

February 11, 2010

EXHIBIT 3 - MECHANICAL PROJECT SPECIFICS (Request for Proposal)

SECTION 1: PROJECT DESCRIPTION

- 1.1 **PROJECT DESCRIPTION** -The project is the “core and shell” for a commercial building in Phoenix, Arizona. The twenty-six story building is a hybrid concrete post-tension structure and steel structure of approximately 780,000 sq. ft. with usable office space of 460,000 sq. ft. All building construction shall meet all applicable code requirements; in case of discrepancy among codes and contract documents, the most stringent shall prevail.
- 1.2 This **Downtown Office Tower** project will consist of full mechanical project and instrumentation and controls scopes. The project includes office areas, parking areas, retail areas, and service rooms such as basement and rooftop. The total project area is approximately 780,000 SF. The project will consist of multiple systems that will include but are not limited to Mechanical, HVAC, Plumbing and Instrumentation & Controls. In addition to these systems, there will be the installation of Mechanical Equipment as well as the use of various subcontractors.
- 1.3 **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 and related systems WORK as set forth in the Specifications and Drawings. Listed below is a summary of the major specifications for this Contract, but is not all-inclusive. All work reflected on the Drawings that fall within the following CSI Divisions is included in the Contract Work.
 - 1.3.1 **SPECIFICATIONS**
 - 1.3.2 See Schedule of Documents

SECTION 2: PROJECT SPECIFIC CLARIFICATION- It is mutually understood and agreed that the Scope of the Contract Work also 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 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. 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 Contractor fails to clean up, the General Contractor may do so at Contractor's expense.
- 2.1.2 All Contractors are required to follow all General Contractor Safety requirements and Construction Site Protocol as appropriate. Include cost for qualified onsite safety representative if man-power including subcontractors exceeds 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 Contractor shall submit a "Contractor Daily Job Report".
- 2.1.5 The Contractor shall submit weekly man-hour report, including any subcontractors.

2.2 ADMINISTRATIVE:

- 2.2.1 Scope items for each trade are on multiple sheets. Contractors are responsible for reviewing all sheets to ensure complete scope. Any discrepancies in scope are to be relayed to the GC for clarification.
- 2.2.2 Coordinate work with other trades to minimize interruption of workflow. Coordination will be required with other installation contractors on site including electrical, civil/architectural and the owner.
- 2.2.3 Contractor is advised that costs associated with Contractors Proposal are to be broken out and reported by Cost Code. Said Pricing is contained in Attachment- Bid break down form. This form is to be completed in its entirety and submitted with Contractors Proposal.
- 2.2.4 All mail (including RFI's, C.O.; etc) shall be distributed as defined in the pre-bid meeting.
- 2.2.5 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, **including Division 1, 15, 16 and 17 specifications**. In cases of discrepancies between the Division 1 Specifications and the Contract Agreement, the Contract Agreement will prevail.
- 2.3.2 If conflicts exist between documents, the order of priority is as follows:
- 2.3.3 RFI's, Meeting Minutes, Contract Documentation.
- 2.3.4 Drawings
- 2.3.5 Specifications
- 2.3.6 All RFI's will be submitted to the General Contractor Construction Office, location to be determined at pre-bid meeting.
- 2.3.7 Contractor is directed to pay special attention to the Drawing General Notes and Key Notes as they relate to the Contract Scope of Work.
- 2.3.8 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.
- 2.3.9 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 Contractor for distribution as necessary.
- 2.4.2 Critical submittals with required submittal dates are listed on the Project Schedule. This is not meant to be a complete list of all submittals required.

- 2.4.3 Submittals must be transmitted to the General Contractor so that they support the Project Schedule. Allow five 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 Contractor.

2.5 Schedule

- 2.5.1 Contractor shall work all overtime and shift work as required to meet Scheduled Milestone Dates.
- 2.5.2 Only **48 hours worth of materials will be allowed to be stored inside the building** at any one time.
- 2.5.3 The Project Schedule is included with this bid package. The following milestone dates must be met.
- 2.5.4 See Construction Schedule

2.6 Field Coordination

- 2.6.1 All Contractors 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, and to ensure minimal impact to operational areas.
- 2.6.3 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 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 Not used.
- 2.6.7 Contractor shall schedule and perform all inspections required to complete their final inspection. 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 repaired by the responsible 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.
- 2.7.4 Not used

2.8 General Construction

- 2.8.1 **Temporary Facilities/Storage** – Subcontractor acknowledges that on-site space is limited. Subcontractor on-site trailers may not be allowed. It is agreed and understood that the Contractor will not allow on-site trailers or onsite storage of materials. Materials, which the

Contractor does allow to be **stored on site**, shall be stored for **no more than 48-hours prior to incorporation into the work**, at a location acceptable to the Contractor. These materials are subjected to being relocated by Subcontractor at the discretion of the Contractor. Contractor accepts no liability for stored material. Furthermore, this Subcontractor 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. Subcontractor 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 Contractor. This Subcontractor 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 Subcontractor's work. Any relocating of trailers, stored materials, or other equipment required for job coordination shall be at Subcontractor's expense. Subcontractor shall be responsible for all relocation of materials as required so that other trades can complete their work. It is understood and agreed that Subcontractor will be required to move materials around to facilitate installation of work by other trades. Subcontractor 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.
- 2.8.3 **Job Site Deliveries** – All deliveries to the job site shall be scheduled between 7:30 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 Contractor. Subcontractor 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. Contractor may utilize a "Delivery Schedule Board" to track pending deliveries. It is agreed and understood that, at 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 besides a crane and hoist operator is the responsibility of the Subcontractor including traffic barricades, traffic control, permits, rigging, loading and unloading.
- 2.8.4 **The General Contractor is to include all coring, cutting and fire patching for all penetrations, sleeved and not sleeved – coring and cutting is not allowed to the post-tensioned slabs and shear (core) walls – and all penetrations shall be sleeved as it applies to the Mechanical scope of work.** Any penetrations in the Fire rated assemblies will maintain the integrity of the assembly. Any exterior penetrations will be sealed weather tight with approved sealants. Roof penetrations will maintain the integrity of the roof system and warrantee. All other penetrations will be sealed with and approved sealant for the application. **For all penetrations, Mechanical Contractor shall provide to General Contractor count per size each of each one of them, for both sleeved and not sleeved.**
- 2.8.5 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.
- 2.8.6 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.
- 2.8.7 The Mechanical Contractor will furnish all labor, materials and equipment for receiving, inspection, unloading, inventory control, distribution, hoisting, rigging, and setting of all equipment.

- 2.8.8 **No lay-down area for material or equipment will be available at the jobsite to any subcontractor.**
- 2.8.9 The General Contractor will provide all scaffolding.
- 2.8.10 **Personnel / Material Hoist** – A dual-car hoist shall be provided and operated by General Contractor during regular working hours (Monday–Friday 7:00am–3:30pm) once structure has reached the sixth floor. One car will be used for personnel movement and the other car will be used exclusively for trash removal. The personnel car may not be available at all times. Subcontractor understands and agrees that all material deliveries requiring the material hoist are to be scheduled during off-hours. All hoisting must be scheduled with Contractor in advance. All hoist operating costs, including overtime (\$95/HR), will be the responsibility of this Subcontractor and are to be included in Subcontractor’s price. Subcontractor has included all impacts, inefficiencies, and all other costs associated with off-hour deliveries and operation of the material hoist in Subcontractor’s price. Subcontractor acknowledges that as each floor is completed, the permanent curtain wall will be installed and the hoist will not be permitted to stop on that floor again. Subcontractor will be required to sign a hold harmless agreement for the use of Contractor’s hoist and/or equipment. **Provide an allowance for the overtime material hoist usage cost for this scope.**
- 2.8.11 **Tower Crane** – General Contractor shall provide a tower crane to support the erection of the office building structure during regular working hours (Monday–Friday 7:00am–3:30pm). Structure trades and other key trades identified by General Contractor shall have priority use of the tower crane. Use of the tower crane by others must be coordinated in writing with Contractor based on tower crane availability. Subcontractor understands and agrees that the majority of material deliveries requiring the crane are to be scheduled during off-hours. All hoisting must be scheduled with Contractor in advance. All crane operating costs, including overtime (\$190/HR) and the operator’s climb time, will be the responsibility of this Subcontractor and are to be included in Subcontractor’s price. Subcontractor has included all impacts, inefficiencies, and all other costs associated with off-hour deliveries and operation of the crane in Subcontractor’s price. Subcontractor will be required to sign a hold harmless agreement for the use of General Contractor’s crane and/or equipment. Subcontractor shall provide all rigging and employ a competent person to rig the load(s) and direct hoisting all of Subcontractor’s materials/equipment. Subcontractor will be required to provide radio communication with tower crane operator for lifts. All requests for lifts must include the weight of the lift including rigging, requested date of the lift, and “pick” and “set” locations. Lifts may be limited by tower crane capacity. Any additional material movement or hoisting required above and beyond what is identified in this document shall be the subcontractor’s responsibility. **Provide an allowance for the overtime crane usage cost for this scope.**
- 2.8.12 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 Mechanical Contractor.

2.9 Start-up & Training

- 2.9.1 The contractor will provide all start up services for all equipment in this scope of work.
- 2.9.2 Contractor will be required to assist in the start up of new equipment that Contractor supplies.

2.10 Assignment of the Work (Lower Tier Subcontractors)

- 2.10.1 In the event that the Contractor deems it cost effective to subcontract any portion of the Contract Work, the intended lower tier subcontractor requested by Contractor will be required to meet the same qualifications and standards that are set forth for Contractor. In addition, this lower tier 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.

2.11 Close-Out and Final Payment

- 2.11.1 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 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.
- 2.11.2 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.
- 2.11.3 Additional closeout requirements are listed in the Specifications.

3. EXCLUSIONS – The scope of the Subcontract Work **excludes** the following:

- 3.1 Provision to furnish Performance and Payment Bonds
- 3.2 Electrical disconnects and, starters others than the ones required in the specifications.**
- 3.3 Dumpsters for debris will be provided by General Contractor.

4. Mechanical, Plumbing & HVAC

- 4.1 Provide and install all Mechanical, HVAC, Plumbing, Instrumentation and Controls, Crane and Rigging, Mechanical Insulation, Excavation, Test & Balance and Chemical Water Treatment.**
- 4.2 Supply pipe labels per specification but as a minimum once every twenty-five feet, both sides of wall penetrations and at least one on each drop.
- 4.3 All shutdowns shall be coordinated with Owner. The actual shutdown of a system or equipment will be by Owner, no exceptions.
- 4.4 Piping that requires sloping shall take precedence in installation over all other work installed by all trades.

5. Equipment

- 5.1 See also Equipment Schedule.

6. Coordination

- 6.1 Verify and test all mechanical systems and respective equipment.
- 6.2 The Contractor will be required to provide the proper assistance to the contractor's testing agency during the performance of the subcontract work.
- 6.3 See also Exhibit 1 section 1.12 regarding coordination.

7. Construction Schedule and Submittals: The 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 Contractor to provide a micro level schedule that supports the bid schedule supplied. This schedule will include submittal dates and fabrication and delivery information.
- 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 one-man day of labor to clean entire construction area, including roof. The direction for this labor will be provided by Owner.
- 8.2 The contractor understands that the 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 Owner.
- 8.3 Perform daily clean-up of work space.