



INTERNAL AUDIT REPORT FOR

Construction Manager at Risk

Gwinnett County Government
Audit Plan Year 2023

February 29, 2024

GWINNETT COUNTY
INTERNAL AUDIT DIVISION

75 Langley Drive | Lawrenceville, GA 30046
O: 770.822.7757 | F: 770.822.7725
GwinnettCounty.com

Auditors: Keenan Nietmann, CFE, Division Director of Operational Audits
Mohammed Sharif, Internal Auditor

Distribution:

To: Ron Adderley, Support Services Acting Director
Tina Fleming, Community Services Director

CC: Tracy Arner, CPA, Gwinnett County Audit Committee
Kirkland Carden, Board of Commissioners – District 1, Gwinnett County Audit Committee
Tiana Garner, Clerk of Court, Gwinnett County Audit Committee
Ben Ku, Board of Commissioners – District 2, Gwinnett County Audit Committee Chairman
Teresa Reese, CPA, Gwinnett County Audit Committee
Glenn Stephens, County Administrator, Gwinnett County Audit Committee
Maria Woods, CPA, Deputy County Administrator/CFO, Gwinnett County Audit Committee

Theresa Cox, Deputy County Attorney
Mike Ludwiczak, County Attorney

This report is intended solely for the individuals contained in the distribution list. Do not send to any other recipients without written authorization.

Table of Contents

Background & Scope.....	4
Assessment.....	4
Recommendations.....	5
Other Considerations.....	5
Exhibit A: Summary of Audit Procedures.....	6
Exhibit B: Sampling Approach.....	8

Background & Scope

The Board of Commissioners (BOC) initiates construction and capital improvement projects to provide or maintain buildings, facilities, and roads that serve Gwinnett County (the County). The Departments of Community Services (DoCS), Support Services (DoSS), Transportation (DOT), and Water Resources (DWR) are primarily responsible for the successful completion of construction projects. They traditionally follow the Design-Bid-Build (DBB) delivery method of construction. Departments hire architects and engineers to design facilities and contract with general contractors through the County's competitive bid process to complete construction at the best price. Architects typically oversee contractor work quality. Departmental project managers oversee all aspects of project delivery. They among many tasks monitor project completion, process contractor pay applications, manage change orders, and complete closeout procedures. Though less common, departments also increasingly utilize the Construction Manager at Risk (CMAR) delivery method for certain construction projects. The County contracts with a construction manager to be involved with pre-construction services, such as planning, design review, pricing, and value engineering, as well as construction. The construction manager works with architects and engineers during the planning phase to find possible cost savings and then submits a guaranteed maximum price (GMP) to complete construction for the County. The construction manager assumes responsibility for any costs that exceed the guaranteed maximum once the GMP is contracted. The pre-construction collaboration associated with this method often results in more timely deliveries and cost savings because of better cost-quality alternatives in construction materials and procedures. The scope of this audit was limited to CMAR construction projects occurring or closed out during the audit period January 2022 through August 2023. The County managed or closed out six CMAR projects (all DoSS) for approximately \$70 million during this period. Management's key control objectives for these projects were as follows:

- Contractor pay applications are accurate, approved, and supported by detailed schedules of values with allowances for retainage.
- Construction delivery adheres to GMP and work quality standards per contract terms.
- Closeout procedures account for contingencies, progress payments, and warranties.

The purpose of this audit was to evaluate the adequacy and effectiveness of management's control activities that are designed to provide reasonable assurance of achieving the objectives. Internal Audit (IA) conducted this audit in accordance with *International Standards for the Professional Practice of Internal Auditing* (Standards). The Standards require that we plan and perform the audit to identify and evaluate sufficient information to support engagement results. We interviewed employees, observed certain control activities, and reviewed construction documents on a sample basis for the audit period. We believe the evidence provided a reasonable basis for our assessment. See **Exhibit A** for a summary of our audit procedures.

Assessment

Management's control activities were generally adequate and effective in providing reasonable assurance of achieving their control objectives. IA found no evidence of abuse or opportunities to

improve control activities. We included best practice suggestions to enhance certain project activities for management's consideration only. See **Other Considerations** for details.

Recommendations

Not Applicable

Other Considerations

IA observed opportunities to improve certain project activities based on best practices and included advisory comments for management consideration only. Management is not required to provide written responses or corrective action plans. The advisory comments are as follows:

- DBB and CMAR delivery methods are similar, but there are significant differences in project manager, contractor, and subcontractor responsibilities. Contractual obligations also vary in terms of construction administration, costs, and project oversight. During the course of the audit, we noted that project budgets may be determined far in advance of the actual procurement and GMP process, which can make it difficult to achieve the desired outcome due to inflation, supply chain issues and other cost escalation causes. Departments possess extensive experience overseeing DBB projects but may lack CMAR expertise. During test work, we also noted that management relies on walkthroughs and engineer or architect assertions to validate percentages completed of pay application line items. Although we understand the importance of establishing accurate GMPs during the planning stages of a project, CMAR contracts require the contractor to submit a written schedule for each pay application, itemizing bills, invoices, and receipts of actual costs. Management should consider incorporating cost-effective strategies for reviewing the supporting documentation related to the written schedules for accuracy when approving pay applications. Departments should maintain construction management handbooks or guides to memorialize this guidance and aid project managers in overseeing the various types of construction arrangements.
- Departments use Lucy software to manage repair work orders for building facilities. They also keep equipment and material warranty information in the system to prevent paying for repairs that may be covered under the various contractor or vendor warranties. Project managers currently walk through facilities within a year of project completion to identify potential issues prior to warranty expirations, but there are no tools to ensure complete and timely inspections. Project managers should periodically generate a comprehensive list from Lucy with all warranties and expiration dates by facility to better manage inspections.

Exhibit A: Summary of Audit Procedures

IA performed the following procedures to evaluate the adequacy and effectiveness of control activities:

- Interviewed departmental management to identify key control activities. Walked through key activities to confirm understanding and validate operations.
- Reviewed a judgmental sample of 23 monthly pay applications from five CMAR projects for approvals, mathematical accuracy, contract compliance, and documentation. Also, reviewed evidence of approvals if applicable by architects, contractors, and engineers. Compared pay amounts, including retainage, to SAP disbursement transactions. Notes: The five projects contained the entire population of pay applications for the audit period. Two other CMAR projects did not have pay application data during the audit period. After the audit period, DoCS established the GMP for a CMAR project, the Lenora Park Gymnasium Renovation. See **Exhibit B** for Sampling Approach.
- Reviewed the entire population of seven GMP packages initiated during the audit period across six CMAR projects for mathematical accuracy, adherence to contract terms, supporting documentation, and management approval. Reviewed approvals by DoSS, Law, and the Purchasing Division.
- Evaluated recent list of complaints kept by Purchasing and found no evidence of pervasive or significant activity associated with samples. There were only two complaints about one contractor pertaining to project timeliness and debris clean up.
- Confirmed Administration, BOC, and Legal approved CMAR contracts for audit period. Verified each winning construction manager's proposal package received higher score than competing proposals.
- Confirmed accuracy, authorization, and supporting documentation of entire population of six change orders during the audit period without exception. Note: Change orders totaled approximately \$23 million.
- Reviewed a sample of project closeout documentation to validate execution and completeness.
- Conducted site visits and walkthroughs for two construction sites to confirm work per pay applications and change orders, including the Gwinnett Justice and Administration Center (GJAC) renovation and the OneStop Centerville project.
- Observed an Owner-Architect-Contractor meeting for the GJAC renovation and OneStop Centerville.
- Reviewed management's warranty management procedures for sufficiency.

- Confirmed completion of ethics training for BOC members. Reviewed BOC disclosures for any relevant conflicts of interest without exception.
- Inquired with management regarding public input procedures.
- Reviewed Occupational Safety and Health Administration or OSHA violations per website for any enforcement issues associated with County contractors without exception.

Exhibit B: Sampling Approach

We used sampling procedures to select pay applications for review. Our sampling objectives were to select representative samples of the population with the smallest sample sizes necessary for evaluating control effectiveness. Based on our risk assessment and engagement objectives, we used a nonstatistical sampling approach. We judgmentally selected samples based on their dollar value to cover at least 10% of the total dollar value of expenditures for the period. We believe the sample size and selection methods provided sufficient evidence for our evaluation.

CMAR Projects Ongoing or Closed during Audit Period						Test Samples	
Department	Project Name	Date of Contract	Total GMP Amount	Pay Applications as of August 2023	Amount	Pay Applications	Amount
DoSS	Fire Station 13 Relocation	2/16/2021	\$ 7,000,000.00	17	\$ 6,954,301.77	6	\$ 2,863,358.41
DoSS	GJAC Campus Space Plan Implementation	11/9/2021	34,000,000.00	18	12,453,665.01	6	7,392,537.15
DoSS	Historic Courthouse Roof Renovations	6/27/2022	995,554.00	8	928,227.59	4	730,619.48
DoSS	Hooper-Renwick Themed Library	12/2/2021	7,600,000.00	7	1,332,079.90	4	1,170,752.80
DoSS	OneStop Centerville	6/14/2022	14,000,000.00	3	2,893,250.79	3	2,893,250.79
DoSS	Records Management and Emergency Management Storage Facility	4/14/2022	6,000,000.00	-	-	-	-
		Totals	\$ 69,595,554.00	53	\$ 24,561,525.06	23	\$ 15,050,518.63

Data Sources: FileNet, SAP (Unaudited for Financial Reporting Purposes)