

# **MECHANICAL PROJECT SPECIFICS (Request for Proposal)**

## SECTION 1: PROJECT DESCRIPTION

**PROJECT DESCRIPTION** -The Work shall consist of furnishing labor, tools, materials, equipment, supplies, services, and transportation necessary to construct Mechanical and Piping for Phase 2 of the Compressor Station Gas Gathering and Processing Facility Rebuild Project located on McDonald Island, approximately 8 miles west of Stockton, California. See Attachment A, Directions to Whisky Slough.

Phase 2 includes all work required to demolish and reinstall all piping systems like in kind as indicated in the scope of work section of this RFP. Phase 2 Construction will start on or about May 1, 2016, shall achieve a mechanical completion date of September 30, 2016, and shall be completed to assure a full release to Operations (substantial completion) no later than October 30, 2016.

# All building construction shall meet all applicable code requirements; in case of discrepancy among codes and contract documents, the most stringent shall prevail.

This Request for Pricing (RFP), request pricing for the demolition and installation of all Mechanical systems as stated in the work scope below.

1.1 **BASIS OF THE CONTRACT WORK**- The scope of the Contract Work shall include for the provision of all labor, materials and equipment as necessary to complete the mechanical systems as set forth in the Specifications and Drawings. Listed below is a summary of the major systems for this Contract, but is not all-inclusive.

# 1.2 SCOPE OF WORK WORK INCLUDED IN PHASE 2

- 1.2.1 Safety, health, and environmental assurance planning and execution during construction.
- 1.2.2 Coordination of all Subcontractor work with other project participants, including the Owner, and separate project subcontractors performing work in parallel.
- 1.2.3 Provide Operator Qualified (OQ) personnel for key tasks as defined by Contractor flowdown of Owner requirements.
- 1.2.4 Perform test and inspection verification of constructed work with respect to the quality requirements of these specifications.

- 1.2.6 Unloading, receiving and preparation for storage and installation of Contractor supplied equipment and materials at job site.
- 1.2.7 Carefully demolish existing facilities as shown on the drawings and specified below, to facilitate the salvage and/or removal of all demolished existing infrastructure. Phase 2 demolition and salvage includes:
  - a. Strict coordination of mechanical and structural demolition work with demolition preparation work by others (Electrical/Instrumentation subcontractor) to assure all sources of electrical power and control energy have been disconnected from work features to be demolished by mechanical Subcontractor.
  - b. Demolish all existing control valves and isolation valves on Contactor Towers C-1 through C-4 -work to include demolition of associated rich and lean glycol piping and production liquid lines.
  - c. Demolish existing gas, process, utilities and blowdown piping and pipe supports as indicated on the drawings.
  - d. Demolish existing (34) 3-inch and 4-inch tubing and casing meter runs on the gathering platform, including tubing and casing pipes below the platform through the buried tees and reducers at the below ground to above ground transitions at the edge of the platform.
  - e. Disconnect (68) 4-inch plug valves and save for re-installation as shown on the drawings.
  - f. Demolish existing filter separators and supports (C-11, C-12, C-14) and air receivers.
  - g. Demolish all existing valves, gear operators, power actuators (except V-37, V-38, V-41, V-42, V-43, V-56, V-57, V-63, V-74, and V-M).
  - h. Disconnect (4) 16-inch plug valves and save for re-installation as shown on the drawings.
  - i. Demolish existing methanol system including the methanol pump, valve rack, and distribution piping, tubing, and injection points at the gathering platform and process piping.
  - j. Demolish existing insulation on piping and equipment on the gathering and process platforms.
  - k. Demolish existing main gas meters (M-1, M-2, M-3, M-4, M-5, M-6, M-7, and M-8)
  - I. Demolish existing walkway on process platform, including stairs.
  - m. Demolish existing monorail and support columns along the walkway.
  - n. Demolish all existing pipe supports under the gathering platform.
  - o. Demolish waste water vessel C-26 and associated production liquid piping to the Phase 1

production liquids tie-in point. Demolish associated C-26 dump system piping.

- p. Demolish existing glycol lines to and from regeneration units to contactor towers.
- q. Demolish residual abandoned 6" piping and supports in coalescing separator pipe trench to abandonment point through bulkhead fitting at the south side of coalescing separator pipe trench bulkhead – locating abandoned piping on the south side of the trench bulkhead will require excavation.
- 1.2.8 Phase 2 reinstallation
  - a. Reinstall like in kind the following piping systems as indicated on drawings and specifications
    - a. Main Gas
    - b. Instrument Air
    - c. Utility Air
    - d. Waste Water Production Fluid
  - b. Insulate all piping as called out in the piping specifications
  - c. Paint all piping as called out in the piping specifications
  - d. Install pipe supports as indicated on drawings
  - e. Hydro test on all new piping
  - f. Subcontractor to provide all lifting equipment
  - g. Subcontractor to provide all scaffolding or aerial lift necessary to access the work safety
  - h. Lead abatement must be done at all demo cut locations and where ever new pipe supports weld to existing structural steel

**SECTION 2: PROJECT SPECIFIC CLARIFICATION-** It is mutually understood and agreed that the Scope of the Contract Work includes, but is not limited to, the following items:

#### 2.1 SAFETY:

- 2.1.1 Work areas shall be kept orderly at all times. At the end of the work period or day, whichever occurs first, the Sub Contractor must arrange work in progress so that traffic through the area can move unimpeded, sweep area and remove debris. Where appropriate, temporary or long-term areas in occupied space should be marked off with cones, barrier tape, etc., to limit access into hazardous areas. Sub Contractor shall remove, at completion of work, all waste materials, rubbish, debris, tools, equipment, machinery and surplus materials from and about the work site. If the Sub Contractor fails to clean up, the General Contractor may do so at Sub Contractor's expense.
- 2.1.2 All Sub Contractors are required to follow all General Contractor Safety requirements and Construction Site Protocol as appropriate. Include cost for

qualified onsite safety representative if workers of Sub - Contractors exceed 25 (Twenty-five). Safety Representatives cannot be a working foreman.

- 2.1.3 Provision of all Pre-Task Analysis, Safety Analysis, and Job Hazard Analysis documentation as required by Construction Manager and Owner's Field Personnel. It is understood and agreed that this documentation shall be submitted on the proper forms supplied by the General Contractor and will be reviewed and approved prior to the commencement of any of the Contract Work.
- 2.1.4 The Sub Contractor shall submit a "Sub Contractor Daily Job Report".
- 2.1.5 The Sub Contractor shall submit weekly man-hour report, including any subcontractors.

#### 2.2 ADMINISTRATIVE:

- 2.2.1 Scope items for each trade are on multiple drawings. Sub Contractors are responsible for reviewing all drawings to ensure complete scope. Any discrepancies in scope are to be relayed to the GC for clarification.
- 2.2.2 Sub Contractor is advised that costs associated with Sub Contractors Proposal are not recoverable.
- 2.2.3 All mail (including RFI's, C.O.; etc) shall be distributed as defined in the pre-bid meeting.
- 2.2.4 Sub Contractor shall not proceed with any changes, deviations, revisions, or additional work without prior written documentation (authorization) from the General Contractor Project Manager.

## 2.3 DOCUMENTS

- 2.3.1 Performance of the Contract Work is to be in strict accordance with all specifications.
- 2.3.2 If conflicts exist between documents, the order of priority is as follows:
  - 2.3.2.1. RFI's, Meeting Minutes, Contract Documentation.
  - 2.3.2.2. Drawings
  - 2.3.2.3. Specifications
- 2.3.3 All RFI's must be submitted to the General Contractor Construction Office, location to be determined at pre-bid meeting.
- 2.3.4 Sub Contractors directed to pay special attention to the Drawing General Notes and Key Notes as they relate to the Contract Scope of Work.
- 2.3.5 Sub Contractor is responsible for reviewing all notes and / or details on any drawings related to your scope of work, i.e. architectural details for piping supports may appear on the mechanical drawings.
- 2.3.6 Sub Contractor is required to maintain as-built drawings (redlines). This process will start with the commencement of construction and will be updated on a weekly basis. Failure to comply shall result in hold up of billing payment.

#### 2.4 SUBMITTALS

- 2.4.1 Five (5) copies of all submittals are required, including any shop drawings. One (1) copy will be returned to the Sub Contractor for distribution as necessary.
- 2.4.2 Critical submittals with required submittal shall be identified on your proposal Project Schedule along with lead times of equipment.

2.4.3 Submittals must be transmitted to the General Contractor so that they support the Project Schedule. Allow fifteen working days to review and return the submittals. If you cannot support the schedule, notify the General Contractor during the bid process. Late processing of submittals will NOT be a reason for delaying the job and all costs associated with expedited deliveries to maintain progress will be solely the responsibility of the Sub - Contractor.

## 2.5 Schedule

- 2.5.1 Sub Contractor shall work all overtime and shift work as required to meet Scheduled Milestone Dates.
- 2.5.2 The Project Schedule is included with this bid package. The following milestone dates must be met. Include any and all overtime/premium time to meet schedule.
  - 2.5.2.1. Demolition
  - 2.5.2.2. Installation of all systems
  - 2.5.2.3. Punchout and turnover, with acceptance by owner of all systems

## 2.6 Field Coordination

- 2.6.1 All Sub Contractors supervision and project manager are to attend a 1-hour weekly coordination meeting.
- **2.6.2** Provision of all Coordination with all other on-site trades, as required for the proper installation of this Contract Work.
- **2.6.3** Sub Contractor will be responsible for complete familiarization of the jobsite relative to the complete identification of existing conditions as they relate to Contract Work.
- **2.6.4** Sub Contractor will provide all field engineering and layout required for the proper execution of the Contract Work.
- **2.6.5** Provisions for any Field Measurements as may be required for the proper execution of this Contract Work.
- **2.6.6** Sub Contractor shall schedule and perform all inspections required to complete their final inspections and sign off from Authority Having Jurisdiction (AHJ). Sub Contractor shall coordinate all inspections with the General Contractor.

#### 2.7 Protection of Work

- 2.7.1 Provide protection of surrounding work and facilities as required in the performance of the Contract Work. Any damage to surrounding areas will be the responsible Sub Contractor.
- 2.7.2 Provide any protection necessary and take all precautions to protect any Equipment installed in place and/or in operation during construction.
- 2.7.3 Provide reasonable protection for new work until the end of the project of such a time as no longer required.

#### 2.8 General Construction

2.8.1 **Temporary Facilities/Storage** –Sub - Contractor acknowledges that on-site space is limited. Sub - Contractor on-site trailers are limited to one office trailer and two storage containers. General Contractor accepts no liability for stored material. Furthermore, this Sub - Contractor shall be responsible for all temporary facilities required during the performance of the work, including generators if temporary power is not available, temporary lighting if required, and all required security of lock-ups including temporary locks and/or related hardware. Sub - Contractor shall be responsible for keeping lock-ups clean and orderly on a continuous basis. Temporary toilets are the sole facility to be provided by the General Contractor. This Sub - Contractor shall be responsible for all costs associated with setting up, maintaining, relocating and removing trailers, storage compounds and any other facilities required for the performance of this Sub - Contractor's work. Any relocating of trailers, stored materials, or other equipment required for job coordination shall be at Sub - Contractor's expense. Sub - Contractor shall be responsible for all relocation of materials as required so that other trades can complete their work. It is understood and agreed that Sub - Contractor will be required to move materials around to facilitate installation of work by other trades. Sub - Contractor agrees to coordinate all such movement of materials and has included all costs associated with relocation of materials as required.

- 2.8.2 The successful Bidder will furnish all labor, materials and equipment for the receiving, inspection, unloading, inventory, distribution, staging and installation of all equipment and materials including all transition in direction and elevation as required and identified for the completion of the Bid Package Work per the drawings and specifications set forth herein.
- Job Site Deliveries All deliveries to the job site shall be scheduled between 7:30 2.8.3 AM and 3:00 PM. Deliveries will not be accepted if deliveries arrive at the job site before 7:30 AM or after 3:00 PM. Deliveries arriving at the job site after 3:00 PM will be unloaded the following workday. Unscheduled deliveries may be refused by General Contractor. Sub - Contractor shall not receive schedule relief in the event of refused, unscheduled deliveries. Furthermore, all deliveries shall be coordinated with the project superintendent a minimum of 72 hours prior to scheduled delivery. General Contractor may utilize a "Delivery Schedule Board" to track pending deliveries. It is agreed and understood that, at General Contractor's sole option and as permitted by those have jurisdiction, some deliveries may be required to be made before or after normal work hours, including but not limited to structural steel, reinforcing steel, concrete, brick and masonry, and building equipment. These deliveries shall be coordinated at no additional cost to the Owner. All associated manpower and equipment is the responsibility of the Sub - Contractor including traffic barricades, traffic control, permits, rigging, loading and unloading.
- 2.8.4 Only electrical powered lifts will be allowed in the work area. Any use of powered lifts in these areas must have the General Contractor approval.
- 2.8.5 Sub Contractor will be responsible for furnishing and installation of all fasteners, grout, anchors, hardware, prime coatings, backing, clips, alignment, and field welding as required to properly complete the Contract Work.
- 2.8.6 The Sub -Contractor will furnish all labor, materials and equipment for receiving, inspection, unloading, inventory control, distribution, hoisting, rigging, and setting of all equipment including equipment furnished by others (FBO) as it relates to this scope of work.
- 2.8.7 The General Contractor will provide all scaffolding.
- 2.8.8 All other equipment and materials as required for the complete installation of the Contract Work per drawings and specifications set forth herein are the responsibility of the Sub -Contractor.

#### 2.9 Assignment of the Work (Lower Tier Sub - Contractors)

2.9.1 In the event that the Sub - Contractor deems it cost effective to subcontract any portion of the Contract Work, the intended lower tier Sub - Contractor requested by Sub - Contractor will be required to meet the same qualifications and standards that are set forth by the General Contractor. In addition, this lower tier Sub – Contractor will be reviewed and approved by the General Contractor and the Owner prior to their mobilization on site. In no event can this process affect the progress of the job.

# 2.10 Close-Out and Final Payment

- 2.10.1 The General Contractor will issue a final punch list. The punch list work must be completed and signed off by a representative from your company, an owner's representative, a representative from Facility Maintenance, and a representative from the General Contractor. Contact the General Contractor when you are complete and we will coordinate the final walk thru with the various representatives.
- 2.10.2 You will be required to provide a complete set of as-built drawings (signed, stamped, & dated). All RFI changes, event changes and change order work must be identified on drawings.
- 2.10.3 Additional closeout requirements are listed in the Specifications.
- 3. <u>EXCLUSIONS</u> The scope of the Subcontract Work excludes the following:
  - 3.1 All Civil work
  - 3.2 Reinstallation of all vent piping at the well heads
  - 3.3 All structural steel installation
  - 3.4 The following piping systems
    - 3.4.1 Glycol
    - 3.4.2 Methanol
    - 3.4.3 Hydraulic
    - 3.4.4 Vent
  - 3.5 Third party inspection

# 4. Mechanical

- 4.1 Supply all unique valve ID's and pipe labels per specification. As a minimum pipelables must be placed once every twenty-five feet, both sides of wall penetrations and at least one on each drop.
- 4.2 All shutdowns shall be coordinated with General Contractor. The actual shutdown of a system or equipment will be by Owner, no exceptions.

# 5. Equipment

5.1 All equipment will be provided by the owner.

# 6. Coordination

- 6.1 Verify and test all mechanical systems and respective equipment.
- 6.2 The Sub Contractor will be required to provide the proper assistance to the Generals Contractor's testing agency during the performance of the subcontr**a**ct work.

- 7. Construction Schedule and Submittals: The Sub Contractor hereby acknowledges and agrees that it has been made aware of an hereby agrees to comply with the following schedule and submittal requirements for the performance of the subcontract scope of work:
  - 7.1.1 Sub Contractor to provide a micro level schedule that supports the bid schedule supplied. This schedule will include submittal dates, equipment delivery dates, fabrication, field installation dates, and commissioning and startup dates.
  - 7.1.2 Commence and complete the Contract Work in accordance with the construction schedule a copy of which is enclosed herewith and hereby made a part hereof.

## 8. Clean-up Employee

- 8.1 At the completion of the work, provide five-man day of labor to clean entire construction area, including roof. The direction for this labor will be provided by Owner.
- 8.2 The General Contractor understands that the Sub Contractor will provide one (1) Dedicated Employee for 8 hours a week strictly responsible for continuous clean-up. This dedicated clean-up employee will be responsible for continuous clean-up under the direction of General Contractor.
- 8.3 Perform daily clean-up of work space.