

**Bond Accountability Commission 2, Inc.**  
**Construction Projects Management and Oversight**

7/10/20

Mark Donnelly – Executive Director, BAC

**Introduction:**

During the data gathering phase of the previous BAC project to review summer projects it was noted that requests for documentation were met with questions from the District and many documents actually came from the OHG team. It appeared that the information being requested was either not available or possibly never gathered by the District. This raised several concerns regarding record keeping and the construction project data that the District should have on file.

To completely understand the significance of this concern it is important to review the construction process and the types of data that is generated and available to the Owner. It must also be noted that many departments, administrators, staff, and consultants are involved in the different phases of planning and construction of a new or renovated facility. The BAC is tasked with holding the District accountable for proper use of the bond dollars as well as the state matching dollars and other sources of funding that flowed into the 003 account. However, accountability is more than just an exercise in financial auditing or questioning expenditures. Accountability for a project of this scope and magnitude will be an in-depth review of the many processes involved in spending these funds as well as frequent observation of the processes followed by CMSD.

**Understanding the Construction Process:**

The process for planning and building a single facility is extraordinarily complex and requires expertise from multiple professionals along with the owners' requirements and approval from the city. The process of designing and gaining approval for the design of the building can take 18 to 24 months. The actual bidding, construction, and close out can take an equal amount of time. This short narrative will not be able to explain the process completely; however, we will cover some of the key professionals that must be contracted to bring a new building on-line. Understanding these processes and the role of certain contractors on the project will help to understand the nature and intent of the need for project oversight and the documentation needed to accomplish this task.

### **Third Party Experts utilized during construction:**

**Architect:** The architect is a licensed professional that designs the school building including all exterior and interior features. The architect must consider functionality, building codes, safety regulations and construction costs. They approve all change orders and each submittal for materials being used to construct the school. They participate in the entire building process including visits to the building site to monitor the construction progress. After creating the design and building blueprints, commercial architects coordinate on the construction process, collaborating with other professionals, such as engineers, interior designers, landscape architects and construction contractors.

**Construction Manager:** They oversee and direct the construction project from conception to completion. The construction manager reviews the project in-depth to schedule deliverables and estimate costs. They also oversee all onsite and offsite constructions to monitor compliance with building and safety regulations. Basically, the construction manager is responsible to build what the architect has drawn up.

The process CMSD has adopted for their construction projects since 2010 has been the Construction Manager at Risk method of project delivery. Construction Manager at Risk (CMR) has been accepted as a permissible delivery method for public projects as it eliminates a few of the cost variables of the other methods. In this method, the architect signs a contract with the owner and begins design of the project. Shortly after, a CMR is selected and they work closely with the architect through the various design phases. The CMR's primary responsibility is to ensure the project cost and scope parameters align with the owner's expectations throughout the design stages.

The CMR will provide detailed estimates after each phase of design. The project's design will be adjusted to meet scope and budget requirements at each of these milestones. When the construction documents are near completion, the CMR will provide the owner with a Guaranteed Maximum Price, or GMP. Given that the cost of the project has been monitored throughout the design process, the GMP should be comparable to the owner's initial expectations. This method eliminates the possible large gap between the architect's estimate and the contractor's bids in a traditional DBB approach.

With close cooperation between the architect and CMR, this approach also allows for various early packages of construction documents to be produced, which can accelerate the

project's schedule. At completion of the construction documents phase, the CMR will solicit bids from various subcontractors to solidify the GMP. In some cases, the CMR can return some "bid day" savings to the owner from this exercise. From that point, construction begins with full-time supervision from the CMR. The architect provides construction observation services as well. All contractors and sub-contractors are under contract with the CMR.

**Owner's Agent/Representative:** An Owner's Representative acts as an extension of the Owner's staff managing the day-to-day operations of a project. The Owner's Representative can advise and represent the Owner from the earliest stages of the project, starting with conceptual design, through the final design, permitting, pre-construction, bidding construction, commissioning, move-in and preliminary occupancy stages. An Owner's Representative has a background in the construction industry and will help the owner understand the terminology, processes and provide valuable advice on schedule, costs, and a wide variety of issues that can happen during construction.

*The Owner should maintain all decision-making authority and all contractual relationships flow back to the Owner.* As an extension of the owner's staff, the Owner's Representative interfaces with all project team members, tracking issues and facilitating and expediting solutions. The Owner's Representative will be responsible for maintaining clear and concise communications, keeping accurate records and thorough documentation throughout all phases of the project. The fiduciary responsibility remains with the owner.

**Commissioning Agent:** Building commissioning is an all-inclusive systematic quality assurance process of ensuring that building systems are designed, installed, tested, and capable of being operated and maintained to perform interactively according to the design intent and the owner's operational needs. Thus, the U.S. General Services Administration (GSA) defines commissioning as: "A systematic process of assuring by verification and documentation from the design phase to a minimum of one year after construction that all facility systems perform interactively in accordance with the design documentation and intent, and in accordance with the owner's operational needs, including preparation of operation personnel."

As a quality assurance-based process, commissioning is intended to deliver preventive and predictive maintenance plans, operating manuals, and training procedures for users to follow. The principal function of the commissioning process therefore is to ensure that the various systems such as the HVAC systems and associated controls, domestic hot water systems, lighting controls, renewable energy systems (PV, wind, solar, etc.), and other energy-using

building systems meet the owner's performance requirements, and perform and operate as intended and at optimal efficiency. The commissioning agent will routinely visit the construction site and submit reports indicating progress and expressing concern over construction issues.

**Special Inspections:**

- Materials Testing: A construction materials testing (CMT) technician performs a variety of tests and inspections on construction materials such as concrete, asphalt, masonry, mortar, paint, special coatings, and many others. They check that the components of each unique structure have been assembled in a manner consistent with its plans and specifications.
- Geotechnical Testing: A specialized soils and materials engineer will determine if the building site is suitable to support the weight of the structure being constructed. They may make recommendations as to alternative geo-piers or other foundation supports that can overcome unsuitable soils.
- HVAC Testing, Adjusting & Balancing (TAB) The TAB specialist performs air and hydronic measurements on the HVAC systems and adjusts the flows as required to achieve optimum performance of the building environmental equipment. The balancing is usually based upon the design flow values required by the Mechanical Engineer for the project, and the TAB contractor submits a written report which summarizes the testing and balancing and notes any deficiencies found during the TAB work.

These processes ensure the contractors perform their work as prescribed by the architectural drawings. Reports from these inspectors should be reviewed by the owner to ensure all deficiencies are properly addressed and approved by the architect. Additionally, the City Building Inspectors, the OFCC, the Fire Department, and the Owner's Agent will perform their own inspections to ensure all work is compliant.

These different inspection reports, field review notes, change order logs, request for information logs, meeting minutes, punch lists, close-out documentation and other sources of information should be reviewed periodically by the owner. This review process is important for staying on top to the construction progress and associated issues that arise with each and every building. Lack of construction knowledge is not a barrier to performing this review successfully; with each question the school administrator becomes more educated in the process. Also, asking

about the schedule and the high cost of change orders conveys to the contractors that the district is keeping a watchful eye on the project.

### **Project Oversight**

In 2002, the Cleveland Municipal School District had a school building inventory of 127 buildings. Since that time, they have built 43 new buildings, renovated 11, and are still using 32 of the buildings that existed in 2002. The remaining buildings have been demolished, closed, sold, or repurposed for other district use.

The construction/renovation costs total \$988,298,941. The district has also spent an additional \$91,807,513 on maintenance items for the older structures as well as some updates to the newly constructed facilities. With over \$1 billion spent on facilities in the past 18 years the BAC endeavored to review documentation that would give evidence of the management oversight processes the District has established over this period of continued construction. Because each building has a different set of professionals contracted to complete the facility and each building has its own design the district should have a separate file of documentation for each new building.

There is not set standard for what should be in such a file, however there could be copies of the different professional contractors notes, reports, meeting minutes, inspections, change order logs, request for information logs, issues logs for the commissioning agent, as well as city building inspector reports, fire department inspection reports, punch lists and final close out documents. These reports and other such data should be reviewed by a district employee to ensure all the contractors are doing their jobs and the schedule is being maintained. The goal is to show the level of involvement in the construction management of each new building and to build the best buildings for the students of Cleveland Schools.

Due to the lack of some documentation during the summer project review by the BAC, many questions came up regarding the actual formal and informal processes the district has implemented to track the over \$1 billion in construction expenses.

The BAC inquired:

- 1) Does the District have a physical file (yellow folder) for each building or some sort of electronic file for each building? If so, can the BAC select 5 or 6 buildings to review such files?

- 2) How does CMSD review all the data and reports to stay on top of the construction process and are there any notes, RFI's, meeting minutes to show follow-up of the different concerns?
- 3) If you do not have files as described, can you give details as to how CMSD managed the construction process and stayed on top of the contractors and all the vendors involved in this process?
- 4) Even though the owner agent (OHG) is an integral part of managing the process, they are a contracted service and the fiduciary responsibility for the project lies with CMSD. So, the BAC is looking for process management by the CMSD Administration.

The response to these questions included a detailed timeline from the inception of the construction program in 2002 up to the present day. This document covered the planning process and named several CNSD staff who were involved in the early years as well as those who stepped up as time went on. The response also detailed the different construction delivery methods and the roles of the construction manager, the architect, the owner's agent, and several of the other contractors involved in each project. What was not clarified was the level of involvement by CMSD staff and the processes they followed to manage the entire process.

Due to the Covid-19 pandemic the opportunity to review any documentation and to sit in on construction meetings was not possible.

***Fiduciary Responsibility*** (<https://definitions.uslegal.com/b/breach-of-fiduciary-duty>)

*A fiduciary duty is an obligation to act in the best interest of another party. For instance, a corporation's board member has a fiduciary duty to the shareholders, a trustee has a fiduciary duty to the trust's beneficiaries, and an attorney has a fiduciary duty to a client.*

*A fiduciary obligation exists whenever the relationship with the client involves a special trust, confidence, and reliance on the fiduciary to exercise his discretion or expertise in acting for the client. The fiduciary must knowingly accept that trust and confidence to exercise his expertise and discretion to act on the client's behalf.*

*When one person does agree to act for another in a fiduciary relationship, the law forbids the fiduciary from acting in any manner adverse or contrary to the interests of the client, or from acting for his own benefit in relation to the subject matter. The client is entitled to the best efforts of the fiduciary on his behalf and the fiduciary must exercise all the skill, care and diligence at his*

*disposal when acting on behalf of the client. A person acting in a fiduciary capacity is held to a high standard of honesty and full disclosure regarding the client and must not obtain a personal benefit at the expense of the client.*

The District has a fiduciary duty to the citizens of Cleveland and that duty cannot be contracted away to the Architect, the Construction Manager, or the Owner's Agent. The District is responsible to the taxpayer and must exercise reasonable management practices over the construction process to ensure the taxpayer is receiving full value.

It has been observed how carefully the owner's agent manages the construction schedule and holds all contractors to fulfill their requirements. At this point we assume the day to day management of the project is left up to the Owner's Agent, OHG. It is very possible that OHG is doing an excellent job managing the construction process. The BAC would prefer that CMSD be more directly involved and here's the reason.

The Owner's Agent is really three different construction management firms that have agreed to a joint venture for this massive project. At the root of it, they are all in the same industry as the rest of the architects and contractors and most likely have developed relationships with most of the other organizations. There is a high probability that these firms have worked together on multiple projects in the past or even concurrent to the CMSD project. Does this mean something inappropriate is happening; No, it does not. However, when the contract is over these firms move on and the knowledge about the project will go with them unless CMSD staff are more directly involved.

Also, we should look at the cost increases over the past 18 years. The average cost per square foot in segment 1 was \$181.28 as compared to the average cost per square foot in segment 7 of \$305.83. This was a 68.7% increase over the 18-year period. There are some variables to consider such as the smaller buildings built in the early stages would naturally have a higher cost per square foot than the larger buildings the District is constructing in the more recent years. Additionally, the cost of demolition has been broken out in a separate line for the more recent projects, it is possible the abatement and demolition costs were included with the building cost at the beginning of the project. These factors may have had an impact on the cost variance. Therefore, the cost per square foot may be lower than \$181.28 in the early stages and percentage of increase may be higher.

This works out to an average of 3.1% per year. At first the bids and the cost estimates were closer in line. Over the years the gap between the bids and the estimates began to widen. As this cost variance occurred the District may have adopted a different strategy to control their costs.

Did the district engage a construction auditing firm to review the actual invoices, contracts, and other such documentation to determine the validity of these cost increases? What were the results of this work? OR Why not engage such a firm?

### **Conclusion**

Unfortunately, without data and information from the CMSD staff these questions cannot be answered directly. This leads to a series of unanswered questions and possible doubt as to the amount of oversight the District exercised over the construction projects.

The District's response to the Draft version of this report stated that they have several staff assigned to the construction management and that they meet regularly to discuss progress on each project. However due to Covid-19 these files could not be verified or reviewed to determine the accuracy of this statement. Additionally, the District's oversight processes could not be verified. With the request for these files being sent on May 7, 2020 and the response being sent on July 9, 2020, concerns were raised due to the slow response. As the BAC Executive Director is transitioning to a new position the next BAC Director will be task with following up on these unanswered questions. Also, the management processes will be observed and verified to bring closure to the questions raised with this report.

The students of Cleveland Municipal School District deserve up-to-date facilities that are warm, safe, and dry with the latest technology and equipment. The process to deliver on this promise from 18 years ago includes being good stewards of public funds and proving worthy of additional funding when needed. If the District fails to show they have effectively managed the construction process, the future funding needed for this massive project may not be approved by the voters.

It is strongly recommended that the CMSD review all formal and informal management oversight practices for the construction process and develop meaningful processes that clearly show proper construction oversight.



Only an open and transparent process will build the trust required for this reconstruction plan to continue and bring it to a successful conclusion.