

Commissioning Services Proposal

Prospect Heights School District 23
Phase 4 HVAC Retrofit
MacArthur Middle School

October 29, 2021

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Michael Ziaja, and Amy McPartlin
Prospect Heights School District 23

Re: School District 23, Phase 4 HVAC Retrofit – MacArthur Middle School

Dear Mr. Ziaja, and Ms. McPartlin:

Per your recent request, E Cube is pleased to present its proposal to provide commissioning services for the Prospect Heights School District 23 Phase 4 HVAC Retrofit project. Leveraging our recent work on this campus, E Cube aims to provide the same high-quality services and project team for this next phase.

Specifically, we will be using:

- Tom Vannatta, CPMP, HCC, LEED-AP – Senior PM / Technical Authority – 30 years' experience
- Mandeep Singh, CCP, LEED-AP – Project Manager – 25 years' experience
- Jim Radzienda – Assistant Project Manager / Commissioning Specialist – 35 years' experience
- Jason Hendrixson, P.E., CCP, LEED-AP – Project Engineer – 10 years' experience
- Mike Romito – Commissioning Specialists – 30 years' experience

Mandeep Singh will be the main point of contact. He is well regarded for his ability to lead teams. Under his leadership, each team member will be aware of the project's status and progress, providing depth of knowledge and flexible client support. We are committed to providing reliable, efficient, high-quality services, focused on achieving your goals and encouraging the same in our colleagues.

Thank you for considering E Cube for this project. Please feel free to contact us if you have any questions or concerns. We are happy to tailor this proposal to meet your needs and budgets as this process moves forward. We look forward to the possibility of once again assisting School District 23.

Sincerely,



Joseph P. Havey, CEM®, MS RECM, RPA®, FMA®, SMA®, LEED® AP
Chief Executive Officer

Table of Contents

Scope of Work3

Schedule.....4

Fee Summary4

Assumptions and Clarifications5

Approval7

Scope of Work

Project Understanding

We understand this project continues HVAC retrofit work from summer 2020 and summer 2021. Specifically, additional HVAC retrofits are to be completed for several heat pump fan-coil units. All equipment is located within the MacArthur school. The project is intended to be complete by Aug 2022.

Base Services

Our understanding of the scope of commissioning services is to review design documents and review installation and operation of new equipment and systems included in the design documents order to provide a high level of confidence these systems perform according to the new design intent.

The scope of services does not include any work, troubleshooting, analysis, etc. associated with existing systems: geothermal loop (piping, water quality, performance, etc.), associated pumps and any other existing-to-remain equipment. E Cube is not liable for any pre-existing conditions on this project.

The following is a list of commissioning tasks that will be completed for this project.

Task Description

Design Phase

- Review Design Documents and issue a design review report with relevant comments. Provide one back-check to help ensure incorporation of comments in one subsequent design document set.
- Attend up to two, 1-hour design phase meetings.
- Develop Commissioning Specifications to be inserted into the bid documents by the design team
- Develop a Commissioning Plan

Construction Phase

- Coordinate and execute the Commissioning Process
- Update and expand the Commissioning Plan
- Conduct a Commissioning Kick-Off meeting at the beginning of the construction phase
- Conduct periodic commissioning meetings, virtual Teams meetings (maximum once a month)
- Review submittals for systems/equipment under the scope of work
- Maintain a master issues log (using CxAlloy). Distribute regularly.
- Maintain a Commissioning Status Report (using CxAlloy). Distribute regularly.
- Develop and complete Commissioning Pre-Functional Checklist (using CxAlloy). Conduct Pre-functional (installation verification) procedures.
- Review and witness a portion of contractor startup of major equipment.
- Conduct a 10% random sample review of BAS point-to-point testing results. Installing contractor to complete 100% testing prior to this review.
- Conduct a 10% random sample review of Test and Balance results. Installing contractor to complete 100% testing prior to this review.
- Develop Functional Checklists and conduct Functional Procedures with assistance from installing contractors.
- Develop a final Commissioning Report

Base Systems and Equipment

The following systems and equipment will be included in the scope of work, based on the October 21, 2021 email from Arcon Associates.

The goal is to review a representative sample of each type of unit to evaluate proper installation and performance. This scope does not constitute an exhaustive effort to review all installed equipment / systems and spaces served.

Please note: For most packaged equipment with integral (local) controls, assistance from manufacturer's controls technicians will be needed to gain access to and manipulate these controls for the purposes of testing. Installing contractor shall procure services from the appropriate parties to complete this work.

Total for MacArthur School

Description	Total Quantity	Sampling Rate	Quantity to be Commissioned
Vertical Cabinet Heat Pump Dehumidification Retrofits (Bard Units)	33	25%	8
Electric Duct Booster Heaters	N/A	N/A	N/A
HW Reheat Coils	N/A	N/A	N/A
Ceiling Mounted De-humidifiers	N/A	N/A	N/A

Schedule

The scope of work and fee estimate is based the following estimated schedule. Please note that any significant changes to this schedule directed by the Owner, may require additional fees, subject to Owner's pre-approval.

Phase	Start	End
• Design Phase		Feb 2022
• Construction Phase	May 2022	Jul 2022
• Final Report:	Sep 2022	Sep 2022

Fee Summary

The following fee applies to the base scope of work. This is based on a Fixed Fee contract.

\$ 24,000 Twenty-Four Thousand Dollars

Expenses

E Cube, Inc. makes a point of aggressively managing reimbursable expenses so that project costs may be used for more productive purposes such as additional time on-site working with the contractors. With this goal in mind, we re-allocate any remaining expense budgets to additional field time as appropriate. Expenses will be billed at their direct cost with no markup and are included in the Fee Summary above.

Rates

The following rates will be used for tasks included in the scope of work on this project.

Staff Position	Staff Name	2019	2020	2021	2022	2023
Principals, Project Executives	Joe Havey Leonard Rozek	\$224	\$233	\$242	\$252	\$262
VPs, Senior Associates	Tom Vannatta Mandeep Singh Trey King Dave Anderson Sub-Consultants	\$194	\$202	\$210	\$218	\$227
PMs, Associates, Senior Engineers	Jason Hendrixson Matt Worthington Jim Radzienda Mike Romito Steve Guinard Chuck Cusak	\$165	\$172	\$179	\$186	\$193
Staff Engineers & Analyst, Level III	Tally Metzger	\$158	\$164	\$171	\$177	\$184
Staff Engineers & Analyst, Level II	Terrell Thomas	\$150	\$156	\$162	\$169	\$176
Staff Engineers & Analyst, Level I	Catherine Dressler Brandon Black	\$104	\$108	\$112	\$116	\$121
Project Resource Manager	Jody Baca John Magnuson	\$75	\$78	\$81	\$84	\$88

Assumptions and Clarifications

General

1. E Cube is an independent Commissioning Authority (CxA), not the project Engineer of Record (EOR) or Construction Manager (CM). As such, E Cube is not responsible for design concept, design criteria, system sizing, compliance with codes, design or construction scheduling, cost estimating or construction management.
2. This quotation does not include MEP coordination. Coordination of MEP trades including items such as planning for contractor testing, startup and operation, balancing etc. as well as any related scheduling, meetings, and communications necessary for the same shall be by the General Contractor.
3. This quotation is based on the currently available construction schedule, specifications and plans provided by the Owner/Construction Team.
4. An addition of equipment or an increase in complexity to the scope (after approved Cx contract) shall result in an incremental increase in commissioning fees, subject to owner's pre-approval.
5. The scope of services does not include any work, troubleshooting, analysis, etc. associated with existing systems: geothermal loop (piping, water quality, performance, etc.), associated pumps and any other existing-to-remain equipment. E Cube is not liable for any pre-existing conditions on this project.

Design Phase

1. This quotation assumes design documents are provided at a level of completeness appropriate for the given phase of design (i.e. SD, DD, CD). Any additional reviews required as a result of incomplete documents shall

be at an additional cost. Such occurrences shall be presented to the Owner for approval prior to proceeding with work.

2. Design review services described in this proposal do not constitute a peer review. As such, review/verification of system sizing, loads, etc. are not included in the scope of work.

Construction Phase

1. E Cube is not responsible for any construction means and methods, site safety, or site security.
2. E Cube will not authorize and/or approve any changes in construction schedule, cost (including change-orders), or contractual requirements, and has no contractual authority to do so.
3. E Cube is not responsible for schedule impacts due to incomplete systems or unforeseen problems or delays.
4. Construction Team shall coordinate meeting invites, attendance, participation from their subcontractors.
5. This quotation is based on equipment vendors (including owner supplied equipment) planning for, performing, and properly documenting the results of their respective factory-prescribed start-up procedures.
6. Functional procedures will be started upon systems being ready. This shall require written notice from Construction Team. **Systems that are not ready for successful completion of functional procedures after being represented as ready by the contractor will be subject to additional incurred costs (hourly rate(s), travel and other expenses) if additional work or return visits are required.** These situations will be documented and reported to the Owner/Construction Team for authorization to proceed.
7. This quotation is based on full cooperation from contractors during all commissioning procedures. Contractors shall provide experienced technicians, adequately knowledgeable of the project.
8. The relevant contractors shall provide any special / proprietary tools, test equipment and software as necessary during the commissioning process and/or as required by the commissioning specifications.
9. This quotation is contingent upon providing E Cube with no-cost access to the Building Automation System operator workstation for local and remote monitoring. Appropriate login ID's and passwords shall be provided by the BAS contractor to allow for complete monitoring and commissioning. Web-based access is acceptable and often preferred.
10. Should specialty data logging information be desired (particularly medium voltage electric values and/or power quality event recording from operating equipment), E Cube will notify Owner/Construction Team as soon as possible and will proceed only after obtaining authorization for any additional cost.
11. Once deficiencies are noted, reported and commented on and the responsible parties have provided written notification that the deficiencies have been resolved, E Cube will be available at no additional charge for **ONE (1)** additional effort to confirm that the deficiencies have been resolved. **E Cube's scope does not include further efforts should deficiencies remain unresolved. All work beyond the scope of this proposal will be at an added charge.**

Fee and Payments

1. This proposed fee is based upon E Cube's interpretation of the project's needs and our estimation of the required level of effort in person-hours and trips to the project site. This is based on our experience with adding value to projects of this type. Should you have any questions or concerns regarding our interpretation of the desired scope of services, please do not hesitate to contact us to discuss these matters.
2. Payment Terms: E Cube will invoice monthly, net 30 without retainage for labor and expenses for that month. E Cube will supply the standard AIA G702 and G703 forms with each invoice. Invoices that are not paid in full after 60 days will bear a 1 ½ % late charge against all outstanding balances until paid in full.
3. Reasonable and normal reimbursable expenses including long distance calls, printing, reproduction, shipping, equipment rental, and mileage expenses, will be billed at their direct cost with no markup, and are estimated in this document. Project-related expenses will be itemized and invoiced at direct cost. Vehicle charges will be invoiced at \$0.545/mile for project-related travel in 2018 or IRS approved rate, whichever is lower

Approval

Submitted by:

Company: E Cube, Inc.
 Date: October 29, 2021
 Authorized Agent: Joseph Havey, CEM®, MS RECM, RPA®, FMA®, SMA®, LEED® AP
 Title: CEO



Signature

Offer is good for 90 days from date of proposal

Approved by:

Company: _____
 Date: _____
 Authorized Agent: _____
 Title: _____

Signature