

April 8, 2023

Mr. Scott Spalding
Finance Director
Marion County Public Schools
755 East Main Street
Lebanon, KY 40033

Re: Commissioning Services for New Calvary Elementary School

Dear Mr. Spalding,

ZHCx is responding to a request for proposal for the New Calvary Elementary School project. Our proposal is based on the bid documents dated 2/16/23 and addenda 1 through addenda 3. I was unable to locate a specific commissioning agent scope of work but extrapolated what I could from specification sections 230800 and 260800. I have identified the systems and equipment included and our proposed scope of work for your review. Please note this proposal is negotiable if you feel there is not enough or too little scope.

We are pleased to provide a fee of \$36,400.00 for the base bid work. If Alternate #1 is accepted we propose an additional cost of \$2,200.00. I have included a schedule of values that will assist in evaluating our fee.

Proposed Scope of Work – Commissioning Tasks

Organize and Lead the Commissioning Team

Chris Zerhusen will act as the lead commissioning agent for the project and the point of contact for the client.

Document Review

This task was not included in the scope of work but believe this to be beneficial to you and the project. ZHCx will review the bid drawings and specifications and addenda. Comments from our review will be sent directly to the design team. ZHCx will request these items be answered by the respective team member.

Commissioning Plan

The Commissioning Plan is created by ZHCx and shared with the commissioning team. It defines the roles of all the team members during the commissioning process, intertwines the commissioning activities into the project schedule and provides guidance to the team in respect to commissioning throughout the project.

Commissioning Kick-off Meeting

ZHCx organizes a Commissioning Kick-off Meeting with all members. The purpose of the meeting is to help the entire team, including installing contractors, understand their specific roles in the commissioning process. This meeting will occur prior to installation of materials by associated trades who are involved in the commissioning process.

Coordinating Activities

The commissioning plan highlights the commissioning activities, roles and responsibilities, and overall expectations of the project team. During the commissioning kickoff meeting, ZHCx will ensure that all team

members have a clear understanding of the commissioning process. This plan will include a commissioning specific schedule, used to track our activities along with the progress of constructions.

Additionally, we plan to have a presence during recurring project construction meetings once the project progresses to a point where the commissioned systems installation begins. We find these meetings are the best way to coordinate and integrate the commissioning process with the construction schedule. This step is important in order for us to provide our services at the right time for the project during and after the project has been completed.

Tracking System

To keep our information simple and organized, ZHCx utilizes a user-friendly online system to develop and complete checklists and reports. These checklists and reports can be accessed using a computer, tablet, or smartphone. In order for the project team to view the report, we will provide a URL unique to the project. As findings and resolutions are documented by the commissioning team, this up-to-date information can be viewed online by any member of the project team using the URL provided.

Prefunctional Performance Testing

ZHCx develops project-specific checklists to ensure the designed and approved equipment is installed. Each checklist will be specific to the equipment designed and installed. ZHCx personnel are responsible for these inspections including completing the checklists.

Witness Equipment Startups

ZHCx strives for direct involvement, assistance, and optimization of systems with the balancing contractor. This includes documenting system start-up parameters and data. This type of involvement requires commitment from the commissioning agent to be both flexible and available during these project activities. Too often, we find functional and operational issues that persist into occupancy that should have been identified during startup and balancing. ZHCx is committed to being an active team member participating in BOTH equipment startup and system balancing activities.

Witness Testing, Adjusting, and Balancing

As part of our process, ZHCx intends to meet with the balancing contractor prior to work commencing to discuss pertinent or potential issues, expectations, and methodology. We have found the balancing contractors appreciate this coordination and understand our expectations thoroughly. This leads to well-balanced, highly optimized systems. Once balancing begins ZHCx will be onsite to witness balancing of both the air and water systems.

Functional Performance Testing

ZHCx will lead and document Functional Performance Testing. The performance of the installed equipment and systems is verified utilizing checklists developed by ZHCx. The success of the Functional Performance Testing process will be ensured by monitoring the building throughout the entire year. All equipment is tested; sampling is not involved in our testing.

Lighting and Receptacle Control

Interior and Exterior lighting control devices and systems will be tested specifically to confirm all hardware and software is calibrated, adjusted, programmed and in proper working condition. Also, occupancy sensors will be tested in a realistic setting to verify that they are placed correctly, ensuring lights and receptacles do not turn off automatically when they should not. Time of day controls will be tested to ensure they are functioning properly and as intended. Lastly, the commissioning agent will ensure photo-sensor control devices reduce light levels as designed. All of this testing information will be documented via online checklists as well as the Commissioning Report.

Training

ZHCx will witness training of systems within the commissioning scope of work.

Resolution Tracking

ZHCx works toward the resolution of deficiencies during the entire project. We provide access to an online report that displays all open and closed items. These items are tracked throughout the project and remain open until resolved. Once resolved, the resolution is documented, and the item is closed.

Seasonal Testing

Following initial completion of Functional Performance Testing, ZHCx will schedule testing of sub-systems, systems, and interactions between systems that could not be carried out prior to acceptance due to unsuitable weather conditions.

Final Commissioning Report

ZHCx will meet with the team to determine the expectations for a Final Report. It is important to us to include usable information, rather than providing a report just for the sake of meeting a requirement. The Final Commissioning Report will include the Resolution Tracking information, completed checklists, and any other information required and deemed necessary by the Owner.

Quality of Performance Follow Up

ZHCx will provide follow-up for quality of performance during the guarantee period. This will also include monitoring utility consumption.

Proposed Scope of Work – Systems Included

Heating, Ventilating and Air Conditioning

Building Automation System

Dedicated Outside Air Unit

VRF Heat Pump/Split System

Water Source Heat Pumps

Base Mounted Pumps

Kitchen Hood

Geothermal Flush and Purge

Geothermal Balance

Variable Air Volume Boxes

Electric Heaters

Plumbing

Domestic Water Heaters

Domestic Hot Water Recirculation

Electric

Lighting and Lighting Controls.

This is our scope of work proposed for this project. I hope you find this acceptable. Please let me know if you need further information or want to amend the scope of work.

Thank you for the opportunity, and we look forward to working with you on another project.

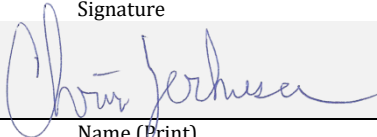
Respectfully,



Chris Zerhusen, CxA, CEM, EMP
Partner
Chris@ZHCommissioning.com

Contract Signature

If you find the proposal acceptable, please sign below and return.

Company Zerhusen Holten Commissioning, LLC	
Signature 	
Name (Print) Chris Zerhusen	
Title Partner	Date 04/08/23

Company Marion County Board of Education	
Signature	
Name (Print)	
Title	Date

Contact Information

Please fill out the information below and return or click on the URL below to submit contact information electronically to ZH Commissioning.

<https://app.smartsheet.com/b/form?EQBCT=81f624efcdb04148afccab454846813f>

Project Title Marion County New Calvary Elementary School

Project Contact:

Name and Title	E-mail	Phone Number
Address		

Billing Contact:

Name and Title	E-mail	Phone Number
Address	Address Invoices To <i>(If invoices should be addressed to a business or person other than the billing contact, please provide the name and address of the business or person to whom the invoices should be addressed)</i>	
Comments for Billing		

New Calvary Schedule of Values



Description of Work	C SCHEDULED VALUE	D WORK COMPLETED FROM PREVIOUS APPLICATION (D + E)	E THIS PERIOD	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	G % (G ÷ C)	H BALANCE TO FINISH (C - G)
Totals	\$36,040.48	\$0.00	\$0.00	\$0.00	0%	\$36,040.48
100% CD Review	\$1,667.50	\$0.00	\$0.00	\$0.00	0%	\$1,667.50
Produce and Update Cx Schedule	\$580.00	\$0.00	\$0.00	\$0.00	0%	\$580.00
Write Construction Phase Cx Plan	\$1,160.00	\$0.00	\$0.00	\$0.00	0%	\$1,160.00
Organize and Lead Cx Meetings	\$1,740.00	\$0.00	\$0.00	\$0.00	0%	\$1,740.00
Create Prefunctional Checklists	\$986.00	\$0.00	\$0.00	\$0.00	0%	\$986.00
Create Functional Checklists	\$1,145.50	\$0.00	\$0.00	\$0.00	0%	\$1,145.50
Perform Prefunctional Testing	\$4,944.50	\$0.00	\$0.00	\$0.00	0%	\$4,944.50
Flushing and Purging Verification	\$1,160.00	\$0.00	\$0.00	\$0.00	0%	\$1,160.00
Equipment Start-up Verification	\$2,204.00	\$0.00	\$0.00	\$0.00	0%	\$2,204.00
TAB Verification	\$1,160.00	\$0.00	\$0.00	\$0.00	0%	\$1,160.00
Resolution Tracking Form	\$1,160.00	\$0.00	\$0.00	\$0.00	0%	\$1,160.00
Perform Functional Performance Testing	\$8,279.50	\$0.00	\$0.00	\$0.00	0%	\$8,279.50
Equipment Backchecks	\$413.98	\$0.00	\$0.00	\$0.00	0%	\$413.98
Training Attendance	\$6,960.00	\$0.00	\$0.00	\$0.00	0%	\$6,960.00
O&M Review	\$580.00	\$0.00	\$0.00	\$0.00	0%	\$580.00
Final Commissioning Report	\$580.00	\$0.00	\$0.00	\$0.00	0%	\$580.00
Seasonal Testing	\$1,319.50	\$0.00	\$0.00	\$0.00	0%	\$1,319.50