

ORANGE COUNTY
BOARD OF EDUCATION

AGENDA ITEM ABSTRACT

Meeting Date: August 12, 2013

AGENDA ITEM No. 13-08-13

ACTION ITEM: (Y/N) Y

SUBJECT: Cedar Ridge High School Emergency Replacement of Chiller

INFO. CONTACT: Pam Jones, Interim Exec. Dir. Of Auxiliary Services PHONE: 919) 732-8126

ATTACHMENTS:

- Resolution
- Design Cost Proposal

PURPOSE: To consider waiving the qualifications-based selection process for engineering services to design a replacement chiller at Cedar Ridge High School; authorizing staff to proceed with bidding a replacement unit; and endorse a rental option for a substitute chiller as needed during the interim.

BACKGROUND: Cedar Ridge High School was constructed in 2001. The facility was designed with an innovative and energy-saving chiller system that utilizes two chiller units to freeze ice during the nighttime when power costs are lowest; and subsequently use the ice to cool the building during the daytime when energy costs are at their highest. One of the chiller units has failed and the cost of repairs significantly outweighs the benefit of repairing this twelve year old unit.

Reece, Noland & McElrath (RN&M) has provided a cost proposal in the amount of \$13,500 to review the cause of failure, right-size and design a replacement unit and provide construction management throughout the installation. RN&M has previously done considerable work for the District and has a proven track record of quality work within stringent time constraints. The Board is asked to waive the Qualifications Based Selection Process and authorize the Interim Superintendent to execute an agreement for this work as quickly as practicable.

The second unit is not designed to cool the entire school and cannot continue at this high demand level without running the risk of a second unit failure. Although the weather has been reasonably mild since the unit's failure, the humidity levels in the school will continue to be unmanageable and may cause additional issues. For this reason, staff requested the Engineer explore the possibility of

- 1.) finding a chiller unit of suitable size and function that may be in inventory somewhere in the US (generally, these units must be built to the Owner's specification when they are ordered, with delivery lead times up to 10 weeks); or
- 2.) locating a mobile unit that could be rented and moved on-site until the weather no longer requires air conditioning.

While the Engineer has not been successful in finding an install-ready unit to bid, they have been able to locate a rental. The unit would likely be installed on site the week of August 19 and would be needed through at least the end of September. A six-week rental cost is approximately \$26,000. Given the student comfort factor during August and September; and the potential for the proliferation of issues related to high humidity levels over an extended period, staff is recommending the rental option be exercised.

continued

FINANCIAL IMPACT: The cost of professional services related to the replacement is \$13,500. The cost of the rental unit is estimated at \$26,000. The estimated cost for the chiller replacement is estimated between \$170,000--\$200,000, depending upon the sufficiency of the electrical service to support the new unit. A fund balance appropriation of approximately \$240,000 may be needed at such time bids are received and costs are finalized.

RECOMMENDATION: The Superintendent recommends the Board:

1. Approve the Resolution waiving the Qualifications Based Selection Process for professional services related to design of the new chiller; and
2. Authorize the Interim Superintendent to execute an agreement with Reece Noland & McElrath as the designer of the installation in the amount of \$13,500; and
3. Endorse the rental of a mobile chiller unit for use as identified herein.

A RESOLUTION WAIVING THE QUALIFICATIONS-BASED SELECTION PROCESS FOR DESIGN SERVICES OF A REPLACEMENT CHILLER FOR CEDAR RIDGE HIGH SCHOOL

WHEREAS, the Orange County Board of Education ("Board of Education) desires to complete the emergency replacement of one of the two chillers at Cedar Ridge High School, Hillsborough, NC; and

WHEREAS, the Board of Education has retained RNM Engineering, Inc, Waynesville, NC to design other similar projects for the District; and

WHEREAS, the Board of Education has been satisfied with the work product delivered by RNM Engineering, Inc; and

WHEREAS, the Board of Education desires to award a contract to RNM Engineering, Inc. to provide engineering services associated with the referenced project; and

WHEREAS, G.S. 143-64-32 allows the Board of Education to exempt itself from the notice and qualifications-based selection criteria outlined in G.S. 143.64.31 for the award of contracts to engineering consultants.

NOW, THEREFORE, BE IT RESOLVED, by the Orange County Board of Education that:

1. Due to the urgency of this project and the Board's previous and satisfactory experience with work performed by this firm; and pursuant to the provisions of G.S. 143-64.32, the Board of Education hereby exempts itself from the notice and selection criteria used to award contracts to engineering consultants as outlined in G.S. 143.64-31 ; and
2. The Board of Education selects RNM Engineering, Inc. to provide engineering services for the referenced project.

ADOPTED this 12th day of August, 2013.

Donna Coffey, Chair

(Corporate Seal)

ATTEST:

Dr. Del Burns, Interim Superintendent



Reece, Noland & McElrath, Inc.

PO BOX 540

WAYNESVILLE, NC 28786

(828)456-9851

(828)456-6205 (FAX)

WWW.RNM-ENGINEERS.COM

DESIGN SERVICES PROPOSAL

Orange County Schools
Cedar Ridge High Chiller Replacement
Hillsborough, NC
July 29, 2013

Reece, Noland, & McElrath Engineers propose to provide Professional Engineering Services for design of a replacement water chiller for this facility.

PROJECT DESCRIPTION: One of the existing 125 ton outdoor packaged chillers will be replaced with a new outdoor packaged chiller with exact size to be determined. This facility is cooled by an ice storage system and the Owner would like to install a larger chiller to improve redundancy and allow ice system charging in a shorter period. We will evaluate most effective replacement size taking into account cooling load profiles, building schedules, and available electrical capacity.

FEE: Our lump sum fee for Basic Services for this project is Thirteen Thousand Five Hundred Dollars (\$13,500.00). The milestones for billing are as follows: Construction Documents 75%, Bid/Negotiate 5%, Construction Phase 20%.

BASIC SERVICES: The lump sum fee proposed above includes the following basic services:

1. Evaluate new chiller sizing.
2. Prepare project drawings and specifications in sufficient detail to obtain regulatory approval and to receive bids on an informal basis.
3. Review shop drawings and submittals for items of work that are part of our design.
4. Conduct site visits during construction to observe the work and assist with coordination or problem resolution, as requested by the Owner.
5. Review Owner's Manuals and as-built drawings submitted by the Contractor.
6. Support Owner and Architect during the Contractors' warranty period to resolve any problems with equipment manufacturers, suppliers, system operation, balancing, etc.

ADDITIONAL SERVICES: The lump sum fee proposed above does not include services such as those listed below. We will propose additional fees for such services upon request:

1. Construction administration services which extend beyond the established Contract Completion Date, through no fault of the Designer, including default of the Contractor.
2. Modifying drawings and specifications as a result of Contractor's equipment substitutions, failure to coordinate or sequence the work, or other fault of the Contractor.

BILLINGS/PAYMENTS: Invoices will be presented monthly, based on progress during the month. Payments will be due on a net 30-day basis. Financing charges on balance beyond 30 days will be 1-1/2% per month (18% APR). If we should have to seek legal action to effect collection, and we prevail in

litigation, then all costs associated with collecting overdue accounts will be recoverable. If payments are withheld or disputed, then we retain the right to suspend further services until the account is current.

Submitted by:

Accepted by:

REECE, NOLAND & McELRATH, INC.



Stephen C. Kaufman, PE

July 29, 2013

Date

Date