

B	ISSUED FOR REVIEW	5/27/15	M. Ginsburg	<i>[Signature]</i>
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NO	REVISIONS	DATE	DSNR	APPD DM



**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT

**ZACHRY**

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**AUX BOILER RELOCATION AND DESIGN**

**SPECIFICATION**

**SECTION 011101**

**FOUNDATION CONSTRUCTION SCOPE OF WORK**

DATE 5/19/15	DSNR M. Ginsburg	APPD DM G.B. Little	APPD PM S. Sevick	<i>[Signature]</i>
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A001399-SPCG011101 RB

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#### **PART 1 GENERAL**

##### 1.1 SUMMARY

###### A. Section Includes:

1. The Auxiliary Boilers Relocation Project consists of the relocation of an existing Cleaver-Brooks package boiler from their current indoor location owned by Hackman Capital (Campbells Soup) to two (2) outdoor locations within Sacramento County, California. The boiler is being uprated to 90 kpph at 190 psig and retrofitted with a Selective Catalytic Reduction (SCR) System. A limited amount of ancillary equipment, piping, instrumentation and controls will be relocated with the balance being replaced with new equipment. For design data refer to Section 000101-Project Information and Site Data.
2. The scope of this Section includes earthwork and construction of new foundations.

###### B. Related Sections:

1. Section 000101 – Project Information and Site Data

###### C. Attachments:

1. Attachment A – Design Drawing List
2. Attachment B – SMUD Requirements
  - a. SMUD Section 01300 – Submittals
  - b. SMUD Section 02200 – Earthwork
3. Attachment C – SCA Geotechnical Report (P001399-SRWSZ001)

##### 1.2 SCOPE OF WORK

###### A. General Scope of Work:

1. The Contractor shall receive, protect, store, haul, assemble, erect, install, test and place into service foundations and associated materials defined by this document and associated specifications and drawings.

###### B. Structural Scope of Work:

1. Subsoil preparation.
2. Excavation and backfilling.

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3. Replacement of unsuitable material with engineered fill as directed by geotechnical engineer on site.
4. Supply and installation of form work, concrete, and reinforcing bars.
5. Supply and installation of anchor bolts, rods and concrete embedments (i.e., plates, angles, channels, welding studs, pipe sleeves, manway covers, etc.).
6. Supply and installation of grout.
7. Supply and installation of water stops, joint sealants, and joint fillers.
8. Foundations to be installed include:
  - a. Boiler Area, includes Packaged Boiler, SCR, Economizer and Stack
  - b. Deaerator/Boiler Feed Area
  - c. PEC Building
  - d. Transformer
  - e. Pipe Rack
  - f. Any other work assigned by task owner

C. Mechanical Scope of Work:

1. NOT USED

D. Electrical Scope of Work:

1. NOT USED

E. Instrumentation and Controls Scope of Work:

1. NOT USED

### 1.3 REFERENCES

- A. The work performed under these specifications shall be done in accordance with the following codes and standards. Unless otherwise specified, the applicable governing edition and addenda to be used for all references to codes or standards specified herein shall be interpreted to be the jurisdictionally approved edition and addenda. If a code or standard is not jurisdictionally mandated, then the current edition and addenda in effect at the date of the document shall apply.

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1. American Society of Civil Engineers (ASCE)
  2. California Building standards Code (CBSC)
- B. Seller shall comply with all applicable codes and standards, whether or not identified in this listing. This specification refers to these publications by the basic designation only. These references shall govern the work except where they conflict with the Engineer's specifications. In case of conflict, the more stringent requirement, as interpreted by the Engineer, shall govern.
- 1.4 SUBMITTALS
- A. Refer to SMUD requirements (Attachment B).
- 1.5 QUALITY ASSURANCE
- A. NOT USED
- 1.6 NOISE
- A. NOT USED
- 1.7 TESTING
- A. See Section 02200 (Attachment B) and Drawing D001399-PSAS0Y001 (Attachment A)
- 1.8 GUARANTEES
- A. NOT USED

## **PART 2 PRODUCTS**

### 2.1 STRUCTURAL CONSTRUCTION

- A. The Contractor shall furnish the labor, supervision, materials, incidentals and equipment as required for the completed installation of the following:
  1. Excavation, backfilling, and dewatering as required for foundations, duct banks, underground piping, and concrete structures installation.
  2. Forming, placing, and finishing of all concrete foundations, floor slabs, slabs-on-grade, door stoops, door aprons and concrete structures including reinforcement and installation of anchor bolts, post installed anchors, gaskets, special fasteners and connections, and all other embedded materials.

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3. Installation and maintenance of all construction storm water pollution prevention measures including, but not limited to:
  - a. Silt fencing
  - b. Inlet protections
  - c. Outlet protections
  - d. Hay bales
- 2.2 MECHANICAL CONSTRUCTION
  1. NOT USED
- 2.3 ELECTRICAL CONSTRUCTION
  - A. NOT USED
- 2.4 INSTRUMENTATION AND CONTROLS CONSTRUCTION
  - A. NOT USED
- 2.5 CONSTRUCTION POWER
  - A. Owner will provide temporary construction power. Contractor shall be responsible for bringing power to work area and providing appropriate electrical connections including compliance with OSHA Power Cord Requirements.
- 2.6 WORK NOT INCLUDED IN THIS CONTRACT
  - A. Installation of structural and miscellaneous steel
  - B. Grading
  - C. Installation of equipment
- 2.7 PERMITS
  - A. Owner will provide all permits

### **PART 3 EXECUTION**

- 3.1 LABOR, EQUIPMENT AND MATERIALS
  - A. The Seller shall provide competent, suitably qualified personnel to survey, lay out the work, and perform construction as required by the contract documents. The Seller shall maintain good discipline and order at the Site at all times. Unless otherwise specified, the Seller shall furnish and assume full responsibility for all equipment and materials, labor, transportation, construction equipment and machinery, tools, appliances,

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fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the work.

- B. All equipment and materials incorporated in the work shall be designed to meet the applicable safety standards of federal, state and local laws and regulations.

#### 3.2 LAWS AND REGULATIONS

- A. Seller shall give all notices and comply with all laws and regulations applicable to furnishing and performance of the work. Except where otherwise expressly required by applicable laws and regulations, neither the Owner nor the Owner's Engineer shall be responsible for monitoring the Seller's compliance with any laws or regulations.
- B. If the Seller observes that the sections or drawings are at variance with any laws or regulations, the Seller shall make necessary changes authorized by the Owner or the Owner's Engineer. If Seller performs any work knowing, or having reason to know, it is contrary to such laws or regulations, the Seller shall bear all governmental fines, penalties and legal costs associated therewith; however, it shall be the Seller's primary responsibility to make certain the sections and drawings are in accordance with such laws and regulations.

#### 3.3 TEMPORARY BARRIERS AND CONTROLS

- A. For protection of existing finish work, the Seller shall:
  - 1. Provide design, materials and installation of interior and exterior shoring, bracing or other supports as determined by the Seller's Engineer to prevent movement, settlement or collapse of structures or elements to be demolished, including adjacent facilities or equipment, which will remain in place. Design shall be prepared by technically competent and qualified professionals and shall be submitted to the Owner for approval prior to the commencement of installation.
  - 2. Protect from damage existing finish work that is to remain in place, which becomes exposed during construction and demolition. Protect floors with suitable coverings as necessary. All damage shall be repaired at the Seller's expense.
- B. For environmental protection control, the Seller shall:

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1. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of hazardous or toxic substances from the Seller's construction operations.
2. Provide equipment and personnel, perform emergency measures required to contain any spillages by the Seller. Remove the soils or liquids contaminated by the Seller. Excavate and dispose of any contaminated earth offsite in approved locations and replace with suitable compacted fill and topsoil.
3. Take special measures to prevent harmful substances generated by the Seller from entering public waters, sanitary or storm sewers.
4. Concrete, rubble and other materials shall not be disposed of in the river, except where approved for use as riprap.

#### 3.4 DRAWINGS

- A. The drawings listed in Attachment A – Drawing List, are enclosed as part of this section. The Seller shall furnish and install all work in accordance with this section and as shown on the drawings and other drawings that may subsequently be furnished or approved by the Owner to provide greater detail. The Seller shall furnish or install all work in accordance with this section and as shown on the drawings and other drawings that may subsequently be furnished or approved by the Owner to provide greater detail.
- B. Drawings and sections are intended to be descriptive only and any errors or omissions of details in either shall not relieve the Seller from an obligation to install, in correct detail, all materials necessary for complete and operable systems to the extent shown on the drawings and described in this section.
- C. In the event the Seller finds any discrepancies, errors, omissions or conflicts between the Contract, other documents and the drawings, the Seller shall refer the matter to the Owner immediately for clarification.
- D. Changes, additions, or deletions shall be made only with written approval or instruction from the Owner. A separate, complete and accurate as-built file of Seller's drawings shall be maintained by the Seller at all times, using the latest issues of drawings marked to show all subsequent data, approved deviations, and critical locations determined during the course of construction. Seller's as-built file shall be kept up-to-date throughout the

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Project on a daily basis, and all changes shall reference the appropriate change requested and approval. The as-built file shall be turned over to the Owner and the as-built drawing shall be turned over to the Engineer within 30 days of the completion of construction.

- E. Seller shall be aware that the sections and drawings describe the minimum requirements. Components and modifications which are not specifically referenced herein, but are obviously required to complete the work and provide the Owner with a finished, complete and operable project shall be the responsibility of the Seller. It shall also be the responsibility of the Seller to obtain from the Owner or Owner's Engineer, in a timely manner, any additional drawings or other information deemed necessary to prepare the bid package and complete the work after contract award.
- F. After contract award, the Seller shall be responsible for gathering and verifying all necessary as-built field information for completing the work as described herein and as shown on the drawings.

#### 3.5 CODES AND STANDARDS

- A. All work shall be performed in accordance with all applicable local, state and federal codes, regulations, laws and standards.
- B. Codes and standards applicable to the work described in each division are listed separately within each section. The latest edition of the document in effect as of the date of the Request for Bid shall be used.
- C. Section sections refer to codes, standards and other documents which establish product, installation and quality standards of industry-recognized associations and institutes. If there is, or seems to be, a conflict between this section and a referenced document, the matter shall be referred to the Engineer.

#### 3.6 HOLD POINTS

- A. The Owner and the Owner's Engineer shall have the right to establish hold points for which the Seller shall give prior notification. Hold points require the Seller to give prior notification at least 48 hours in advance of the scheduled time of performance. The Owner and Owner's Engineer may require that activities performed without prior notification and work covered prior to inspection is repeated for the Owner or the Owner's Engineer's observation at the Seller's expense.

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- B. The Owner or Owner's Engineer shall inform the Seller of its desire to witness the event or authorize the Seller to proceed without witnessing the event. The above may be performed by telephone communication.
- C. Written waiver will be issued if requested by the Seller and agreed to by the Owner or Owner's Engineer.

END OF SECTION

## SPECIFICATION SECTION 011101

### FOUNDATION CONSTRUCTION SCOPE OF WORK

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#### Attachment A

#### Design Drawing List

D001399-SRWL1Y001 S01 RC Site Related Work SCA Site General Arrangement  
D001399-PSAS0Y001 S01 RB SCA Site Concrete General Structural Notes  
D001399-PSAS1Y101 S01 RD SCA Site Overall Foundation Plan  
D001399-PSAS1Y102 S01 RD SCA Site Enlarged Boiler Foundation Plan  
D001399-PSAS1Y103 S01 RB SCA Site Foundation Sections & Details  
D001399-PSAS1Y104 S01 RB SCA Site Foundation Sections & Details  
D001399-PSAS1Y105 S01 RB SCA Site Foundation Sections & Details  
D001399-PSAS1Y106 S01 RA SCA Site Foundation Sections & Details