by Design-Builder to the date of termination, including all reasonable costs incurred as a result of the termination or owed pursuant to subcontract;
- .2 A percentage markup of the amount in subsection 18.3.1, above, for Design-Builder's overhead and profit, which percentage shall not to exceed the percentage(s) set forth in the preamble to this Agreement;
- .3 Reasonable out-of-pocket expenses incurred by Design-Builder to close-out the Project; and
- .4 Subtract the aggregate of previous payments made by CPR to Design-Builder for the Project.

The total of 18.3.1 through 18.3.4, above, may not exceed the Contract Sum.

To the extent that CPR elects to take legal assignment of subcontracts, agreements with Design Professionals and purchase orders (including rental agreements) after a termination for convenience, Design-Builder shall, as a condition of receiving the payments referred to in this Article, execute and deliver all such documents and take all such steps, including the legal assignment of such agreements and other contractual rights of Design-Builder, as CPR may require for the purpose of fully vesting in CPR the rights and benefits of Design-Builder under such subcontracts, rental agreements, agreements with Design Professionals, purchase orders, or other agreements, with CPR assuming full responsibility for the fulfillment of only those obligations subsequent to the date of the assignment and except as provided elsewhere in this Agreement, to defend, indemnify and hold Design-Builder harmless against all claims, demands, liability or judgments arising out of CPR's performance of those contracts or completion of the Work.

#### **18.4 Flow-down of Assignment Right**

Subcontracts, purchase orders, rental agreements, and design contracts entered into by Design Builder shall contain provisions requiring assignment to CPR in the event of a termination for cause or for convenience, and providing for termination pursuant to the terms of this Agreement.

#### **18.5 Suspension for Convenience**

CPR may, without cause and upon notice to Design-Builder, order Design-Builder to suspend, delay or interrupt the Work in whole or in part for such period of time as CPR may determine. The Contract Sum and Contract Time shall be adjusted for reasonable, documented increases in the cost and time caused by such suspension, delay or interruption. Adjustment of the Contract Sum shall include profit. No adjustments shall be made to the extent:

(a) that the suspension, delay or interruption is attributable to the negligence or fault of the Design-Builder or a Subcontractor, Sub-subcontractor or their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Design-Builder, or performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Design-Builder is responsible; or

(b) that an equitable adjustment is made or denied under another provision of the Agreement.

**ARTICLE 19  
ASSIGNMENT AND GOVERNING LAW**

**19.1 Assignment**

This Agreement shall be binding upon and shall inure to the benefit of the parties and their respective permitted successors and assigns. Design-Builder shall not be entitled to assign or delegate any of its rights or obligations hereunder without the prior written consent of CPR. CPR may assign this Agreement to (i) the State of California, or (ii) an affiliated entity, as that term is defined in California Corporations Code section 150, at any time and without Design-Builder's consent. CPR will promptly provide notice to Design-Builder of any such assignment.

**19.2 Governing Law**

This Agreement shall be governed by the laws of the State of California, shall be interpreted and enforced in accordance with the laws of the State of California (without respect to its choice of law rules), and is deemed entered into and executed in the city and county of Sacramento. Subject to Rule 66 of the Federal Rules of Civil Procedure and 28 U.S.C. § 959, any litigation between CPR and Design-Builder pertaining to or arising out of or in connection with this Agreement or the Project shall be venued exclusively in a court with subject matter jurisdiction located in San Francisco or Sacramento, California, or other mutually acceptable location. A condition precedent of any such litigation shall be that the claimant has made diligent, good faith efforts to resolve the dispute in accordance with Article 21.

**ARTICLE 20  
MISCELLANEOUS PROVISIONS**

**20.1 Ownership and Use of Contract Documents**

20.1.1 All plans, drawings, tracings, specifications, programs, calculations, reports, electronic data, BIM files, models and other work product (collectively, the "Documents") prepared and/or furnished by Design-Builder under this Agreement or for the Project shall be the property of CPR at all times, whether the Project is completed or not, and shall be delivered to CPR on the earlier of (i) Final Completion of the Project, or (ii) the date of termination of this Agreement for any reason prior to Final Completion of the Project. Design-Builder and any applicable Design Professionals shall be deemed to have assigned any intellectual property rights (including copyright) in the Documents to CPR.

20.1.2 CPR grants a non-exclusive license to Design-Builder and the Design Professionals to re-use portions of the Documents which represent less than the full design for the Project. To the extent that Design-Builder, General Contractor or any Design Professional, Subcontractor or Sub-subcontractor uses or reuses the Documents, such party shall defend, indemnify and hold CPR and the Indemnified Parties harmless from (and defend against) any and all liability, costs and expenses (including reasonable legal fees and disbursements), relative to claims arising out of or in connection with such use of the Documents by such other party.

20.1.3 CPR and its agents, employees, representatives and assigns may use (in whole or in part, or in modified form), reproduce and make derivative works from the Documents for all purposes CPR may deem advisable in connection with the Project, including without limitation the completion, as well as subsequent renovation and remodeling, of the Work, all without further employment of, or payment of any compensation to, Design-Builder.

20.1.4 CPR's use of the Documents without Design-Builder's involvement is at CPR's sole risk, and CPR shall defend, indemnify and hold harmless Design-Builder and Design Professionals from and against any and all claims, damages, losses, costs and expenses, including but not limited to attorney's fees, costs and expenses incurred in connection with any claim or dispute resolution process, arising out of or resulting from CPR's use of the Design-Build Documents without Design-Builder's involvement, except to the extent directly caused by the negligent error or omission of any Design Professionals in preparing the document. This Section 20.1.4 shall have no applicability if Design-Builder was terminated for a Default.

20.1.5 Design-Builder shall obtain from its General Contractor, Design Professionals, Subcontractors and Sub-subcontractors intellectual property rights and rights of use that correspond to the rights given by Design-Builder to CPR in this Agreement.

## **20.2 Notices**

All notices, requests, documents, approvals and other instruments made, given or delivered pursuant to and in connection with this Agreement shall be in writing to the address stated below, or to such other at any other address duly notified by the applicable party to the other party at its address for service, and shall be deemed to have been duly given (1) when delivered, if delivered in person or by reputable courier, (2) if transmitted before 5:00 p.m. Pacific Time on a business day, on the date transmitted by electronic mail or facsimile (as evidenced by a facsimile confirmation), otherwise on the next business day, or (3) three business days after deposit in the United States Mail, registered or certified mail, return receipt requested, postage prepaid.

The parties' addresses for notice and service are as specified on the cover page of this Agreement.

## **20.3 Integrated Agreement; Modification**

This Agreement represents the entire and integrated agreement between CPR and Design-Builder for the Project and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended or otherwise modified only by written instrument signed by each of the parties or pursuant to the change procedures set forth in Article 14. If anything in any document incorporated into this Agreement is inconsistent with this Agreement, this Agreement shall govern. Except as expressly provided elsewhere, the Contract Documents shall not be construed to create a contractual relationship of any kind between CPR and a General Contractor, Subcontractor, Sub-subcontractor, Material Supplier, or Design Professional.

## **20.4 No Joint Venture**

Design-Builder is an independent contractor for all purposes, and nothing contained in this Agreement shall be construed to create an association, joint venture, trust or partnership, or impose a fiduciary duty, trust, or partnership obligation or liability on or with regard to any of the parties. Except where otherwise expressly approved by another party in writing, each party shall act hereunder only on an individual basis and shall not be authorized to act as agent or representative of the other party nor have the power or authority to bind the other party for any purpose. No party shall so bind the other party, or represent to anyone that it has the authority to bind the other party, or make any other representation about or on behalf of the other party.

## **20.5 Waiver**

No action or failure to act by CPR or Design-Builder shall constitute a waiver of a right or duty afforded them under the Agreement, nor shall such action or failure to act constitute approval of or acquiescence in a breach, except as may be specifically agreed in writing.

## **20.6 Attorneys' Fees**

If a party commences any action or proceeding against the other party for any reason arising out of, in connection with, or related to the Agreement or the Project, the prevailing party in such action or proceeding shall be entitled to recover such amount as the court or arbitrator may judge to be reasonable attorneys' fees, together with all costs, charges and expenses related to the suit, including all expert and consultant fees, provided that such prevailing party is determined to have made a reasonable and good faith effort to fully comply with the dispute resolution provisions of Article 21.

## **20.7 Severability**

The invalidity of any covenant, restriction, condition, limitation or any other part or provision of the Contract Documents shall not impair or affect in any manner the validity, enforceability or effect of the remainder of the Contract Documents, except when such invalidity would constitute an essential deviation from the general intent and purpose of the parties as reflected in the Contract Documents.

## **20.8 Procurement Requirements**

In selecting Subcontractors and Design Professionals not approved by CPR at the signing of this Agreement, Design-Builder shall comply with the following procurement requirements:

20.8.1 Expedited Formal Bids. Design-Builder shall utilize the expedited formal bidding process below on all higher cost contracts – i.e., those contracts whose total contract price is estimated to be valued at \$750,000 or more. The expedited formal bidding process shall also presumptively apply to contracts whose total contract price is estimated to be valued at between \$75,000 - \$750,000, unless CPR determines that urgent circumstances require use of the urgent informal bidding process (see Section 20.8.2 below).

- (a) Design-Builder shall develop and issue a Request for Proposal ("RFP") and will formally solicit at least three bids by publishing the solicitation in a trade publication of general circulation and/or an internet-based public RFP clearinghouse for a period of at least one week (7 calendar days). Design-Builder may, in his discretion, identify and solicit additional bidders, and shall solicit any bidders requested by CPR. If fewer than three bidders respond to the RFP, Design-Builder shall make reasonable, good faith efforts to identify additional bidders and solicit their responses to the RFP; Design-Builder shall document such efforts and report same to CPR.
- (b) The period for response to the RFP shall be at least 30 days.
- (c) Criteria for selection of the successful bidder shall be values-based and may, in the reasonable determination of Design-Builder, include such factors as cost, reputation of the bidder for responsiveness and timeliness of performance, quality of service or product performance, ability of the bidder to provide innovative methods for service delivery, and other similar factors Design-Builder deems relevant.
- (d) Design-Builder may conduct interviews of some or all bidders, answer questions posed by bidders and provide additional information to bidders. For contracts whose total contract price is estimated to be valued at \$750,000 or more, Design-Builder shall conduct interviews of at least the top two bidders.
- (e) Design-Builder shall list all bidders in Design-Builder's documentation of the procurement and report same to CPR.

20.8.2 Urgent Informal Bids. With CPR's approval, Design-Builder may use an alternative second process described below when urgent circumstances require Design-Builder to move more quickly than permitted by the expedited formal bidding process; however, competitive bidding is still required to the extent possible. With CPR's approval, Design-Builder may utilize the urgent informal bidding process for contracts whose total contract price is estimated to be valued at between \$75,000 - \$750,000; Design-Builder may also utilize the urgent informal bidding process for any contract whose total contract price is reasonably estimated to be valued at less than \$75,000.

- (a) Design-Builder will make reasonable, good faith efforts to identify and solicit at least three proposals and will accept additional unsolicited bids that may be submitted.
- (b) Design-Builder may, in its discretion, develop an RFP prior to soliciting bidders and establish a response period with respect to any such RFP.
- (c) Criteria for selection of the successful bidder shall be values-based, and may, in the reasonable determination of Design-Builder, include cost, reputation of the bidder for responsiveness and timeliness of performance, quality of product or service, ability of the bidder to provide innovative methods for service delivery, and other similar factors Design-Builder deems relevant.
- (d) Design-Builder shall list all bidders in Design-Builder's documentation of the procurement and report same to CPR.

20.8.3 Sole Source Bidding. Finally, with CPR's approval, Design-Builder may utilize a sole source when Design-Builder has determined, after reasonable effort under the circumstances, that there is no other reasonably available source or where the procurement is reasonably estimated at less than

\$25,000. Design-Builder shall identify to CPR any contract that is sole-sourced along with an explanation as to the basis for sole-sourcing the contract.

## **ARTICLE 21 DISPUTE RESOLUTION**

### **21.1 Scope**

All claims, disputes or other matters in question among the Parties which arise from or in connection with this Agreement ("Claims") shall be resolved as provided in this Article 21. The responsibility to substantiate a Claim rests with the party making the Claim.

### **21.2 Continued Performance**

At all times during the pendency of a Claim or a dispute resolution proceeding hereunder, Work shall continue unless otherwise directed by CPR.

### **21.3 Notice**

A notice of potential Claim shall be made to the other party at the earliest opportunity in an effort to afford maximum opportunity to avoid Project delay or cost impacts. Notice for Claims related to changes in the Work or requested extensions of time shall be provided in accordance with the applicable notice provisions for same in this Agreement. All notices of potential Claim must be made by written notice and shall contain the information listed below, provided that, if any of the required information is not available at the time the notice of potential Claim is submitted, the claimant shall provide all information which is available and a statement indicating when the remaining information will be provided:

- .1 The date of the event giving rise to the Claim and, if applicable, the date when the event ceased;
- .2 The nature of the occurrence or condition giving rise to the Claim
- .3 Identification of the contractual provisions affected and an explanation of how the Claim relates to those provisions
- .4 An estimate of effect upon the Contract Amount and/or Cost of the Work, including an itemized breakdown of additional cost, if any; and
- .5 An estimate of the effect, if any, upon the Schedule and the Contract Time, including a comparison of the Schedule and schedules prepared in connection with the Claim.

### **21.4 Time Limits on Claims**

Subject to Section 12.9, any notice of potential Claim by any party must be initiated within fourteen (14) days after occurrence of the event giving rise to such Claim or within seven (7) days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. Design-Builder's failure to deliver the notice of potential Claim with its required documentation within the applicable time frame shall be deemed a waiver of the Claim by Design-Builder. Also, to the maximum extent possible, a notice of potential Claim shall be provided before any additional work is performed or additional cost is incurred, with a specific request that a response be provided by the date identified in order to avoid the harm contemplated by the notice of potential Claim.

### **21.5 Informal Dispute Resolution**

CPR and Design-Builder shall attempt to resolve their disputes by reasonable business-like negotiations in accordance with the following procedures. Upon receipt of a notice of potential Claim, Program Manager and Design-Builder's project manager shall meet face-to-face to review and consider the claim. This meeting shall occur at the earliest practicable date and shall be for the express purposes of: (1) exchanging and reviewing all pertinent documents and information relating to the matters and issues in dispute, (2) freely and candidly discussing each party's position, and (3) reaching agreement upon a reasonable, compromise resolution of the claim.

If the Program Manager and Design Builder's project manager are unable to resolve the claim, a senior representative from CPR and a senior representative from Design-Builder each shall review the claim in detail and then meet face-to-face to discuss and resolve the matter. This meeting of senior management representatives shall occur no later than fifteen (15) days after the meeting of the project managers, unless the parties both agree upon a longer period of time. CPR and Design-Builder each shall designate a senior representative for purposes of this section within fourteen (14) days of execution of this Agreement. Either party may, if necessary, designate a different senior representative at any time during the course of the Project. If any claim remains unresolved after the meeting of the senior management representatives, CPR and Design-Builder agree promptly to submit the matter to mediation by an experienced, mutually acceptable mediator.

#### **21.6 Independent Expert**

If the Claim is not resolved within seven (7) days after the senior management meeting, then CPR may appoint one or more independent, third-party experts ("Independent Expert") to review the Claim. Once appointed, the Independent Expert shall review any technical analysis or recommendation, review material submitted by the parties and, as the Independent Expert deems appropriate, meet with the parties and other persons having information relevant to the issues in dispute before rendering an opinion as to an appropriate resolution of the Claim, giving consideration to the factual and contractual issues involved. Within twenty-one (21) days after appointment, Independent Expert shall deliver a written recommendation to the other parties to the Claim. CPR may utilize Independent Expert's report as it deems appropriate in responding to Claims or in assessing withheld amounts or backcharges. The Independent Expert's fees shall be shared equally by CPR and Design-Builder. Independent Expert's opinion, conclusions and findings shall be admissible in any subsequent dispute resolution proceeding only to the extent agreed by both parties and so ordered by a court pursuant to the California Evidence Code or the Federal Rules of Evidence as appropriate.

#### **21.7 Non-Binding Mediation**

If the Claim has not been resolved as provided above, either party may, at its option, initiate mediation proceedings. These proceedings shall be conducted by a third-party mediator who is acceptable to both parties and experienced in design and construction in California on large health-care projects. The mediator shall be given written statement(s) of the Parties and may inspect the Site and any Project documents. The mediator shall schedule a mediation session, to be attended by CPR, Program Manager and Design-Builder, together with any other person who has an interest in the Claim, within a reasonable time of the mediator's selection. The mediation shall be attended by representatives of CPR and Design-Builder with authority sufficient to resolve the dispute. The cost of the mediation shall be borne equally by CPR and Design-Builder. No minutes shall be kept and the proceeding shall be confidential and not admissible except as provided below. The entire mediation process must be completed within thirty (30) days of the initiation of mediation proceedings, unless the Parties agree to extend the mediation period.

#### **21.8 Confidentiality**

Any mediation pursuant to Section 21.7 shall be treated as confidential and privileged, pursuant to California Evidence Code Sections 1115 through 1128. If, as a result of the mediation, a negotiated settlement is reached, the parties agree that such settlement shall be reduced to writing and that the parties waive the protection of Evidence Code Sections 1115 through 1128 to the extent necessary to enforce the mediated settlement. Such agreement shall be enforceable under California Code of Civil Procedure Section 664.6 and Evidence Code Section 1123 and judgment may be entered upon it in accordance with applicable law in any court of competent jurisdiction.

#### **21.9 Unresolved Impasse**

If the foregoing procedure cannot resolve the dispute, the parties are free to pursue any legal and equitable remedies available to them.

#### **21.10 Application of Procedures**

Design-Builder shall cause the provisions of this Article 21 to be incorporated in contracts with General Contractor and all Subcontractors, Sub-subcontractors, Material Suppliers, and Design Professionals, so that all such parties shall also be bound to this dispute resolution procedure. This dispute resolution

procedure shall not in any way affect any statutes of limitation relating to any Claim, dispute or other matter arising out of the Contract Documents.

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***Signatures on Following Page***

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By their signature below, each of the following represent that they have authority to execute this Agreement and to bind the party on whose behalf their execution is made.

<b>CPR</b> [Insert Name]	<b>DESIGN-BUILDER</b> [Insert Name] California Contractor License No. _____
By _____ (Signature)	By _____ (Signature)
Printed Name: _____	Printed Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD WHICH HAS JURISDICTION TO INVESTIGATE COMPLAINTS AGAINST CONTRACTORS IF A COMPLAINT REGARDING A PATENT ACT OR OMISSION IS FILED WITHIN FOUR YEARS OF THE DATE OF THE ALLEGED VIOLATION. A COMPLAINT REGARDING A LATENT ACT OR OMISSION PERTAINING TO STRUCTURAL DEFECTS MUST BE FILED WITHIN 10 YEARS OF THE DATE OF THE ALLEGED VIOLATION. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 26000, SACRAMENTO, CA 95826.

**EXHIBIT A**

**SCOPE OF THE WORK; PROJECT DESCRIPTION**

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## EXHIBIT B

### STATE REQUIRED TERMS AND CONDITIONS

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1. **AUDIT:** Design Builder agrees that the California Prison Health Care Receivership ("CPR"), the State of California, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Agreement. Design Builder agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of records retention is stipulated. Design Builder agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Design Builder agrees to include a similar right of CPR or the State to audit records and interview staff in any subconsultant agreement related to performance of this Agreement. (Gov. Code §8546.7, Pub. Contract Code §10115 et seq., CCR Title 2, Section 1896.)

2. **RECYCLING CERTIFICATION:** If products, materials, goods or supplies are offered or sold to CPR or the State under this Agreement, the Design Builder shall certify in accordance with Public Contract Code section 12205, the minimum, if not exact, percentage of post-consumer material as defined in the Public Contract Code Section 12200, in products, materials, goods, or supplies offered or sold regardless of whether the product meets the requirements of Public Contract Code Section 12209. With respect to printer or duplication cartridges that comply with the requirements of Section 12156(e), the certification required by this subdivision shall specify that the cartridges so comply. (Pub. Contract Code §12205.)

3. **NON-DISCRIMINATION CLAUSE:** During the performance of this Agreement, Design Builder and its subconsultants and contractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave. Design Builder, subconsultants and contractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Design Builder, subconsultants and contractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full, and Design Builder hereby certifies that it has, unless exempted, complied with these nondiscrimination program requirements. Design Builder, subconsultants and contractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement. Design Builder shall include the nondiscrimination and compliance provisions of this clause in all its agreements with subconsultants and contractors to perform work under the Agreement.

4. **ANTITRUST CLAIMS:** The Design Builder agrees that if this Agreement was awarded by means of a competitive bid, the Design Builder shall comply with the requirements of the Government Codes Sections set out below.

a. For the purpose of this Section 4:

1) "Public purchase" means a purchase by means of competitive bids of goods, services, or materials by CPR or the State or any of its political subdivisions or public agencies on whose behalf the Attorney General may bring an action pursuant to subdivision (c) of Section 16750 of the Business and Professions Code.

2) "Public purchasing body" means CPR or the State or the subdivision or agency making a public purchase. (Government Code Section 4550.)

b. In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder. (Government Code Section 4552.)

c. If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under this chapter, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. (Government Code Section 4553.)

d. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under this part if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action. (See Government Code Section 4554.)

**5. CHILD SUPPORT COMPLIANCE ACT:** If this Agreement is in excess of \$100,000, Design Builder acknowledges in accordance with Public Contract Code 7110, that:

a. Design Builder recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with section 5200) of Part 5 of Division 9 of the Family Code; and

b. Design Builder, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

**6. PRIORITY HIRING CONSIDERATIONS:** If this Agreement includes services in excess of \$200,000, Design Builder shall give priority consideration in filling vacancies in positions funded by the Agreement to qualified recipients of aid under Welfare and Institutions Code Section 11200 in accordance with Pub. Contract Code §10353.

**7. DRUG-FREE WORKPLACE REQUIREMENTS:** Design Builder will comply with the requirements of the Drug-Free Workplace Act of 1990 and will provide a drug-free workplace by taking the following actions:

a. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.

b. Establish a Drug-Free Awareness Program to inform employees about:

- 1) the dangers of drug abuse in the workplace;
- 2) the person's or organization's policy of maintaining a drug-free workplace;
- 3) any available counseling, rehabilitation and employee assistance programs; and,
- 4) penalties that may be imposed upon employees for drug abuse violations.

c. Every employee who works on the proposed Agreement will:

1) receive a copy of the company's drug-free workplace policy statement; and, 2) agree to abide by the terms of the company's statement as a condition of employment on the Agreement.

Failure to comply with these requirements may result in suspension of payments under the Agreement or termination of the Agreement or both and Design Builder may be ineligible for award of any future CPR or State agreements if CPR or the State determine that any of the following has occurred: Design Builder has made false certification, or violated the certification by failing to carry out the requirements as noted above. (Gov. Code §8350 et seq.)

**8. NATIONAL LABOR RELATIONS BOARD CERTIFICATION:** Design Builder certifies that no more than one (1) final unappealable finding of contempt of court by a Federal court has been issued against Design Builder within the immediately preceding two-year period because of Design Builder's failure to comply with an order of a Federal court, which orders Design Builder to comply with an order of the National Labor Relations Board. (Pub. Contract Code §10296.) (Not applicable to public entities.)

**9. CONTRACTS FOR LEGAL SERVICES \$50,000 OR MORE- PRO BONO REQUIREMENT:** If this is a legal services contract, Design Builder hereby certifies that Design Builder will comply with the requirements of Section 6072 of the Business and Professions Code, effective January 1, 2003. Design Builder agrees to make a good faith effort to provide a minimum number of hours of pro bono legal services during each year of the contract equal to the lessor of 30 multiplied by the number of full time attorneys in the firm's offices in the State, with the number of hours prorated on an actual day basis for any contract period of less than a full year or 10% of its contract with the State.

Failure to make a good faith effort may be cause for non-renewal of a state contract for legal services, and may be taken into account when determining the award of future contracts with the CPR or the State for legal services.

**10. EXPATRIATE CORPORATIONS:** Design Builder hereby declares that it is not an expatriate corporation or subsidiary of an expatriate corporation within the meaning of Public Contract Code Section 10286 and 10286.1, and is eligible to contract with the State of California.

**11. SWEATFREE CODE OF CONDUCT:**

a. If this Agreement is for the procurement or laundering of apparel, garments or corresponding accessories, or the procurement of equipment, materials, or supplies, other than procurement related to a public works contract, Design Builder hereby certifies that no apparel, garments or corresponding accessories, equipment, materials, or supplies furnished to CPR or the State pursuant to the contract have been laundered or produced in whole or in part by sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor, or with the benefit of sweatshop labor, forced labor, convict labor, indentured labor under penal sanction, abusive forms of child labor or exploitation of children in sweatshop labor. Design Builder further certifies that it adheres to the Sweatfree Code of Conduct as set forth on the California Department of Industrial Relations website located at [www.dir.ca.gov](http://www.dir.ca.gov), and Public Contract Code Section 6108.

b. Design Builder agrees to cooperate fully in providing reasonable access to Design Builder's records, documents, agents or employees, or premises if reasonably required by authorized officials of CPR, the Department of Industrial Relations, or the Department of Justice to determine the Design Builder's compliance with the requirements under paragraph (a).

**12. DOMESTIC PARTNERS:** For contracts over \$100,000, Design Builder certifies that Design Builder is in compliance with Public Contract Code section 10295.3.

**13. CONFLICT OF INTEREST/STATE OFFICERS OR EMPLOYEES:** Design Builder acknowledges its awareness of the following provisions regarding current or former state employees:

a. No state officer or employee may engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular state employment. (Pub. Contract Code § 10410.)

b. No state officer or employee may contract on his or her own behalf as an independent Design Builder with any state agency to provide goods or services. (Pub. Contract Code § 10410.)

c. For the two-year period from the date he or she left state employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any state agency. (Pub. Contract Code §10411.)

d. For the twelve-month period from the date he or she left state employment, no former state officer or employee may enter into a contract with any state agency if he or she was employed by that state agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to his or her leaving state service. (Pub. Contract Code §10411.)

**14. LABOR CODE/WORKERS' COMPENSATION:** Design Builder acknowledges its awareness of the provisions which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with law, and Design Builder agrees to comply with such provisions before commencing the performance of the work of this Agreement. (Labor Code Section 3700.)

**15. AMERICANS WITH DISABILITIES ACT:** Design Builder certifies that it complies with the Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA. (42 U.S.C. 12101 et seq.)

**16. AIR OR WATER POLLUTION VIOLATION:** Design Builder agrees that it shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to a cease and desist order not subject to review issued pursuant to Section 13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

## EXHIBIT C

### INSURANCE REQUIREMENTS

Prior to commencing performance of the Work, Design-Builder shall procure and, at all times while performing the Work Design-Builder shall maintain, at its sole cost and expense, all insurance coverage, limits and terms required by this **Exhibit C** with companies satisfactory to CPR. Certificates, using the ACORD form, evidencing such insurance and, upon request, copies of the insurance policies and endorsements shall be promptly delivered to CPR. Evidence that the required insurance is currently in force is a condition precedent to CPR's obligation to pay Design-Builder.

#### 1. Types of Insurance:

- a. **Workers' compensation; Employer's Liability.** In accordance with the provisions of Section 3700 of the Labor Code, workers' compensation insurance and occupational disease insurance as required by law and employer's liability insurance, covering all work places involved in this Agreement. If applicable Design-Builder shall furnish a Certificate of Permission to self insure under the workers' compensation and employers' liability Insurance statutes of California.
- b. **Commercial General Liability.** Commercial general liability insurance written on the occurrence basis on ISO form CG 00 01 12 04 or an equivalent form. Modified Occurrence form is not acceptable. The insurance shall cover all operations of Design-Builder and its team, including but not limited to (1) premises, operations and mobile equipment liability; (2) completed operations and products liability; (3) contractual liability coverage including the tort liability of another assumed in a business contract; (4) explosion, collapse, and underground property damage; (5) broad form property damage liability; (6) personal injury and advertising liability; and (7) CD 22 80 01 96 (Limited Exclusion – Contractor's Professional Liability).
- c. **Automobile Liability.** Coverage shall be written on ISO form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or an equivalent form and shall apply to any auto including owned, hired, and non-owned autos and such insurance shall cover bodily injury and property damage.
- d. **Professional Liability.** Coverage shall apply to negligent acts, errors or omissions arising from the professional services, including architecture, engineering, land surveying, landscape architecture, and construction management and any other services provided under this Agreement, of Design-Builder or any person/entity for whose acts Design-Builder may be liable. The deductible under any such policy shall not be more than \$50,000, without CPR's prior written permission. The retroactive date on any such policy shall be prior to the first date upon which Design-Builder provided services under this Agreement. Such coverage shall be maintained for a period of not less than three (3) years after Substantial Completion.
- e. **Builder's Risk Insurance.** Design-Builder shall purchase, and at all times maintain, such property insurance as to protect CPR, and CPR's agents and employees, Design-Builder, Subcontractors, and Sub-subcontractors from loss or damage to the Work in the course of construction ("Builder's Risk Insurance"). This insurance shall be in the form of "Builders All Risk," or the equivalent and shall include windstorm and soft costs. Design-Builder shall provide alternate pricing for obtaining flood and earthquake coverage, if requested by CPR. Coverage shall be provided on a replacement cost basis. Coverage shall not be bound without the CPR's prior approval in writing. This insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final payment has been made as provided in this Agreement, or until no person or entity other than CPR has an insurable interest in the Project, whichever is later. CPR shall be named as Loss Payee on the Builder's Risk policy.
- f. **Umbrella Liability.** Coverage shall apply over the employer's liability, commercial general liability and automobile liability policies required above and shall be at least as broad as the underlying coverage, including but not limited to completed operations and contractual liability.

- g. **Pollution Liability.** Coverage shall apply to bodily injury or property damage arising from a pollution incident or event caused by the Design-Builder's activities. If such coverage is claims-made, the retroactive date will be prior to the commencement of the Work. Such policy shall provide for the following: (a) deductible of no more than \$50,000; (b) inclusion of contractual liability coverage; (c) inclusion of hazardous transporters pollution liability coverage; (d) no limitation or exclusion for claims by one insured party against another insured; (e) severability of interests; (f) natural resource damages coverage; (g) mold coverage.
- h. **Property Insurance/Design-Builder's Equipment.** Design-Builder shall insure its own property and equipment (owned, rented or borrowed) including but not limited to tools, materials, supplies, equipment, forms, scaffolding towers, staging, bunkhouses, and other temporary structures including their contents except for such contents as are to be including in and remain a part of the permanent construction.
2. CPR, Program Manager, the State of California, and each of their officers, directors, venturers, parents, affiliates, subsidiaries and agents, and all shareholders, officers, directors, employees and managers of same shall be named as additional insured parties under the commercial general liability, automobile liability and umbrella liability insurance policies with respect to the Work. The additional insured endorsement on the commercial general liability policy shall include both "on-going operations" and liability arising from "your work/completed operations" (the equivalent of ISO additional insured endorsement CG20-10-11-85).
  3. In addition to providing evidence of the required coverage and limits, each Certificate of Insurance shall provide evidence of compliance with the requirements of Section 2 above. Such certificates of insurance shall be provided/updated annually until three years after Substantial Completion. The certificates shall provide that there will be no cancellation or material modification of coverage without 30 days' (except for ten (10) days' for non-payment of premiums) prior written notice to CPR, and shall further provide that CPR shall be given notice of nonrenewal at least fourteen (14) days prior to the nonrenewal date. The words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" shall be deleted from the certificate of insurance form's cancellation provision. Failure of the Design-Builder to supply a certificate of insurance or other evidence of full compliance with these insurance requirements or failure of the CPR to identify a deficiency from evidence that is provided shall not be construed as a waiver of the Design-Builder's obligation to maintain such insurance.
  4. All insurance coverage (except workers compensation and professional liability above) to be maintained and furnished hereunder by Design-Builder shall be primary and non-contributory with respect to any insurance maintained by CPR and/or any other additional insured.
  5. The workers compensation policy shall be endorsed to include coverage for USL&H benefits if the Design-Builder's employees work in or about navigable waterways.
  6. All insurance (except professional liability and pollution liability) shall be maintained on an "occurrence" basis. All insurance (except Builders Risk) shall continue to be maintained for a period of at least three (3) years following Substantial Completion.
  7. Contractual liability insurance coverage (commercial general, umbrella, and auto liability) required to be maintained and furnished hereunder by Design-Builder shall specifically include coverage in respect to the indemnification provision set forth hereinabove in Section 13.1 of the Agreement. If necessary, the auto policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.
  8. Each policy of liability insurance shall include a waiver of subrogation in favor of all additional insured parties and shall be endorsed to recite the name of the Project and the location of the Project Site. If the Design-Builder's liability policies do not contain the standard ISO separation of insureds condition, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.
  9. Insurance coverage shall be maintained by insurance companies that have a rating of at least A:VII in the most recent edition of Best's Key Rating Guide, have equivalent or better ratings from

Standard and Poor and Moody's and are otherwise satisfactory to CPR. CPR shall have the right to approve the insurer, form and content of Design-Builder's insurance policies.

10. Design-Builder shall require each of its General Contractor, Subcontractors, Sub-subcontractors and Design Professionals (collectively the "Design-Builder's subs") to procure and maintain during the life of the Project: workers' compensation/employer's liability, commercial general liability, automobile liability and professional liability insurance (Design Professionals only), meeting the same requirements (other than limits) as those specified above for Design-Builder. Since Design-Builder is responsible for the acts and omissions of Design-Builder's subs, Design-Builder shall not allow any General Contractor, Subcontractor, Sub-subcontractor, Design Professional or Subconsultant to commence Work or provide services in connection with the Project until that party has procured and provided evidence of the insurance specified herein. If CPR requests additional insurance requirements for Design-Builder's subs based on their scopes of work, Design-Builder shall require that such subs procure and maintain the desired insurance.
11. Except as otherwise provided herein, Design-Builder shall be responsible for any and all deductibles under all policies.
12. CPR and Design-Builder waive all rights against (1) each other any of their Subcontractors, Sub-subcontractors, agents and employees, each of the other, and (2) separate contractors, if any, and any of their subcontractors, sub subcontractors, agents and employees, for loss or damage to the extent covered by Builder's Risk or any other property or equipment insurance applicable to the Project, except such rights as they may have to the proceeds of such insurance less their pro-rata share of the deductible. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged. In no event shall this waiver apply to faulty workmanship in the design or construction of the Project.
13. If the policies of insurance referred to in this Exhibit C require an endorsement or consent of the insurance company to provide for continued coverage where there is a waiver of subrogation, the owners of such policies will cause them to be so endorsed or obtain such consent.
14. Failure to maintain the required insurance may result in termination of this contract at the CPR's option. If the Design-Builder fails to maintain the insurance as set forth herein, the CPR shall have the right, but not the obligation, to purchase said insurance at Design-Builder's expense.
15. By requiring insurance herein, the CPR does not represent that coverage and limits will necessarily be adequate to protect CPR and/or Design-Builder and such coverage and limits shall not be deemed as a limitation on Design-Builder's liability under the indemnities granted to the CPR in this contract.

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16. Minimum amounts of insurance to be carried by Design-Builder are as follows.

<b>Workers' Compensation Employers' Liability</b>	Statutory Limits \$1,000,000 Each Accident
<b>Commercial General Liability</b>	\$2,000,000 Each Occurrence \$4,000,000 General Aggregate/Per Project \$4,000,000 Products-Completed Operations Aggregate
Automobile Liability <b>Combined Single Limit Any Auto</b>	\$1,000,000 Each Accident
<b>Professional Liability</b>	\$2,000,000 (Per Claim/Annual Aggregate)
<b>Builder's Risk</b>	Completed Value of the Project
<b>Umbrella Liability</b>	\$9,000,000 (Each Occurrence/Aggregate)
<b>Pollution Liability</b>	\$2,000,000 (Each Occurrence/Aggregate)

## EXHIBIT D

### COST OF THE WORK; RELATED DEFINITIONS

#### 1.1. Cost of the Work.

1.1.1. The term "Cost of the Work" shall mean all costs and expenses actually incurred by Design-Builder in the performance of the Work and allowed under this Section 1.1. Where a Package Pricing Addendum provides for a form of compensation structured as a lump sum, "Cost of the Work" for such Construction Package is simply the lump sum amount (inclusive of Design-Builder's overhead and profit). "Cost(s)" shall be defined as the actual expenses incurred or prices paid by Design-Builder, but at costs not higher than the standard paid at the place of the Project except with prior approval of Program Manager. Costs may not exceed any caps or not-to-exceed amounts set forth in the applicable agreement with the party seeking reimbursement.

#### 1.1.2. *Labor Costs.* The Cost of the Work includes the following:

(a) Wages of workers directly employed by Design-Builder to perform for the benefit of the Project. Design-Builder shall obtain approval of Program Manager for construction workers performing Work at off-site workshops. Wage schedules shall be approved by Program Manager.

(b) Wages and salaries of Design-Builder's supervisory and administrative personnel when stationed at the Site, in the home or branch office, or on the road when engaged in the administration of the Project with prior approval of Program Manager, but only for that portion of their time required for the Work. Rates and categories shall be as set forth in Appendix 1 hereto.

(c) Costs paid or incurred by Design-Builder for payroll taxes, insurance, contributions, assessments and benefits for workers required by applicable Legal Requirements or collective bargaining agreements, and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holidays and vacations, provided that such Costs are based on wages and salaries included in the Cost of the Work under this Exhibit. These amounts shall be included in the rates set forth in Appendix 1.

(d) With approval of Program Manager, Cost of annual cash bonuses actually paid to Design-Builder's salaried personnel assigned to the Project, in an amount not to exceed a percentage of each such person's annual base salary approved by Program Manager in advance, pro-rated according to the amount of time the employee worked on the Project during the preceding twelve months.

(e) When pre-agreed rates do not exist, Design-Builder shall compute Costs for payroll taxes giving proper consideration to the annual limitations of wages that are subject to certain payroll taxes. Design-Builder may accomplish this through the use of an accounting system which computes actual costs for payroll taxes when incurred up to the wage limit cut-off and allocates them to all jobs by individual based on the time worked on each job by the individual. Alternatively Design-Builder may use an estimated net effective payroll tax percentage to allocate payroll tax costs during the year and make appropriate adjustments at the end of the year or at the end of the Project (whichever is more appropriate) to adjust the Costs to actual net payroll tax cost. Using the latter approach, for example, if 50% of the wages paid to an employee during the year were chargeable to the Cost of the Work, then only 50% of the actual annual Costs of payroll taxes would be allocable to the Cost of the Work.

(f) The actual net Cost to Design-Builder for worker's compensation insurance attributable to the wages chargeable to the Cost of the Work per this Agreement.

(g) Any payroll burden or related Costs which are not required by Legal Requirements shall be subject to advance approval of Program Manager to be considered reimbursable. Fringe benefit costs typically falling into this category include, but are not limited to, pension, employee

stock option plans, bonuses, medical and dental benefits, and life and accident insurance. Design-Builder shall submit detailed breakdowns of all such payroll burden costs along with a representation as to how the proposed actual billable cost will be computed. Such information must be reviewed and approved no later than approval of the Final Pricing Scheme. Except for rates established in Appendix 1, adjustments will be made to account for actual costs which may be less than the provisional maximum costs previously billed.

1.1.3. General Contractor, Material Suppliers and Design Professional Costs. The Cost of the Work includes the following:

(a) Payments made by Design-Builder to General Contractor, Material Suppliers and Design Professionals, in accordance with the requirements of their respective agreements.

(b) General Contractor, Subcontractors, Sub-subcontractors, and Design Professionals to be compensated on a Cost of the Work reimbursement basis shall have the Cost of their work calculated in accordance with the requirements of this Section 1.1, subject to specific variations that may be negotiated with such entity and approved by CPR.

(c) For General Contractor, Subcontractors or Sub-subcontractors compensated on a Cost of the Work reimbursement basis, any out-of-pocket Costs incurred by such entity for providing those performance and completion assurances to CPR (if any) as required by the Contract Documents or their contracts (e.g., payment and performance bonds, subcontractor default insurance, completion insurance, and/or completion guaranties).

1.1.4. Costs of Materials and Equipment Incorporated in the Completed Construction. The Cost of the Work includes the following:

(a) Costs, including transportation, of materials and equipment incorporated or to be incorporated in the completed construction.

(b) Costs of materials in excess of those actually installed but required to provide reasonable allowance for waste and for spoilage. Unused excess materials, tools, or equipment paid for by CPR, if any, shall be delivered to CPR at the completion of the Work or, at CPR's option, shall be sold by Design-Builder; amounts realized, if any, from such sales shall be credited to CPR as a deduction from the Cost of the Work.

1.1.5. Costs of Materials and Equipment, Facilities and Other Items. The Cost of the Work includes the following:

(a) Costs, including transportation, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers, that are provided by Design-Builder at the Site and fully consumed in the performance of the Work; and cost less salvage value of such items if not fully consumed, whether sold to others or retained by Design-Builder. Cost for items previously used by Design-Builder shall mean fair market value.

(b) Rental Costs for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers, that are provided by Design-Builder at the Site, whether rented from Design-Builder or others, and Costs of transportation, installation, repairs and replacements, dismantling and removal thereof, provided such Costs are consistent with those prevailing in the locality. Rates and quantities of equipment rented shall be subject to prior approval of Program Manager. Unless otherwise agreed by Program Manager and Design-Builder, Design-Builder shall provide at least two (2) bona fide price quotations from other reputable equipment suppliers to validate the reasonableness of the rental rates charged, or rates to be agreed upon in a Package Pricing Addendum.

(c) Proposed rental rates and related fair market values for equipment owned by Design-Builder, General Contractor, Subcontractor or a Sub-subcontractor (or any affiliate, subsidiary, or related party) shall be submitted to and approved by Program Manager prior to being used in connection with the Work. The projected usage for each piece of equipment proposed to be rented, and estimated total rentals shall be submitted for approval in advance in a form satisfactory to Program Manager so that an appropriate lease versus buy decision can be made.

(d) Rental Costs for bona-fide third-party equipment shall be considered reimbursable and will be reimbursed at actual Costs, as long as rental rates are consistent with those prevailing in the locality. For any lease/purchase arrangement where any of the lease/purchase rental charges were charged to CPR as reimbursable job costs, appropriate credit adjustments to job cost will be made for an appropriate pro rata share of the fair market value of the equipment at the time it was last used on the job.

(e) Design-Builder shall be required to maintain a detailed equipment inventory of all job-owned equipment (either purchased and charged to job cost or job-owned through aggregate rentals) and such inventory shall be available to CPR each month.

(f) All Costs incurred for routine and ordinary maintenance and repairs of equipment shall be reimbursed at actual Cost. Repairs and/or replacement of a capital nature are considered to be covered by the rental rates and are not separately reimbursed. Major repairs and overhauls are not considered routine and ordinary; consequently, such Costs for rented equipment are not reimbursable and are intended to be covered by the rental rates.

(g) Costs of removal of debris from the Site.

(h) Costs of reproductions, copies, faxes, long-distance telephone calls, all other communication and technology expenses directly related to the Project, postage and express delivery charges, telephone service at the Site, radio/communications systems and equipment, and reasonable petty cash expenses.

1.1.6. *Miscellaneous Costs.* The Cost of the Work includes the following:

(a) That portion directly attributable to this Agreement of premiums for insurance for Design-Builder, to the extent not covered by a CIP. Costs for self-insurance will be considered as a reimbursable cost only if the arrangements for self-insurance are first disclosed in writing to CPR along with a proposed methodology for allocating a fair and equitable portion of the actual cost of the self-insurance out-of-pocket costs incurred to settle claims related to work performed to this Project, and in no event in excess of the comparable cost of procuring conventional insurance. Deductibles are not reimbursable.

(b) Any out-of-pocket Costs incurred by Design-Builder itself for providing those performance and completion assurances to CPR (if any) as required by the Contract Documents (e.g., payment and performance bonds, subcontractor default insurance, completion insurance, and/or completion guaranties).

(c) Sales, use or similar taxes imposed by a governmental authority that are related to the Work and for which Design-Builder is liable.

(d) Fees and assessments for any permits, licenses and inspections for which Design-Builder is required by the Contract Documents to pay, other than those permits for which CPR pays directly.

(e) Costs incurred for tests required by the Contract Documents or necessarily incurred in the performance of the Work.

(f) Costs of royalties and license fees paid for the use of a particular design, process or product required by the Contract Documents, provided that Design-Builder notified CPR, in writing, that a royalty payment would be necessary to use the design, process, or product specified in the Contract Documents; the Cost of defending suits or claims for infringement of patent or other intellectual property rights when Design-Builder is adjudged not to have infringed such rights; and payments of settlements of such suits made with CPR's consent.

(g) Data processing Costs directly attributable to work on the Project. Data processing Costs are limited to the Cost of personal computer hardware and software used in the performance of normal day-to-day administration, management and control of the Project, internet access, and labor Costs directly supporting the information technology at the Project.

(h) Lost deposits for any reimbursable Costs.

(i) That portion of the reasonable travel and subsistence expenses of Design-Builder's personnel incurred with CPR's prior written consent while traveling outside of a 100-mile radius of the Project and in discharge of duties connected with the Work.

1.1.7. *Other Costs.* The Cost of the Work includes the following:

(a) Other Costs incurred in the performance of the Project if and to the extent approved in advance by Program Manager.

(b) In-house and outside legal and consultant Costs reasonably resulting from performance of the Project, other than those arising from disputes between CPR and Design-Builder, to the extent incurred with CPR's permission, which shall not be unreasonably withheld.

(c) Costs of Design-Builder's safety program directly related to the Work.

(d) Cost of Design-Builder's correcting or revising Construction Documents.

(e) Costs allowed under this Section 1.1 that are incurred by Design-Builder in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property, as provided in the Agreement.

1.1.8. *Costs Not To Be Reimbursed.* The Cost of the Work shall not include:

(a) Except as otherwise provided in Section 1.1.2, salaries and other compensation of Design-Builder's personnel stationed at Design-Builder's principal office or offices other than the Site office.

(b) Except as otherwise provided in Sections 1.1.2 through 1.1.6, expenses of Design-Builder's principal offices, and offices other than the Site office, including Design-Builder's home office computer systems and all hardware, software, maintenance, and similar expenses.

(c) Except as otherwise allowed for Lump Sum contracts as described in Section 1.1.1, Design-Builder's overhead and general and administrative expenses.

(d) Design-Builder's capital expenses, including interest on Design-Builder's capital employed for the Work.

(e) Costs resulting from the fraud or gross misconduct of Design-Builder or anyone for whom it is responsible.

(f) Any cost not included in Sections 1.1.2 through 1.1.7.

1.1.9. *Discounts, Rebates and Refunds.* Design-Builder shall notify Program Manager of available discounts, rebates and refunds. Cash discounts obtained on payments made by Design-Builder shall accrue to CPR if (1) before making the payment, Design-Builder included them in a payment application and received payment therefor from CPR, or (2) CPR has deposited funds with Design-Builder with which to make payments; otherwise, cash discounts shall accrue to Design-Builder. Trade discounts, rebates, refunds and amounts received from sales of surplus materials and equipment shall accrue to CPR, and Design-Builder shall make provisions so that they can be secured. Amounts that accrue to CPR in accordance with this paragraph shall be credited to CPR as a deduction from the Cost of the Work.

1.2. Final Verification of Cost of the Work.

1.2.1. For any Construction Packages structured on a Cost of the Work reimbursement basis, Design-Builder shall submit a Final Verified Cost Report (defined below) with its application for final payment for such Construction Package. CPR's accountants or other representatives will endeavor to review and report in writing on Design-Builder's Final Verified Cost Report and application for final payment within thirty days after Design-Builder's delivery of them to Program Manager. Based upon such Cost of the Work and other amounts included in the application for final payment which CPR's accountants report to be substantiated, and provided the other conditions of the Agreement for final payment have been met, Program Manager will, within seven (7) days after receipt of the written report of CPR's accountants or other representatives, either issue a certificate for Final Payment (the "Final Payment Certificate"), or notify Design-Builder in writing of the reasons for withholding a certificate. "Final Verified Cost Report" means Design-Builder's report of the final Cost of the Work, verified by Design-Builder's accounting staff as accurate, to be submitted with Design-Builder's application for final payment.

1.2.2. If CPR's accountants or other representatives report the Cost of the Work stated in Design-Builder's Final Verified Cost Report or other amounts included in the application for final payment for a Construction Package to be less than those claimed by Design-Builder, Design-Builder shall be entitled to file a Claim in accordance with Article 21 of the Agreement. Pending a final resolution of the disputed amount of final payment, CPR shall pay Design-Builder the amount certified in the Final Payment Certificate.

DRAFT

Switchgear Replacement and Generator Repair Project  
San Quentin State Prison

Document 006113

**PERFORMANCE BOND**  
TO ACCOMPANY CONSTRUCTION CONTRACT

BOND NO. \_\_\_\_\_

The premium on this Bond is \_\_\_\_\_  
for the term of Agreement Number \_\_\_\_\_ (PCU \_\_\_\_).

**Know All By These Presents:**

That The California Prison Health Care Receivership Corporation has awarded to \_\_\_\_\_ whose address is  
\_\_\_\_\_ as Principal, a contract for the work described as follows:

Project Title: **Switchgear Replacement and Generator Repair Project**  
Project Location: **San Quentin, CA 94954**

WHEREAS, The contractor is required to furnish a bond in connection with said contract, guaranteeing the faithful performance thereof;

NOW THEREFORE, Principal and \_\_\_\_\_, a  
Surety Corporation organized under the laws of the state of \_\_\_\_\_ and authorized to transact a general surety business in the State of California as  
Surety are held and firmly bound to the California Prison Health Care Receivership Corporation in the penal sum of \_\_\_\_\_  
\_\_\_\_\_ and No/100 Dollars (\$) \_\_\_\_\_ for which payments we bound  
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 above bounded Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform, the covenants, conditions, and agreements in the foregoing contract and any alteration thereof made as therein provided, on his or their part to be kept and performed, at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless, the California Prison Health Care Receivership Corporation, its officers and agents as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Contractor

Address of Contractor: \_\_\_\_\_ [Seal]  
\_\_\_\_\_

Name of Surety: \_\_\_\_\_

Address of Surety: \_\_\_\_\_ [Seal]

By: \_\_\_\_\_  
Attorney In Fact

State of California  
Std. 807 (Rev. 9/93)

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**PAYMENT BOND**

TO ACCOMPANY CONSTRUCTION CONTRACT

BOND NO. \_\_\_\_\_

The premium on this Bond is \_\_\_\_\_  
for the term of Agreement Number \_\_\_\_\_ (PCU \_\_\_\_)

**Know All By These Presents:**

That The California Prison Health Care Receivership Corporation has awarded to \_\_\_\_\_ whose address is \_\_\_\_\_ as Principal, a contract for the work described as follows:

Project Title: **Switchgear Replacement and Generator Repair Project**  
Project Location: **San Quentin, CA 94954**

WHEREAS, The provisions of Civil Code Section 3247 require that the Principal file a bond in connection with said contract and this Bond is executed and tendered in accordance therewith.

NOW THEREFORE, Principal and \_\_\_\_\_, a Surety Corporation organized under the laws of the state of \_\_\_\_\_ and authorized to transact a general surety business in the State of California as Surety are held and firmly bound to the California Prison Health Care Receivership Corporation in the penal sum of \_\_\_\_\_ and No/100 Dollars (\$) \_\_\_\_\_ for which payments we bound ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents

**The Condition Of This Obligation Is Such:**

1. That if said Principal or its subcontractors shall fail to pay any of the persons named in Civil Code Section 3181, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department for the wages of employees of the Principal and subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, that the Surety herein will pay for the same, otherwise this obligation is to be void. In case suit is brought upon this Bond, the Surety will pay a reasonable attorney fee to be fixed by the court.
2. That this Bond shall inure to the benefit of any persons named in Civil Code Section 3181 as to give a right of action to such persons or their assigned in any suit brought upon this Bond.
3. That the aggregate liability of the Surety hereunder, including costs and attorney fees, on all claims whatsoever, shall not exceed the penal sum of the Bond in accordance with the provisions of Section 996.470(a) of the Code of Civil Procedure.
4. That this Bond is executed by the Surety, to comply with the provisions of Chapter 7, Title 15, Part 4 to comply with the provisions of Chapter 7, Title 15, Part 4, Division 3 of the Civil Code and of Chapter 2, Title 14, Part 2 of the Code of Civil Procedure and said Bond shall be subject to all of the terms and provisions thereof.
5. That this Bond may be cancelled by the Surety in accordance with the provisions of Section 996.310 et seq. of the Code of Civil Procedure.
6. That this Bond is to become effective \_\_\_\_\_.

\_\_\_\_\_  
(Name of Surety) (Address of Surety)

I certify (or declare) under penalty of perjury that I have executed the foregoing Bond under an irrevocable power of attorney.

Executed in \_\_\_\_\_, California on \_\_\_\_\_ under the laws of the state of California.  
(City) (Date)

\_\_\_\_\_  
(Signature of Attorney In Fact)

\_\_\_\_\_  
(Printed or Typed Name of Attorney In Fact)

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## **SUPPLEMENTARY CONDITIONS**

### **1. SPECIFICATIONS**

- 1.1 Where portions of these Specifications are written in imperative form, the imperative language is directed to the Design-Builder, unless specifically noted otherwise.
- 1.2 The organization of the Specifications into Divisions and Sections is not intended to control the Design-Builder in the distribution of work among the Design-Builder's own forces or the forces of the various subcontractors unless specifically required in individual specification sections.
- 1.3 Specification Paragraphs:
  - A. Specification paragraphs entitled "Section Includes" are not intended to "scope" the section or imply a trade responsibility, but serve merely as a non exclusive listing of significant items in the section allowing the reader to quickly asses the content of each section.
  - B. Similarly, specification paragraphs entitled "Related Sections" have been edited to generically indicate that all projects parts are interrelated are not intended to coordinate the Design-Builder's work, but merely indicate where certain other significant items which may be related to the work of the section are specified.

### **2. WEATHER DATA**

- 2.1 Data from the Larkspur Weather Station will be used to determine the actual weather conditions at the site during the Contract.
- 2.2 To determine normal amounts of precipitation (inches per month) and normal rate of precipitation (inches per hour) at the Project location, a ten-year average will be calculated using historical data from this weather station.

### **3. LIQUIDATED DAMAGES**

- 3.1 Assessment: CPR and the State agree that the State will suffer economic damage in the event that the Project is not substantially completed by the Contract Time and there is a delay in use due to ongoing rental of emergency generator set. Liquidated Damages will be assessed in the amount of One Thousand dollars (\$1,000.00) per day for failure to achieve Project Completion and use within the Contract Time.

### **4. DESIGN-BUILDER'S WORK AREA**

- 4.1 Coordinate keying of gate lock(s) on temporary construction fencing with Project Manager / CDCR Staff.

- 4.2 Procure the services of a private utility locator firm if necessary to locate existing underground utilities.

## **5. DESIGN-BUILDER'S WORK PHASES**

- 5.1 Design-Builder's Work phases include:
- A. Construction Documents. This phase includes all normal design-related services to fully define and detail the project for construction.
    - a. There shall be one CPR review. The review shall focus on functional and design issues and details of the project.
    - b. Additional CPR reviews may be required if review does not meet the requirements of the Contract.
  - B. Owner, Peer Review Approval. This phase requires approval of the design from the Owner, its Peer review team. The jurisdictional approval process (C.) may be concurrent or sequential at the Design-Builder's option.
    - a. CPR Approval will include processing of formal approvals by the CPR.
    - b. The Peer Review will consist of review of the documents by CPR's professional consultants in each design discipline involved.
  - C. Applicable Jurisdictional Approvals.
    - a. The Applicable Jurisdictional Approvals include the normal review and approval process by those jurisdictions required in the Contract: including the California office of State Fire Marshal and PG&E.
  - D. Construction. This phase includes all normal procedures and construction-related services to complete the Work of the Project.

## **6. ABBREVIATIONS**

- 6.1 Wherever the following abbreviations are used in the Contract Documents, the meaning shall be as indicated:

AAMA	Architectural Aluminum Manufacturers Association
ASSHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 007300**

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AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
AREA	American Railway Engineering Association
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc.
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWG	American Wire Gage
AWPA	American Wood-Preservers' Association
AWS	American Welding Society, Inc.
AWWA	American Water Works Association
CCR	California Code of Regulations
CDCR	California Department of Corrections and Rehabilitation
EIA	Electronic Industries Association
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
MCA	Mechanical Contractors Association of America
NECA	National Electrical Contractors Association
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NIC	Not In Contract
NSF	National Sanitation Foundation
OCIP	Owner Controlled Insurance Program
OFCI	Owner Furnished Contractor Installed
SAE	Society of Automotive Engineers
TCA	Tile Council of America
UBC	Uniform Building Code
UL	Underwriters' Laboratories Inc.
USAED	Department of the Army, Corps of Engineers, Handbook for Concrete and Cement
WCLIB	West Coast Lumber Inspection Bureau
WWPA	Western Wood Products Association

## 7. DEFINITIONS

- 7.1 Wherever the following terms are used in the Contract Documents, the meaning shall be as indicated:

**Acceptance**--The formal written acceptance of the work by CPR Corp. or an authorized representative of CPR Corp.

**Approved, Directed, or Ordered**--Approved, directed, or ordered by CPR Corp. or Program Manager, unless otherwise indicated.

**Caltrans Plans**--The standard plans of the State of California, Department of Transportation (Caltrans).

**Caltrans Specifications**--The Standard Specifications of the State of California, Department of Transportation (Caltrans).

**Construction Equipment**--Equipment used for performance of work but not incorporated into the Project.

**Contract**--The executed CPR Corp./Design-Builder Agreement, together with the other Contract Documents.

**Contract Conditions**--The Agreement for Design-Build Services and the Supplementary Conditions.

**Equipment**--Equipment incorporated or to be incorporated into the project.

**Extra Work**--New or unforeseen work determined by Program Manager as not included in the Contract Documents.

**Furnish**—To supply labor, material or equipment to be incorporated into the Project.

**Install**--Incorporate into the Project materials or equipment.

**Materials**--Materials incorporated or to be incorporated in the Project.

**Milestone**--A designated portion of the work described in the Contract Documents.

**Others**--Any entity not a party to the Agreement, who is not under contract with Design-Builder or its Subcontractors or Sub-subcontractors.

**Product**--Name of type of materials and equipment.

**Provide**--Furnished and installed by Design-Builder.

**Safety Orders**--Title 8, Chapter 4, CCR.

**Shown**--Appearing on drawings, unless otherwise indicated.

**State**--The State of California.

**State Contract Act**--Public Contract Code, commencing at Section 10100.

## **8. REFERENCES**

- 8.1 Wherever the following terms are used in the Contract Documents, they shall mean "Program Manager" as defined in the Agreement: CPR Corp. Representative, CPR Corp. Designated Representative, Client Representative, Construction Manager, Project Manager.
- 8.2 Wherever the following terms are used in the Contract Documents, they shall mean "California Prison Health Care Receivership Corporation": CPR, CPR Corp., Owner.
- 8.3 Wherever the following term is used in the Contract Documents, it shall mean "Design-Builder": Contractor; provided that where the Contract Documents indicate "General Contractor" that shall mean Design-Builder's General Contractor (if any) on the Project.

## **9. SCHEDULE**

- 9.1 In addition to any other requirements of the Contract Documents related to the Schedule, Design-Builder shall:
  - A. Use project planning software that is satisfactory to CPR Corp. and have the means of providing the Program Manager with compact disk (CD ROM) or other electronic versions of the Schedule.
  - B. Ensure the Schedule reflects float time. Float time is the amount of time between the earliest start date and the latest start date or between the earliest finish date and the latest finish date of activities of the Schedule. Float time is not for the exclusive benefit of either Design-Builder or CPR Corp.. Design-Builder shall not use zero free float, zero total float, or mandatory start or finish constraints in the Schedule.
  - C. Provide a time-scaled CPM logic diagram in bar chart format.
  - D. Provide a cost associated with performing each activity. The activity cost shall include all labor, materials, equipment, taxes and markup. The sum of all activity costs shall equal the Contract Sum.
  - E. Identify separate activities for submittal reviews.
  - F. Identify furnished materials and equipment as separate activities for CPR Corp.
  - G. Detail activities to show the plan for completion of the Work within the Contract Time.
  - H. Indicate relationships between activities for CPR Corp.
  - I. Identify separate activities for developing punch list, completion of correcting punch list items, and final clean-up for the work.
  - J. Ensure that no activity on the schedule shall have a duration longer than 10 days, with the exception of fabrication, submittal review activities, procurement and punch list

activities, unless otherwise approved by the Program Manager. Activity durations shall be the total number of days required to perform that activity including consideration of weather impact on completion of that activity.

9.2 Program Manager's Review

- A. Program Manager will review the Schedule for conformance with the requirements of the Contract. Within five (5) days after receipt, Program Manager will accept the Schedule or will return it with comments.
- B. If the Schedule is returned with comments, Design-Builder shall revise the Schedule to incorporate the comments and resubmit the revised Schedule for approval within seven (7) days after receiving Program Manager's comments.

9.3 Short Interval Schedule

- A. Program Manager may require the use of Short Interval Scheduling to be submitted as directed by the Program Manager.
- B. A weekly meeting will be scheduled at the Project Site by the Program Manager to review and discuss the Short Interval Schedule, if required.

9.4 Cost Breakdown

- A. If required by CPR Corp. or Program Manager, Design-Builder shall submit a breakdown for approval in a form specified by Program Manager.
- B. Mobilization may be shown either as individual activities or as an individual activity running the entire project duration.
- C. Except as directed by Program Manager, submittal activities, shop drawing activities, and other similar administrative or engineering activities shall not be cost-loaded.

**10. AS-BUILT DOCUMENTS**

10.1 In addition to any other requirements of the Contract Documents related to as-built documents, Design-Builder shall ensure that updated information shall include:

- A. Any deviations in construction caused by change orders or field instruction including, but not limited to, bulletins and request for information responses.
- B. Dimensional locations from a fixed reference point of buried work.
- C. Sufficient information to locate work concealed in building with ease and accuracy. In some instances this may be by dimension, in others, it may be in relation to the spaces in the building near which it was installed.

- 10.2 The as-built drawings and specifications shall be a true, complete, and accurate record of the Project.

## **11. BRAND OR TRADE NAMES**

- 11.1 Wherever an item is specified by brand, trade name, or specific entity, the item shall be deemed to be followed by the term "or equal" unless the specifications provide that use of the item listed is necessary in the public interest or to match other such items in use or to be used.

## **12. SUBSTITUTIONS**

- 12.1 A substitution is a material, product, thing, or service proposed for use in lieu of that specified in the Contract Documents, including that alleged to be equal.
- 12.2 Modifications and additional costs incurred as a result of substitutions by Design-Builder shall be borne by Design-Builder.
- 12.3 If the Program Manager determines the substitution is not equal to that specified, Design-Builder shall provide the material, product, thing, or service specified.
- 12.4 The burden of proof as to the equality of any material, product, thing, or service shall rest with the Design-Builder. Insufficient supporting documentation shall be grounds for denying the requested substitution.

## **13. CLAIMS**

- 13.1 Certification
- A. Each copy of claim documentation shall include the following certification: "I certify under penalty of perjury, according to the laws of the State of California that this claim is made in good faith, that the supporting documentation is accurate and complete, and that the amount requested accurately reflects the Contract adjustments for which CPR is responsible."
- B. Certification shall be signed by a representative of the Design-Builder who has legal authority to bind the Design-Builder. The title and authority of the person signing shall be specifically set forth in the Certification.
- C. Should Design-Builder be unable to support any part of the claim, and it is determined that such inability is attributable to falsity of such certification or misrepresentation of fact or fraud on the part of Design-Builder, Design-Builder may be liable to CPR Corp. as provided in Government Code Section 12650 et. seq.

13.2 Release of Claims Form

- A. Program Manager shall issue the below "Release of Claims form" to Design-Builder, and Design-Builder shall complete the form and return to Program Manager within thirty (30) days of receipt.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 007300**

**RELEASE OF CLAIMS**

DESIGN-BUILDER: \_\_\_\_\_ DATE: \_\_\_\_\_

PROJECT: **Switchgear Replacement and Generator Repair Project at San Quentin State Prison**

NET FINAL PAYMENT CALCULATED BY CALIFORNIA PRISON HEALTHCARE RECEIVERSHIP CORPORATION (CPR CORP): [Net Final Payment to be furnished by CPR Corp Representative]

**Mail completed and signed Release of Claims form by certified mail, return receipt requested, to:**

[Address to be furnished by CPR Corp Representative]

CAUTION: Failure of Design-Builder to complete, sign, and return this form to the above address within thirty (30) days of Design-Builder's receipt of this form shall constitute Design-Builder's binding acceptance of the final accounting and above Net Final Payment calculated by CPR Corp.

Choose one:

**Approval of CPR Corp's final accounting and calculated Net Final Payment; Release of All Claims**

Design-Builder agrees with CPR Corp's accounting and calculated Net Final Payment for the Contract set forth above and agrees that payment of said Net Final Payment pursuant to said accounting shall constitute payment in full for all labor, services, equipment or materials furnished in performance of the above Contract. Upon receipt by Design-Builder of a check from CPR Corp in the sum of \$ \_\_\_\_\_ payable to \_\_\_\_\_ and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release CPR Corp and the State of California from any and all liability for any and all services, claims, demands for monetary compensation or damages arising out of, or related to the performance of the above Contract that exceed the amount of said Net Final Payment.

**Claim for additional money; Partial Release of Claims**

Design-Builder does not agree with CPR Corp's final accounting and calculated Net Final Payment for the Contract set forth above and makes claim for the additional sum of \$ \_\_\_\_\_ (Additional Sum) above and beyond the amount of said calculated Net Final Payment. Upon receipt by Design-Builder of a check from CPR Corp for the calculated Net Final Payment in the sum of \$ \_\_\_\_\_ payable to \_\_\_\_\_ and when the check has been properly endorsed and has been paid by the bank upon which it is drawn, this document shall become effective to release CPR Corp and the State of California from any and all liability for, any and all services, claims, demands for monetary compensation or damages arising out of, or related to the performance of the above Contract that exceed the sum of (1) the above calculated Net Final Payment plus (2) the above Additional Sum plus (3) interest and/or costs, if any, provided by law.

Design-Builder understands that Stop Notice actions are not included in the calculations herein and are not included in the proposed Net Final Payment.

DATE: \_\_\_\_\_ DESIGN-BUILDER: \_\_\_\_\_  
(Please type or print)

(Signature): \_\_\_\_\_ TITLE: \_\_\_\_\_

END OF DOCUMENT

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## SUMMARY OF WORK

### PART 1 GENERAL

#### 1.1 SUMMARY

##### A. Section Includes

1. Project Description, Design Objectives & Project Characteristics
2. General Requirements
3. Use of Premises
4. Building Codes, Standards and Regulations
5. Construction Site Logistics

##### B. Related Documents and Sections

1. Agreement for Design-Build Services
2. Supplementary Conditions
3. Basic Electrical Requirements

#### 1.2 PROJECT DESCRIPTION

##### A. Project Location and Background: The site is located on California State Prison property at San Quentin, Marin County, California.

1. Project site is on State prison property.
2. Salvage of items for re-use and incorporation into this project will be from within the State prison property.
3. The existing main service switchgear at the San Quentin State Prison is located in the existing Power House Building outside the secured perimeter in the northern portion of the existing San Quentin State Prison. Existing 15KV main service switchgear is 65 year old, which is beyond its reliable life expectancy (approximately 20 years), and it needs to be replaced in order to ensure reliable operation.
4. Existing outdoor pad mounted 15KV generator paralleling switchgear and two emergency backup generators are located next to the existing Power House Building. Existing paralleling switchgear, emergency generators and associated controls were damaged during a fire and are inoperable. Existing paralleling switchgear and generator controls need to be replaced. Existing emergency generators need to be repaired.
5. Alternative to generator repairs: Existing generators were installed in 1988 and they may need to be upgraded in order to meet current emissions control standards. Replacement of the existing generators may be considered as possible alternative to repairing the generators if the cost of repair work will exceed 50% of a new generator cost.

- B. Work Covered by Contract: The Design-Build Entity shall be responsible for the design and construction of a complete Project in conformance with the intent, performance and function described in the Request for Proposal. The work of this contract consists of furnishing all labor, materials, equipment, services, expertise and licenses necessary to design and construct the work described in this section, the Design Criteria, Drawing and Specifications. The work includes but is not limited to:
1. Expansion of the existing Power House Building to meet code required clearances and accommodation for replacement of the existing 15KV main service switchgear with new 15KV NEMA 1 metal-clad switchgear.. The New 15KV switchgear will replace existing switchgear at the same location within the existing Power House Building so that all existing incoming and outgoing feeder cables will be reconnected to the new switchgear breakers.
  2. Replacement of the existing 15KV generator paralleling switchgear. New 15KV NEMA 1 metal-clad paralleling switchgear will replace existing outdoor pad mounted 15KV paralleling switchgear at the approximate same location within the Power House Building expansion footprint. Refer to the paragraphs below for detailed scope of switchgear replacement work.
  3. Two new 15KV NEMA 3R metal-clad main service switchgears located at the top of the Hill for the incoming PG&E services. There are two existing PG&E services: one 12KV overhead line from San Rafael and one 12KV overhead line from Greenbrae. Each new 15KV metal-clad main service switchgear will be outdoor pad mounted and will include provisions for PG&E metering. One feeder section will include breaker for existing feeder serving main switchboard in the Power House Building. Second feeder section will include provisions for future breaker and conduit stub-outs for future feeder. The Project includes all necessary infrastructure and site improvements to make room for the new main service switchgears.
  4. Selective removal of the existing main service switchgear and generator paralleling switchgear to make room for the new switchgears and all necessary infrastructure required for installation of new switchgears to replace existing switchgears.
  5. Repairs of two existing diesel-engine generators, each rated 1,500KW, 12KV, 3-phase, standby. Refer to Section 263214 for more detailed scope and requirements for generator repairs.
  6. Relocation and extension of existing underground electric utilities located at the generator paralleling switchgear. These utilities include underground 12KV emergency distribution feeders to and from paralleling switchgear breakers and generator controls and signal wiring in conduits.
  7. Temporary electrical construction required for temporary electrical service and distribution to all buildings during construction. The scope of temporary electrical construction will include 12KV cables to accommodate all required connections

and rerouting and reconnection of the existing feeders for temporary power service of the entire facility distribution system during construction. Temporary service and distribution must be coordinated with the Facilities Engineering Department. A detailed scope and cut-over schedule of temporary back-feeds shall be submitted to the Facility Engineering Department for review and approval prior to proceeding with the work, but at a minimum the contractor must allow for cut-overs to take place on the weekends from Saturday 3:00PM – Sunday 9:00PM with facility operating on temporary power for no more than 7 calendar days.

In addition, the Design-Build Contractor to provide the following generator's at six (6) different locations on campus:

- Three (3) total 60KW 120/208 volt generators to service PBX (phone/data rooms)
- One (1) total 60KW 120/208 volt generator to service Tower 1 Sewer Life Station
- One (1) total 100KW 120/208 volt generator to service Watch Office
- One (1) total 150KW 480/277 volt generator to service Main Kitchen

The cut-over priority and sequence shall be as follows:

- Feeder 3 – All inmate housing units, Main Kitchen, Upper Yard buildings
- Feeder 4 – 12KV – 2.4KV Transformer, which powers all buildings outside the security wall, including residential housing and sewer lift stations
- Feeder 1 – H-Unit inmate housing unit
- Feeder 5 – Central Health Services Building
- Feeder 2 – Prison Industries

8. The Project also includes relocation of existing items located inside existing Power House Building and rerouting of associated conduits and wiring which may impact construction work under this Project.

C. Design Criteria:

The Design Build Team is challenged to provide innovative and cost effective solutions to complete the design and construction of the building and it's systems that meet the Project goals. The Team shall also provide the functional quality requirements that comply with the Design Criteria and constraints stated in the documents.

1. General Requirements:

- a. This Design Criteria, Drawings and Specification outline the project scope, including building and electrical design guidelines for replacement of existing 15KV main service switchgear, 15KV paralleling switchgear and repairs of the two existing emergency generators, the expansion of the existing Power House

Building to meet current code clearance requirements, selective removal of the existing main service switchgear and paralleling switchgear to make room for the new equipment installation. The project scope also includes temporary electrical service and distribution in order to maintain all buildings, utilities and systems at the San Quentin State Prison functional during construction and cut over

- b. Refer to Performance Criteria, Division 26 Sections, Electrical, for technical descriptions of material and installation requirements for the Project. Provide all labor, materials, and equipment required to complete the work as described in the Design Guidelines and as specified in the Performance Criteria, and as reasonably inferable.
  - c. Provide design and engineering, obtain permits, provide installation, start-up, testing, adjusting and commissioning for a complete and operational electrical systems in compliance with applicable codes and in accordance with the State of California Department of Corrections Facility Management Division Design Guidelines.
  - d. Provide detailed calculations for all systems prior to fabrication or installation of the equipment and systems in order to confirm equipment and systems final sizes, capacity and ratings. Submit construction documents for review by the Authorities Having Jurisdiction (AHJ), including the Office of California State Marshal and obtain ALL approvals prior to proceeding with the installation of the equipment and systems.
  - e. Submit construction documents for electrical service switchgears for review by PG&E and obtain PG&E approvals prior to service equipment fabrication and prior to proceeding with the installation.
  - f. The systems design and engineering must be based on an overall level of quality and maintainability.
2. Project Characteristics
- a. New 15KV Switchgear in the Existing Power House Building:
    - i. Provide new 15KV NEMA 1 metal-clad switchgear inside existing Power House Building.
    - ii. The ratings of the new switchgear breakers and bus ratings shall match ratings of the existing switchgear items that will be replaced.
    - iii. All new overcurrent protective devices shall be draw-out vacuum breakers of the specified ratings.
    - iv. Locations of all cable terminations must be coordinated with the existing cable lug locations in order to ensure proper terminations of existing cables.
    - v. The new switchgear footprint must match existing switchgear footprint.

- vi. The new 15KV switchgear shall include provisions for local and remote monitoring of the main breakers and each feeder breaker status.
- b. New Outdoor 15KV Main Service Switchgears with PG&E Metering:
  - i. Provide two new 15KV NEMA 3R metal-clad main service switchgears.
  - ii. The new switchgear shall be outdoor pad mounted in weather-proof enclosure and shall include provisions for PG&E metering.
  - iii. Concrete pad(s) must extend a minimum of 48 inches, as measured from the outside of the equipment's outer doors.
  - iv. Main service switchgear shall include main service breaker section, PG&E metering section and two feeder sections.
  - v. Main and feeder overcurrent protective devices shall be draw-out vacuum breakers of the specified ratings.
  - vi. Main service switchgear shall include protective relays as required by PG&E.
  - vii. Main service switchgear shall include provisions for PG&E meter remote readings.
  - viii. Main service switchgear shall include provisions for local and remote monitoring of the main breakers and each feeder breaker status.
  - ix. Switchgear shall be provided with surge arresters.
- c. New 15KV Paralleling Switchgear:
  - i. Provide new 15KV NEMA 1 metal-clad generator paralleling switchgear.
  - ii. The new paralleling switchgear shall be located in the expanded portion of the Power House Building utilizing the same location as existing gear.
  - iii. The ratings of the new paralleling switchgear breakers and bus ratings shall match ratings of the existing paralleling switchgear items that will be replaced.
  - iv. All new over current protective devices shall be draw-out vacuum breakers of the specified ratings.
  - v. The new generator paralleling switchgear shall include all controls and monitoring of the existing generators.
  - vi. The new 15KV paralleling switchgear shall include provisions for local and remote monitoring of each breaker status and each emergency generator status.
- d. Existing Generator Repairs:

Provide generator repairs including, but not limited to the following:

Generator #2:

1. Replace space heaters (quantity of 8).
2. Replace vent filters (quantity of 16).
3. Recondition generator #2 circuit breaker.
4. Replace Stationary primary disconnects (quantity of 2).

5. Replace Inter-unit main bus barrier.
6. Replace "A" phase main bus bar and insulator.
7. Replace lower main bus barrier.
8. Replace phase runback bus bars and insulators (quantity of 3).
9. Replace potential transformer cables (quantity of 3).
10. Replace potential transformer isolation barrier and porcelain insulators.
11. Replace potential transformer cable support.
12. Replace potential transformer fuses (quantity of 4).
13. Replace insulating boots (quantity approx. 13).
14. Replace PLC's (quantity of 6).
15. Replace stator temperature relay device, under-voltage relay device, etc.
16. Replace under/over voltage relay
17. Replace trip and close relays (quantity 2)
18. Replace green indicating lights (quantity 2)
19. Replace red indicating light (quantity 1)
20. Replace amber indicating light (quantity 1)
21. Replace generator fail to synch and cool down timers (quantity 2)
22. Replace control relays (quantity 8)
23. Replace terminal blocks (quantity 20)

Both Generator #1 and #2 shall include:

24. Replacement of bearings
25. Full draining and cleaning/repairs to existing day tanks.
26. Replacement of belts, hoses, fluids, etc.

e. Electrical Demolition (Selective Removal of Existing Switchgears):

- i. Make provisions for and provide temporary electrical power service and distribution to serve existing facilities during construction prior to removal of existing equipment.
- ii. Safe-off existing switchgears to be removed and disconnect and remove all existing electrical distribution components, wiring, and devices, in their entirety in remove existing switchgears.
- iii. The existing electrical distribution system components in the existing Power House Building may be used by the Contractor as construction power.
- iv. Coordinate any demolition phasing with the Project Manager, Owner and with the San Quentin Facilities. Secure the Project Manager and San Quentin Facilities approval prior to beginning any demolition.
- v. All materials removed, other than materials to be turned over to the owner, shall become the property of the Contractor, and shall be removed from the site in a timely manner, unless otherwise specifically indicated. Verify with San Quentin Facilities for any items to be returned.

Transport and handling of all materials to be returned to the Owner is by the Owner.

- vi. The Contractor shall coordinate all demolition work with other trades.
  - vii. Maintain service continuity to all existing devices and equipment that is to remain in use or to protect the property, whether noted or not. Field verify with the SQ Facilities and provide temporary service to existing items that are to remain in use.
  - viii. As part of the demolition work, remove all existing unused conduits, cabling, devices, equipment, etc. Salvage value of any unused existing equipment or devices the Owner does not want, becomes the Contractors.
  - ix. Where electrical equipment, conduit, or supporting hardware are removed in areas, patch and finish the surface as required to match existing, unless specifically noted otherwise.
  - x. Where buried conduits extending out of a concrete wall or slab become abandoned, cut and grind the conduit off flush with the edge of the concrete, and plug with non-shrinking waterproof grout fill.
  - xi. Suitably dispose of all hazardous materials. Provide final disposition papers to San Quentin Facilities.
- f. Electrical Service and Distribution System – Normal Power System:
- i. There are two existing PG&E services: one 12KV overhead line from San Rafael and one 12KV overhead line from Greenbrae. These two lines are from separate PG&E loops. Only one is used at any time. The two overhead pole lines come to close proximity from each other at the top of a hill and are approximately 1/4 mile from existing Power House Building. The two 12KV service cables from the overhead lines to the switchgear in the existing Power House Building run underground. Two separate new 15KV main service switchgears, each with PG&E metering, shall be located at the top of the hill for the incoming PG&E services. Existing service drops from overhead lines will be intercepted and re-routed through the new 15KV service switchgears.
  - ii. Service arrangement with dual source power from PG&E provides for each service as preferred source and the other service is emergency source. Both normal power sources are always energized.
  - iii. Main breakers in the new switchgear located in the existing Power House Building shall include interlocks so that only one breaker can be closed at any time under any conditions.
  - iv. Main breaker controls shall include PLC's programmed to open a preferred source breaker upon power failure on the respective source and then close other breaker on emergency source.

- v. Additional interlocks shall be provided between each of the main breakers and tie breaker connecting normal power switchgear to the paralleling switchgear so that tie breaker is always open when either one of the main breakers is closed. The interlocks shall also maintain main breakers in open position when the tie breaker is closed.
  - vi. PLC controls in the normal power switchgear shall be programmed to operate in conjunction with the PLC in the paralleling switchgear to initiate sequence of transfer to emergency backup generators upon failure of both normal power sources.
  - vii. The PLC's shall be programmed to initiate transfer back to normal power source when normal power is restored.
  - viii. Perform short circuit analysis and complete breaker protective device coordination study for main service switchgears and downstream switchgears, utilizing the available short circuit at the 15KV main service switchgear, and incorporating all motors, and other sources inside the buildings. In all cases, provide service and distribution components which are braced to withstand the maximum available short circuit. Submit the study to the owner for review.
  - ix. Main service protective devices shall be provided per PG&E requirements, and protective device settings must be coordinated with PG&E. Set devices to the proper setting before substantial completion.
- g. Emergency Power Service and Distribution - Emergency Power System:
- i. Tie-in breakers will be provided in both, the indoor 15KV switchgear and in the 15KV paralleling switchgear, for automatic transfer of electrical system loads to the standby emergency power source upon utility power failure. Provide interlocks on main breakers and breaker interlocks.
  - ii. Provide controls to permit automatic transfer of the 15KV switchgear located in the existing Power House Building from utility power source to emergency backup generators upon utility power failure on the both of the 12KV normal power services. Provide tie breakers in both, the 15KV switchgear and in the 15KV paralleling switchgear, for automatic transfer of electrical system loads to the backup standby emergency power source upon utility power failure on both, preferred and emergency source from PG&E. Provide interlocks on main breakers and tie breaker interlocks with main breakers as described under Normal Power System above.
- h. Expansion of the Existing Power House Building:
- i. General: The existing Power House building shall be a non-inmate accessible area. It is the policy of the CDCR with regard to design and engineering criteria that security and durability are paramount.

The following paragraphs establish the minimum acceptable level of quality for materials and finishes. References may be made to materials of certain types.

Such references are intended to establish a level of quality and material attributes, including longevity, durability and wear resistance.

ii. Exterior Enclosure:

- a. Exterior wall materials shall be of high quality, durable construction, requiring minimal maintenance and a lifespan of no less than fifty years. Examples include concrete and concrete masonry.
- b. Exterior louvers and frames shall be steel angles cast into the concrete wall or built into the exterior masonry system with steel louvers.
- c. Exterior metal shall be galvanized steel painted with a two-part urethane enamel coating system. All exposed fasteners shall be tamper proof. They shall be corrosion-resistant, hardened, high-strength, plated or stainless steel metal fasteners of a size and type best suited for the intended application.
- d. Roofing: Roofing shall be multi-ply asphalt sheet to match existing and provide a 30 year warranty should the entire roof material be required to be replaced.
- e. Exterior shall be painted. Prep., repair and repaint existing sliding and man doors at the south and north sides of the existing building.

iii. Interior:

- a. Sealed concrete floors shall typically be used in all mechanical, electrical and service rooms. A base is not required in these areas.
- b. All wall, structure and interior finishes shall be painted with epoxy paint.
- c. Ceiling assembly shall be exposed structure, no finished ceiling is required.
- d. Suspended pendant lighting shall be provided within the building expansion. Lighting shall be sufficient to support repair and maintenance of equipment and of type and quality of existing.

E. Owner's Responsibilities: On Contractor's receipt of products, inspect products jointly.

E. Contractor's Responsibilities: Install products in accordance with the Contract Documents, manufacturer's instructions and applicable code requirements.

### 1.3 USE OF PREMISES

A. Access to the site will be provided to Contractor's through the main facility gate unless otherwise approved by the Project Manager.

- B. Security clearance is required for each individual entering the project site.
- C. Confine operations within the limits of designated construction areas unless otherwise approved.
- D. Confine material storage, shop areas, equipment yards, and employee parking within designated areas unless otherwise directed by the Project Manager.
- E. Laydown Area
  - 1. Request from Project Manager the assignment of a laydown area.
    - a. Only the area actually required by the Contractor's will be assigned for the Contractor's use.
    - b. Locate Contractor's site offices within Contractor's laydown area.
  - 2. The area assigned to the Contractor may be improved by the Contractor for its use.
    - a. Electric power is available free of charge. Contractor is responsible for running power lines from source to Contractor's site office trailer and work areas.
    - b. Do not contaminate the soil during occupancy of the area.
    - c. Return area to its original condition upon termination of occupancy.
- F. Temporary Facilities
  - 1. Contractor shall provide and maintain proper sanitary toilet facilities, including hand washing facilities, for use of all workers employed on the Project in accordance with State and Local health departments. Use of Institutional toilet facilities will not be allowed.
  - 2. Contractor shall provide and maintain temporary security fencing and/or safety barriers surrounding the project site and laydown areas and all open work areas in accordance with California Industrial Safety and to the satisfaction of CDCR and the Project Manager to secure and protect the area and work.
  - 3. Contractor shall provide and maintain adequate protection measures to ensure that damage will not occur to institution/prison property during the course of construction
  - 4. Contractor shall provide and maintain adequate fire extinguishers and safety kits to be used in the event of an emergency.

#### 1.4 BUILDING CODES, STANDARDS AND REGULATIONS

The project and systems shall be designed and constructed in accordance with all applicable Codes, Standards, Regulations, and Authorities Having Jurisdiction as well as

California Department of Corrections and Rehabilitation Design Criteria Guidelines. The latest edition of the document shall apply, unless otherwise noted. Perform work specified in accordance with the codes and standards listed below. Where these specifications are more stringent, they shall take precedence. In case of conflict, obtain a decision from the Project Manager.

1. NFPA-70, National Electrical Code – 2008
2. California Electrical Code - 2010
3. NFPA-72, National Fire Alarm Code - 2007
4. NFPA-101, Life Safety Code - 2006
5. NFPA-780, Lightning Protection Code - 2004
6. ANSI Electrical Systems
7. ANSI Handicapped Code - A117.1 - 2003
8. International Building Code - 2008 with State of California Amendments (2010 CBC)
9. California Code of Regulations, Title 24
10. State of California Code Regulations, Titles 8, 17, 19, and 22, Division 7, 24 - Part 3
11. California Occupational Safety and Health Act of OSHA
12. Americans with Disabilities Act - 1994
13. All rules and regulations of the serving utilities
14. Underwriters Laboratory (UL)
15. National Electrical Manufacturer Association (NEMA)
16. American National Standard Institute (ANSI)
17. International Fire Code - 2006
18. California Building Standard Administrative Code (Part 1, Title 24, CCR)

#### 1.5 CONSTRUCTION SITE LOGISTICS

##### A. Continuity of Service and Connections to Existing Work

1. Outages to occupied areas are to be as stated in paragraph 1.2.B.7 of this specification section. Requests for outages shall state the specific dates and hours and the maximum durations, with the outages kept to these specified times. When power interruptions will last longer than 5 minutes and cover more than 10% of the building, or affect public areas, they shall be performed on the weekend as stated above.

2. Contractor shall coordinate with the Owner so that work can be scheduled not to interrupt operations, normal activities, building access, etc. Coordinate work with other crafts for proper scheduling.
3. No circuits shall be turned off without prior approval from Owner. Coordinate with the operations, normal activities, building access, etc. Coordinate work with other crafts for proper scheduling.
4. This Contractor shall be liable for any damages resulting from unscheduled outages or for those not confined to the pre-approved times. Include all costs for overtime labor as necessary to maintain electrical services in the initial bid proposal. Temporary wiring and facilities, if used, shall be removed and the site left clean before final acceptance. Requests for outages must be submitted at least (5) days prior to intended shutdown time.
5. Include in bid cost of temporary power to all buildings during construction and any other equipment designated by Owner, during time when electrical service power has been interrupted.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

## PROJECT MEETINGS

### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Drawings and general provisions of Contract, including Agreement for Design-Build Services and other specification sections, apply to work of this section.
- B. The Pre-Construction Conference, Weekly Progress Meetings, and Coordination Meetings are described herein.

#### 1.2 PRE-CONSTRUCTION CONFERENCE

- A. A pre-construction conference will be held at the work site, at a location, time, and date set by the Project Manager.
- B. Contractor and major subcontractors shall attend the conference.
- C. The meeting will be chaired, and minutes taken, by the Project Manager.
- D. The subjects to be reviewed include, but are not limited to:
  - 1. Construction Coordination
  - 2. Delivery Routes
  - 3. Correspondence
  - 4. Submittals
  - 5. Schedule
  - 6. Contractor's Representative
  - 7. Testing and Inspection
  - 8. Changes and Clarifications
  - 9. Site Maintenance: storage areas, spill prevention, clean-up procedures, training procedures
  - 10. As-Built Documents
  - 11. Prevailing Wage Requirements
  - 12. Environmental Protection, Plan and Procedures
  - 13. Temporary Facilities Construction
  - 14. Progress Payments
  - 15. Site Regulations and Security
  - 16. Operation and Maintenance Data

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 013119**

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1.3 WEEKLY PROGRESS MEETINGS

- A. Once a week during the Contract period, Contractor shall meet at the Work Site with the CPR Representative and the Project Manager.
- B. Day, time, and location of the meeting will be determined during the Pre-construction Conference. Efforts shall be made to limit the meeting to sixty minutes; topics that are anticipated to require in-depth discussion shall be deferred to special Coordination Meetings.
- C. The Project Manager will serve as chair and take minutes of meetings.
- D. The subjects to be reviewed include, but are not limited to:
  - 1. Requests for Information (RFIs)
  - 2. Submittals
  - 3. Safety and Security
  - 4. Testing and Inspections / Quality Control
  - 5. Proposed/Potential Change orders (PCOs)
  - 6. Change Orders
  - 7. Schedule
  - 8. Progress Payments
- E. Should the installation of a major building system require a separate meeting, Contractor shall not utilize the Weekly Progress Meeting as a means of coordinating the work.

1.4 COORDINATION MEETINGS

- A. The Contractor shall convene coordination meetings prior to the installation of major building systems, such as mechanical, fire alarm, and roofing.
- B. The Contractor shall invite the Project Manager and CDCR Representative to attend Coordination Meetings as appropriate for the successful installation of building systems.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

## **SUBMITTALS**

### **PART 1 GENERAL**

#### 1.1 SUMMARY

##### A. Section Includes

1. Submittal Procedures.
2. Manufacturer's Instructions
3. Contractor Provided Design – Build Submittals

##### B. Related Sections and Documents

1. Agreement for Design-Build Services
2. Supplementary Conditions

#### 1.2 SUBMITTAL PROCEDURES

- A. Provide submittals only as required in individual specification section and otherwise directed by Project Manager.
- B. Neither the review or lack of review of any submittal shall waive any of the requirements of the Contract, or relieve the Contractor of any obligations thereof.
- C. Make submittals promptly and in such sequence as to cause no delay in the work or in the work of any other contractor.
- D. Number submittals sequentially, using alphabetic suffixes on re-submittals.
- E. Each submittal shall contain data representing only one specification section.
- F. Unless otherwise specified, submit a total of 4 copies of each submittal. 2 copies will be retained and two copies will be returned after review.
- G. Submittals shall contain:
  1. Transmittal cover sheet.
  2. Project title and number.
  3. Names of product manufacturer.
  4. Identification of the product, with the specification Section number.
  5. Dimensions and values in units to match those indicated.
  6. Field dimensions, clearly identified as such.
  7. Relation to adjacent or critical features of the work or materials.
  8. Applicable standards, such as ASTM or Federal Specification numbers.
  9. An 8 by 3 inch space for review stamps in the lower right hand corner of each page.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 013323**

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- 10. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the work and of the Contract.
  
  - H. Project Manager will review and return submittals in a timely manner
    - 1. Review status will be marked "No Exception Taken", "Make Corrections Noted", "Revise and Resubmit", "Rejected", or "Not Reviewed".
    - 2. Revise and resubmit within 5 days of return submittals marked "Revise and Resubmit" or "Rejected".
  
  - I. Distribute copies of the reviewed submittals to concerned parties.
  
  - J. Do not begin work covered by a submittal designated "Revise and Resubmit" or "Rejected". Contractor may begin work covered by other submittals. Work shall proceed in accordance with review notes and comments.
- 1.3 MANUFACTURER'S INSTRUCTIONS
- A. Where any item of work is required by the Contract to be delivered, stored, assembled, installed, started-up, adjusted, or finished in accordance with the Manufacturer's instructions, submit manufacturer's printed instructions.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

## **CORRECTIONAL PROJECT SECURITY PROCEDURES**

### **PART 1 GENERAL**

#### 1.1 SUMMARY

- A. The following special requirements for Department of Corrections Institutions are applicable to San Quentin State Prison; hereinafter referred to as Institution. Security regulations include, but are not limited to, the given provisions in this Section.
- B. Reference: Contractor, subcontractors, and their on-site employees will be required to read, sign, and date the "Digest of Laws Related to Association with Prison Inmates".
- C. Related Documents and Sections
  - 1. Agreement for Design-Build Services
  - 2. Supplementary Conditions
  - 3. Section 011113 - Summary of Work

#### 1.2 DEFINITIONS

- A. Construction Personnel: Any individual person, employed directly or indirectly by the Contractor to perform work or provide services in connection with the Work of this Contract.
- B. Employee: For purposes of this Section, an employee is any individual person, employed directly or indirectly by the Contractor to perform work or provide services in connection with the Work of this Contract.

#### 1.3 APPLICATION

- A. Construction will occur on State prison property, while inmates are housed within the secure perimeter of the prison property.
- B. The requirements of this section apply to all construction personnel who enter onto State prison property. All construction personnel shall be aware of their legal limitations and responsibilities as on-site construction workers.
- C. The requirements of this section shall be in effect for the duration of this Contract

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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1.4 USE OF PROPERTY

- A. Contractor shall confine work operations to the areas of work indicated on the Drawings. Material storage, shop facilities, and the like, shall be located as near to the working areas as custodial regulations permit. However, entering and exiting of Institution grounds from and to lay-down, material storage, fabrication, and tool storage areas will be required. Contractor shall make allowances in bid for delays caused by routine gate inspections and checking in and out. Contractor shall allow up to 1 hour each way for access arrival/departure of employees and material to and from Institution grounds.
- B. A staging area will be designated for the Contractor's use for material storage, tool storage or shop facility area.

The staging area for the Contractor's use will be located inside the state prison. In this area the Contractor can store tools, equipment, construction toilets, and dumpsters. The staging area is to be enclosed by a ten-foot security fence with a locking gate. Fence posts shall have in-ground concrete foundations. The minimum offset distance for fencing shall require approval of the institution through the State Construction Supervisor. Specific details will be coordinated with the Contractor after the award of Contract.

- C. In the staging area all trailers, storage areas, construction toilets, dumpsters, and the like must be lockable. Stored materials in staging area may be subject to inspection and inventory.
- D. Construction vehicles entering onto or leasing state prison property are subject to search. Construction vehicle will not be permitted within the secure perimeter of the prison without a correctional officer.
- E. Materials, supplies, tools, and persons shall be subject to inspection by Custodial Officers at gates before entering or leaving Institution grounds.
- F. Contractor's field office trailer is to be kept locked at all times with approved locking device.
- G. Access and Material Delivery: 5 copies of Plan showing paths of travel, affected corridors and yards, for the State's review and approvals shall be submitted. Delivery vehicles will be permitted access to the contractor's trailer/staging area and work areas. Only the driver will be permitted in or on the vehicle.
- H. It is the responsibility of the Contractor to verify that equipment used is appropriate to adequately perform the work and is appropriate as far as size and its impact on the site. Contractor shall be responsible for damage to the site caused by contractor's equipment, including damage to landscaping, plantings, irrigation systems, sidewalks, driveways, roadways, utility systems, structures, surfaces of structures, appurtenances of structures, and equipment. Any such features damaged shall be repaired or replaced to a condition equal to that existing before starting work of this Contract.

1.5 CONTRACTOR WORKERS

- A. Contractor's personnel must receive CCI clearance prior to entering the Institution. The CCI clearance will include fingerprinting, photography and orientation by the In-Service Training Office at the Institution. Approximately 3 hours should be included with the

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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- Contractor's bid for security orientation for each worker. This will be required of each new worker only once.
- B. Workers will be required to show photo identification and their Institution-issued identification, if issued. They will be allowed to park their private vehicles outside the security perimeter, as directed by the Correctional Officer.
  - C. Personal vehicles shall not enter the secure perimeter, shall be parked only in areas designated by the Project Manager, and shall be driven only on roadways servicing designated parking areas.
  - D. Construction personnel will not be permitted into any occupied area without being escorted at all times by a Correctional employee.
  - E. Workers will be in the same vicinity of inmates at times. Inmates will not be allowed within the area secured by the Contractor's temporary construction barricades.
  - F. Contractor shall ensure that clear access for emergency vehicles is maintained at all times.
  - G. Contractor's personnel will be required to work in clothing different from that worn by the inmates. No blue clothing of any shade will be allowed. No denim will be allowed. Camouflaged clothing, red or orange jumpsuits, and blue chambray shirts will not be allowed.
  - H. Within 10 calendar days after award of Contract, Contractor shall provide a list of all personnel who will be working on the project site. Contractor shall provide 48 hours notice of all changes or additions in personnel as such changes or additions occur.
    - 1. Listing shall include the following information.
      - a. Full name, including middle name.
      - b. Name of issuing state and number of drivers license or non-drivers identification card. Include date of expiration.
      - c. Social Security number.
      - d. Date of birth.
      - e. Dates for which clearance is requested.
    - 2. Contractor and all their subcontractors shall ensure and certify that their employees are legally documented resident aliens or US citizens in conformance with all applicable State and federal laws.
    - 3. Prior arrest/conviction record may or may not affect the eligibility of a worker. The Captain of Operations of the Institution will decide in each individual case. The Institution stresses that Contractor's personnel should be as truthful and divulging as possible to assist in these decisions. Information about work arrest/conviction records will be kept confidential.
    - 4. Name of Contractor's pre-approved personnel working on Project site, separated according to trade classification, shall be submitted to Institution at least 24 hours before commencing work of that trade.
    - 5. Workers may enter Project site after security clearance has been obtained with temporary gate passes issued each day, prior to obtaining CCI identification.
    - 6. Allow 7 working days for security clearance, prior to new employee being permitted on Project site. Workers are subject to eviction from Institution at any time when a question of security clearance arises. Eviction for this reason is not a statement as to the character of the employee being evicted.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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7. Any Contractor's personnel who are terminated from employment at the job site shall immediately leave Institution grounds. The Contractor's supervisor shall immediately notify Custodial Officers of such termination.

**1.6 WORK HOURS**

- A. Normal work hours are from 7:30 a.m. to 4:00 p.m. However, the State shall reserve the right to adjust start/quit times in the best interest of the Project.
- B. Contractor shall make special arrangements for overtime work with the Associate Warden of Custody through the State Inspector for the Project. No overtime will be allowed unless prior approval has been obtained.
- C. Contractor shall pay for necessary Institution custodial services for time before and after normal working hours and time worked on Saturday, Sunday or State holiday. Arrangements for extra custodial service shall be made 48 hours in advance. A minimum of one Custodial staff is required. Staffing requirements will be determined by the Institution. Charges to Contractor for extra custodial services will be \$60.00 per hour for each staff member.

**1.7 SECURITY**

- A. If Institution officials deem it necessary to declare a "State of Emergency", work may be curtailed or terminated for the duration of said emergency. Contractor shall be aware that events of this nature are considered potentially every day occurrences on project sites of this nature. Requests for additional compensation for occurrences of the aforementioned type will not be considered.
- B. All persons shall remove ignition keys from their vehicles when they are out of the vehicle. Contractor's equipment shall be rendered temporarily inoperative when not in use; by locking or other means.
- C. In order to maintain Institution security, inspection searches on the project site may become necessary; therefore, keys shall be furnished to provide access to all locked areas or places on the project site and for periodic fire prevention inspection. The keys will be kept in the Security Administration Building. Two CHITS will be issued to each project supervisor. The Institution will not be responsible for Contractor's loss due to fire.
- D. Personal search is not normally required. However, the Institution reserves the right to search workers when there is probable cause, as determined by the Institution.
- E. Lunch boxes, tool boxes and vehicles are inspected on a regular basis, as determined by the Custodial staff.
- F. Contractor is responsible for missing tools. In the event of missing tools, the expense of search by Custodial staff shall be paid for by Contractor.
- G. Debris loading into trucks or dumpsters shall be observed by a Custodial Officer. In the event an officer is not notified and present to view a loading, Contractor shall remove the debris from the truck or dumpster to the satisfaction of the officer in order to make an inspection. Costs for such actions shall be paid for by the Contractor.
- H. Restaurant facilities are not available for Contractor's personnel. Workers will have to carry lunch boxes and shall eat in designated areas only. Aluminum cans are permitted. Glass bottles and metal utensils are not permitted.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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- I. Contractor will be required to provide the Institution, or its representative, with a master inventory list of tools brought into the Institution. These tools, and the like, shall be stored in locked boxes outside Institution gates.
- J. Under the administration of the Correctional Officer Escorts, the master inventory list will be checked once at beginning of each work period, once during work period, and once again at end of work period. Master inventory list will be held by Correctional Officer Escorts. Correctional Officer Escorts shall report lost or broken tools to their Supervisor.
- K. Contractor shall include in the bid all costs necessary to accommodate Correctional Officer Escorts in the inventories (tool checks), described above, to the satisfaction of the Correctional Officer.
- L. Tools and equipment not necessary for completion of Project should be removed from vehicles and tool boxes prior to arriving at Institution. Removal of unnecessary tools and equipment will facilitate required searches.
- M. Tools and parts (including nails, bolts, screws etc.), both Contractor and Contractor's workers owned, shall be removed from the site each day, or be stored at the close of working hours and located in a place of security provided by Contractor, as accepted and directed by the Custodial Officer. Roofing material and equipment should be secured on the roof, before leaving work site. Tools and parts, if not being utilized, shall be kept in locked boxes at all times.
- N. Restrictions may be placed on quantity and type of tools and materials taken by construction workers into occupied areas. Workers may be required to account for tools and materials taken into occupied areas every time workers with escorts depart for breaks, meals, or end of workday.
- O. Broken tools shall be reported to the Correctional Officer Escort. This loss shall also be reported on "Loss of Tools Report" form, to be completed by Contractor Design. All parts and pieces of the broken tool shall be shown to the Correctional Officer Escort. Contractor shall also ensure that metals or other items deemed dangerous in the opinion of the Institution are stored away and protected from inmate pilferage.
- P. Mismanagement of tools, equipment or materials will result in Contractor's personnel being removed and barred from Institution property. The Institution reserves the right to determine any mismanagement concerned.
- Q. The following tools are considered "escape priority tools" and shall be color coded and/or numbered by Contractor, as directed by the Institution.
  - 1. Contractor shall notify Institution personnel prior to use of the following items:
    - a. Hacksaws.
    - b. Bolt cutters.
    - c. Oxygen-acetylene equipment.
    - d. Hydraulic jacks.
    - e. Blocks and tackles.
    - f. Ropes.
    - g. Ladders over 6 feet.
    - h. Portable scaffolds.
    - i. Files.
    - j. Steel pipe cutters.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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- k. Pneumatic jackhammers with equipment.
  - l. Welding torches and cutting tips.
  - m. Impact hammers and bits.
  - n. Powder activated tools.
  - o. Any other item deemed appropriate by CDCR/Institution.
2. Items including, but not limited to the following, are considered dangerous tools and stock:
- a. Knives.
  - b. Hatchets.
  - c. Axes.
  - d. Chisels.
  - e. Hammers.
  - f. Screwdrivers.
  - g. Prick punches.
  - h. Scribes.
  - i. Sharp pointed tools.
  - j. Electric grinders and/or belt grinders.
  - k. Shears and scissors.
  - l. Grinders, stationary or portable.
  - m. Shears - metal cutting (capable of shearing 1/16" metal stock).
  - n. Plexiglass, plastic or fiberglass.
  - o. Any other tools as designated by the CDCR/Institution.
3. The following items shall not be brought onto state prison property:
- a. Weapons, ammunition.
  - b. Hunting bows arrows.
  - c. Personal knives of any kind, regardless of size.
  - d. Explosives.
  - e. Volatile substances, except those to be used in conjunction with operating equipment fuel as air compression on generators.
  - f. Tear gas.
  - g. Flares.
  - h. Alcohol or other intoxicants.
  - i. Black powder.
  - j. Animals (pets).
  - k. Cameras and video recorders not required to fulfill requirements of the contract. If these items are required, prior approval shall be obtained for the CDCR Representative.
  - l. Camouflage clothing.
- R. Control of Hacksaw, Do-All Saw and Bandsaw Blades: Contractor shall notify the Institution prior to bringing hacksaws, do-all saws and/or bandsaw blades onto Institution grounds. Controlled items will be issued and stored in accordance with Institution policy. Lost blades or missing parts of broken blades shall be reported to the Correctional Officer

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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- Escort. Under no circumstances shall blades be brought into the Institution other than through outlined procedure.
- S. Use and Control of Ladders: Ladders shall be used and transported under direct and constant supervision of Institution personnel. Ladders 6 feet in height and over, and which are not in use, shall be under chain and padlock furnished by Contractor. They shall be accounted for on a daily basis. At the end of work day, ladders shall be stored in an area designated by the Institution.
  - T. Use and Control of Scaffolding: Contractor shall notify the Correctional Officer Escort prior to scaffolding being used in order that clearances may be obtained. When it is necessary to leave scaffolding at the project site overnight or longer, the Custodial Coordinator will be notified so that he/she may evaluate security precautions that must be taken in the area that the scaffolding is to be left. Scaffolding shall be placed in an area which provides adequate security measures, as determined by the Institution. Scaffold shall be securely chained and padlocked in such a manner to prevent it from being moved. Chain and padlocking devices shall encompass more than single rungs or struts of scaffolding and thereby provide adequate protection from becoming freed from such security. When not in use on project site, scaffolding shall be broken down and stored in an area designated by Custodial Coordinator. Chains shall be furnished by Contractor. Locks shall be furnished by Correctional Officer.
  - U. Control/Storage of Volatile Materials: Custodial control shall be maintained over volatile, quick and evaporating liquids and alcohol based thinners.
  - V. Locks on equipment, tool boxes, ladders and scaffolding shall be installed by Contractor to the satisfaction of the Custodial staff.
  - W. Gang boxes for storage of tools shall be specially constructed to allow for "shadow boards" or other means to quickly identify contents by Custodial staff.

**1.8 HOSTAGES**

- A. Attention is directed to Title 15, Department of Corrections, Article 3304, hostages, which states: "Employees must not permit inmates or others to use hostages to escape from custody or otherwise interfere with orderly institutional operations. Hostages will not be recognized for bargaining purposes. All inmates, visitors and staff will be informed of this regulation."
- B. Responsible subcontractor personnel shall attend security briefing at Preconstruction Meeting.

**1.9 REMOVAL OF DEBRIS**

- A. Debris, waste materials, and other trash resulting from work of this project, shall be disposed of daily. Disposal shall be off of State property and Contractor shall pay fees required for use of public dumps. Burning on State property is prohibited. Containers/dumpsters in which debris is placed must be lockable and will be subject to clearance by Correctional Officers as stated in Article 1.05 of this Section. Dumpsters must be placed outside sally-port gate in a location approved by the institution.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 013513**

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1.10 WORKING INMATES

- A. Guarded inmates may be performing work at the Institution at the same time as Contractor. Under such conditions, Contractor shall cooperate with the State and conform to certain security requirements, as may be directed by the State.

1.11 CORRECTIONAL OFFICERS FOR SECURITY

- A. During the time of this Contract, the Institution will maintain Correctional Officers at the Project site for protection of persons and properties, at no charge to Contractor, while work is actually being performed during regular work hours. Should Contractor have no work force present on any particular working day, Contractor will be required to pay Institution guarding costs for each missed work day; unless Contractor notifies the Institution, through the State Inspector, at least 24 hours in advance of each particular working day on which Contractor expects no work force to be present.
- B. The Contractor at all times shall make a good faith effort to schedule, coordinate, and locate work with the consideration that there are limited Correctional Officers available to oversee security for the project. If, in the course of the project, the Contractor is in need of additional guarding resources for the Contractor's benefit beyond the custodial service provided, the Contractor shall be responsible to compensate the State for this additional expense.

1.12 CAMERAS, CELL PHONES, LABTOPS AND AUDIO OR VISUAL RECORDING DEVICES

- A. Comply with requirements and restrictions set forth in Title 15, Department of Corrections, Article 3261.7, Cameras, Cell Phones, Laptops and other Audio or Visual Recording Devices. Contractor shall obtain written approval from Institution prior to use of such devices within Institution grounds.

1.13 UTILITY OUTAGES AND INTERRUPTIONS

- A. Utilities shall not be interrupted except with the approval of the Institution, through the State Construction Supervisor. Forty-eight (48) hour written notice is required prior to all interruptions of less than eight (8) hours duration. Provide three (3) calendar days written notice for interruptions eight (8) hours or longer. Interruptions shall be scheduled so as to minimize duration and disruption to existing operations. Approval requests shall be in the format depicted by the CPR Representative.
- B. Contractor shall consult with Project Manager and CDCR Representative prior to excavating any manholes.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

**END OF SECTION**

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## ENVIRONMENTAL PROTECTION PROCEDURES

### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section Includes
1. Asbestos and Lead-Based Paint Summary/Procedures.
  2. Storm water pollution prevention measures on site.
- B. Related Sections:
1. Section 015000 – Construction Facilities

#### 1.2 ACBM SUMMARY

The CDCR does not have a detailed survey of suspect ACBM materials. It is expected that the following list of materials may be present and are assumed to be asbestos-containing.

- Roofing Mastic 25 square feet
- Approximately 2,800 square feet of Transite Conduit piping is present between the two existing PG&E service drops to Power House. The Conduit piping was not sampled but is assumed to be asbestos containing.

#### 1.3 LBP SUMMARY

The CDCR does not have a detailed survey of surfaces for the presence of lead-based paint (LBP). All paint shall be assumed to be LBP and addressed as a potential lead hazard. In addition it is assumed that the Roofing Membrane on the existing Power House Building is lead based.

- A. Potential Lead Hazard
1. The disturbance or dislocation of lead-based paint may cause lead dust to be released into the building's atmosphere, thereby creating a potential health hazard to workers and building occupants. apprise all workers, supervisory personnel, and subcontractors who will be at the job site of the seriousness of the hazard and of proper work procedures which must be followed in accordance with Cal/OSHA Title 8 CCR 1532.1 and other applicable regulations.
  2. Where in the performance of the work, workers, supervisory personnel, and subcontractors may encounter, disturb or otherwise function in the immediate vicinity of any identified lead-based paint or debris, take appropriate continuous measures as necessary to protect all building occupants from the potential hazard

of exposure to airborne lead dust. Such measures shall include compliance with regulations of applicable federal, state and local agencies.

3. Prohibited LBP interactions:

- a. Open flame burning;
- b. Chemical stripping with methylene chloride based paint strippers;
- c. Uncontained abrasive blasting;
- d. Uncontained power washing;
- e. Dry sanding or scraping;
- f. Power sanding without High Efficiency Particulate Air (HEPA) attachment.
- g. Sanding of wood after chemical stripping.

B. Repair of LBP Coated Components

1. Mist damaged area with wet detergent wash solution. Using a utility knife, score paint around area to be removed. Include entire area of patch.
2. Remove paint from area to be patched with scraper or utility knife. Mist area during scraping operations.
3. Do not allow paint chips, debris or dust to accumulate. Pick up with wet paper towel and place in disposal bag.
4. Carefully remove loose paint at edges. remove damaged sections of substrate place in disposal bag.

C. Component Refinishing Procedures

1. Prior to painting LBP coated components remaining, use a wet detergent wash with a high phosphate content (at least 5%) trisodium phosphate (TSP) to clean the surfaces. Follow dilution ratio recommended by the manufacturer's instructions.
2. Surfaces may not be sanded prior to painting unless this activity is performed by a certified LBP abatement contractor with trained workers utilizing correct containment and local exhaust techniques.
3. Surfaces may be painted by sprayer, brush, or roller following the manufacturers instructions.

1.4 POTENTIAL POLLUTANTS

- A. Identify potential pollutants that are used in the Work.

1.5 SUBMITTALS

- A. Submit under provisions of Section 013323.
- B. Concrete Waste Management Data: Indicate concrete washout areas.
- C. Identify potential pollutants that are used in the Work.

1.6 PRECONSTRUCTION CONFERENCE

- A. Review delivery routes, storage areas, spill prevention and clean up procedures, and training procedures.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store construction raw materials containing potential pollutants off the ground in designated areas in secondary containment structures or surrounded by earth berms away from storm drain inlets, waterways, and drainage paths. Store chemicals in their original labeled containers. Cover the materials with plastic tarps when not in use.
  - 1. Store hazardous waste and materials in sealed containers; protect from vandalism. Place in areas that will be paved and surround the areas with earth berms.
  - 2. Store reactive, ignitable, or flammable liquids in accordance with fire codes.
  - 3. Store materials in a covered area during wet weather.
  - 4. Small amounts of material may be secondarily contained in "bus boy" trays or concrete mixing trays.
- B. Remove and dispose of residual materials and contaminated soil after construction is complete.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

3.1 CONCRETE WASTE MANAGEMENT

- A. Wash out concrete trucks in approved areas only. Locate washout area at least 50 feet from storm drains, open ditches, streams, streets, or water bodies. Prevent runoff from washout area.
- B. Wash out wastes and allow hardening. Break the hardened concrete into pieces and dispose offsite.

3.2 SPILL PREVENTION AND CONTROL

- A. Place a stockpile of spill cleanup materials where it will be readily accessible.

- B. Clean up leaks and spills immediately, in accordance with waste management regulations.
- C. Clean up spills on paved surfaces with minimal water usage. Clean small spills with cloths and larger spills with absorbent material. Immediately send used hazardous cleanup cloth material to a certified laundry or remove and dispose as hazardous waste, in accordance with waste management regulations.

### 3.3 TEMPORARY CONTAINMENT REMOVAL

Remove all temporary containment structures, devices and equipment when directed by the Project Manager. Clean and repair damage caused by installation and use of temporary work.

END OF SECTION

## REGULATORY REQUIREMENTS

### PART 1 GENERAL

#### 1.1 SUMMARY

##### A. Section Includes

1. Submittals.
2. Quality assurance.
3. Regulatory requirements.

##### B. Related Sections

1. Agreement for Design-Build Services
2. Section 013323 - Submittals.

#### 1.2 SUBMITTALS

##### A. Submit under provisions of Section 013323.

##### B. Submit the following when required by individual section:

1. Shop drawings.
2. Design-build drawings
3. Product data.
4. Design data.
5. Test reports.
6. Certificates.
7. Manufacturer's Instructions.
8. Manufacturer's Field Reports.
9. Operation and Maintenance Data.
10. Guarantee.
11. Other items indicated.

#### 1.3 QUALITY ASSURANCE

##### A. Perform work in accordance with specific standards indicated. Maintain one copy of each document on site.

##### B. UL Assemblies:

1. Where UL Design Numbers are indicated for various fire-rated floor/ceiling, roof/ceiling, wall, and structural frame assemblies.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 014100**

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2. Where Documents indicate UL Assemblies, the materials and installation shall comply exactly with the particulars of the Design Number indicated.
3. Components may not be interchanged or substituted from different assemblies.

1.4 REGULATORY REQUIREMENTS

- A. Conform to applicable codes, except conform to more stringent requirements of the Drawings and Specifications.
- B. Applicable codes include, but are not limited to the following:
  1. NFPA-70, National Electrical Code – 2008
  2. California Electrical Code - 2010
  3. NFPA-72, National Fire Alarm Code - 2007
  4. NFPA-101, Life Safety Code - 2006
  5. NFPA-780, Lightning Protection Code - 2004
  6. ANSI Electrical Systems
  7. ANSI Handicapped Code - A117.1 - 2003
  8. International Building Code - 2008 with State of California Amendments (2010 CBC)
  9. California Code of Regulations, Title 24
  10. State of California Code Regulations, Titles 8, 17, 19, and 22, Division 7, 24 - Part 3
  11. California Occupational Safety and Health Act of OSHA
  12. Americans with Disabilities Act - 1994
  13. All rules and regulations of the serving utilities
  14. Underwriters Laboratory (UL)
  15. National Electrical Manufacturer Association (NEMA)
  16. American National Standard Institute (ANSI)
  17. International Fire Code - 2006
  18. California Building Standard Administrative Code (Part 1, Title 24, CCR)
- C. When required by individual Section, arrange for enforcing authority and authorities having jurisdiction to witness indicated tests.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 014100**

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**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

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## **QUALITY CONTROL**

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

##### **A. Section Includes**

1. Quality assurance and control of installation.
2. References.
3. Field samples.
4. Mock-up.
5. Inspection and testing laboratory services.
6. Manufacturers' field services and reports.

#### **1.2 QUALITY ASSURANCE/CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship to produce Work of specified quality.
- B. Comply fully with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Project Manager before proceeding.
- D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- E. All work shall be performed by persons qualified to produce workmanship of specified quality.
- F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

#### **1.3 REFERENCES**

- A. Conform to reference standards in effect on date of Contract Documents unless otherwise specified in product Sections.
- B. Obtain copies of standards when required by Contract Documents.
- C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

#### **1.4 FIELD SAMPLES**

- A. Install field samples at the site as required by individual specifications sections for review by Architect of Record or Project Manager.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified in individual sections to be removed, clear area after field sample has been accepted by Architect.

# Switchgear Replacement and Generator Repair Project San Quentin State Prison

Document 014500

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- 1.5 MOCK-UP
  - A. Tests will be performed under provisions identified in this section.
  - B. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals and finishes.
  - C. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted by Project Manager.
  
- 1.6 INSPECTION AND TESTING LABORATORY SERVICES
  - A. Owner will appoint, employ and pay for services of an independent firm to perform special inspection and testing if required.
  - B. The independent firm will perform inspections, tests, and other services specified in individual specification sections and as required by the Project Manager and State Inspector.
  - C. Reports will be submitted by the independent firm to the Project Manager in writing indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
  - D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
    - 1. Notify Project Inspector and/or Project Manager 48 hours prior to expected time for operations requiring special inspection services.
    - 2. Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.
  
- 1.7 PROJECT INSPECTOR
  - A. CPR will employ a State licensed inspector to serve as the Project Inspector in accordance with state regulations
  - B. The Project Inspector's authority, rights and duties shall be as set forth in Section 4-342, Part 1, Title 24, CCR.
  - C. The Project Inspector shall make semi-monthly reports in writing to the Project Manager
  - D. The Project Inspector shall keep records of certain phases of construction which shall be maintained on the project site until completion. Upon completion, these records shall be copied, with the original delivered to the Project Manager for the permanent record and the copy forwarded to the Architect/Engineer of Record. The record shall include, but is not limited, to the following:
    - 1. The time and placement of concrete and the time and date of removal of forms for each portion of the structure.
    - 2. Weighmasters tickets/certificates associated with each load of concrete delivered to site.
    - 3. Identification marks of welders, lists of defective welds, and manner in which the defects were corrected.
    - 4. Certification of grounding of electrical system.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 014500**

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- E. The Project Inspector shall monitor the work of Special Inspectors and Testing Laboratories to ensure testing program is satisfactorily completed.
  - F. The Project Inspector shall notify the Contractor in writing of deviations from Contract Documents. Copies of such notice shall be forwarded immediately to the Project Manager and Architect/Engineer of Record.
  - G. Contractor shall cooperate with all Inspectors. Provide access to the work at all times whether it is in preparation or progress. Provide proper facilities for access and inspection.
  - H. Perform work with the knowledge of the Inspectors. Cover no work prior to inspection.
  - I. Notify Inspectors in writing at least 48 hours prior to expected time for operations requiring inspection.
  - J. The Contractor shall pay the cost of the Inspector's salary for the time the Inspector is required on the project beyond the allotted Contract Time. The cost of the Inspector's salary shall be in addition to liquidated damages outlined elsewhere in this Specification (Supplementary Conditions) and will be deducted by CPR from the Contract Sum by Change Order.
- 1.8 MANUFACTURERS' FIELD SERVICES AND REPORTS
- A. Submit qualifications of Manufacturer's observer to Project Manager 30 days in advance of required observations. .
  - B. When specified in individual specification sections, require material or product suppliers or manufacturers to provide: qualified staff personnel to observe site conditions, conditions of surfaces and installation; quality of workmanship; start-up of equipment; test, adjust, and balance of equipment; and other as applicable, and to initiate instructions when necessary.
  - C. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
  - D. Submit report in triplicate within 30 days of observation to the project manager for review.

**PART 2 - PRODUCTS**

Not used

**PART 3 - EXECUTION**

Not used

END OF SECTION

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## **CONSTRUCTION FACILITIES AND TEMPORARY FACILITIES AND CONTROLS**

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

##### **A. Section Includes**

1. Furnish and install temporary facilities as hereunder specified, plus other unspecified temporary facilities, including labor, materials, services, utilities, and equipment, as may be required for proper performance of Work, except as otherwise provided. Temporary facilities shall be approved by the State and other authorities having legal jurisdiction. Locate facilities where and as directed, and maintain in safe and sanitary condition at all times until completion of Work.
2. Progress cleaning
3. Water control
4. Removal of Temporary Facilities

##### **B. Related Sections**

1. The requirements of the Contract, and Division 1 - General Requirements, apply to the work of this Section.
2. Section 013543 - Environmental Protection Procedures: Storage and disposal of hazardous waste and materials.
3. Temporary Utilities.

#### **1.2 FIELD OFFICE**

##### **A. Field Office for State: Not required.**

##### **B. Contractor's Field Office: Contractor may provide at Contractor's expense field office facilities for Contractor's use as authorized by the State. Contractor's field office shall be properly finished; neat; substantial; weather tight; secure; lighted; and ventilated. All doors, windows, and other points of access shall be properly lockable and secured in a manner acceptable to the Institution; and Institution shall be given 2 keys for each lock on the field office. While the field office is located on the grounds of the Institution, all equipment, furniture, and fixtures shall be maintained in good and working condition.**

1. Location: As directed by the State's Representative.
2. Removal: The State reserves the right to direct the Contractor to relocate, or remove from the site, the Contractor's field office at Contractor's sole cost. Upon such directive by the State, the Contractor shall relocate or remove the Contractor's field office, and return the affected areas to a condition equal to that prior to the

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 015000**

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installation of the Contractor's field office within 3 calendar days; or as directed by the by the State in writing.

- C. Telephone service required by Contractor shall be provided and paid for by Contractor, if, and as needed in performance of Work.

1.3 CONSTRUCTION EQUIPMENT

- A. Erect, equip, operate, and maintain construction equipment in strict accordance with applicable statutes, laws, ordinances, rules, and regulations of authorities having jurisdiction.
- B. Provide and maintain scaffolding, staging, runways, and similar equipment, as needed.

1.4 SAFETY PRECAUTIONS

- A. Provide and maintain barricades, fencing, shoring, pedestrian walkways, and other safety precautions to properly guard against personal injury and property damage as prescribed by authority having jurisdiction.
- B. Attention is directed to Safety Orders issued by State of California, Division of Industrial Safety. Contractor shall obtain copies of Safety Orders applicable to type of work to be performed, and shall be governed by requirements thereof in construction operations.
- C. Fully inform each subcontractor and material supplier as to requirements of applicable Safety Orders.

1.5 ROADS AND ACCESSWAYS

- A. Entrance to Work Site: Contractor and Contractor's employees and subcontractors shall use certain access roads or entrance ways as indicated on Plans or as directed by State.
- B. Maintain these roads in satisfactory condition during Contract time, and repair damages attributable to Work of this Project at intervals as needed. At completion of Contract, roads and entrance ways shall be left in condition at least equal to that existing at start of Contract, except as may be otherwise required by Contract documents.

1.6 USE OF STATE PROPERTY

- A. On Site Storage and Work Areas: The State will allocate available on site storage and work areas to Contractor, subject to change as may be necessary by job progress, such as site development or other intervening work.
- B. State Property: Except as otherwise shown or specified, Work operations shall be confined to State property and shall not encroach on areas other than those designated or approved for such use by State.
- C. Ascertain, observe, and comply with rules and regulations in effect at occupied State facilities, including, but not restricted to, parking and traffic regulations, security

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 015000**

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restrictions, hours of allowable ingress and egress as to main arteries, occupied buildings, and the like.

- D. Protection of Existing Utilities: Protect from damage, existing utility lines not specified to be altered by Work of this Contract; any such features damaged shall be repaired or replaced to condition equal to that existing prior to commencing work of this Contract.

1.7 SIGNS

- A. Signs or Advertising: Not permitted, except that Contractor's name may be placed on field office.

1.8 SANITARY FACILITIES

- A. Toilet Facilities: Provide sufficient suitably enclosed chemical toilets, conforming to ANSI Z4.3., with urinal for workmen. Chemical toilets shall be kept locked at all times. Contractor shall provide keys to Contractor's personnel as necessary and 2 keys to the Institution. Use of Institutions toilet facilities will not be allowed.
- B. Washing Facilities: Provide properly mounted and adequate wash sinks connected to Owner's water supply. Locate sinks where directed by State.
- C. Drinking Water Facilities: Provide clean, sanitary and adequate drinking water

1.9 TEMPORARY WATER

- A. Contractor shall make arrangements for water required for construction purposes; furnish and install temporary piping or hoses to carry water to every part of construction at Contractor's sole cost. Heating of any required water shall be performed by Contractor unless otherwise agreed.
- B. Water is available from existing sources at site and will be furnished free of charge for construction operations.

1.10 TEMPORARY ELECTRICAL FACILITIES

- A. Contractor shall provide such temporary electrical facilities as are necessary to supply temporary lighting for work operations and temporary power for portable power driven tools and other Contractor equipment.
- B. Temporary power is available from existing sources at site and will be furnished free of charge for construction operations.

1.11 TEMPORARY HEAT

- A. Contractor shall provide and pay all costs for temporary heat, including equipment, fuel, and operators which may be required during Contract time to provide adequate temperatures for storage, application, and drying of installed materials.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 015000**

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- B. Contractor shall provide temporary closures for windows and doors, and temporary general building ventilation, for proper storage and drying of materials and safe working conditions.

1.12 SECURITY

- A. Contractor is responsible for security of work areas involved in this Project, during entire time of Contract. Make good all damages to work and loss of materials due to vandalism or theft, within this responsibility.

1.13 DISRUPTION OF UTILITIES

- A. If Contractor anticipates disrupting any utilities, Contractor must receive written permission from the Institution, and make provisions for supplying those disrupted utilities, or services, at Contractor's sole cost

1.14 PROGRESS CLEANING

- A. Under provisions of the contract, maintain areas free of waste materials, debris, and rubbish; maintain site in a clean and orderly condition. Designate on-site waste collection areas; locate containers in a covered area or an area with secondary containment. Keep work and storage areas clean and free of rubbish and perform protective and cleanup work within one day of being so notified. Contractor shall provide and maintain a construction debris box with a lid and hasp to receive a pad lock, provided by the Institution, located on site, within the project site in a designated on-site waste collection area. A custody officer, designated to the project, shall control access to the debris box at all times. All construction debris generated within the project site shall be deposited into the debris box and witnessed by the officer at time of disposal."
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed spaces and remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect non-hazardous construction waste materials including wood, paper, plastic, cleared trees and shrubs, building rubble, scrap metal, rubber and glass and deposit in a secured debris box/covered dumpsters at designated waste storage areas, with an officer witnessing disposal of all items.
- E. Remove waste materials, debris, and rubbish from site periodically and dispose off-site at authorized disposal areas.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 015000**

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1.16 REMOVAL

- A. Remove temporary equipment, facilities, and materials prior to request for final inspection.
- B. Clean and repair damage caused by installation and use of temporary work.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

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**FIELD ENGINEERING**

**PART 1 GENERAL**

1.1 SUMMARY

- A. Section Includes
  - 1. Layout and Staking as needed.

1.2 QUALITY ASSURANCE

- A. Surveying Services: Under direct supervision of a person licensed to perform surveying in the State of California.

1.3 SUBMITTALS

Not used

1.4 REQUIREMENTS

- A. Preserve monuments, reference points, control points, and bench mark(s) unless noted or otherwise directed.
- B. Re-establish monuments, reference points, control points, and bench marks disrupted by construction operations.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

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## OPERATION AND MAINTENANCE MANUALS

### PART 1 GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Format of Manuals
2. Content of Manuals
3. Submittals
4. Training

#### 1.2 FORMAT

- A. Prepare Operation and Maintenance Manual in the form of an instruction manual for use by operating and maintenance personnel.
- B. Organize into binders of manageable size.

#### 1.3 CONTENT

- A. Include title page, table of contents, general information, information on equipment, systems, and products specified in individual sections including product data, written text, drawings and guarantees.
- B. Provide master index with page numbers. Include references to:
  1. Manufacturers' printed data.
  2. As-built drawings by sheet number, title, and date.
- C. Organize manual into separate sections for each finish, piece of equipment, system, and material.
- D. Architectural Products: Provide manufacturer's data and instructions on care and maintenance of architectural products.
- E. Equipment and Systems: Provide the following for each piece of equipment, building operating system, electrical system, and electronic system.
  1. Identification of building number in which item of equipment is located
  2. Complete description of each unit and related component parts
  3. Manufacturer's information

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 017823**

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4. Schematics and wiring diagram of operation
5. List of special tools required for operation and repair
6. Maintenance procedures
7. Trouble shooting procedures
8. Operating procedures
9. Servicing schedule
10. Equipment Maintenance Data Summary
11. Mechanical Products: Indicate danger warnings
12. Electrical Products: Provide separate manuals for electrical power, lighting equipment, and electronic systems

1.4 SUBMITTALS

- A. Upon completion of items requiring operation and maintenance data, submit three draft copies of Operation and Maintenance Manual for review.
- B. Make corrections and modifications to comply with reviewer comments.
- C. Submit three copies of conformed (final) Operation and Maintenance Manual.

1.5 TRAINING

- A. Train the Owner's personnel as to the use and maintenance of each piece of equipment.

**PART 2 PRODUCTS**

Not Used

**PART 3 EXECUTION**

Not Used

END OF SECTION

## **BASIC ELECTRICAL REQUIREMENTS**

### **PART 1 GENERAL**

#### **1.1 GENERAL PROVISIONS**

- A. Provide material, equipment, and systems indicated on the Drawings and specified herein in accordance with Division 1. Scope of work shall include all incidental equipment, appliances, services, hoisting, scaffolding, supports, tools, supervision, labor, consumable items, fees and licenses to provide complete systems. Perform start-up and check-out to provide fully operable systems.
- B. It is the intent of the Drawings and Specifications to provide a complete workable set of systems ready for the Owner's operation. Provide all items not specifically shown on the Drawings or called for in the Specifications, but required to conform with the design intent.
- C. Examine Specifications and Drawings to be familiar with items which require electrical connections and coordination. Coordinate electrical work provided with other Divisions so as to assure proper and complete installation of all connections and equipment.
- D. Related Documents: Drawings and General Provisions of Contract, including but not limited to, the General and Supplementary Conditions and Division 1 Specification Sections apply to work of this and all Sections of Division 26.

#### **1.2 SUMMARY**

- A. The Division 26 Specifications and Drawings are complementary; what is called for by one is binding, as if called for by both. Items shown on the Drawings are not necessarily included in the Specifications and vice versa. Where these documents contain a conflict, include the more expensive in the base bid.
- B. Imperative language is frequently used in Division 26 Specifications. Except as otherwise specified, requirements expressed imperatively are to be performed by the Contractor.
- C. All Sections of Division 26, Electrical Specifications, are interrelated. Use Division 26, in its entirety, when interpreting any material, method or direction listed in any Section.
- D. When specified materials or methods exceed the applicable code standards, use the materials or methods specified. When materials or methods specified fall below applicable code standards, replace or modify materials or methods to meet applicable code standards. Do not provide materials or employ methods that do not conform to applicable codes and standards.

#### **1.3 RELATED WORK SPECIFIED ELSEWHERE**

- A. Section 015000: Construction Facilities.
- B. Section 017823: Operation and Maintenance Manuals.

**PART 2 PRODUCTS**

**2.1 MATERIALS AND EQUIPMENT**

- A. The device numbers noted in this specification are generally those of a specific manufacturer and represent the minimum quality required as the basis of design for this project. Contractor may submit equivalent devices from the other manufacturers listed in the section.
- B. Materials and equipment used in carrying out these specifications shall be new and have UL listing, or listing by other recognized testing laboratory when such listings are available.
- C. All material shall bear manufacturer's name, model number, electrical characteristics and other identification and shall be the standard product of manufacturer regularly engaged in production of similar material.
- D. Manufacturer: Company specializing in manufacturing specified products for at least 3 years.
- E. Specifications of many items, wiring devices, lighting fixtures, control devices, etc. are described on the drawings.
- F. Except for conduit, conduit fittings, outlet boxes, wire and cable (600V and below only), all items of equipment or material shall be the product of one manufacturer throughout.
- G. Construction of equipment shall be as follows:
  - 1. All prefabricated equipment shall be designed and constructed in such a manner that all parts of said equipment and the equipment as a whole, including attachments, will resist the seismic forces to which they may be subjected.
  - 2. Design criteria shall be no less than 1.5g for lateral forces and 0.6g for vertical forces.
  - 3. Provisions for support and anchorage of equipment shall be an integral part of each item and shall include the fastening means and all necessary internal and external bracing, brackets and connections.
- H. The documents contain specifications regarding equipment design, including BIL levels, AIC ratings, and series ratings. In all cases provide equipment sufficient for the use intended. Do not provide materials whose ratings fall below those included in the Documents.

**PART 3 EXECUTION**

**3.1 DELIVERY AND STORAGE**

- A. Deliver items in manufacturers' original packaging. Cover items with protective materials to keep them from being damaged. Use care in loading, transporting, unloading, and storage to keep items from being damaged.
- B. Store items in a clean, dry place, and protect from damage. If any item is damaged, do

not install, but take immediate steps to obtain replacement.

### 3.2 COORDINATION

- A. Visit site and observe conditions under which work must be performed.
- B. Before starting work, carefully examine Architectural, Civil, Landscape, Structural, Plumbing, Heating, Ventilating and Air Conditioning drawings to become thoroughly familiar with conditions governing work on this project. Verify elevations, measurements, rough-in requirements of equipment and its installation location before proceeding with the work. Install equipment with access as required by the CEC.
- C. Circuit "tags" on the Electrical Drawings in the form of arrows are used to indicate home runs of raceways to electrical distribution points. These tags show the circuits in each home run and the panel designation. Do not combine circuits other than those shown or allowed on the Drawings. Show the actual circuit numbers on the finished record drawing, and on the panel directory card. Provide an insulated grounding conductor sized in accordance with CEC in every power circuit.
- D. The general directions and location of homeruns are indicated on Drawings and are to be extended to panels as though routes were completely shown. Items which are installed other than as shown on Drawings and without receiving prior written approval will be ordered removed and installed as shown without additional cost to Owner.
- E. The Drawings do not indicate the exact number of wires in each conduit for the branch circuit wiring. Provide the correct quantity of wires as indicated by: the circuit numbers indicated, wiring diagrams, and by applicable requirements of the CEC.
- F. Electrical Drawings are diagrammatic and shall not be scaled for exact sizes. Adjust location of conduits, panels, equipment, pull boxes and fixtures to accommodate the work and to prevent interferences.
  - 1. Lines which pitch have right-of-way over those that do not. Lines whose elevation cannot be changed have right-of-way over lines whose elevations can.
  - 2. Make offsets, transitions, and changes in direction in raceways as required to maintain proper headroom pitch of sloping lines.
- G. Wire and cable routing shown on the Drawings is approximate. Route wire and cable as required to meet Project Conditions.
- H. When wire and cable routing is not shown, and destination only is indicated, determine exact routing and lengths required.
- I. The Drawings are diagrammatic. They do not show every offset, bend, conduit body, elbow or junction box that may be required to install work in the space provided and avoid conflicts. Follow the Drawings as closely as is practical and install additional bends, offsets and elbows where needed by local job site conditions. Provide necessary junction boxes to meet code regulations for the allowed number of conduit bends.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 260010**

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- J. Establish sizes and locations of the various concrete bases required. Coordinate and provide all necessary anchor bolts together with templates for holding these bolts in position.
- K. Provide supports, blocking, hangers, and auxiliary structural members required for support of work.
- L. Furnish and set all sleeves for passage of raceways through structural, masonry, and concrete walls, floors, and elsewhere for proper protection of the raceways.
- M. Establish size, location, and count of cast-in conduits or conduits to be concealed underneath the foundations. Coordinate with steel reinforcing.
- N. The architectural drawings govern the locations and elevations of all electrical equipment, devices and fixtures. Resolve conflicts with the Architect prior to rough-in.
- O. Verify that the physical dimension of each item of electrical equipment will fit the available space. Coordinate electrical equipment space requirements with the allotted space provisions, and access routes through the construction area.
- P. Coordinate rough-in and wiring requirements for all mechanical, kitchen and other equipment with equipment supplier and installer. Make installation in accordance with rough-in and wiring diagrams provided by equipment supplier and installer.
- Q. Coordinate all aspects of the electrical, telephone and other utility services with the appropriate serving utility company.
- R. Coordinate underground work with other contractors working on the site. Common trenches may be used with other trades. In such areas, maintain clearances as required by codes and ordinances.
- S. Coordinate underground work with foundation plans and work.
- T. Existing wires, conduits, pipes, ducts or other service facilities are shown in a general way only. The Contractor shall visit the site and make exact determination of the existence of any such facilities prior to submission of his bid. It is understood that he will be responsible for making the exact determination of the location and condition of these facilities.
- U. The location of utilities indicated on the plans is taken from existing public records. The exact location and elevation of public utilities must be determined by the Contractor. The Contractor shall ascertain whether any additional facilities other than those shown on the Drawings may be present.
- V. Call to the attention of the Architect any error, conflict or discrepancy in Plans and/or Specifications. Do not proceed with any questionable items of work until clarification of same has been made. Supplementary Details and Plans may be supplied as required and they will become a part of the Contract Documents.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 260010**

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- W. Arrange work to reduce interruption of any existing service to minimum. When interruptions are unavoidable, consult Owner or Utility involved and agree in writing, with copy to the Architect, upon a mutually satisfactory time and duration.

3.3 UTILITY SERVICE

- A. Coordinate incoming utility provisions and requirements with local utility company representatives:
  1. Company:
  2. Contact Person:
  3. Contact Telephone Number:
- B. Provide required connections for each incoming utility service.

3.4 INSTALLATION

- A. Follow manufacturer's instructions.
- B. Where the product has no manufacturer's instructions, follow these specifications. Where neither the manufacturer nor these specifications contain such instructions, install in accordance with the standards listed above. No allowance of any kind will be made for negligence on part of Contractor to foresee means of bringing in or installing equipment into position.
  1. Verify all dimensions by field measurements.
  2. Install systems, materials, and equipment to provide the maximum headroom possible.
  3. Install systems, materials, and equipment to comply with approved submittal data, including coordination drawings
  4. Install systems, materials, and equipment level and plumb, parallel and perpendicular to other building systems and components, where installed exposed in finished spaces.
  5. Install electrical equipment to facilitate servicing, maintenance, and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations. Rearrangement or relocation of electrical work that blocks access to mechanical duct inspection or servicing panels, valves, fire damper actuators and similar apparatus shall be done at no cost to the Owner.
  6. Fit surface panels, devices and outlets with neat, appropriate trims, plates or covers, without over-hanging edges, protruding corners or raw edges, to leave a finished appearance.
- C. Wiring Requirements: Install wiring complete to every outlet with all devices shown and/or required. All wiring to be in raceways and concealed throughout finished areas unless specifically noted otherwise. For the purpose of electrical specifications, all areas, with the exception of boiler rooms, mechanical rooms and mechanical spaces, are to be considered as finished areas.

- D. Locations:
1. Verify all locations with actual field conditions, architectural, structural, plumbing, heating and ventilating plans to avert possible installation conflicts.
  2. Architect reserves the right to make minor changes prior to installation without cost to Owner.
  3. Coordinate work with that of other trades to assure symmetrical placing of fixtures in respect to ceiling tile, grilles, etc. See Architectural reflected ceiling plan for exact location of light fixtures and other equipment.
  4. Where electrical outlets occur in face, decks or base of cabinets or in walls above counters, carefully coordinate with details and arrangements of same.
  5. Any work which is incorrectly installed without prior verification with General Contractor, Architect and architectural drawings will be ordered removed and relocated and any damage to other work shall be repaired at no cost to the Owner.
  6. In general, locate outlets as indicated in symbol schedule on Drawings.
- E. All mounting heights shown on drawings are from finish floor to centerline unless otherwise shown. Mounting heights at non-typical locations shown with (+) sign and height required noted adjacent to outlet. Outlets located in concrete block, brick or tile walls are to be adjusted in height to coordinate with modular joints of the materials. Verify requirements with Architect prior to installation.

### 3.5 FIRE WALL PENETRATIONS

- A. Provide necessary wall material to maintain fire wall rating where flush mounted panelboards or cabinets are installed.
- B. Where raceway penetrate floors, ceilings, ducts, chases and fire walls, provide fire stopping to maintain integrity of the fire assembly. Fire stopping method shall be approved by the authority having jurisdiction.
- C. Where electrical boxes with total area exceeding 16 square inches are located in fire resistive walls, fire stopping shall be provided to maintain integrity of the fire assembly.
- D. Where electrical boxes are installed on opposite sides of a rated wall, horizontal separation between the boxes shall be a minimum of 24-inches. Horizontal separation of these boxes may be less than 24-inches if a UL approved protective material is utilized.
- E. Electrical boxes shall not be installed back to back in rated walls.
- F. The aggregate surface area of the boxes shall not exceed 100 sq in per 100 sq ft of wall surface.

### 3.6 EQUIPMENT CONNECTIONS

- A. Provide complete electrical connections for all items of equipment requiring such connections, including incidental wiring, materials, devices and labor necessary for a finished working installation.
- B. Verify the location and method for connecting to each item of equipment prior to roughing-in. Check voltage and phase of each item of equipment before connection.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 260010**

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- C. Make motor connections for the proper direction of rotation.
- 3.7 EQUIPMENT SUPPORT
- A. Provide a system of supporting devices and hangers for support and bracing of conduit and electrical equipment provided under this Division as indicated on plans and as described herein.
  - B. Support devices in accordance with mounting details shown on drawings. Where mounting details are not provided, comply with NUSIG - National Uniform Seismic Installation Guidelines and SMACNA - Sheet Metal and Air Conditioning Contractors National Association, Inc. - "Guidelines for Seismic Restraint on Mechanical Systems and Plumbing Piping Systems".
  - C. Where conditions arise not covered by details on the drawings or by NUSIG and SMACNA, or where equipment is being furnished with different weights and/or dimensions from those on drawings, submit details and calculations for review by Architect.
  - D. Do not install supporting devices so as to obstruct access to equipment.
  - E. Floor-mounted equipment shall not be held in place solely by its own dead weight. Include floor anchor fastening in all cases.
  - F. Do not support electrical conduits, conductors, or equipment from other conduits, ceiling grids, equipment, piping, ductwork, or ceiling supports. In all cases, provide independent supports for electrical conduits and equipment.
- 3.8 CUTTING, PATCHING, EXCAVATING AND CORE DRILLING
- A. Coordinate with Division 1.
  - B. Do not cut or break any steel or wood framing, concrete, masonry, or partitions, etc., without permission from the Architect or as shown on the Drawings.
  - C. Cut, channel, chase and drill floors, walls, partitions and ceilings as necessary for the proper installation, support and anchorage of raceway, boxes, and other equipment.
  - D. Repair any damage to the building, piping, equipment, or finish.
  - E. Perform repairs with materials matching the original, and install in accordance with appropriate sections of these Specifications.
  - F. All cuts and penetrations of existing structural walls and floors that do not appear on the Structural Drawings must be x-rayed prior to beginning work. Assure that all conduit penetrations pass through the center of all rear "windows" or avoid structural members by a minimum of 12-inches. All cuts that are not covered by detail on the Drawings must be pre-approved by the Structural Engineer prior to proceeding.
  - G. All concrete work shall be in accordance with Division 3.
  - H. Where trenching is done through existing paving, walks, curbs, etc. responsibility for

patching and repair to original condition rests with this Contractor.

- I. In new work, patch and refinish all finished surfaces damaged by this contractor to match adjacent surface.
- J. Where new electrical work is installed in the existing building, patch and refinish surfaces damaged to match existing. Refinishing to be as directed by the Architect.
- K. Refinishing to be as directed by the Architect.

### 3.9 WATERPROOFING

- A. Avoid, if possible, penetrations of waterproof membranes.
- B. Where such penetration is required, perform it prior to waterproofing and in accordance with Architectural details.
- C. Where penetrations are not detailed, provide a detail of the penetrations for approval of the Architect.

### 3.10 ASBESTOS BEARING MATERIAL

- A. If during the course of work, the contractor observes the existence of asbestos or asbestos bearing material, the contractor shall immediately terminate further work on the project and notify the Owner of the condition. The Owner will, after consultation with the Architect, determine a further course of action.

### 3.11 POLYCHLORINATED BIPHENYLS (PCB'S)

- A. If during the course of his work, the Contractor observes the existence of polychlorinated biphenyls (PCB's), the Contractor shall immediately terminate further work on the project and notify the Owner of the condition. The Owner will, after consultation with the Architect, determine a further course of action.

### 3.12 SAFETY

- A. The Drawings and the specifications do not include design or construction details or instructions relating to the Contractor's safety precautions or to means, methods, techniques, sequences or procedures required for the Contractor to perform his work.
- B. The Contractor shall provide necessary shoring, railing, barricades, protective devices, safety instructions and procedures to perform the work safely and to comply with State Safety Requirements and OSHA requirements.

### 3.13 DEMONSTRATION OF COMPLETED ELECTRICAL SYSTEM

- A. Subsequent to final completion and testing operations, this Division is responsible for conducting classes and instructing the Owner's authorized representatives in operation, adjustment, and maintenance of electrical plant, as described in other sections of the specification.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 260010**

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- B. When you are required by other sections of Division 26 to hold classes or/and instruct Owner's personnel, do so, then submit 3 copies of certificate, signed by Owner's representatives, attesting to the Owner's authorized representatives having been so instructed.
  - C. Instruct operation and maintenance personnel selected by Owner's representative at a single designate time in operation and maintenance of the electrical system and its components.
- 3.14 FUTURE PROVISIONS
- A. Provide pull line in each empty conduit provided for future installation of wiring.
  - B. At all systems such as fire alarm, clock and program, intercom, etc., where future stations are to be fed from adjacent outlets or terminal cabinets, all conductors required for complete installation of additional units are to be provided to nearest outlet or terminal cabinet as required. In general, all wiring installed so it will not be necessary to remove existing conductors and re-pull additional wiring to install additional units. All spare conductors properly labeled and terminated in outlet boxes or at terminals in terminal cabinets.
- 3.15 PAINTING
- A. All electrical equipment and conduit exposed in finished areas and on exterior walls shall be painted to match surrounding surfaces.
  - B. Contractor shall coordinate the timing of painting requirements.
  - C. Refer to architectural specifications for methods and materials.

END OF SECTION

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**MEDIUM-VOLTAGE CABLES**

**PART 1 GENERAL**

1.1 SECTION INCLUDES

- A. Medium voltage cable.
- B. Cable terminations.

1.2 RELATED REQUIREMENTS

- A. Section 260553 - Identification for Electrical Systems.

1.3 REFERENCE STANDARDS

- A. IEEE C2 - National Electrical Safety Code; Institute of Electrical and Electronic Engineers; 2007.
- B. IEEE 48 - IEEE Standard Test Procedures and Requirements for Alternating-Current Cable Terminations 2.5 kV through 765 kV; Institute of Electrical and Electronic Engineers; 1996 (R2003).
- C. NEMA WC 70 - Non-Shielded Power Cable 2000 V or Less for the Distribution of Electrical Energy; National Electrical Manufacturers Association; 1999.
- D. NEMA WC 71 - Standard for Nonshielded Cables Rated 2001-5000 Volts for Use in the Distribution of Electrical Energy; National Electrical Manufacturers Association; 1999.
- E. NEMA WC 74 - S5-46 kV Shielded Power Cable for Use in the Transmission and Distribution of Electric Energy; National Electrical Manufacturers Association; 2006.
- F. NETA STD ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems; International Electrical Testing Association; 2007.
- G. 2010 California Electrical Code (CEC); Part 3, Title 24, California Code of Regulations.
- H. 2010 California Building Code (CBC); Part 2, Title 24, California Code of Regulations.

1.4 SUBMITTALS

- A. See Section 013323 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide for cable, terminations, and accessories.
- C. Samples: Submit two samples of each size cable, 24 inches (600 mm) in length.
  - 1. Select each length to include complete set of manufacturer markings.
  - 2. Attach tag indicating cable size and application information.
- D. Test Reports: Indicate results of cable test in tabular form and in plots of current versus voltage for incremental voltage steps, and current versus time at 30 second intervals at maximum voltage.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 260513**

---

- E. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of product.
  - F. Project Record Documents: Record actual sizes and locations of cables.
  - G. Certificate of Compliance: Indicate approval of installation by authority having jurisdiction.
  - H. Maintenance Data: Include instructions for testing and cleaning cable and accessories.
- 1.5 QUALITY ASSURANCE
- A. Comply with NFPA 70.
  - B. Comply with CEC.
  - C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience and with service facilities within 100 miles (160 km) of Project.
  - D. The electrical contractor shall be a company specializing in installation of the medium voltage (15 KV minimum) equipment and cable for a minimum period for five (5) years. When requested by the Architect, an acceptable list of installations with similar equipment shall be provided demonstrating compliance with this requirement.
  - E. Installer Qualifications: Authorized installer of specified manufacturer with service facilities within 100 miles (160 km) of Project.
  - F. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Deliver, store, protect, and handle Products to site under provisions of Division 1 - Product Requirements.
  - B. Accept cable and accessories on site in manufacturer's packaging. Inspect for damage.
  - C. Store and protect in accordance with manufacturer's instructions.
  - D. Protect from weather. Provide adequate ventilation to prevent condensation.
- 1.7 PROJECT CONDITIONS
- A. Verify that field measurements are as shown on Drawings.
  - B. Verify routing and termination locations of cable bank prior to rough-in.
  - C. Cable routing is shown on Drawings in approximate locations unless dimensioned. Route as required to complete wiring system.

**PART 2 PRODUCTS**

2.1 MANUFACTURERS

- A. Cerro Wire Inc.: [www.cerrowire.com](http://www.cerrowire.com).
- B. Industrial Wire & Cable, Inc.: [www.iewc.com](http://www.iewc.com).
- C. Southwire Company: [www.southwire.com](http://www.southwire.com).
- D. Substitutions: Agreement for Design Build Services and Section 013323 – Submittals.

2.2 CABLE

- A. Medium Voltage Cable: NEMA WC 74 ethylene propylene rubber (EPR) insulated cable, 133% insulation level.
  - 1. Type MV-105, 15 KV shielded power cable.
  - 2. Voltage: 15 kV, grounded.
  - 3. Conductor: Copper, compact round, stranded, with foil conductor shield.
  - 4. Construction: Single conductor with metal wire insulation shielding.
  - 5. Insulation Jacket: PVC, 80 mils (2.03 mm) minimum thickness.
  - 6. Armor Material: Steel.
  - 7. Armor Design: Interlocked metal tape.
  - 8. Armor Jacket: PVC.
- B. Medium Voltage Cable: NEMA WC 70 rubber insulated cable.
  - 1. Voltage: 15 kV, grounded.
  - 2. Conductor: Copper, compact round, stranded, with foil conductor shield.
  - 3. Construction: Single conductor with metal wire insulation shielding.
  - 4. Insulation Jacket: PVC, 80 mils (2.03 mm) minimum thickness.
  - 5. Armor Material: Steel.
  - 6. Armor Design: Interlocked metal tape.
  - 7. Armor Jacket: PVC.
  - 8. Substitutions: Agreement for Design Build Services and Section 013323 – Submittals.

2.3 ACCESSORIES

- A. Potheads: IEEE 48, Class 1 termination. Pothead with porcelain insulators, cable connector and aerial lug, sealed cable entrance and support, and insulating compound.
- B. Cable Terminations: IEEE 48, Class 2 porcelain insulator cable terminator in kit form.

- C. Cast Epoxy Cable Terminations: IEEE 48, Class 1 cast epoxy cable termination in kit form with stress cone, shield ground connection, wet porcelain rain shield for outdoor units, epoxy resin molding material, and accessories and molds required for proper application.
- D. Modular Cable Terminations: IEEE 48, Class 1, molded-rubber cable termination in kit form with stress cone, ground clamp, non-tracking rubber skirts, load break connector, rubber cap, and aerial lug.
- E. Tape Terminations: IEEE 48; Class 1, tape termination kit with semi-conductive tape, stress control tape, splicing tape, vinyl plastic tape, stress cone, mechanical ground straps, and cable preparation kit.
- F. Fireproofing Tape: Minimum 30 - mil, flexible, elastomer tape.
  - 1. Product: 3M 77 Scotch Brand.

### **PART 3 EXECUTION**

#### **3.1 EXAMINATION**

- A. Verify that conduit, duct, trench, or manholes are ready to receive cable.
- B. Verify that field measurements are as indicated.
- C. Verify routing and termination locations of cable bank prior to rough-in.
- D. Cable routing is shown in approximate locations unless dimensioned. Route as required to complete wiring system.

#### **3.2 PREPARATION**

- A. Use swab to clean conduits before pulling cables.
- B. Pull a mandrel through conduit or duct prior to cable installation.

#### **3.3 INSTALLATION**

- A. Avoid abrasion and other damage to cables during installation.
- B. Use suitable lubricants and pulling equipment.
- C. Sustain cable pulling tensions and bending radii below recommended limits.
- D. Ground cable shield at each termination and splice.
- E. Install cables in manholes along wall providing longest route.
- F. Arrange cable in manholes to avoid interference with duct entrances.
- G. Fireproof cables in manholes using fireproofing tape in half-lapped wrapping. Extend fireproofing 1 inch (25 mm) into duct.
- H. Attach cable to pulling rope using a swivel clevis. Basket grips are permitted for pulling

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 260513**

---

between switchgear and transformers. Maximum pulling length using grips is 50-feet.

- I. Do not lay cable on bare ground. Provide vinyl plastic underlay to prevent cable contact with ground moisture or dirt.
  - J. Support cable in manholes or vaults using galvanized steel channel and porcelain or maple blocks.
  - K. Identify cables under the provisions of Section 260553 - Identification for Electrical Systems.
  - L. Do not use block and tackle, or vehicles for cable pulling.
  - M. Make terminations or splices using materials properly sized and suitable for the application. Provide weather skirts for outdoor equipment terminations.
- 3.4 FIELD QUALITY CONTROL
- A. Perform field inspection in accordance with Section 014000.
  - B. Inspect exposed cable sections for physical damage.
  - C. Inspect cable for proper connections as indicated.
  - D. Inspect shield grounding, cable supports, and terminations for proper installation.
  - E. Inspect and test in accordance with NETA STD ATS, except Section 4.
  - F. Perform inspections and tests listed in NETA STD ATS, Section 7.3.3.
- 3.5 PROTECTION
- A. Protect installed cables from entrance of moisture.

END OF SECTION

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**OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY**

**PART 1 GENERAL**

1.1 SECTION INCLUDES

- A. Performance requirements for overcurrent protective devices.
- B. Short circuit study.
- C. Coordination study and analysis.

1.2 RELATED REQUIREMENTS

- A. Section 261300 - Medium-Voltage Switchgear: Overcurrent protective devices in switchgear.
- B. Section 263215 - Medium-Voltage Generator Paralleling Switchgear: Overcurrent protective devices in switchgear.

1.3 REFERENCE STANDARDS

- A. IEEE 242 - IEEE Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems; 2001.
- B. IEEE 399 - IEEE Recommended Practice for Industrial and Commercial Power Systems Analysis; 1997.
- C. 2010 California Electrical Code (CEC); Part 3, Title 24, California Code of Regulations.

1.4 SUBMITTALS

- A. See Section 013323 - Submittals.
- B. Study Report: Submit protective device studies as specified, prior to submission of product data submittals or ordering or fabrication of protective devices.
  - 1. Evaluation of product data submittals by Architect will not commence until acceptable preliminary studies in sufficient detail to ensure that device selection will be adequate have been submitted.
  - 2. Include stamp or seal and signature of preparing engineer.
- C. Product Data: In addition to submittals specified elsewhere, submit manufacturer's time-current curves for all protective devices.
- D. Field Engineer Qualifications.
- E. Field Inspection Report: Show final adjusted settings of protective devices.
- F. Certificates: Prior to final inspection, certify that field adjustable protective devices have been set in accordance with requirements of protective device analysis.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 260573**

---

- G. Project Record Documents: Revise protective device study as required to show as-built conditions.
  - 1. Submit not less than 60 days prior to final inspection of electrical system.
  - 2. Include hard copies in operation and maintenance data submittals.
  - 3. Include all files prepared using software packages, on CD-ROM, with file name cross-references to specific pieces of equipment and systems.
  
- 1.5 PROTECTIVE DEVICE STUDY
  - A. Analyze the specific electrical and utilization equipment (according to NEC definition), the actual protective devices to be used, and the actual feeder lengths to be installed.
    - 1. Scope of Studies: All new and existing 12 kV distribution wiring and equipment, from primary source to buses of 12 kV distribution switchgears and to downstream 2.4 kV switchgear and downstream 480V and 208V main distribution switchboards.
    - 2. Primary Source, for Purposes of Studies: Utility company primary protective devices.
    - 3. Study Methodology: Comply with requirements and recommendations of NFPA 70, IEEE 399, and IEEE 242.
    - 4. Report: State the methodology and rationale employed in making each type of calculation; identify computer software package(s) used.
  
  - B. One-Line Diagrams: Prepare schematic drawing of electrical distribution system, with all electrical equipment and wiring to be protected by the protective devices; identify nodes on the diagrams for reference on report that includes:
    - 1. Calculated fault impedance, X/R ratios, utility contribution, and short circuit values (asymmetric and symmetric) at the main switchboard bus and all downstream devices containing protective devices.
    - 2. Breaker and fuse ratings.
    - 3. Generator kW and voltage ratings, percent impedance, X/R ratios, and wiring connections.
    - 4. Transformer kVA and voltage ratings, percent impedance, X/R ratios, and wiring connections.
    - 5. Identification of each bus, with voltage.
    - 6. Conduit materials, feeder sizes, actual lengths, and X/R ratios.
  
  - C. Short Circuit Study: Calculate the fault impedance to determine available 3-phase short circuit and ground fault currents at each bus and piece of equipment during normal conditions, alternate operations, emergency power conditions, and other operations that could result in maximum fault conditions.
    - 1. Show fault currents available at key points in the system down to a fault current of

- 7,000 A at 480 V and 208 V.
2. Include motor contributions in determining the momentary and interrupting ratings of the protective devices.
  3. Primary Fault Level Assumptions: Obtain data from utility company.
  4. Report: Include all pertinent data used in calculations and for each device include:
    - a. Device identification.
    - b. Operating voltage.
    - c. Protective device.
    - d. Device rating.
    - e. Calculated short circuit current, asymmetrical and symmetrical, and ground fault current.
- D. Coordination Study: Perform an organized time-current analysis of each protective device in series from the individual device back to the primary source, under normal conditions, alternate operations, and emergency power conditions.
1. Graphically illustrate that adequate time separation exists between series devices, including upstream primary device.
  2. Plot the specific time-current characteristics of each protective device on log-log paper.
  3. Organize plots so that all upstream devices are clearly depicted on one sheet.
  4. Also show the following on curve plot sheets:
    - a. Device identification.
    - b. Voltage and current transformer ratios for curves.
    - c. 3-phase and 1-phase ANSI damage curves for each transformer.
    - d. No-damage, melting, and clearing curves for fuses.
    - e. Cable damage curves.
    - f. Transformer inrush points.
    - g. Maximum short circuit cutoff point.
    - h. Simple one-line diagram for the portion of the system that each curve plot illustrates.
    - i. Software report for each curve plot, labeled for identification.
- E. Analysis: Determine ratings and settings of protective devices to minimize damage caused by a fault and so that the protective device closest to the fault will open first.
1. Required Ratings and Settings: Derive required ratings and settings of protective devices in consideration of upstream protective device settings and optimize system

to ensure selective coordination.

2. Motors with Solid-State Protective Modules: Select settings for best possible motor protection, taking into consideration actual installed motor torque and current and thermal characteristics.
  3. Identify any equipment that is underrated as specified.
  4. Identify existing protective devices that will not achieve required coordination and cannot be field adjusted to do so.
  5. Identify specified protective devices that will not achieve required protection or coordination but with minor changes can be made to do so; provide such modified devices at no additional cost to Owner and identify them on submittals as "revised in accordance with Protective Device Coordination Study"; minor changes include different trip sizes in the same frame, time curve characteristics of induction relays, CT ranges, etc.
  6. Identify specified protective devices that will not achieve required protection or coordination and cannot be field adjusted to do so, and for which adequate devices would involve a change to the contract sum.
  7. In all cases where adequate protection or coordination cannot be achieved at no extra cost to Owner, provide a discussion of alternatives and logical compromises for best achievable coordination.
  8. Do not order, furnish, or install protective devices that do not meet performance requirements unless specifically approved by Architect.
- F. Protective Device Rating and Setting Chart: Summarize in tabular format the required characteristics for each protective device based on the analysis; include:
1. Device identification.
  2. Relay CT ratios, tap, time dial, and instantaneous pickup.
  3. Circuit breaker sensor rating, long-time, short-time, and instantaneous settings, and time bands.
  4. Fuse rating and type.
  5. Ground fault pickup and time delay.
  6. Input level and expected response time at two test points that are compatible with commonly available test equipment and the ratings of the protective device.
  7. Highlight all devices that as furnished by Contractor will not achieve required protection.

## 1.6 QUALITY ASSURANCE

- A. Study Preparer Qualifications: Professional electrical engineer licensed in the State in which the Project is located and not employed by the manufacturer of the equipment to

be provided.

1. Experienced in preparation of studies of similar type and magnitude.
  2. Familiar with the software analysis products specified.
- B. Computer Software for Study Preparation: Use the latest edition of commercially available software utilizing specified methodologies.
1. Acceptable Software Products:
    - a. EDSA Micro Corporation: [www.edsa.com](http://www.edsa.com).
    - b. Operation Technology, Inc; ETAP: [www.etap.com](http://www.etap.com).
    - c. SKM Systems Analysis, Inc; Power Tools for Windows: [www.skm.com](http://www.skm.com).
    - d. Substitutions: See Section 016000 - Product Requirements.
- C. Contractor Responsibility: Provide all project-related data needed by study preparer, including equipment, wire sizes, insulation types, conduit types, and actual circuit lengths.
- D. Owner's Responsibility: Provide data on relevant Owner power distribution equipment.

## **PART 2 PRODUCTS**

### **2.1 PROTECTIVE DEVICES**

- A. Provide protective devices of ratings and settings as required so that the protective device closest to the fault will open first.
- B. Replace existing protective devices to achieve specified performance.
- C. The specified equipment has been designed and selected to achieve the specified performance; ensure that equipment actually installed provides that performance.
- D. In addition to requirements specified elsewhere, provide overcurrent protective devices having ratings and settings in accordance with results of this analysis.

## **PART 3 EXECUTION**

### **3.1 FIELD QUALITY CONTROL**

- A. Provide the services of a qualified field engineer and necessary tools and equipment to test, calibrate, and adjust the installed protective devices to conform to requirements determined by the coordination analysis.
- B. Adjust installed protective devices having adjustable settings to conform to requirements determined by the coordination analysis.
- C. Adjust solid-state protective modules for motors prior to applying load to motor.
- D. Submit report showing final adjusted settings of all protective devices.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 260573**

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END OF SECTION

**MEDIUM-VOLTAGE METAL-CLAD SWITCHGEAR**

**PART 1 GENERAL**

1.1 SECTION INCLUDES

- A. Medium-voltage circuit breaker metal-clad switchgear.

1.2 REFERENCE STANDARDS

- A. ANSI C12.1 - American National Standard Code for Electricity Metering; 2001.
- B. ANSI C37.11 - Requirements for Electrical Control for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis or a Total Current Basis; 1979.
- C. ANSI C39.1 - American National Standard Requirements for Electrical Analog Indicating Instruments; 1981 (R1992).
- D. IEC 60051-1 - Direct Acting Indicating Analogue Electrical Measuring Instruments and Their Accessories - Part 1: Definitions and General Requirements Common To All Parts; International Electrotechnical Commission; 1997.
- E. IEC 60051-2 - Direct Acting Indicating Analogue Electrical Measuring Instruments and Their Accessories - Part 2: Special Requirements for Ammeters and Voltmeters International Electrotechnical Commission; 1984.
- F. IEEE 48 - IEEE Standard Test Procedures and Requirements for Alternating-Current Cable Terminations 2.5 kV through 765 kV; Institute of Electrical and Electronic Engineers; 1996 (R2003).
- G. IEEE C12.1 - American National Standard Code for Electricity Metering; Institute of Electrical and Electronic Engineers; 1988.
- H. IEEE C37.04 - IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis; Institute of Electrical and Electronic Engineers; 2005 with errata.
- I. IEEE C37.06 - American National Standard for Switchgear -- AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis -- Preferred Ratings and Related Required Capabilities; 2000. (ANSI/IEEE C37.06)
- J. ANSI/IEEE C37.20.2 - IEEE Standard for Medium-Voltage Metal-Clad Circuit Breaker Switchgear; Institute of Electrical and Electronic Engineers; 2002 (R2010).
- K. IEEE C57.13 - IEEE Standard Requirements for Instrument Transformers; Institute of Electrical and Electronic Engineers; 2008.
- L. NETA STD ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems; International Electrical Testing Association; 2007.
- M. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 261300**

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N. 2010 California Electrical Code (CEC); Part 3, Title 24, California Code of Regulations.

O. 2010 California Building Code (CBC); Part 2, Title 24, California Code of Regulations.

**1.3 SUBMITTALS**

A. See Section 013323 - Submittals.

B. Shop Drawings: Indicate electrical characteristics and connection requirements, outline dimensions, connection and support points, weight, specified ratings and materials.

C. Product Data: Provide electrical characteristics and connection requirements, standard model design tests, and options.

D. Seismic Design: Provide switchboard anchorage details and manufacturer's seismic certification.

E. Test Reports: Indicate procedures and results for specified factory and field testing and inspection.

F. Manufacturer's Installation Instructions.

G. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

H. Manufacturer's Field Reports: Indicate activities on site, final adjustments and overcurrent protective device coordination curves, adverse findings, and recommendations.

I. Project Record Documents: Include copy of manufacturer's certified drawings.

J. Operation Data: Include operating instructions for manually and electrically opening and closing circuit breakers.

K. Maintenance Data: Include maintenance instructions for cleaning methods; cleaning materials recommended; instructions for circuit breaker removal, replacement, testing and adjustment, and lubrication.

L. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

1. Tools: One each of every special tool required to operate and maintain switchgear.

**1.4 QUALITY ASSURANCE**

A. Conform to requirements of NFPA 70.

B. Conform to requirement of CEC.

C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience and with service facilities within 100 miles (160 km) of Project.

D. Testing Agency: Company member of International Electrical Testing Association and specializing in testing products specified in this section with minimum three years documented experience.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 261300**

---

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect products from weather and moisture by covering with heavy plastic or canvas and by maintaining heating within enclosure in accordance with manufacturer's instructions.

**PART 2 PRODUCTS**

2.1 MANUFACTURERS

- A. Eaton Electrical/Cutler-Hammer: [www.eatonelectrical.com](http://www.eatonelectrical.com).
- B. GE Industrial: [www.geindustrial.com](http://www.geindustrial.com).
- C. Square D: [www.squared.com](http://www.squared.com).
- D. Siemens - ITE
- E. Industrial Electric Mfg. (IEM): [www.iemfg.com](http://www.iemfg.com)
- F. Substitutions: Agreement for Design Build Services and Section 013323 – Submittals.

2.2 DESCRIPTION

- A. Switchgear: IEEE C37.20.1, Arc Resistant Metal Clad Switchgear assembly including horizontal draw-out circuit breakers in free-standing cubicles formed into an integrated structure.

2.3 SERVICE CONDITIONS

- A. Meet requirements for usual service conditions described in IEEE C37.20.1 and for the specified unusual service conditions.
- B. Meet requirements for use as service disconnecting means.

2.4 RATINGS

- A. Nominal Voltage: 12 kV, three phase, 60 Hz.
- B. Voltage and Insulation Levels: Conform to IEEE C37.20.1.
- C. Main Bus Ampacity: 1200 amperes, continuous.
- D. Momentary Current Rating: To IEEE C37.20.1.

2.5 CIRCUIT BREAKERS

- A. Circuit Breaker: IEEE C37.04, vacuum type circuit breaker.
- B. Circuit Breaker Operator: Spring-charged stored energy with electric operator to ANSI C37.11.
- C. Rated Maximum Voltage: 15.0 kV.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 261300**

---

- D. Rated Voltage Range Factor: 1.3.
- E. Rated Frequency: 60 Hz.
- F. Rated Continuous Current: 1200 amperes, rms.
- G. Rated Dielectric Strength: 36 kV rms, low frequency; 95 kV crest, impulse.
- H. Rated Permissible Tripping Delay: 2 seconds.
- I. Short-Circuit Rating: 28 kA rms, at rated maximum voltage.
- J. Arc Rating: 25 kA.
- K. Operation Endurance Capability: IEEE C37.06.
- L. Rated Tripping Voltage: 48 volt, DC from capacitor-energized trip device in each circuit breaker cubicle.
- M. Rated Control Voltage, Closing: 120 volt, single phase from switchgear control power transformer.

**2.6 PROTECTIVE RELAYS AND INSTRUMENTS**

- A. Protective Relays: Provide relaying instruments as indicated for each circuit breaker.
- B. Current Transformers: IEEE C57.13, 5 ampere secondary, wound type, with single secondary winding and secondary shorting device, primary/secondary ratio as required, burden consistent with connected metering and relay devices, 60 Hertz.
- C. Potential Transformers: IEEE C57.13, 120 volt single secondary, disconnecting type with integral fuse mountings, primary/secondary ratio as required, burden and accuracy consistent with connected metering and relay devices, 60 Hertz.
- D. Analog Ammeters: IEC 60051-1 and IEC 60051-2, indicating ammeter with 4.5 inch (115 mm) square recessed case and 250 degree scale, white dial with black figures and pointer, 5 ampere, 60 Hertz movement, 1 percent accuracy.
- E. Analog Voltmeters: IEC 60051-1 and IEC 60051-2, indicating voltmeter with 4.5 inch (115 mm) square recessed case and 250 degree scale, white dial with black figures and pointer, 120 volt, 60 Hertz movement, 1 percent accuracy.
- F. Ammeter Transfer Switch: Rotary multistage snap-action type with 600 volt AC-DC silver plated contacts, engraved escutcheon plate, pistol-grip handle, and four positions including OFF.
- G. Voltmeter Transfer Switch: Rotary multistage snap-action type with 600 volt AC-DC silver plated contacts, engraved escutcheon plate, pistol-grip handle, and four positions including OFF.
- H. Watt-Hour Meters and Wattmeters: ANSI C12.1, three phase induction type with two stators, each with current and potential coil, rated 5 amperes and 120 volts at 60 Hertz and with the following features:

1. Suitable for connection to 3- and 4-wire circuits.
  2. Potential indicating lamps.
  3. Adjustments for light and full load, phase balance, and power factor.
  4. Four-dial clock register.
  5. Integral demand indicator.
  6. Ratchets to prevent reverse rotation.
  7. Removable meter with draw-out test plug.
  8. Semi-flush mounted case with matching cover.
  9. Appropriate multiplier tags.
- I. Impulse-Totalizing Demand Meter: ANSI C12.1, with the following features:
1. Suitable for use with switchboard watt-hour meter, including two circuit totalizing relay.
  2. Cyclometer.
  3. Four dial totalizing kilowatt-hour register.
  4. Positive chart drive mechanism.
  5. Capillary pen holding minimum one-month ink supply.
  6. Roll chart with minimum 31-day capacity.
  7. 5 minute integrated demand.
  8. Appropriate multiplier tags.
- 2.7 ACCESSORIES
- A. Surge Arrestors: Station class, rated 15 kV; mount in incoming line compartment.
  - B. Incoming Cable Terminations: Clamp-type.
  - C. Potheads: IEEE 48.
  - D. Space Heaters: In each vertical section of outdoor switchgear. Provide tubular type heaters operated at half voltage for long life: 500-volt or 250-volt rated heaters shall be connected at 240 or 120 volts, respectively, sized by switchgear manufacturer. Provide control power transformers mounted in the switchgear for power space heaters.
  - E. Key Interlocks.
  - F. Circuit Breaker Lifting Device: Portable, floor supported, elevating carriage with a roller base, for movement of circuit breakers in and out of switchboard structure.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 261300**

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2.8 FABRICATION

- A. Construction: Indoor Switchgear located in the Power House Building.
- B. Construction: Outdoor main service switchgear with PG&E metering.
- C. Height: 94 inches, maximum, including auxiliary support members on top and bottom.
- D. Main Bus: Copper.
- E. Provide for incoming feeder in PG&E main service cubicle.
- F. Provide copper ground bus.

2.9 FACTORY FINISHES

- A. Clean surfaces before applying paint.
- B. Apply corrosion-resisting primer to all surfaces.
- C. Apply finish coat of baked enamel paint to 2 mils (0.5 mm) thick.
- D. Finish Color: Manufacturer's standard dark gray finish.

2.10 SOURCE QUALITY CONTROL

- A. Test in accordance with IEEE C37.20.2.
- B. Make completed unit substation available for inspection at manufacturer's factory prior to packaging for shipment. Notify Owner at least 7 days before inspection is allowed.
- C. Allow witnessing of factory inspections and tests at manufacturer's test facility. Notify Owner at least 7 days before inspections and tests are scheduled.

2.11 UTILITY SERVICE ENTRANCE

- A. Provide incoming and metering provisions in compliance with utility company requirements.
- B. Fabricate utility sections to match the switchgear line-up assembly.

2.12 NAMEPLATES

- A. Nameplates and warning signs: Refer to Section 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS, for instructions.

**PART 3 EXECUTION**

3.1 EXAMINATION

- A. Verify that support pads furnished under Section 033000 are ready to receive products.
- B. Verify that field measurements are as indicated on shop drawings.

3.2       INSTALLATION

- A.       Install in accordance with IEEE C37.20.1.
- B.       Install switchgear plumb and level and with each section aligned properly.
- C.       Make electrical connections between equipment sections using connectors furnished by manufacturer.

3.3       FIELD QUALITY CONTROL

- A.       Perform field inspection and testing in accordance with Section 014000.
- B.       Inspect and test in accordance with NETA STD ATS, except Section 4.
- C.       Perform inspections and tests listed in NETA STD ATS, Section 7.1 and 7.6.

3.4       ADJUSTING

- A.       Adjust protective relays in accordance with recommendations in overcurrent protective device coordination study.
- B.       Adjust protective relays as directed.

3.5       CLOSEOUT ACTIVITIES

- A.       Demonstrate operation of circuit breakers.

END OF SECTION

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**DIESEL ENGINE GENERATORS**

**PART 1 - GENERAL**

1.1 SECTION INCLUDES

- A. Description and work scope to be in Contract Sum.
- B. Procedures for administration of work scope.

1.2 RELATED REQUIREMENTS

- A. Division 0 and 1 of the Contract for Construction: Article 14, Changes in the Work.
- B. Section 013323: Submittals

1.3 CONTRACTOR COSTS INCLUDED IN CONTRACT SUM

- A. The scope of work includes repairs of two existing diesel engine generators, each rated 1,500KW 12KV, 3-phase, standby type that have been sitting idle for four years. The contractor is required to perform an independent assessment of the repairs required for both generators to make them fully functional and operational as part of this project. This report and recommended repairs must be submitted to the Owners Representative prior to commencement of any repair work.
- B. Contractor shall include in the Base Bid all costs associated with performing a complete assessment of both existing diesel engine generators as described above. The Contractor shall additionally include in the Base Bid all labor, materials, parts, equipment, and associated costs required to complete the below listed repairs to each of the two generators as defined. The actual scope of the generator repairs will be reviewed and compared to the following base repairs and an adjustment (increase or decrease in scope and actual costs) will be negotiated and administered via change order.

The list of Base Bid diesel generator repairs for both are as follows:

Generator #2:

1. Replace space heaters (quantity of 8).
2. Replace vent filters (quantity of 16).
3. Recondition generator #2 circuit breaker.
4. Replace Stationary primary disconnects (quantity of 2).
5. Replace Inter-unit main bus barrier.
6. Replace "A" phase main bus bar and insulator.
7. Replace lower main bus barrier.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 263214**

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8. Replace phase runback bus bars and insulators (quantity of 3).
9. Replace potential transformer cables (quantity of 3).
10. Replace potential transformer isolation barrier and porcelain insulators.
11. Replace potential transformer cable support.
12. Replace potential transformer fuses (quantity of 4).
13. Replace insulating boots (quantity approx. 13).
14. Replace PLC's (quantity of 6).
15. Replace stator temperature relay device, under-voltage relay device, etc.
16. Replace under/over voltage relay
17. Replace trip and close relays (quantity 2)
18. Replace green indicating lights (quantity 2)
19. Replace red indicating light (quantity 1)
20. Replace amber indicating light (quantity 1)
21. Replace generator fail to synch and cool down timers (quantity 2)
22. Replace control relays (quantity 8)
23. Replace terminal blocks (quantity 20)

Both Generator #1 and #2 shall include:

24. Replacement of bearings
25. Full draining and cleaning/repairs to existing day tanks.
26. Replacement of belts, hoses, fluids, etc.

**1.4 WORK INCLUDED UNDER CONTRACT SUM**

- A. The State will review and determine exact scope of work with Contractor.

**1.5 ADJUSTMENT OF COSTS**

- A. After the complete assessment/inspection is complete, should the net cost of the repairs be more or less than the specified scope work, the Contract Sum will be adjusted accordingly by Change Order in accordance with requirements of the Conditions of the Contract for Construction, Article 14.

**PART 2 – PRODUCTS**

Not Used

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 263214**

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**PART 3 – EXECUTION**

**3.1 PERFORMANCE OF REPAIRS**

**A. Engine-Generator Load Test**

1. Provide a factory load test for each engine-generator unit utilizing appropriate load banks with 0.8PF and including the following test, as a minimum:
  - a. Demonstrate that the engine-generator can be on-line within 10 seconds following a cold start signal with a block load of 50 percent @ 0.8 pf applied at the generator terminal. The voltage and frequency dip shall not exceed 15 percent of rated values.
  - b. Gradual increase to 100 percent load increments followed by a gradual decrease to 0 percent load in the same manner. Allow 30 minutes of operation at each load setting and record all required parameters at each setting (both for increase and for decrease).
  - c. One hour at 25 percent load.
  - d. One hour at 50 percent load.
  - e. One hour at 75 percent load.
  - f. Two hours at 100 percent load.
2. Record all required data for test steps c through f at 15 minute intervals.
3. Data to be recorded for each test step shall include:
  - a. Barometric pressure and ambient temperature at intake air inlet.
  - b. Jacket water temperature,
  - c. Lube oil temperature,
  - d. Speed,
  - e. Fuel flow rate, pressure, and temperature,
  - f. Noise data in accordance with ANSI and OSHA guidelines. Noise shall be obtained on a 5 foot contour around the unit at approximately 5 foot elevation. All readings shall be corrected to free-field conditionis,
  - g. Generator winding temperature.
4. Calculated variables to be recorded and reported for each test shall include:
  - a. Breake Mean Effective Pressure (BMEP)
  - b. Breake Specific Fuel Consumption (BSFC) (engine-generator load tests steps c through f only).
5. The CDCR Representative will consider minor modification to the test procedures as long as the essence of each test is maintained. The responsibility for determining acceptability of modification shall rest soley with CDCR Representative.

**3.2 CONFORMANCE OF MATERIALS WITH EXISTING EQUIPMENT**

**A. Existing Generator specifications are as follows:**

1. Each Catapillar Power Control System is rated at 1,500KW 12KV, 3-phase, standby type, Model # 3516 DITA.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Document 263214**

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3.3 FUNCTIONAL AND OPERATIONAL TESTING

A. FUNCTIONAL TESTING

1. Functionally test generator equipment, and controls systems for proper operation after general start-up and testing tasks have been completed.
2. Demonstrate proper rotation, alignment, speed, flow, pressure, vibration, sound level, adjustments, and calibration. Perform initial checks in the presence of and with the assistance of the manufacturer's representative.

B. OPERATIONAL TESTING

1. Demonstrate satisfactory operation of equipment and systems in actual operation.
2. Immediately correct defects in material, workmanship, or equipment which became evident during operational test.
3. Repeat operational test when malfunctions or deficiencies cause shutdown or partial operation of the facility or results in performance that is less than specified.

C. CERTIFICATE OF PROPER INSTALLATION

1. At completion of Functional Testing, furnish written report prepared and signed by manufacturer's authorized representative, certifying equipment:
  - a. Has been properly installed, adjusted, aligned, and lubricated.
  - b. Is suitable for satisfactory full-time operation under full load conditions.
  - c. Operates within the allowable limits for vibration.
  - d. Controls, protective devices, instrumentation, and control panels furnished as part of the equipment package are properly installed, calibrated, and functioning.
  - e. Control logic for start-up, shutdown, sequencing, interlocks, and emergency shutdown have been tested and are properly functioning.
2. Furnish written report prepared and signed by the electrical contractor certifying:
  - a. Control logic for equipment start-up, shutdown, sequencing, interlocks and emergency shutdown has been tested and is properly operating.
  - b. Co-sign the reports along with the manufacturer's representative and subcontractors.

END OF SECTION

**MEDIUM-VOLTAGE GENERATOR PARALLELING SWITCHGEAR**

**PART 1 GENERAL**

1.1 SECTION INCLUDES

- A. Medium voltage metal-clad generator paralleling switchgear.
- B. Generator controls.
- C. Generator breakers and tie breakers.
- D. Annunciator panel.

1.2 REFERENCE STANDARDS

- A. ANSI C12.1 - American National Standard Code for Electricity Metering; 2001.
- B. ANSI C37.013 - Standard for AC High-Voltage Generator Circuit Breakers Rated on a Symmetrical Current; 1997.
- C. ANSI C37.11 - Requirements for Electrical Control for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis or a Total Current Basis; 1979.
- D. ANSI C39.1 - American National Standard Requirements for Electrical Analog Indicating Instruments; 1981 (R1992).
- E. IEC 60051-1 - Direct Acting Indicating Analogue Electrical Measuring Instruments and Their Accessories - Part 1: Definitions and General Requirements Common To All Parts; International Electrotechnical Commission; 1997.
- F. IEC 60051-2 - Direct Acting Indicating Analogue Electrical Measuring Instruments and Their Accessories - Part 2: Special Requirements for Ammeters and Voltmeters International Electrotechnical Commission; 1984.
- G. IEEE 48 - IEEE Standard Test Procedures and Requirements for Alternating-Current Cable Terminations 2.5 kV through 765 kV; Institute of Electrical and Electronic Engineers; 1996 (R2003).
- H. IEEE C12.1 - American National Standard Code for Electricity Metering; Institute of Electrical and Electronic Engineers; 1988.
- I. IEEE C37.04 - IEEE Standard Rating Structure for AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis; Institute of Electrical and Electronic Engineers; 2005 with errata.
- J. IEEE C37.06 - American National Standard for Switchgear -- AC High-Voltage Circuit Breakers Rated on a Symmetrical Current Basis -- Preferred Ratings and Related Required Capabilities; 2000. (ANSI/IEEE C37.06)
- K. ANSI/IEEE C37.20.2 - IEEE Standard for Medium-Voltage Metal-Clad Circuit Breaker Switchgear; Institute of Electrical and Electronic Engineers; 2002 (R2010).

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 263215**

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- L. IEEE C57.13 - IEEE Standard Requirements for Instrument Transformers; Institute of Electrical and Electronic Engineers; 2008.
  - M. NETA STD ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems; International Electrical Testing Association; 2007.
  - N. NFPA 70 - National Electrical Code; National Fire Protection Association; 2008.
  - N. 2010 California Electrical Code (CEC); Part 3, Title 24, California Code of Regulations.
  - O. 2010 California Building Code (CBC); Part 2, Title 24, California Code of Regulations.
- 1.3 SYSTEM DESCRIPTION
- A. Provide generator control switchgear to parallel two existing 1500 kW, 12 kV, 3-phase generators.
  - B. Provide random access paralleling control system able to supply power within 10-seconds.
  - C. Equip each control section with necessary instrumentation, relaying, voltage regulator equipment, generator control equipment, engine governor controls, indicating lights, selector switches, engine annunciator panel, and other alarms/components required by NFPA 110 (Level 1).
  - D. Generator control switchgear shall include provisions for future remote annunciator panel, which will include alarm or operational status lights, as required by NFPA 110 (Level 1).
  - E. Generator paralleling switchgear shall include separate vertical sections/structures for each generator circuit breaker, one tie breaker, controls section for generator and breaker controls, and load bank circuit breaker section.
  - F. Generator paralleling control system shall interface with emergency system tie breaker controls and with normal system main and tie breaker controls to transfer loads from normal power to emergency power source upon failure of both normal power sources, and retransfer back to normal power source when at least one of the two normal power sources is restored.
- 1.4 SUBMITTALS
- A. See Section 013323 - Submittals.
  - B. Shop Drawings: Indicate electrical characteristics and connection requirements, outline dimensions, connection and support points, weight, specified ratings and materials.
  - C. Product Data: Provide electrical characteristics and connection requirements, standard model design tests, and options.
  - D. System Description: Provide operational narrative for system. Include generator sequence of operation under different load conditions; load ad/shed description during normal and adverse operating conditions; for instance, adverse condition when only one generator

# Switchgear Replacement and Generator Repair Project San Quentin State Prison

## Section 263215

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- able to operate and provide system power. Write description using non-technical language.
- E. Seismic Design: Provide switchboard anchorage details and manufacturer's seismic certification.
  - F. Test Reports: Indicate procedures and results for specified factory and field testing and inspection.
  - G. Manufacturer's Installation Instructions.
  - H. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
  - I. Manufacturer's Field Reports: Indicate activities on site, final adjustments and overcurrent protective device coordination curves, adverse findings, and recommendations.
  - J. Project Record Documents: Include copy of manufacturer's certified drawings.
  - K. Operation Data: Include operating instructions for manually and electrically opening and closing circuit breakers.
  - L. Maintenance Data: Include maintenance instructions for cleaning methods; cleaning materials recommended; instructions for circuit breaker removal, replacement, testing and adjustment, and lubrication.
  - M. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
    - 1. Tools: One each of every special tool required to operate and maintain switchgear.
- 1.5 QUALITY ASSURANCE
- A. Conform to requirements of NFPA 70.
  - B. Conform to requirement of CEC.
  - C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience and with service facilities within 100 miles (160 km) of Project.
  - D. Testing Agency: Company member of International Electrical Testing Association and specializing in testing products specified in this section with minimum three years documented experience.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Protect products from weather and moisture by covering with heavy plastic or canvas and by maintaining heating within enclosure in accordance with manufacturer's instructions.

**PART 2 PRODUCTS**

2.1 MANUFACTURERS

- A. Eaton Electrical/Cutler-Hammer: [www.eatonelectrical.com](http://www.eatonelectrical.com).
- B. GE Industrial: [www.geindustrial.com](http://www.geindustrial.com).
- C. ASCO.
- D. Caterpillar.
- E. Industrial Electric Mfg. (IEM): [www.iemfg.com](http://www.iemfg.com)
- F. Substitutions: Agreement for Design Build Services and Section 013323 – Submittals.

2.2 DESCRIPTION

- A. Switchgear: IEEE C37.20.1, Arc Resistant Metal Clad Switchgear assembly including horizontal draw-out circuit breakers in free-standing cubicles formed into an integrated structure.

2.3 SERVICE CONDITIONS

- A. Meet requirements for usual service conditions described in IEEE C37.20.1 and for the specified unusual service conditions.
- B. Meet requirements for use as service disconnecting means.

2.4 RATINGS

- A. Nominal Voltage: 12 kV, three phase, 60 Hz.
- B. Voltage and Insulation Levels: Conform to IEEE C37.20.1.
- C. Main Bus Ampacity: 1200 amperes, continuous.
- D. Momentary Current Rating: To IEEE C37.20.1.

2.5 CIRCUIT BREAKERS

- A. Circuit Breaker: IEEE C37.04, vacuum type circuit breaker.
- B. Circuit Breaker Operator: Spring-charged stored energy with electric operator to ANSI C37.11.
- C. Rated Maximum Voltage: 15.0 kV.
- D. Rated Voltage Range Factor: 1.3.
- E. Rated Frequency: 60 Hz.
- F. Rated Continuous Current: 1200 amperes, rms.
- G. Rated Dielectric Strength: 36 kV rms, low frequency; 95 kV crest, impulse.

- H. Rated Permissible Tripping Delay: 2 seconds.
- I. Short-Circuit Rating: 28 kA rms, at rated maximum voltage.
- J. Arc Rating: 25 kA.
- K. Operation Endurance Capability: IEEE C37.06.
- L. Rated Tripping Voltage: 48 volt, DC from capacitor-energized trip device in each circuit breaker cubicle.
- M. Rated Control Voltage, Closing: 120 volt, single phase from switchgear control power transformer.

## 2.6 PROTECTIVE RELAYS AND INSTRUMENTS

- A. Protective Relays: Provide relaying instruments as indicated for each circuit breaker.
- B. Current Transformers: IEEE C57.13, 5 ampere secondary, wound type, with single secondary winding and secondary shorting device, primary/secondary ratio as required, burden consistent with connected metering and relay devices, 60 Hertz.
- C. Potential Transformers: IEEE C57.13, 120 volt single secondary, disconnecting type with integral fuse mountings, primary/secondary ratio as required, burden and accuracy consistent with connected metering and relay devices, 60 Hertz.
- D. Analog Ammeters: IEC 60051-1 and IEC 60051-2, indicating ammeter with 4.5 inch (115 mm) square recessed case and 250 degree scale, white dial with black figures and pointer, 5 ampere, 60 Hertz movement, 1 percent accuracy.
- E. Analog Voltmeters: IEC 60051-1 and IEC 60051-2, indicating voltmeter with 4.5 inch (115 mm) square recessed case and 250 degree scale, white dial with black figures and pointer, 120 volt, 60 Hertz movement, 1 percent accuracy.
- F. Ammeter Transfer Switch: Rotary multistage snap-action type with 600 volt AC-DC silver plated contacts, engraved escutcheon plate, pistol-grip handle, and four positions including OFF.
- G. Voltmeter Transfer Switch: Rotary multistage snap-action type with 600 volt AC-DC silver plated contacts, engraved escutcheon plate, pistol-grip handle, and four positions including OFF.
- H. Watt-Hour Meters and Wattmeters: ANSI C12.1, three phase induction type with two stators, each with current and potential coil, rated 5 amperes and 120 volts at 60 Hertz and with the following features:
  - 1. Suitable for connection to 3- and 4-wire circuits.
  - 2. Potential indicating lamps.
  - 3. Adjustments for light and full load, phase balance, and power factor.
  - 4. Four-dial clock register.

5. Integral demand indicator.
  6. Ratchets to prevent reverse rotation.
  7. Removable meter with draw-out test plug.
  8. Semi-flush mounted case with matching cover.
  9. Appropriate multiplier tags.
- I. Impulse-Totalizing Demand Meter: ANSI C12.1, with the following features:
1. Suitable for use with switchboard watt-hour meter, including two circuit totalizing relay.
  2. Cyclometer.
  3. Four dial totalizing kilowatt-hour register.
  4. Positive chart drive mechanism.
  5. Capillary pen holding minimum one-month ink supply.
  6. Roll chart with minimum 31-day capacity.
  7. 5 minute integrated demand.
  8. Appropriate multiplier tags.
- 2.7 ACCESSORIES
- A. Surge Arrestors: Station class, rated 15 kV; mount in incoming line compartment.
  - B. Incoming Cable Terminations: Clamp-type.
  - C. Potheads: IEEE 48.
  - D. Key Interlocks.
  - E. Circuit Breaker Lifting Device: Portable, floor supported, elevating carriage with a roller base, for movement of circuit breakers in and out of switchboard structure.
- 2.8 FABRICATION
- A. Construction: Indoor Switchgear.
  - B. Height: 94 inches, maximum, including auxiliary support members on top and bottom.
  - C. Main Bus: Copper.
  - D. Provide copper ground bus.
- 2.9 FACTORY FINISHES
- A. Clean surfaces before applying paint.
  - B. Apply corrosion-resisting primer to all surfaces.
  - C. Apply finish coat of baked enamel paint to 2 mils (0.5 mm) thick.

**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 263215**

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- D. Finish Color: Manufacturer's standard dark gray finish.
- 2.10 SOURCE QUALITY CONTROL
  - A. Test in accordance with IEEE C37.20.1.
  - B. Make completed unit substation available for inspection at manufacturer's factory prior to packaging for shipment. Notify Owner at least 7 days before inspection is allowed.
  - C. Allow witnessing of factory inspections and tests at manufacturer's test facility. Notify Owner at least 7 days before inspections and tests are scheduled.
- 2.11 UTILITY SERVICE ENTRANCE
  - A. Provide incoming and metering provisions in compliance with utility company requirements.
  - B. Fabricate utility sections to match the switchgear line-up assembly.
- 2.12 NAMEPLATES
  - A. Nameplates and warning signs: Refer to Section 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS, for instructions.

**PART 3 EXECUTION**

- 3.1 EXAMINATION
  - A. Verify that support pads furnished under Section 033000 are ready to receive products.
  - B. Verify that field measurements are as indicated on shop drawings.
- 3.2 INSTALLATION
  - A. Install in accordance with IEEE C37.20.1.
  - B. Install switchgear plumb and level and with each section aligned properly.
  - C. Make electrical connections between equipment sections using connectors furnished by manufacturer.
- 3.3 FIELD QUALITY CONTROL
  - A. Perform field inspection and testing in accordance with Section 014000.
  - B. Inspect and test in accordance with NETA STD ATS, except Section 4.
  - C. Perform inspections and tests listed in NETA STD ATS, Section 7.1 and 7.6.
- 3.4 ADJUSTING
  - A. Adjust protective relays in accordance with recommendations in overcurrent protective device coordination study.

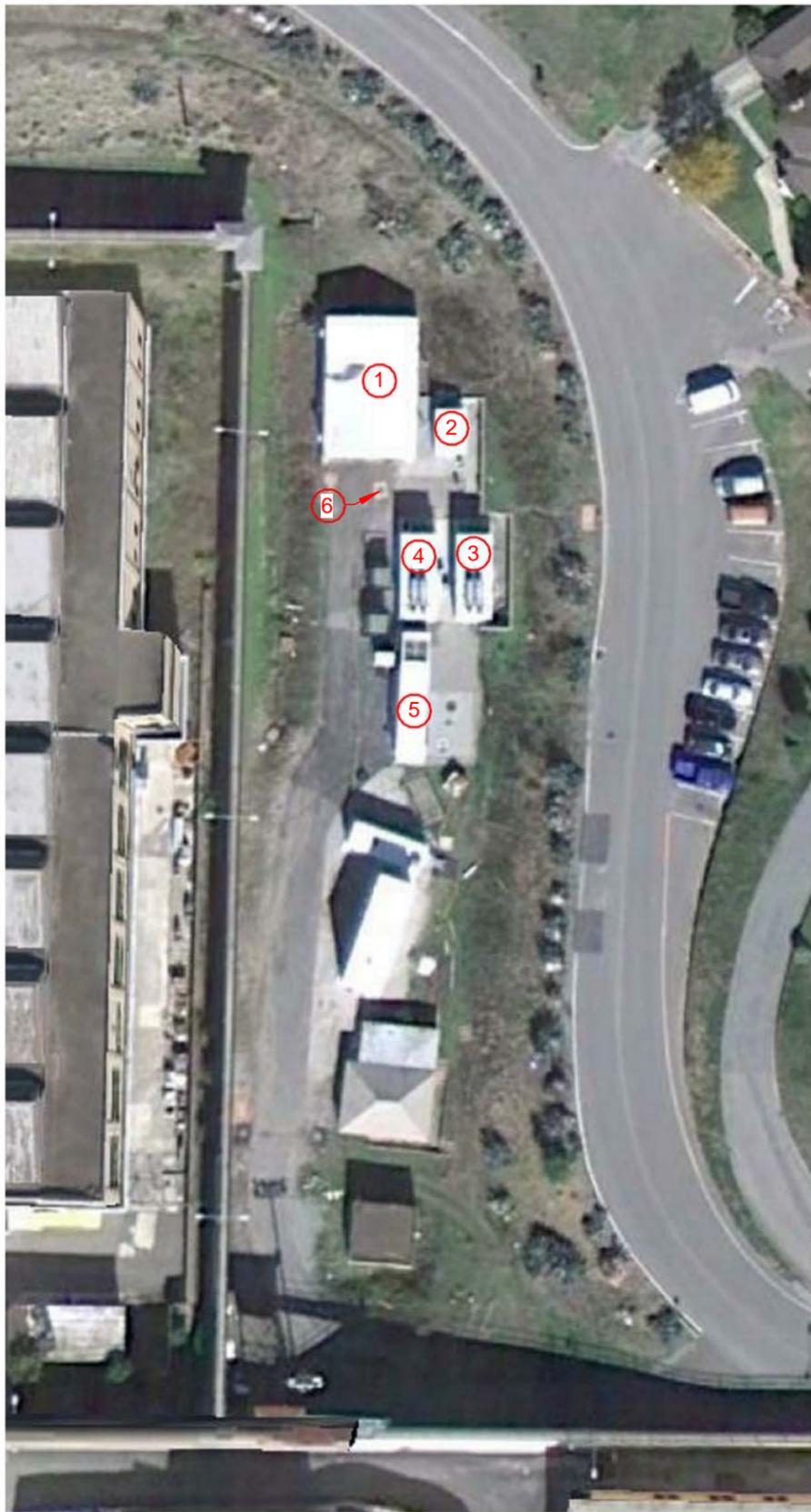
**Switchgear Replacement and Generator Repair Project  
San Quentin State Prison**

**Section 263215**

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- B. Adjust protective relays as directed.
- 3.5 CLOSEOUT ACTIVITIES
  - A. Demonstrate operation of circuit breakers.

END OF SECTION



0' 25' 50' 100'  ① Partial Aerial #1  
1" = 50'-0"



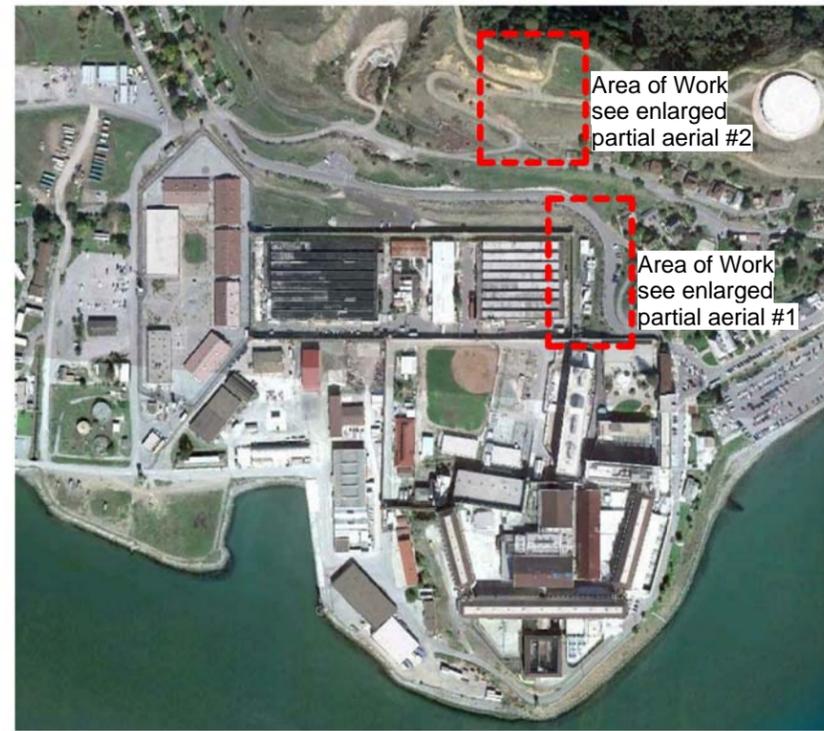
0' 50' 100' 200'  ② Partial Aerial #2  
1" = 100'-0"

**Building Legend**

- ① Power House Building
- ② Paralleling Gear
- ③ Generator #1
- ④ Generator #2
- ⑤ Temporary Generator Trailer
- ⑥ Electrical Underground Cable Manhole
- ⑦ New PG&E Metering Gear Location
- ⑧ San Rafael Feeder
- ⑨ Greenbrae Feeder

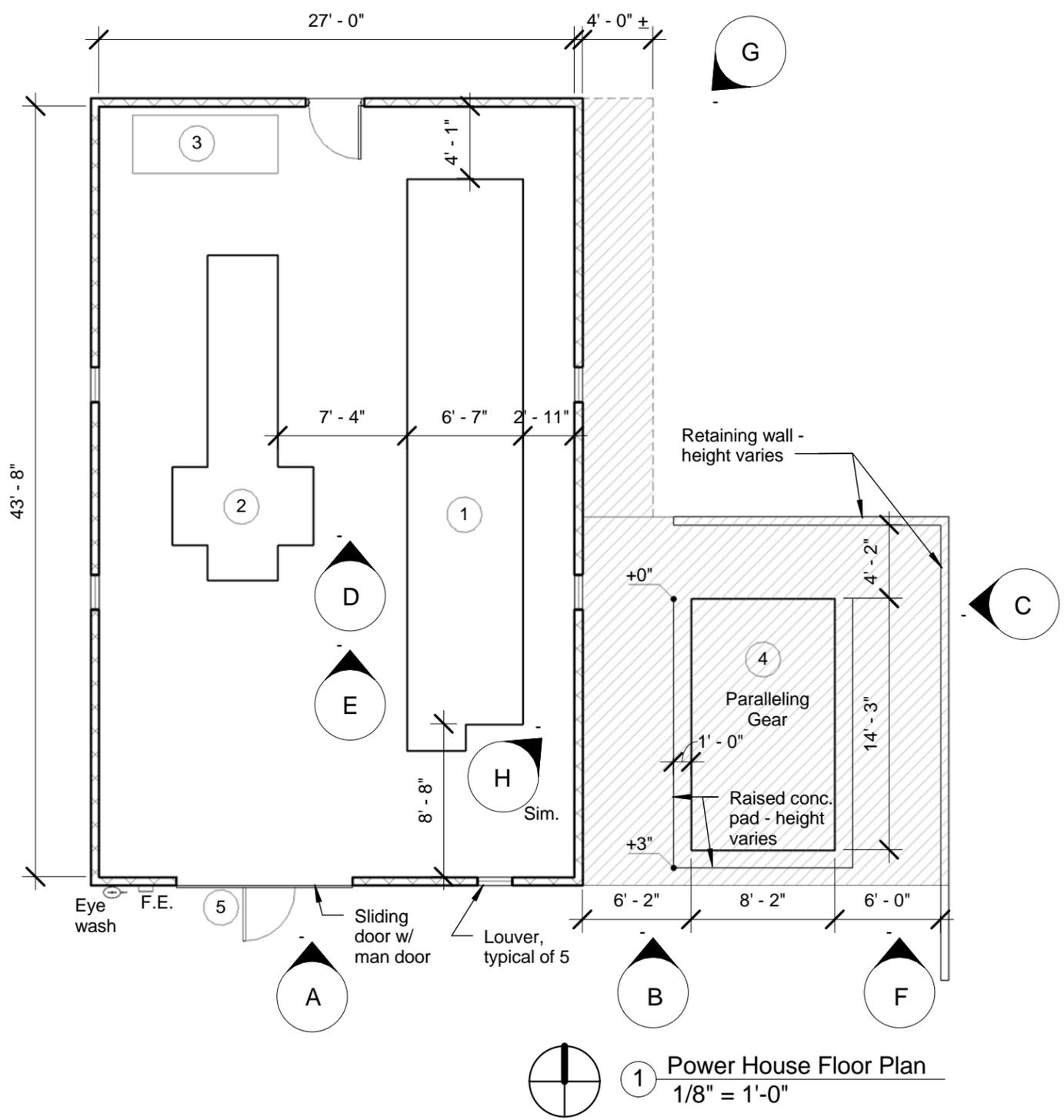


 ③ Vicinity Map  
N.T.S.



 ④ San Quentin Aerial  
N.T.S.

REVISIONS	
NO.	DATE



**Building Characteristics:**

Type I construction  
Structural system: Concrete  
Roofing: Asphalt sheet  
Occupancy: Group U  
Fire alarm: None  
Fire sprinkler: None

Area of Potential Building Expansion - include paralleling gear inside building footprint

**Notes:**

- 1 Existing 15 KVA switchgear to be replaced. Refer to Project Manual for Scope and Design Criteria
- 2 Existing 2.4 KVA gear to remain
- 3 Existing disconnect switches to remain
- 4 Existing paralleling Gear to be replaced. Refer to Project Manual for Scope and Design Criteria
- 5 Prep. and repaint existing doors



(A) South Elevation - Power House



(B) South Elevation - Power House & Paralleling Gear



(C) East Elevation



(D) Interior - Power House



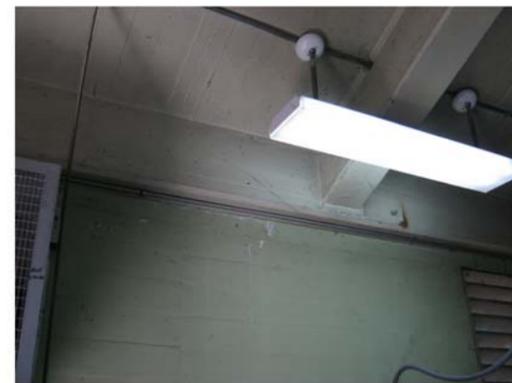
(E) Interior - Power House Structure



(F) South Elevation - Paralleling Gear



(G) Northeast Elevation



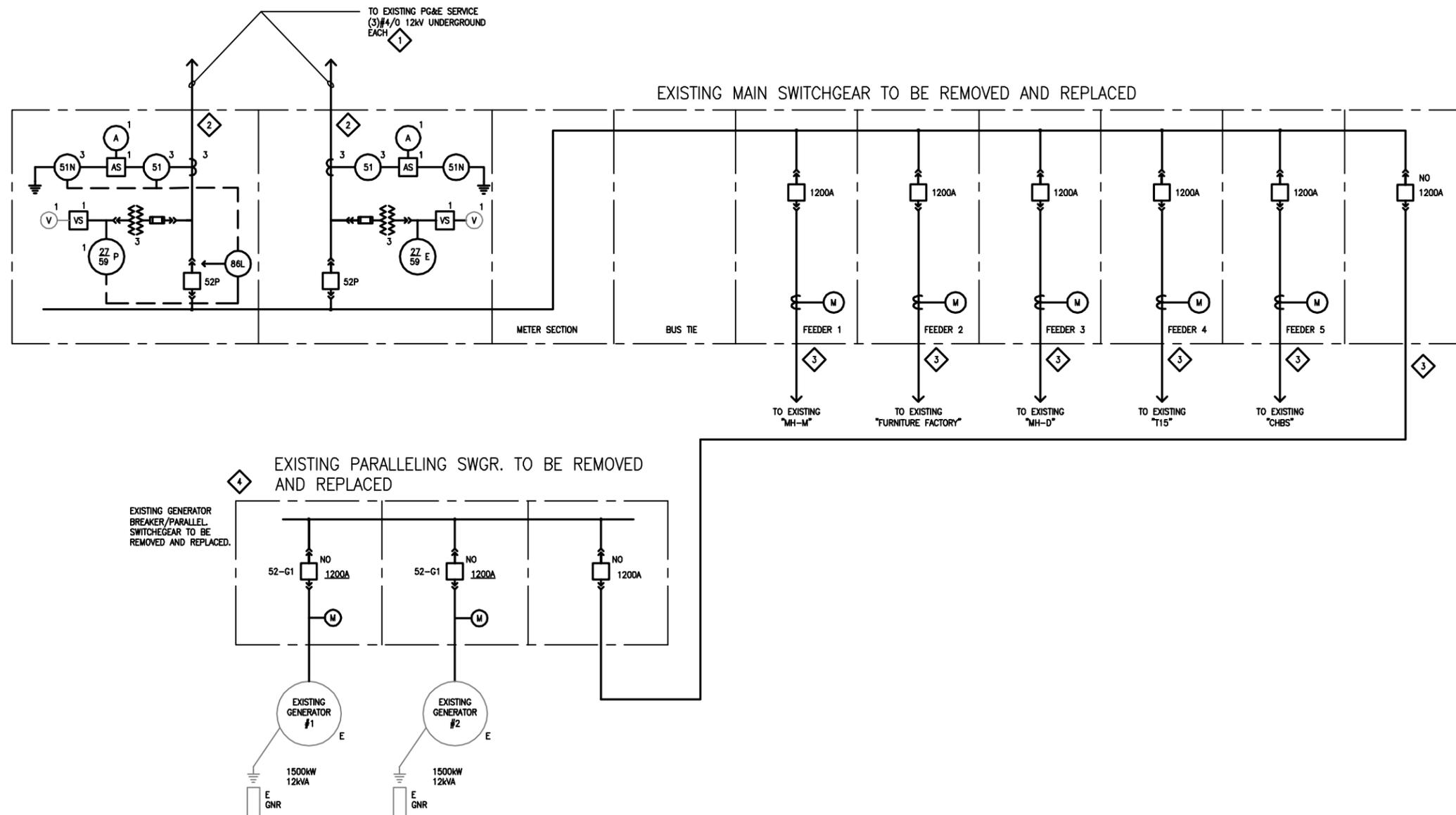
(H) Interior - Power House Structure

SHEET TITLE: Power House Floor Plan  
SCALE: 1/8" = 1'-0"

REVISIONS	
NO.	DATE

**NUMBERED SHEET NOTES:**

- 1 INTERCEPT EXISTING UNDERGROUND SERVICE AS CLOSE AS NEW UTILITY SWITCHGEAR(S) LOCATION AS POSSIBLE. PROVIDE UNDERGROUND PULL BOX AS REQUIRED. EXTEND EXISTING SERVICE FEEDER TO NEW UTILITY SWITCHGEAR(S) AS REQUIRED SEE NOTE 1, SHEET E1.01.
- 2 DISCONNECT EXISTING UNDERGROUND SERVICES, REMOVE EXISTING MAIN SWITCHGEAR. RECONNECT TO NEW MAIN SWITCHGEAR AS REQUIRED UPON THE COMPLETION OF MAIN SWITCHGEAR REPLACEMENT. SEE NOTE 2, SHEET E1.01.
- 3 DISCONNECT EXISTING FEEDER, REMOVE EXISTING MAIN SWITCHGEAR AND RECONNECT TO NEW SWITCHGEAR AS REQUIRED UPON THE COMPLETION OF MAIN SWITCHGEAR REPLACEMENT. SEE NOTE 3, SHEET E1.01.
- 4 DISCONNECT FEEDER(S) REMOVE EXISTING EQUIPMENT. RECONNECT UPON COMPLETION OF EQUIPMENT REPLACEMENT. SEE NOTE 4, SHEET E1.01.



SHEET TITLE:  
**DEMOLITION  
SINGLE LINE  
DIAGRAM**  
SCALE: NONE

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JOB NO. -  
DATE 04/20/11  
SHEET  
**E-1.00**

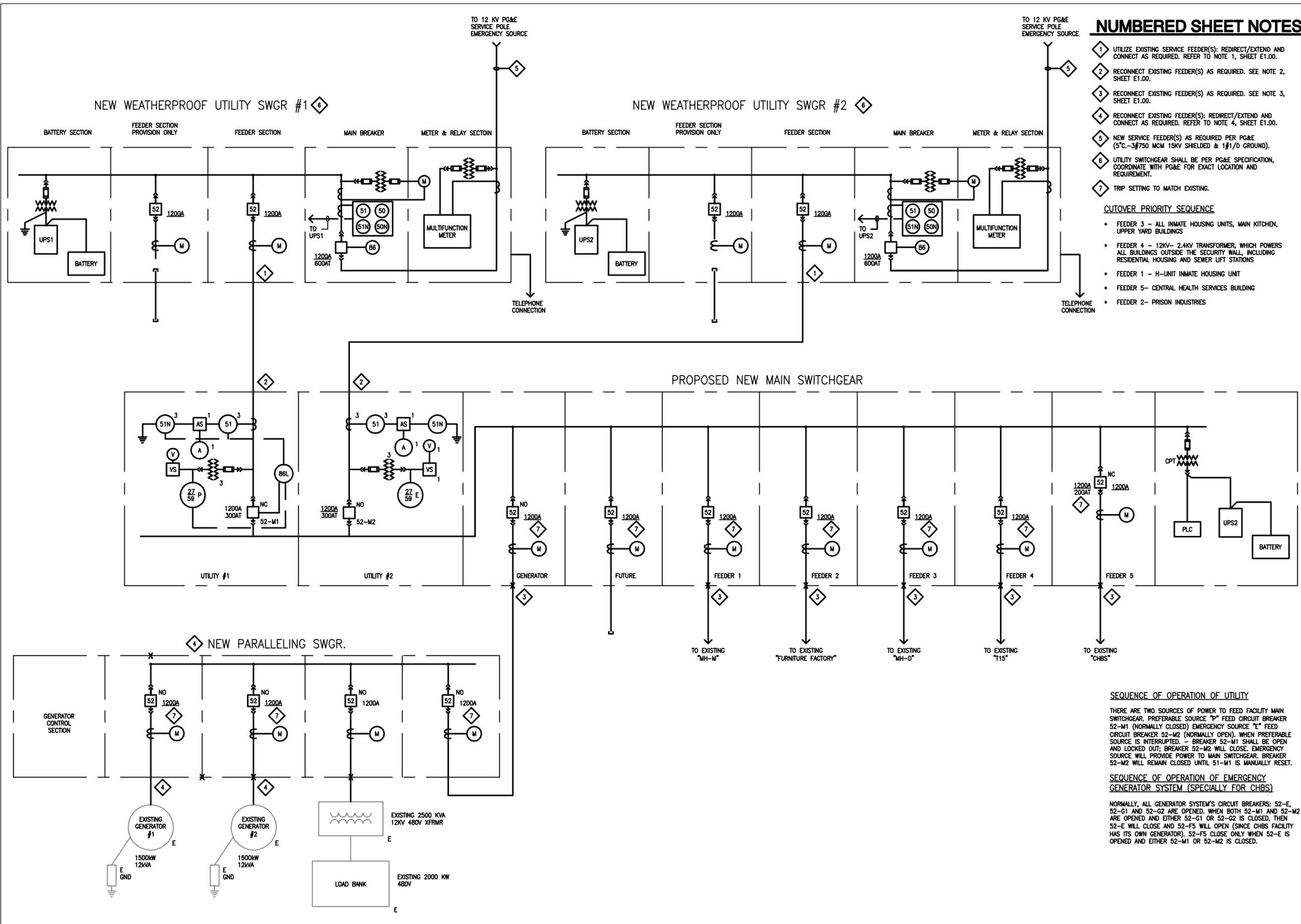


**NUMBERED SHEET NOTES:**

- 1 UTILIZE EXISTING SERVICE FEEDER(S); REDIRECT/EXTEND AND CONNECT AS REQUIRED. REFER TO NOTE 1, SHEET E1.00.
- 2 RECONNECT EXISTING FEEDER(S) AS REQUIRED. SEE NOTE 2, SHEET E1.00.
- 3 RECONNECT EXISTING FEEDER(S) AS REQUIRED. SEE NOTE 3, SHEET E1.00.
- 4 RECONNECT EXISTING FEEDER(S); REDIRECT/EXTEND AND CONNECT AS REQUIRED. REFER TO NOTE 4, SHEET E1.00.
- 5 NEW SERVICE FEEDER(S) AS REQUIRED PER PG&E (5'C.-3#750 MCM 15KV SHIELDED & 1#1/0 GROUND).
- 6 UTILITY SWITCHGEAR SHALL BE PER PG&E SPECIFICATION, COORDINATE WITH PG&E FOR EXACT LOCATION AND REQUIREMENT.
- 7 TRIP SETTING TO MATCH EXISTING.

**CUTOVER PRIORITY SEQUENCE**

- FEEDER 3 - ALL INMATE HOUSING UNITS, MAIN KITCHEN, UPPER YARD BUILDINGS
- FEEDER 4 - 12KV- 2.4KV TRANSFORMER, WHICH POWERS ALL BUILDINGS OUTSIDE THE SECURITY WALL, INCLUDING RESIDENTIAL HOUSING AND SEWER LIFT STATIONS
- FEEDER 1 - H-UNIT INMATE HOUSING UNIT
- FEEDER 5- CENTRAL HEALTH SERVICES BUILDING
- FEEDER 2- PRISON INDUSTRIES



**SEQUENCE OF OPERATION OF UTILITY**

THERE ARE TWO SOURCES OF POWER TO FEED FACILITY MAIN SWITCHGEAR. PREFERABLE SOURCE "P" FEED CIRCUIT BREAKER 52-M1 (NORMALLY CLOSED) EMERGENCY SOURCE "E" FEED CIRCUIT BREAKER 52-M2 (NORMALLY OPEN). WHEN PREFERABLE SOURCE IS INTERRUPTED, - BREAKER 52-M1 SHALL BE OPEN AND LOCKED OUT; BREAKER 52-M2 WILL CLOSE. EMERGENCY SOURCE WILL PROVIDE POWER TO MAIN SWITCHGEAR. BREAKER 52-M2 WILL REMAIN CLOSED UNTIL 51-M1 IS MANUALLY RESET.

**SEQUENCE OF OPERATION OF EMERGENCY GENERATOR SYSTEM (SPECIALLY FOR CHBS)**

NORMALLY, ALL GENERATOR SYSTEM'S CIRCUIT BREAKERS: 52-E, 52-G1 AND 52-G2 ARE OPENED. WHEN BOTH 52-M1 AND 52-M2 ARE OPENED AND EITHER 52-G1 OR 52-G2 IS CLOSED, THEN 52-E WILL CLOSE AND 52-F5 WILL OPEN (SINCE CHBS FACILITY HAS ITS OWN GENERATOR). 52-F5 CLOSE ONLY WHEN 52-E IS OPENED AND EITHER 52-M1 OR 52-M2 IS CLOSED.

SHEET TITLE:  
**REMDEL SINGLE LINE DIAGRAM**  
SCALE: NONE

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NO.	DATE