

Request for Proposal for Commissioning Services

ASHRAE New Headquarters Building Peachtree Corners, GA

1 February 2019



1. INTRODUCTION AND PROJECT DESCRIPTION

Introduction

On behalf of ASHRAE, Collins Project Management (CPM) has prepared this Request for Proposal (RFP) to select a Commissioning Authority (CxA) to provide commissioning services for the renovation of an existing building for the next ASHRAE headquarters in the Atlanta metropolitan area.

ASHRAE, founded in 1894, is a not-for-profit global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 56,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration, and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today. More information can be found at www.ashrae.org.

ASHRAE plans to renovate a building located at 180 Technology Parkway in Peachtree Corners, GA to serve as the future global headquarters of the Society. The renovated facility will provide an outstanding working environment for approximately 145 ASHRAE employees and provide extensive training and meeting space for ASHRAE members and volunteers.

The 67,000-sf building was built in 1978. The project is intended to demonstrate economical renovation of an existing building to net-zero energy or net-zero energy ready condition. This very public project will be closely watched by the global built environment, affording outstanding publicity for those participating. The building is owned by ASHRAE and the new headquarters must be occupied no later than September 2020.

The Owner's Project Requirements (OPR) is attached to this RFP as **Exhibit B**, has been developed by the Owner and establishes ASHRAE's goals for the new ASHRAE Headquarters Building. Every effort has been made to make the OPR as comprehensive and complete as possible to minimize future changes.

However, the OPR will be considered a "living" document during the design phase of the project, and as such is subject to change as the design progresses. By establishing the goals of the new ASHRAE Headquarters in a single document, the OPR becomes a record by which ASHRAE and other parties involved in the project can judge the degree of success in meeting the owner's defined objectives and criteria. In part, the success of the project will be tracked by the minimization of the need to change core tenets of this document.

An ad hoc committee has been established by ASHRAE to oversee the development of the new headquarters. Collins Project Management (CPM) has been selected to represent ASHRAE's interests during the planning, design, construction, commissioning, and occupancy of the new headquarters. Greg Kerr, Sr. Project Manager, will be the RFP for Commissioning Services ASHRAE Headquarters 1 February 2019

primary contact.

The selection process for the design team is underway and is expected to be completed during the second week in February. A selection process for the Construction Manager is also underway and is expected to be completed during the second week in February.

Construction Delivery Strategy

A construction manager (CM) with "deep green" experience and a proven track record on projects of this size and type will provide preconstruction and construction services. The selected CM will provide preconstruction services throughout all phases of design.

Integrated Design Process (IDP) will be utilized during all phases of design to optimize value, performance, energy efficiency, sustainability, and maintenance requirements for the new headquarters. In keeping with the intent of the IDP, the MEP and possibly other key subcontractors will be selected and negotiated by the CM and brought into the process to participate beginning with schematic design and initial cost estimating. The Commissioning Authority will also be selected and included in this process.

Budget

The total renovation budget is \$8,550,000 excluding photovoltaic arrays.

Timeline

The Overall Project Schedule (OPS) is included as **Exhibit A** and reflects the project team's current thinking with respect to the timing of the work. It is preliminary in nature and will be refined with input from the design team and the construction manager during the design and preconstruction phase.

The following attachments are included with this RFP:

- 1. Exhibit A Overall Project Schedule dated 3 January 2019
- 2. Exhibit B Owner's Project Requirements (OPR) dated 3 January 2019
- 3. Exhibit C Contract Terms & Conditions

2. Expectations

ASHRAE intends to engage an independent Commissioning Authority (CxA) to ensure that all systems are complete and function properly when installed or constructed and that ASHRAE facility staff has adequate system documentation and training. The CxA will coordinate and oversee functions related to equipment startup, system performance, testing and balancing, control system calibration, construction and system documentation, and training as per the OPR and this document, whichever is

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more stringent.

It is expected that the CxA will follow ASHRAE Guideline 0-2013 and ANSI/ASHRAE/IES Standard 202-2018 "Commissioning Process for Buildings and Systems." These will serve as the backbone of the Commissioning process. Standard 202 will "provide the procedures, methods and documentation requirements for each activity for project delivery, from predesign through occupancy and operations." CxA shall provide guidance on how to substantiate and document the success of meeting criteria in the OPR.

The CxA will serve as a key member of the team working in concert with the owner, architect, engineer of record, project manager, construction manager, and subcontractors in tracking, trouble shooting, and resolving issues that may arise. The commissioning team shall be led by a qualified, professional engineer eligible for registration in Georgia who will serve as the point of contact for the duration of the project and be actively involved in review & oversight of all aspects of the commissioning process. This person shall evaluate trends both at startup and post occupancy to ensure the systems are properly functioning. The commissioning team shall make suggestions as to operating parameters (post occupancy) to provide for optimum operation. The team shall have experience in commissioning zero energy buildings and/or buildings that have a target design EUI that the building must perform to.

3. Sustainability Targets

The OPR states ASHRAE's desire to be sustainable. This may be substantiated through available certification programs such as LEED, Green Globes, Fitwell or WELL Building or Living Building Challenge. The particular certification that is pursued will be determined by the entire team, of which the CxA is a part, during the design phases.

CxA shall demonstrate experience in commissioning buildings with an EUI target from the onset of design through proving out the achieving of this target in operations. Includes ensuring that metering is in place and commissioned to be able to measure success in meeting EUI target.

4. Equipment and Systems to Commission

The specific equipment and systems that shall be commissioned include:

- HVAC Systems in their entirety (full sampling required but not during functional testing)
- HVAC Controls Systems in their entirety (full sampling required but not during functional testing)
- Plumbing Systems in their entirety (full sampling required but not during functional testing)
- Electrical Power Systems in their entirety (full sampling required but not during functional testing)
- Metering devices including measurement and data collection.
- Lighting Control Systems including occupancy/vacancy sensors must be

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tested in their entirety.

- Automated solar shading devices and controls (full sampling required but not during functional testing).
- Integrated fire protection and life safety systems to ensure the proper operation and inter-relationship between systems.

<u>Alternative fee proposals</u> are requested to include the following systems in the commissioning process:

- Fire Alarm Systems in their entirety.
- Security Systems (CCTV, access control, security, and related systems).

5. Duties and Responsibilities

The following tasks will be accomplished by the CxA to provide Commissioning during the project:

Predesign & Design Phase

- 1. Participate in the Integrated Design Process (IDP) during all phases of design.
- 2. Coordinate and supervise the Commissioning work during design.
- 3. Review and comment on the Owner's Project Requirements (OPR).
- 4. Maintain the OPR through the design process for the owner and modify it as directed by the owner through the Owner's Representative.
- 5. Review the Basis of Design (BOD) and design documentation prepared by the design professionals and provide a report to the Owner of any discrepancies with the OPR and the commission ability of the proposed design.
- 6. Prepare Commissioning specifications for the construction bid documents for all systems and equipment that are to be commissioned.
- 7. Have the Commissioning specifications approved by the A/E team and included in the A/E construction specifications.
- 8. Prepare the Commissioning Plan.
- Attend up to fourteen (14) Project Team review meetings to coordinate and collaborate with the project team and discuss comments on plans and specifications.
- 10. Review bids and contractor/subcontractor pricing associated with Commissioning activities and submit evaluations to the Owner.

Construction Phase

- 1. Conduct a kickoff meeting with the Construction Manager and sub-contractors to discuss Commissioning scope, plan, and schedule.
- 2. Coordinate the Commissioning work with the Construction Manager to ensure that Commissioning activities are being scheduled into the master schedule.
- 3. Continue to update schedule and commissioning plan, and coordinate throughout construction with Construction Manager and subcontractors.
- 4. Submit final Commissioning Plan for construction with coordination and activities for review by the project team, and update commissioning plan as necessary.
- 5. Review all commissioned system shop drawings for commission ability.
- 6. Prepare pre-functional checklists to document installation.
- 7. Prepare draft functional tests for equipment and systems.

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- 8. Submit test procedures to Designers and Contractors for review and comment on compliance with the Design Intent, appropriateness for startup, operations, and personnel/systems safety.
- 9. Based on the comments received, prepare final pre-functional and final functional test procedures for the equipment and systems, to include documentation formats for all commissioned equipment and systems.
- 10. Review completed copies of factory or contractor provided pre-start up and start up test forms
- 11. Review and approve Testing, Adjusting, Balancing (TAB) execution plan.
- 12. Review Requests for Information (RFIs) and changes for impacts on Cx.
- 13. Perform twelve (12) on-site inspections and document each with a field observation report within two (2) days of the site visit.
- 14. Attend twelve (12) on-site meetings for review of progress, coordination, and issues resolution.
- 15. Maintain a deficiency log of any items found to be a problem, poorly installed, or a discrepancy and keep updated throughout Cx activities as to status, actions taken and resolution of the issues. Distribute the deficiency log at least every two
- 16. (2) weeks or make available online to all project team members (any cost associated with the online access is the responsibility of the CxA).
- 17. Coordinate and supervise Cx deficiency corrections.
- 18. Hold construction phase Cx meeting in conjunction with on-site meetings.
- 19. Observe first pre-functional test of each type of system, including mechanical, controls, electrical, and specialty systems.
- 20. Obtain pre-functional checklists from Constructor with sign-offs that the systems have been checked out.
- 21. Observe TAB, including 25% check of diffusers, grilles, hoods, terminal devices, and equipment testing, and document findings.
- 22. Review TAB report.
- 23. Orchestrate the execution of the functional performance tests (FPTs). The Construction Manager is responsible for conducting the tests, but the Owner expects the CxA to be present and to document all functional performance tests. Functional testing shall include operating the system and components through each of the written sequences of operation.
- 24. Provide troubleshooting to assist in resolving control problems, as they are uncovered.
- 25. Keep a detailed log of testing for each piece of equipment. The log will document and maintain a record of each test including the associated equipment/system, the final status of the test and any issues identified and their resolution.
- 26. During testing, maintain a deficiency log of any items found to be a problem, poorly installed, or a discrepancy. Provide the log and test results to the owner, and GC with recommended actions in a timely manner (no more than two days after the test).
- 27. Coordinate retesting as necessary. One retest for each type of equipment will be provided as part of normal checkout. If the CxA has documented the necessary pre-test requirements to the Contractors in advance of the test, then more than one retest will be considered work outside the normal scope of work.

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28. Attend weekly meetings while on-site for functional testing.

<u>Close-out Phase</u>

- 1. Complete online sustainability forms associated with Fundamental Commissioning and upload all supporting documents, either as indicated on the form or requested by particular certification staff sufficient to earn this prerequisite.
- 2. Within two (2) weeks of the completion of Construction Phase commissioning services, prepare a Final Commissioning Report in electronic format (i.e., PDF) that is searchable, is appropriately bookmarked, and has hyperlinks to associate equipment to issues, checklists and tests. The report shall include an executive summary, list of participants and roles, brief building description, and the following sections at a minimum:
 - a. Equipment Summary including asset information
 - b. Design Review Reports
 - c. Submittal Review Reports
 - d. Field Observation Reports
 - e. Completed Pre-functional Checklists
 - f. Passed Functional Performance Test Results
 - g. TAB Report
 - h. Complete Deficiency Log sorted by Discipline
 - i. Open Deficiency Log sorted by Discipline
- 3. Prepare Facilities Requirements and Operations and Maintenance Plan that contains the information necessary to operate the building efficiently. The plan shall include the following:
 - a. As-built sequence of operations
 - b. Building occupancy schedule
 - c. Equipment run-time schedules
 - d. As-built setpoints for all HVAC equipment
 - e. Design lighting levels for each space in the building
 - f. Minimum outdoor air requirements for each system
 - g. Systems narrative describing the mechanical and electrical systems and equipment
 - h. Preventive maintenance plan for building equipment described in the systems narrative
 - i. Commissioning program that includes periodic commissioning requirements, ongoing commissioning tasks, and continuous tasks for critical systems.
- 4. Provide a COBie-compliant file containing all of the commissioned equipment with the following asset information at a minimum:
 - a. Equipment Identification Tag
 - b. Associated System
 - c. Location (Room Name, Room Number, Floor)
 - d. Manufacturer
 - e. Model Number
 - f. Serial Number
 - g. Warranty Start Date

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- h. Associated Electrical Panel
- i. Internal Motor Data, where applicable
 - i. Motor Manufacturer
 - ii. Motor Model Number
 - iii. Motor Serial Number
 - iv. Motor Horsepower
 - v. Motor Frame Size
 - vi. Motor RPM
- j. Filter Type, Size and Quantity, where applicable
- k. Belt Size and Quantity, where applicable

The Owner will spot-check the accuracy of the data provided in the COBie file. If found to be incorrect, the CxA shall re-verify the asset information for all the commissioned systems and equipment and provide an updated and correct file to the Owner.

6. Enhanced Commissioning Tasks

<u>Design Phase</u>

- 1. Perform a focused and detailed design review at the following stages:
 - a. 50% Design Development
 - b. 100% Design Development
 - c. Construction Documents Permit Set (approximately 98%)
- 2. Provide designated owner's representatives with a one-day systems orientation on "how the building is supposed to operate" to ensure alignment between the design team and the owner. This meeting should be held as soon as practical during the design phase.
- 3. Prepare Operator Training specifications for the construction bid documents for all systems and equipment that are to be commissioned.
- 4. Develop monitoring-based procedures and identify points to be measured and evaluated to assess performance of energy- and water-consuming systems. Include the procedures and measurement points in the commissioning plan. Address the following:
 - a. Roles and responsibilities
 - b. Measurement requirements (meters, points, metering systems, data access)
 - c. Control points to be tracked, with frequency and duration for trend monitoring
 - d. Limits of acceptable values for tracked points and metered values
 - e. Elements used to evaluate performance, including conflict between systems, out-of-sequence operation of systems components, and energy and water usage profiles
 - f. Action plan for identifying and correcting operational errors and deficiencies
 - g. Training to prevent errors
 - h. Planning for repairs needed to maintain performance
 - i. Frequency of analyses in the first year of occupancy (must be at least quarterly)
- 5. Attend an additional four (4) Design Team review meetings to discuss comments

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on design documents.

Construction Phase

- 1. Review and approve normal contractor submittals applicable to systems being commissioned for compliance with Commissioning needs, concurrent with the A/E reviews.
- 2. 2. Review Operation & Maintenance (O&M) manuals, as-built documentation, and training documentation for completeness. This review shall be in parallel with the A/E team's review of the O & M documentation for conformance to the project specifications.
- 3. Participate in two (2) days of contractor-provided training for the Owner's operations staff.
- 4. Submit a report verifying that requirements for staff training are complete.
- 5. Provide designated owner's representatives with a one-day systems training on "how the building is supposed to operate."

Close-out Phase

- 1. Complete the sustainability online form associated with Enhanced Commissioning and upload all supporting documents, either as indicated on the form or requested by particular certification staff sufficient to earn this credit.
- 2. Within two (2) weeks of the completion of the Construction Phase, prepare a Systems Manual in electronic format (i.e., PDF) that is fully text searchable, is appropriately bookmarked, and has hyperlinks to associate equipment to higher-level systems. The Manual shall meet all requirements of particular sustainability certification.
- 3. Provide an On-going Commissioning Plan that includes the following information at a minimum:
 - a. As-built "blank" Functional Performance Test for each Equipment and System
 - b. Schedule for Re-testing
 - c. As-built monitoring-based commissioning procedures

Occupancy and Warranty Phase

- 1. Return to the site at the following intervals to review with facility staff the current building operation and the condition of outstanding issues related to commissioning:
 - a. 1 month after turn-over
 - b. 3 months after turn-over
 - c. 6 months after turn-over
 - d. 10 months after turn-over

Submit a detailed status report within 2 weeks of each site review.

- 2. Interview facility staff and identify problems or concerns they have with operating the building as originally intended.
- 3. Identify deficiencies that may come under warranty or under the original

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construction contract.

4. Prepare a detailed evaluation after ten months on the status of warranty issues for the Owner.

7. Submittal Requirements

Provide the following requested information in the order shown. Please keep your responses as succinct as possible.

- 1. Company name, address of the office that this project will be managed and delivered by, and primary contact with phone number and email address for this proposal.
- 2. A brief description of your firm's organization, ownership history, leadership, and capabilities.
- 3. An organization chart that includes only those team members that will be active and ongoing participants on the project. Identify the key point of contact for ASHRAE and the project team.
- 4. Resumes for each of the individuals shown on the organization chart describing qualifications, credentials, and experience that is relevant to this project. Highlight projects in progress or completed by each individual that are targeting LEED Gold or higher and/or which are pursuing net-zero energy.
- 5. Client, engineer, general contractor, and subcontractor references (three (3) of each) that have experience working with key members of your proposed CxA team.
- 6. List of any clarifications or exclusions to the Commissioning Scope of Work described in this RFP.
- 7. Describe specific circumstances under which you would be compelled to request additional services or a fee adjustment.
- 8. Changes you would require to the proposed terms and conditions. You must identify specific language that is objectionable and proposed alternative language for each item.
- 9. Provide a sample COI evidencing your professional liability and other insurance coverages that would be included with this proposal.
- 10. If your firm is involved in any pending claims or lawsuits with clients, describe the issue and status of each.

8. Compensation Proposal

Provide proposed fees with appropriate break downs and other information requested:

- 1. Fundamental Commissioning Fee
- 2. Total # professional hours budgeted for Fundamental Commissioning
- 3. Enhanced Commissioning Fee
- 4. Total # professional hours budgeted for Enhanced Commissioning
- 5. Alternative proposal for fire alarm systems
- 6. Alternative proposal for security systems
- 7. Provide hourly billing rates that would be applicable for the duration of the project.
- 8. Provide a not-to-exceed estimate of reimbursable expenses excluding out-of-

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town travel.

9. Selection Process and Timeline

Evaluation of proposals and selection of the CxA will be a collaborative effort that will include representatives from ASHRAE, Collins Project Management and the design team. Interviews may be held if the group determines that they are necessary to make a final selection.

The anticipated schedule of activities, subject to change, is as follows:

Issue RFP	1 February
Deadline for Questions	5 February
Proposals Due	8 February, 3:00 pm
Shortlist Announced	13 February
Interviews	20 February
Selection Announced	22 February

10. Instructions

All questions about the project or the meaning or intent of this RFP should be directed to Greg Kerr at <u>gkerr@collinspm.com</u>. Direct phone: 404-391-5740

Address and deliver your proposal via email in .pdf format to:

Jeff Littleton, Executive Vice President, ASHRAE JLittleton@ashrae.org

Greg Kerr, Sr. Project Manager, Collins Project Management gkerr@collinspm.com

11. Additional Information

Submittals received after the deadline will not be considered.

Cost of preparing a response to this RFP is solely the responsibility of the submitting firm. There will be no compensation to the proposing firm for services, time, or costs incurred related to this process.

All responses to this RFP will become the exclusive property of the Client upon receipt. Neither client nor Collins Project Management are responsible for verbal representations. The Client and Collins Project Management, Inc. reserve the right to solicit additional submittals, to cancel or revise this RFP in part or in its entirety, to modify the Project, to reject any or all Submittals, to waive any irregularities, or to accept any submittal which in the Client's sole discretion is in the Client's best interest for this project. This RFP does not commit the Client to award a contract.

-End of Request for Proposal-