

**SCHOOL DISTRICT OF ESCAMBIA COUNTY
INTERNAL AUDITING DEPARTMENT**

AUDIT OF CONSTRUCTION CHANGE ORDERS

PROJECT # 2002-09

Accepted by: Audit Planning and Review Committee

August 27, 2001

Published

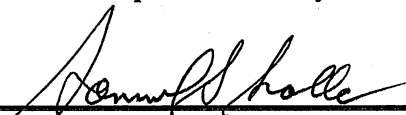
August 28, 2001

Field Work Conducted By:



Auditor

Report Issued By:



Director, Internal Auditing

ESCAMBIA COUNTY SCHOOL DISTRICT AUDIT OF CONSTRUCTION CHANGE ORDERS

SCOPE AND OBJECTIVES

We have conducted an audit of construction change orders. This audit concludes our efforts to audit construction activity of the District that started under the direction of former superintendent William Maloy. This audit was identified in our annual work plan and approved by the Audit Planning and Review Committee.

For the past three years our efforts to audit construction activity were focused on the construction of the N. B Cook Elementary School. In order to provide broad coverage, this audit of change orders was expanded to include change orders for other projects and concludes the audit of N. B. Cook Elementary School.

Twenty-two (22) change orders were selected for audit from a sample of 82 change orders submitted to the Board during the period of July 1, 1999 through September 2000. Change orders were selected to provide broad coverage of the major contractors and architects the District currently does business with.

There were five broad objectives of our work:

1. To provide a detailed analysis of construction change orders to district management to assist them in their work in managing the District's construction activity.
2. To gain an understanding of and report the processes and procedures used by the Facilities Planning Department in recommending change orders to the Board.
3. To compare and evaluate change order activity within Escambia County School District with that of adjacent and/or peer districts in the state.
4. To test compliance with applicable statutes, State Board Rules, and Board Policies as well as compliance with the Board's contract language provisions, and
5. To verify support for the actual costs of the work performed under each change order.

Regarding the fifth objective of our work, we were unable to test actual costs of any of the work performed under these change orders. No evidence of record was available in construction files maintained in the Facilities Planning Department to support the actual costs of each change order.

Our findings and recommendations constitute the balance of our report that follows. One of our objectives identified at the beginning of our work was to provide Facilities Planning Department with a detailed analysis of construction change orders as well as a comparison with peer and/or adjacent districts. Those analyses are more appropriately addressed directly with district management and are in the form of observations and suggestions to staff rather than findings and recommendations that should be brought to the Board's attention. A separate meeting is scheduled with Facilities Planning Department to discuss this information.

FINDINGS AND RECOMMENDATIONS

Change Order Limitations

A change order is a change to the original construction contract and as such requires the Board's approval. Board policy currently sets the Superintendent's limit to approve change orders at \$6,000.00. This limit is below that for purchases (\$15,000) and is on the low end of those school districts we polled.

The Board may wish to consider increasing this limit to provide flexibility in approving minor construction change orders. Such change orders would be reported to the Board at the next regularly scheduled meeting.

The Board may also wish to establish policy granting additional authority to the Superintendent in approving emergency change orders to avoid delays in project completion that would jeopardize the successful start of a school or school program. The change order approved by the Board last year for fencing surrounding the wetland areas at Blue Angles Elementary was one such example. In that instance the contractor admitted proceeding with the work on his own volition. In addition, we wish to point out the conclusions of the recent (September 2000) Grand Jury in their report on the Escambia County School District indicating that many times the work had already been done and change orders were approved after the fact. We do not know whether these changes were under the \$6,000.00 limit currently in effect however.

We recommend raising the Superintendent's authority limit for approval of change orders and establishing guidelines for emergencies such as when the project completion deadline is critical to the schools operations. Such measures would help prevent placing contractors at risk as in the case mentioned previously and provide for a more efficient and effective construction program.

Board Oversight

In the Grand Jury Report referred to previously, there was a clear recommendation that the Board increase its oversight of construction activity including change orders of the District. With that in mind we offer the following findings and recommendations.

Change Order Pricing

At the onset of our audit, questions were raised by the Director of Facilities Planning Department regarding the District's right to examine supporting documentation for the actual cost of construction change orders. Language regarding change orders is contained in three different places within current contract documents. In each place pricing of change orders is discussed. In the Escambia County School District's General Conditions of Contract for Construction language requires that change orders be priced based on actual cost and requires the contractor to "submit receipts or other evidence showing his cost and his right to payment of claims" to support the actual cost of the change order.

In the past, change orders have been approved based on cost estimates that were deemed *reasonable* and yet we know costs for construction, including change orders, can fluctuate widely.

The demolition of the Tate High School cafeteria is an example that illustrates this point. In evaluating the decision to demolish and build new versus remodel the old cafeteria for the new media center at Tate High School, the District's architect employed a cost estimator to help them in the decision to remodel or replace. According to the estimator, the cost estimate to "demolish and provide a clean slate for a new facility" was \$25,000. However, when the cafeteria was demolished under a change order issued to the contractor already on site, the estimate submitted and amount paid was \$98,848. This estimate was approved by the architect and recommended for board approval by Facilities Planning. As mentioned previously, we were unable to verify the actual costs of the demolition due to the lack of support documentation available in the Facilities Planning Department.

Work for construction change orders is not competitively bid rather it is based on an estimate submitted by the contractor for the job. In addition, the architect does not provide a written cost estimate of the work to be performed as they do in the original construction contract. Such an estimate would permit an independent evaluation of the cost proposal by district staff.

Given the findings above including the wide fluctuations that can exist in cost estimates, the lack of competitive bids and written cost estimates by the design professional, and the recommendation in the recent Grand Jury Report for better oversight, the Board may want to consider expanding current board policy regarding construction change orders. Such language would give clear direction to staff regarding the items mentioned above. Some districts we contacted have adopted specific language in board policy regarding construction change orders.

To eliminate any confusion regarding the Board's intent in this regard, we recommend the Board consider additional language in Board policy that more clearly defines the method of pricing change orders and whether they require documentation to support actual costs. In addition, the Board may want to establish minimum limits requiring competitive bids for change orders and under what circumstances they should be required.

Additional Information to Support Change Orders

Change order requests are submitted to district staff from the architect who designed the original plans. Change order information supplied to the Board indicates who requested the work, i.e., owner recommended, recommended by the architect, changes mandated by the Department of Education, etc. and what work is to be done.

Except to the extent that justification for the work to be performed may be derived from the preceding information, nothing is provided to the Board to indicate *why* the change is being made or whether such changes should have been envisioned in the original construction plans. More importantly, there is no information provided to the Board to indicate whether the cost of the change order exceeds the cost had the changes been envisioned in the original plans or when such determination is warranted.

We recommend the Board require a statement of justification for the work to be performed in all change orders.

Procedures Manual

The Facilities Planning Department maintains an internal procedures manual. Such operations manuals are desirable as they give clear direction to staff and are invaluable in a period of rapid turnover of key staff. Indeed, a recent audit of the District points out the need for such manuals. The Facilities Planning Department is commended for having a procedures manual. We do recommend, however, that the manual contain a section on change orders that gives clear direction to staff in processing a request for a change order.

Unit Schedule

Contract documents approved by the Board require a "Unit Schedule" be submitted within ten days after receipt of the signed contract. Current contract language states that:

"... within ten days after receipt of a signed contract, the contractor shall file with the Director of Facilities Planning a correct, complete, itemized schedule of the different materials or subdivisions of work, giving quantities and unit prices of labor and materials. Each item shall include its due proportion of expense and profit, all arranged in a satisfactory form. The total of all items shall equal the total contract price"

In reviewing those submitted we noted that this "unit cost schedule" was not being supplied as required in current contract language. The contractor was submitting a "schedule of values" used to support progress payments only.

Unit cost schedules, when itemized to the extent specified in the contract language, provide a valuable tool to evaluate change order pricing whether additive or deductive.

We recommend that the Facilities Planning Department request this schedule and provide follow-up to verify that the schedule is being provided and in the minimum format described in contract language.

Labor Burden and Overhead/Profit Rates

Documents that form the agreement between the owner and contractor address "labor burden rates" and "overhead/profit rates" as components of change order pricing. Estimates submitted by contractors for some of the change orders reviewed were not in sufficient detail to determine these rates, whether they were excessive, or what costs they were applied to. In addition, absent documentation to support the final actual costs of the change orders neither the architect as the district's representative or district staff are able to determine whether such rates were correctly applied in those instances where such rates were stated separately on the estimate. Because of this we are unable to determine whether contractors are complying with these terms of the contract.

As mention previously, we recommend the Board establish policy that provides clear direction to the Superintendent and his staff regarding their expectations for change order pricing.

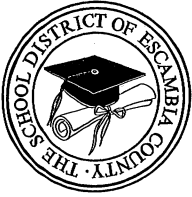
Extended Overhead

We found one instance where "extended overhead" was billed and paid by the District contrary to language contained in the board approved Contract Agreement (Article 11). In the instance noted, a weekly charge plus overhead and profit was assessed, approved and paid, for the additional days added to the substantial completion date of the Washington High School Pool Project.

In addition to extended overhead, the general contractor also charged for liability and builders risk insurance which would have been included in the amount allowed in the overhead percentage already paid on the change order. The documentation presented clearly shows these charges as separate charges and yet the change order was approved both by the architect of record and the District, resulting in a charge in 2 different change orders totaling \$6,436.78.

We recommend that Facilities Planning staff monitor and evaluate cost proposals received from the general contractor more closely to determine if the District is being billed for amounts that should not be charged as defined in current contract language.

Please see management's response attached.



THE SCHOOL DISTRICT OF ESCAMBIA COUNTY

J. E. HALL EDUCATIONAL SERVICES CENTER

30 EAST TEXAR DRIVE

PENSACOLA, FL 32503, PH. 850/432-6121

<http://www.escambia.k12.fl.us>

JIM PAUL, SUPERINTENDENT

"Making A Positive Difference"

MEMORANDUM

TO: Samuel S. Scallan, Director
Internal Auditing

FROM: Ted A. Kirchharr, Director 
Facilities Planning

DATE: June 25, 2001

RE: Construction Change Orders

Please find attached the response to your tentative audit findings regarding construction change orders and timeline for preparing a joint response.

From what I understand, your auditor has obtained a number of examples of change order formats, contract language, board policy, etc. I am anxious to take advantage of this research you staff has done to date.

We may both work together to make improvements in our change order process.

TAK/ko

attachment

JUN 27 2001

Change Order Limitations

The Office of Facilities Planning would like to review board policies from peer districts to determine the standard limit of the Superintendent's authority to approve change orders without questions. The greater flexibility would allow our office the ability to approve routine change orders and avoid delays in our projects.

I am puzzled because of the inclusion of the specific change order for fencing at Blue Angels Elementary. While it is representative of a project that would not be completed prior to the start of school, it was a project in which the Contractor assumed all risk associated with proceeding with this work. The District was not at risk and I am just puzzled as the inclusion of this particular change order.

In addition, a September 2000 grand jury report was cited and I am concerned that in our Exit Interview on June 13, 2001, you made no reference to this grand jury report. The Office of Facilities Planning did not participate in the grand jury, we provided no documentation to the grand jury, no member of Facilities Planning staff was questioned by the grand jury and we did not receive a copy of the grand jury report. I am very skeptical of any comments from the grand jury since they apparently were not interested in examining the documents or interviewing those responsible for construction change orders in our District. Furthermore, to my knowledge no Architects or Contractors were interviewed by the grand jury, casting further doubt on their opinions.

Once we have reviewed the policies from peer districts, I would propose we submit to the Board, policy revisions by the October Board Meeting.

Board Oversight Change Order Pricing

There appears to be an error in one finding, "Work for construction change orders is not subject to competitive bidding rather it is based on an estimate submitted by the contractor for the job." This is not always the case. Many times Contractors provide us with unit prices that are used as a basis for change orders. Change orders also can reflect acceptance of alternates bid at the time the entire project is bid. Finally, our Owner Direct Purchase Program also involves competitive bidding of equipment.

"Board may want to establish minimum limits requiring competitive bids for change orders and under what circumstances they should be required." I would be interested in any data from our peer districts where change orders are competitively bid. In most cases you would not want multiple Contractors providing the same service, for example, to have one fire alarm vendor provide a base system with the second vendor providing additions to system would create significant quality and warranty concerns. I would be interested in seeing any evidence of peer counties competitively bidding change orders.

I would like to review any policies on change order pricing and make recommendation for board policy at the October Board Meeting.

Additional Information to Support Change Orders

Certainly we can provide additional justification for change orders. However, as the auditor suggests, to determine when a change order exceeds original cost is very difficult to determine and is probably of little value.

I would like to see examples from our peer districts.

Procedures Manual

We have begun assembling a section dealing specifically with change orders for inclusion in our Project Procedures Manual.

Unit Schedule

We would like to look at our peer districts and propose changes in contract language by the October Board Meeting.

Labor Burden and Overhead/Profit Rates

A standard format for change order pricing would alleviate this. We look forward to reviewing formats from peer districts and propose changes in contract language by the October Board Meeting.

Extended Overhead

This was an oversight by staff and I recommend training for Project Managers and Accounting staff.