

DANNY CLEMENS, DIRECTOR
TRACY PARSLEY, MAINTENANCE SUPERVISOR
THOMAS STOKES, CUSTODIAL SUPERVISOR
GEORGE BROCK, ENERGY MANAGER

DEPARTMENT OF FACILITIES

MEMO

TO: Dr. Jesse Bacon, Superintendent *JB*

FROM: Danny Clemens, Director of Facilities

Date: January 18, 2024

RE: Bernheim Renovation- Test and Balance Contractor *DC*

Attached are three proposals for Test and Balance Services for the Bernheim Middle School renovation. This scope of work includes testing and balancing the HVAC, geothermal and domestic water systems. This work is critical for the proper performance of these systems and will be paid out of construction contingency funds.

The following companies submitted a quote:

Thermal Balance: \$25,530
Kahoe Air Balance: \$47,540
Synergy Test and Balance: \$28,813

Scott Balch from CMTA recommends the use of Thermal Balance for the Bernheim Middle School project since they are the lowest bidder..

I recommend approval of this request.

Attachment:

Thermal Balance - Recommended - Bernheim TAB Proposal
Kahoe - Bernheim TAB Proposal
Synergy Test and Balance - Bernheim TAB Proposal

TWood

OUR MISSION IS TO INSPIRE AND EQUIP OUR STUDENTS TO SUCCEED IN LIFE

BULLITT COUNTY PUBLIC SCHOOLS IS AN EQUAL EDUCATION AND EMPLOYMENT INSTITUTION

Date: May 31, 2023

AABC Certification #89-06-23
TBI Quote #Q138657

This quote is to perform the test and balance services per the *AABC Standards for Field Measurement and Instrumentation, Seventh Edition, 2016*. Any deviations or clarifications are listed below. This quote is valid for 30 days from the date of issuance and shall become an attachment to any contract provided. Unless noted below this price is based on an unoccupied facility and regular working hours. Fees for individually listed services are valid only on acceptance of the TAB contract.

Project: BERNHEIM MIDDLE SCHOOL
RENOVATION
SHEPHERDSVILLE, KY

Total: \$25,530.00

Provided Services:

- | | | | |
|---|--|--|--|
| <input checked="" type="checkbox"/> Air Balance | <input type="checkbox"/> Sound Testing | <input checked="" type="checkbox"/> Cx Team Member | <input type="checkbox"/> System Analysis |
| <input checked="" type="checkbox"/> Water Balance | <input type="checkbox"/> Vibration Testing | <input type="checkbox"/> Pretesting | <input checked="" type="checkbox"/> Domestic Water |

Excluded Services:

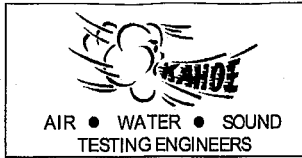
1. Any sheaves, belts, balancing or control devices or installations thereof
2. Any lifts or scaffolding, as-builts, cleaning, lubing or uniform space temperature balancing
3. Any return trips for inoperable equipment, deficiencies, troubleshooting, report reviews, or final inspections
4. Any fees associated with subscriptions, memberships or 3rd party requirements

Remarks:

- A LIFT IS INCLUDED FOR ALL HIGH WORK.

Prior to any scheduling, a purchase order must be sent to contracts@thermalbalance.com.

Nicholasville, KY 859.277.6158
Paducah, KY 270.744.9723



KAHOE AIR BALANCE CO.
TEST AND AIR BALANCE ANALYSIS REPORTS



PROPOSAL

August 23, 2023

CMTA

Attention: Scott Balch

**Project: Bernheim Middle School Renovation
Shepherdsville, KY**

Bid Date: August 24, 2023

We are pleased to offer our **PROPOSAL** for the above reference project. All work to be in accordance with the drawings and specifications dated **May 16, 2023** with noted exceptions in our proposal. All labor, insurance, workmen's compensation certificates and certified calibrated instruments are to be furnished by this company.

SCOPE OF WORK

1. Air and Water Balance.
2. No TAB Specifications received: Balancing per AABC Standards.

Includes: Twelve (12) hours of participation in Commissioning of TAB work only.

For the Sum of: \$ 47,540.00

ADDITIONAL SERVICE(s)

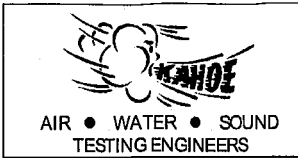
NONE

ALTERNATE(s)

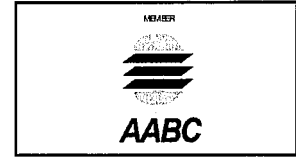
NONE

ADDENDUMS

Kahoe has reviewed the following Addendums at bid time: None



KAHOE AIR BALANCE CO.
TEST AND AIR BALANCE ANALYSIS REPORTS



PLEASE NOTE

- The proposal is based on working Monday through Friday (7:00am to 4:00pm)
- The return system must be operational during the balancing of the supply system.
- DDC program and hardware must be made available for **Kahoe Air Balance Co.** use.
- **Kahoe** will provide the appropriate sizing for the required sheaves and belts necessary for proper balancing. (Purchasing and installing by other.)
- **Kahoe** will provide an Insurance Certificate for this project. (Purchasing the waiver of subrogation "Workers Comp. / Employers Liability" will be billed as a T & M with your approval)
- Balance damper must be provided for each diffuser, register and grille. Locate balancing damper as close to branch takeoff as possible.
- A lift must be provided for use by **Kahoe** when inaccessible with a 10-foot step ladder.

NOT INCLUDED IN PROPOSAL

- The addition of necessary dampers for correct air balance, or test cocks on the water system.
- Commissioning ~~or participation in the Commissioning process.~~
- Schematic System Diagrams.
- Duct Pressure Testing.
- Sound and Vibration Measurements.
- Domestic Water Balancing.
- Heat Transfer Measurements.

TERMS

- For scheduling purposes, Kahoe Air Balance Co. will require **3 to 4 weeks** advanced notice for mobilization.
- Invoices payable **net 30 days**.
- This proposal is firm for **60 days** from date of this proposal.
- Cancellation of this Confirmed Order is subjected to a **10%** Service Charge.

Sincerely,

Edward A. Knapp

KAHOE AIR BALANCE COMPANY

Edward A. Knapp

ACCEPTANCE OF THIS PROPOSAL

Purchase Order #: _____

Name: _____

Date: _____ / _____ / _____

Title: _____

Amount: \$ _____

Signature: _____

Start Date: _____ / _____ / _____



Synergy Test and Balance

8355 Rockville Road Suite 36 | Indianapolis, IN 46234 | Tel. (317) 222-1828
154 Burt Road | Lexington, KY 40503

PROJECT: Bullitt County Public Schools DATE: 08/29/2023
Bernheim Middle School Renovation
Shepherdsville, KY
Drawings: 05/03/2023
Addenda: 1, 2, & 3
Specification: 203100

The amount referenced below reflects our cost to perform Test and Balance (TAB) Services for equipment listed below.

TAB Base Bid:	<u>\$28,813.00</u>
TOTAL:	<u>\$28,813.00</u>
Duct Leakage Test Per Trip Cost:	<u>\$800.00</u>

Please be advised of the following:

- 1) Synergy Test and Balance performs work as an independent, third party owner advocate in accordance with AABC National Standards to accomplish the established scope of work.
- 2) Each contractor must include time in their proposal to perform stipulated tests. The costs associated with other contractors' work are not included in the Synergy Test and Balance fee amount.
- 3) Contractors not adhering to the TAB schedule will assume responsibility for lost time of other participating contractors, consultants, and owner's personnel.
- 4) Retests required due to concealed conditions, design, or installation issues are not included in our base scope of work.
- 5) Lost time or issues related to the requirements noted above will be reported to the project manager in a timely manner following the occurrence.
- 6) Please note this price is based on an unoccupied facility unless indicated below.

Please note our standard hourly rates for services extended beyond the scope of this proposal can be provided upon request.

Thank you for the opportunity to provide a quotation on the above referenced project. Please call if there are any questions: (317) 222-1828 or FAX: (317) 451-8079

NOTE: This quote is firm for thirty (30) days.

SYNERGY TEST AND BALANCE, INC.

Cheryl L. Yates, President
Cheryl@SynergyTAB.com



Synergy Test and Balance

8355 Rockville Road Suite 36 | Indianapolis, IN 46234 | Tel. (317) 222-1828
154 Burt Road | Lexington, KY 40503

THIS PROPOSAL IS ACCEPTED:

BY:

TITLE:

DATE:

PRINTED NAME:

ORGANIZATION NAME:



Synergy Test and Balance

8355 Rockville Road Suite 36 | Indianapolis, IN 46234 | Tel. (317) 222-1828
154 Burt Road | Lexington, KY 40503

Equipment List

- DOAS w/ Energy Recovery Wheel
- Water Sourced Heat Pumps
- Geothermal Hydronic Pumps
- Kitchen EF
- Kitchen MAU
- Kitchen Hood
- EF's
- Toilet/Mech. EF's
- GRD's (High Work)
- Ex. GRD's
- GRD's
- Geothermal Wellfield - Valve/Setters
- Participate in wellfield flush/purge, velocity and pressure drops
- DHW Balance - Valve/Setters
- DHW Balance - Recirc. Pumps

*Equipment not included in this list is specifically excluded from our quote

Notes

- +/- 10% Balance Tolerances per AABC Standards
- Cx Support / Final Inspection per 203100-2.24
- PDF Copy of TAB Report

Exclusions

- Pre-Demo Readings
- Existing equipment with no CFM/GPM shown
- Electric Heaters
- Ductless Split Systems
- Sound and Vibration tests
- Sheave and belt changes
- Installation of dampers or valves
- Termination of wiring
- Installation of filters
- Installation of test ports for hydronic balance
- Installation of any other accessories or components
- Fees associated with memberships, subscriptions, or 3rd party requirements
- Software or Hardware required to access BAS
- Hydrostatic testing
- Steam Balance
- Refrigerant measurements
- Overtime, Weekend, or Night work
- Lifts or scaffolds