



EXHIBIT 3 - MECHANICAL PROJECT SPECIFICS (Request for Proposal)

SECTION 1: PROJECT DESCRIPTION

PROJECT DESCRIPTION - The project consists of a new “Cathedral Building” which is located in a large urban city located in an earthquake fault zone in Northern California. The building is a state of the art religious and business center incorporating the latest facility amenities to teach and support the surrounding communities, practice religion, business conference center, and support local community programs, including community food distribution to the needy. The project consists of a four-story ground up to finish build out of the Cathedral Building for a turnkey commissioning turnover to the owner. Including state of the art: worship center, large food service kitchen, Large dining facility, Baptismal Font (Pool), Large Plumbing and HVAC mechanical rooms, Business offices, Residential living area (separate out building), laundry service area, large locker rooms with showers, large public bathrooms and two levels of parking garage on the bottom two levels, everything required to support large regional community.

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

The building will require some special considerations in design, construction and pricing as this new building sits on a major Northern California earthquake fault. The structural engineer requires the building to be built on seismic inertia support pads, allowing the building to move three feet in any direction during a seismic event. This would require plumbing and mechanical systems to perform in the same manner. The worship center architectural structure is an ellipse, meaning exterior walls and structure are curved from floor to roof, requiring all plumbing and mechanical to follow the same structural contour.

This Request for Pricing (RFP), request pricing for the installation of all Mechanical systems; both wet and dry sides in the building to support such state of the art environment the owner intends. The purchase of some equipment may be included in the RFP as well. The owner has requested that a 3D BIM be created and maintained throughout construction

- 1.1 Mechanical Contractor “Sub - Contractor” is to lead the Information Modeling and MEPS coordination. This method must be incorporated and utilized on this project.
- 1.2 **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.
 - 1.2.1 **Systems**
 - 1.2.1.1. Chilled Water
 - 1.2.1.2. Heating Hot Water
 - 1.2.1.3. Condenser Water

- 1.2.1.4. All Vents and Drains associated with the three systems above
- 1.2.1.5. Make up water for HVAC equipment to Point of connection (POC) as shown on Drawings
- 1.2.1.6. Supply Air
- 1.2.1.7. Return Air
- 1.2.1.8. Exhaust
- 1.2.1.9. Procurement and installation of all interior grills, registers, and diffusers
- 1.2.1.10. Procurement of VFD Drives for your scope of work – Installation will be by others
- 1.2.2 **The Following scopes are not to be included under this RFP**
 - 1.2.2.1. **Sanitary Waste and Vent Piping**
 - 1.2.2.2. **Domestic and Industrial Water**
 - 1.2.2.3. **Radiant heating system (This RFP includes procurement and installation of heat exchanger and pumps and chilled water connection to HX)**
 - 1.2.2.4. **Any work associated with Generator including Generator Exhaust and discharge Plenum**
 - 1.2.2.5. **Any and all Grease duct**
 - 1.2.2.6. **Any and all duct specified as stainless steel**
 - 1.2.2.7. **Procurement or installation of exterior louvers**
 - 1.2.2.8. **Procurement of Scheduled Equipment labeled “Miscellaneous” Installation of this equipment is in the scope of work**

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 Coordinate work with other trades to minimize interruption of workflow. Coordination will be required with other installation Sub - Contractors on site including electrical, plumbing, fire suppression, civil/architectural and the owner.
- 2.2.3 Sub - Contractor is advised that costs associated with Sub - Contractors Proposal are are not recoverable.
- 2.2.4 All mail (including RFI's, C.O.; etc) shall be distributed as defined in the pre-bid meeting.
- 2.2.5 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, **including Division 15 specifications**. In cases of discrepancies between the Division 15 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:
- 2.3.2.1. 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 - Contractor is directed to pay special attention to the Drawing General Notes and Key Notes as they relate to the Contract Scope of Work.
- 2.3.5 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 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. Include any and all overtime/premium time to meet schedule.
 - 2.5.3.1. Equipment Set start dates and durations
 - 2.5.3.2. MEP Rough in durations
 - 2.5.3.3. MEP Finish durations

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. Materials, which the General 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 General Contractor. These materials are subjected to being relocated by Sub - Contractor at the discretion of the General Contractor. 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.
- 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 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 **The Sub - 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, Sub - 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 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.
- 2.8.7 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.
- 2.8.8 The General Contractor will provide all scaffolding.
- 2.8.9 **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 3rd floor. One car will be used for personnel movement and the other car will be used exclusively for material transport. The personnel car may not be available at all times. Sub - Contractor understands and agrees that all material deliveries requiring the material hoist are to be scheduled during off-hours. All hoisting must be scheduled with General Contractor in advance. All hoist operating costs, including overtime (\$95/HR), will be the responsibility of this Sub - Contractor and are to be included in Sub - Contractor’s price. Sub - Contractor has included all impacts, inefficiencies, and all other costs associated with off-hour deliveries and operation of the material hoist in Sub - Contractor’s price. Sub - Contractor 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. Sub - Contractor will be required to sign a hold harmless agreement for the use of General Contractor’s hoist and/or equipment. **Provide an allowance for the overtime material hoist usage cost for this scope.**

- 2.8.10 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 Start-up & Training

- 2.9.1 The Sub - Contractor will provide all start up services for all equipment in this scope of work.
- 2.9.2 Sub - Contractor will be required to assist in the start up of new equipment that General Contractor supplies.
- 2.9.3 Sub – Contractor to include 80 hours of Training on Systems and Equipment by a qualified comprehensive for Owner Training including the supplying of all training materials.

2.10 Assignment of the Work (Lower Tier Sub - Contractors)

- 2.10.1 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.

2.11 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 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.
- 2.11.2 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 General Contractor will provide dumpsters for debris.
- 3.4 **Chemical Water Treatment**

4. Mechanical & HVAC

- 4.1 **Provide and install all Mechanical and HVAC, Crane and Rigging, Mechanical Insulation, Test & Balance.**
- 4.2 Supply all unique valve ID's and pipe labels per specification. As a minimum pipe lables must be placed 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 General Contractor. 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 The following equipment is to be supplied by others and installed under this contract:
- 5.1.1 Miscellaneous Equipment (Ref. M0.1)
- 5.1.2 Fire and Smoke Dampers (Ref. M0.1)

5.1.3 VAV Boxes (Ref. M0.2)

All other scheduled equipment is to be procured and installed by the Sub - Contractor

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 General 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 Sub - Contractor hereby acknowledges and agrees that it has been made aware of and 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.