



Internal Audit of Program Management FY 2022-23 Q2

June 2023



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TRANSMITTAL LETTER

June 14, 2023

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Pursuant to the approved internal audit scope of work, dated March 20, 2023, we hereby submit our FY 2022-23 Q2 internal audit report of the Program Management function. We will present this report to the Audit Committee on June 22, 2023.

Our report is organized in the following sections:

Executive Summary	This section provides a brief background and a summary of the observations related to our internal audit of the Program Management function.
Prior Observations Follow Up	This section provides an update and current status of remediations related to prior noted findings.
Objectives and Approach	The objectives and approach of the internal audit are explained in this section.

We would like to thank all those involved for their assistance in connection with the FY 2022-23 Q2 internal audit of the Program Management function at Broward County Public Schools.

Respectfully Submitted,

RSM US LLP



EXECUTIVE SUMMARY

Background, Objectives and Scope

RSM has provided various operational and construction auditing services through agreement with the District's Office of the Chief Auditor ("OCA") since 2012. In March of 2017, RSM began providing quarterly evaluation reports of the District's Program Management team directly to the District's Office of Capital Programs ("OCP"). During our engagement, we worked closely with OCP and members of the Atkins, and CBRE-Heery Program Management team to improve the District's design and construction control environment and encourage transparency and accuracy in reporting. In November 2018, contractual oversight and management of our work shifted from OCP, back to the OCA. RSM works with OCA on a quarterly basis to define an audit plan for the upcoming quarter.

The objective of our procedures is to verify that the District's Cost and Program Controls Manager ("CPCM" - Atkins) and Program Manager - Owner's Representative ("PM/OR" - AECOM) are providing deliverables and services in conformance with the terms and conditions of their respective agreements/RFP/RFQ. Generally, our procedures include tests of compliance with contracts (CPCM and PM/OR), tests to confirm adherence to District standard operating procedures, and evaluations of alignment with industry leading practices.

Observations

The observations identified during our assessment are summarized on the pages that follow and include management action plans.

Six (6) of nine (9) follow-up items remain open, including observations related to the incorporation of contract time modifications in project schedules, PM/OR monthly deliverables, PM/OR monthly invoicing, change order processing, electronic signatures on change order forms, and compliance with contractual construction schedules.

Approach

Our audit approach consisted of the following:

Quarterly Cycle Audit Procedures

- Obtained and reviewed deliverables submitted in accordance with CPCM and PM/OR monthly reporting requirements derived from each respective RFP/RFQ
- Reviewed CPCM and PM/OR monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Followed up on prior findings, including the following prior observations:
 - Contract Time Modifications and Schedule Updates
 - PM/OR Compliance with Reporting Requirements
 - e-Builder System Access
 - PM/OR Monthly Invoicing
 - Change Order Review and Adherence to SOP for Change Management
 - Change Order Process Duration
 - Monthly Schedule Reporting: Monthly Project Updates
 - Electronic Signatures on Change Order Forms
 - Monthly Schedule Reporting: Contractual Completion Dates

Reporting

Fieldwork was conducted between March and May 2023. At the conclusion of our procedures, we summarized our findings into this report. We have reviewed the results of our testing with OCA, the CPCM and PM/OR teams, and incorporated management's response herein.

We would like to thank all District team members who assisted us throughout this review.



PRIOR OBSERVATIONS FOLLOW UP



PRIOR OBSERVATIONS FOLLOW UP

INTERNAL AUDIT – PROGRAM MANAGEMENT

1. Contract Time Modifications and Schedule Updates

February 2020

Open

PRIOR OBSERVATION DETAIL

Through our detailed testing of change orders, we noted a variance between additional days approved via change orders, and days added to the next corresponding project schedule update. We also noted instances where the final completion date listed in versions of project schedules, prior to approved changes, did not agree the final completion date listed in the Notice to Proceed (“NTP”).

Project final completion dates are included in the contractor’s NTP. Minor fluctuations to the daily/weekly schedule are expected, and should be reflected in the updated schedule provided by contractors each month (typically within the pay application package). Changes to the final completion date are only allowed with the District’s approval through a change order, and should also be reflected in monthly schedule updates. We selected a sample of ten (10) change orders to validate that appropriate schedule updates were made, to reflect additions of time approved via the change order. We noted exceptions for four (4) of our samples.

We recommend the OR-PM review the process for updating the schedule included in the pay applications to ensure the accuracy of the project schedule.

CURRENT OBSERVATION STATUS

RSM re-tested an additional sample of three (3) change orders with time modifications to verify inclusion of change order time extensions/reductions in the Contractor’s project schedule. Through our detailed testing, we noted discrepancies between the completion dates noted in the Contractor’s schedule and the RSM calculated completion dates for three (3) of three (3) sampled change orders.

A summary of RSM’s testing related to change order time extensions/reductions is provided below:

- **Q2 2020:** Three (3) of four (4) samples failed testing
- **Q3 2020:** Four (4) of four (4) samples failed testing
- **Q3 2021:** Two (2) of three (3) samples failed testing
- **Q4 2021:** Three (3) of three (3) samples failed testing
- **Q4 2022:** Two (2) of three (3) samples failed testing
- **Q1 2023:** Two (2) of two (2) samples failed testing
- **Q2 2023 (current period):** Three (3) of three (3) samples failed testing

This observation will remain open, and RSM will select additional samples as they are available.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

1. Contract Time Modifications and Schedule Updates (continued)

February 2020

Open

MANAGEMENT'S RESPONSE

Q2 2023 Update: AECOM has previously added controls (1 and 2), while the general results are positive, we continue to have some select issues and have added an additional control (3) to prevent this from occurring in the future:

1. In e-Builder, the Contract Invoice process checklist item, "Has there been an approved CO with Time this pay period? If so, has the construction schedule been updated?", is asked of the A/E, PM, and CM in all three checklists.
2. In-house Schedulers are provided the BACO approvals after each Board Meeting to check that the next month's schedule includes the Approved CO's in the updated schedule.
3. Additionally, we are now adding the questions, "Has there been an approved CO with Time this pay period? If so, has the construction schedule been updated?" to the schedule section of the MPU. This will roll out for the June MPU.
4. Contract Invoice SOP includes this as a requirement. AECOM will provide additional training to staff.

In addition to the controls included above, AECOM noted the following observations from RSM's findings:

Sample #1: Boyd Anderson HS: The Contractor received Notification on 1/7/23, the contractor submitted an updated schedule, but had the incorrect dates.

Sample #2: Gulfstream Early Learning Center: The Contractor received Notification on 1/7/23, the contractor did not update the schedule correctly. A Notification of Liquidated Damages Analysis is being issued to the contractor.

Sample #3: C. Robert Markham ES: The Contractor received Notification on 1/7/23, the contractor did not update the schedule correctly. The Contractor has since been put on Notice.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

2. PM/OR Compliance with Reporting Requirements

June 2021

Partially Complete

PRIOR OBSERVATION DETAIL

RSM conducted detailed testing procedures related to the PM/OR's compliance with the monthly/quarterly deliverables as required by the RFQ. We noted that required monthly/quarterly reporting deliverables were not provided to OCP during our scope period (December 2020 – March 2021).

Monthly Reporting Requirements

The PM/OR's RFQ provides a summary of monthly deliverables that are required to be provided to the District by the PM/OR starting December 2020. Through discussions with OCP and the PM/OR, we noted that a completed monthly reporting package had not been submitted to OCP as of March 2021. The PM/OR submitted their first monthly reporting package for February 2021 in April 2021. Through our testing of the February and March 2021 reports, we noted certain monthly deliverables were not provided, including deliverables related to the following RFQ requirements:

- Variance Analysis (Schedule / Budget) Slippage
- Evaluation of Pay Requisition (Consultants & Contractor)
- Earned Value Project Management
- Monthly Executive Summary of Program Performance
- Monthly Executive Summary of Program Performance

Quarterly Reporting Requirements

The items listed in the table below were identified as the agreed-upon quarterly deliverables to be provided after the first three (3) months of the PM/OR's tenure. The table below summarizes the results of our testing:

AECOM Quarterly Reporting Requirements (section 6.7 of the Owners Representative RFQ)	Provided Q4 2020?	Provided Q1 2021?
Knowledge Management/Continuous Improvement at Program & Project Level (industry best practices & lessons learned)	Yes	No
Responsible, Accountable, Consulted, Informed (R. A. C. I.) Matrix	Yes	Yes

We recommend the PM/OR provide monthly and quarterly deliverables as required by their RFQ to allow the District to more effectively monitor project and program performance. As the Program Manager/Owner's Representative, AECOM should seek to provide timely information and actively collaborate with District staff and the CPCM in an effort to collectively move the Program forward.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

2. PM/OR Compliance with Reporting Requirements (continued)

June 2021

Partially Complete

CURRENT OBSERVATION STATUS

As part of our quarterly and follow-up testing procedures, RSM conducted detailed testing related to the PM/OR's compliance with the monthly/quarterly deliverables required by the RFQ. Through our testing, we noted that certain required monthly deliverables were not provided to the District during our scope period. We obtained the monthly reporting packages provided to the District for the period of June 2022 through January 2023, and tested for compliance with the requirements of the RFQ. The following deliverables were not included in the "SMART Program Monthly Reports":

- **Variance Analysis (Schedule / Budget) Slippage:** During our scope period, the PM/OR produced variance reports detailing delays and advancements incurred at the project and District-level. However, the monthly packages did not include a report for budget slippage, as required by Section 6.7.1 of the RFQ.
- **Evaluation of Pay Requisition (Consultants & Contractor)**
- **Earned Value Project Management**
- **Monthly Executive Summary of Program Performance:** Several requirements outlined in Section 6.7.9.1 *Monthly Executive Summary of Program Performance* were not provided, including deliverables related to:
 - RFI Rates
 - Stakeholder Satisfaction
- **Monthly Executive Summary of Project Specific Performance:** Several requirements outlined in Section 6.7.9.2 *Monthly Executive Summary of Project Specific Performance* were not provided, including deliverables related to:
 - Contractor's Progress Payments
 - Field & Change Order Root Causes
 - M/WBE Compliance
 - Responses to RFI's
 - Quality Deficiency & Building Dept. Inspection Reports
 - (EDDC) Compliance
 - Material Testing Reports

RSM held a meeting with the Office of Capital Programs ("OCP") on May 25, 2023 to discuss the current status of the proposed amendment to the PM/OR's Agreement and revisions to the required monthly deliverables. According to OCP, a revised list of monthly deliverables will be included in an amendment to the PM/OR Agreement, which will be presented to the Board for approval in June 2023. RSM obtained the draft amendment and noted that six (6) of the twelve (12) monthly deliverables identified in the bulleted list above will be removed from the required deliverables list.

This observation will remain open, pending further testing of SMART Program Monthly Reports and Board approval of the revised monthly deliverable requirements.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

2. PM/OR Compliance with Reporting Requirements (continued)

June 2021

Partially Complete

MANAGEMENT'S RESPONSE

Q2 2023 Update: Amendment to change the reporting requirements is going to the Board for approval on 6/13/23 including:

Deliverables. Section 6.7.9: Performance Evaluation at Program and Project Level -Monthly, which is incorporated into the Agreement by reference is hereby amended removing the following via interlineation as follows:

- Variance Analysis, Budget (provided by Atkins)
- Earned Value Management
- RFI Rates
- Responses to RFIs
- Quality Deficiency & Building Department inspection Reports
- Material Testing Reports

AECOM will begin reporting on our May 2023 report the following requirements:

- Stakeholder Satisfaction (End of Project Survey)
- W/MBE Compliance
- (EDDC) Compliance
- Field and Change Order Root Causes
- Contractor's Progress Payments (provided by Atkins)



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

3. e-Builder System Access

June 2021

Closed

PRIOR OBSERVATION DETAIL

Through our detailed testing and discussions with the CPCM, we noted that a terminated project manager from a PM/OR subconsultant had access to e-Builder, the District's Construction Management Software for nine (9) days after their termination date. The PM/OR's Document Control Manager informed the CPCM via email that the individual should have their access removed from e-Builder on March 22, 2021, but the access was not removed until March 31, 2021. Per inquiry with the CPCM, their team did not remove the Project Manager until they received project reassignment instructions from the PM/OR, as the removal of this employee without reassignment would result in e-Builder functionality issues with the open workflow items in the Project Manager's queue.

The CPCM and PM/OR should consider evaluating the current procedures for removing e-Builder system access for terminated personnel. If an individual is terminated, a qualified secondary approver should have the ability to review and approve items in place of the terminated employee until the position is filled and a replacement is on-boarded.

CURRENT OBSERVATION STATUS

As part of our follow-up procedures, RSM obtained a listing of PM/OR personnel departures/terminations for the period of July 1, 2022 through December 31, 2022. To confirm the individuals included in the listing were removed from e-Builder in a timely manner, we compared the exit dates (the last date of employment) included in the listing to a report provided by the CPCM detailing all users removed from e-Builder during our scope period.

Through our testing, we noted significant improvements in the duration between employee exit dates and removal of e-Builder system access. For thirteen (13) of thirteen (13) individuals terminated during our scope period, we noted that e-Builder access was removed within one (1) business day or less. Since our last report, the District has implemented the "PMOR Termination Notification" workflow in e-Builder, which came into effect on July 15, 2022.

Considering the implementation of the new workflow and the results of our testing, we recommend closure of this observation.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

4. PM/OR Monthly Invoicing

June 2021

Open

PRIOR OBSERVATION DETAIL

For the current period, RSM reviewed five (5) CBRE-Heery and four (4) AECOM PM/OR labor invoices for contractual compliance, proper supporting documentation, and mathematical accuracy. RSM detailed tested 100% of the \$9,076,647 in total labor invoiced by CBRE-Heery and AECOM. Through our testing, we identified the following exceptions related to the PM/OR monthly invoicing process:

- Miscalculation of invoiced labor (CBRE-Heery)
- Invoiced labor rates exceeded the rates specified in the staffing matrix provided with the invoice package (AECOM)
- An incorrect “hourly rate multiplier” was applied to invoiced labor rates (AECOM)
- Missing supporting documentation for invoiced labor (AECOM)
- Employees billed were not included on the staffing matrix provided with the invoice package (AECOM)

We recommend the District define responsibilities for PM/OR invoice reviews to validate that each employee billed is included in the staffing matrix, and that the correct labor rate and hourly rate multipliers are being applied to the invoiced labor. This may include Capital Payments and OCP personnel identifying specific review procedures for each reviewer in the workflow.

We further recommend the PM/OR team develop an internal invoice review process to aid in the reduction of errors and omissions in the invoice preparation and submittal process.

The District may consider also seeking a credit on subsequent PM/OR invoices to account for the exceptions identified above.

CURRENT OBSERVATION STATUS

RSM performed detailed testing of twelve (12) AECOM labor invoices and seven (7) AECOM expense invoices as part of our quarterly and follow-up testing procedures. Through our review of the PM/OR monthly invoices, we noted the following:

A. Labor Invoices:

1. For one (1) of twelve (12) AECOM labor invoices, we noted that the hours invoiced for one (1) AECOM employee may not have been eligible for reimbursement, as the employee was no longer working on BCPS projects. The employee’s timesheet included the comment “no work” for a three (3) day period. In total, twenty-four (24) hours were invoiced during this period, resulting in a potential overbilling of \$3,769.
2. For one (1) of twelve (12) AECOM labor invoices, we noted one (1) instance where the hours invoiced for one (1) AECOM subconsultant exceeded the forty (40) hour weekly limit outlined in the PM/OR Agreement. Article 2.03, Cost of Services states that “As payments for services are based upon actual salaries paid, SBBC shall not be billed for hours worked for salaried employees in excess of forty (40) hours per week.” In total, eight (8) additional hours were invoiced, resulting in a potential overbilling of \$1,075.
3. For one (1) of twelve (12) AECOM labor invoices, we noted one (1) instance where the hours invoiced for one (1) AECOM subconsultant did not agree to the hours shown in the employee timesheets, resulting in a potential overbilling of \$134.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

4. PM/OR Monthly Invoicing (continued)

June 2021

Open

CURRENT OBSERVATION STATUS

Labor Invoices (continued):

4. For three (3) of the twelve (12) AECOM labor invoices, we noted that timesheets for two (2) AECOM employees and one (1) AECOM subconsultant were not included within the invoice package provided to the District. In total, ninety (90) labor hours representing \$10,507 in labor costs were initially unsupported. Timesheets were provided by AECOM upon further request.
5. For one (1) of twelve (12) AECOM labor invoices, we noted one (1) instance where the invoiced labor rate for one (1) AECOM subconsultant exceeded the labor rate specified in the staffing matrix provided with the monthly invoice package, resulting in a potential overbilling of \$520. An amended staffing plan was provided by AECOM upon further request.

B. Expense Invoices:

1. For one (1) of seven (7) invoices, supporting documentation was not provided for miscellaneous supplies and shipping costs. In total, \$463 was unsupported by backup documentation. Supporting documentation was provided by AECOM upon further request.

This observation will remain open, and RSM will continue to test PM/OR invoices on a quarterly basis.

MANAGEMENT'S RESPONSE

Q2 2023 Update:

Labor Invoices:

AECOM has reviewed these items and noted the following:

- A1: The observation is correct. Employee intended to bill as PTO 24 hours for April 6, 2022, thru April 8, 2022. The PTO hours were entered as regular hours in error. AECOM will credit the district for those hours billed.
- A2: The observation is correct. Employee billed 48 hours for the week ending 8/19/2022. Subconsultant has been notified that a credit is required.
- A3: The observation is correct. The Subconsultant overbilled by 1 hour. The Subconsultant has been notified that a credit is required.
- A5: The staffing plan submitted with the July 2022 invoices did not reflect the correct rate.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

5. Change Order Review and Adherence to SOP for Change Management

January 2022

Closed

PRIOR OBSERVATION DETAIL

Through our detailed testing of change orders, we identified exceptions related to missing supporting documentation, mathematical accuracy, and non-compliance with Standard Operating Procedure (“SOP”) for two (2) of five (5) change order samples. Specifically, we noted the following exceptions related to James S. Rickards Middle School Change Order #1:

Missing Supporting Documentation:

- Change Order #1, Item #1: Supporting documentation was not provided for \$2,302 of the \$10,891 in material costs included in the Contractor’s change order request for one (1) of five (5) change orders.
- Change Order #1, Item #1: Partial or no documentation was provided to support equipment costs included in the Contractor’s change order request for one (1) of five (5) change orders. We noted three (3) instances where equipment usage was not supported by the daily reports submitted by the Contractor.
- Change Order #1, Item #2: Supporting documentation was not provided for \$15,850 of the \$78,340 in labor costs included in the Contractor’s change order request for one (1) of five (5) change orders
- Change Order #1, Item #2: Supporting documentation was not provided for \$15,000 of the \$156,334 in subcontractor costs included in the Contractor’s change order request for one (1) of five (5) change orders.

Mathematical Accuracy:

- Change Order #1, Item #1: The labor breakdown provided by the Contractor was not mathematically accurate for one (1) of five (5) change order samples. As a result of our recalculation, we noted eighteen (18) instances where the product of the invoiced rate and the total hours billed for the period did not equal the total amount invoiced by the Contractor, resulting in a potential overbilling of \$2,531.

Independent Cost Estimates:

- Change Order #1, Item #2: An independent cost estimate (“ICE”) was not performed for one (1) of two (2) change items for James S. Rickards Middle School Change Order #1. SOP 12.20 for Construction Change Management requires that an ICE be performed by the PC Cost Estimator for all requested changes greater than \$25,000. An independent cost estimate was not performed for Change Item #2 (\$270,835), which included the time, labor, and material costs incurred by the Contractor to secure Building #1 at James S. Rickards Middle School following the collapse of the media center roof on March 5, 2021.

Through our review of the e-Builder workflow, and further inquiry with the CPCM, we noted several steps in the workflow were bypassed or overridden for Change Item #2 due to the urgent nature of the changes and exigent circumstances of the change item, including the independent cost estimate by the PC Cost Estimator.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

5. Change Order Review and Adherence to SOP for Change Management (continued)

January 2022

Closed

PRIOR OBSERVATION DETAIL

We recommend the District obtain sufficient evidence to determine the actual cost incurred by the Contractor for change orders for work previously completed. Prior to submitting the change order to the Change Order Review Panel (“CORP”), the Owner’s Representative Project Manager (“OR-PM”) should perform a detailed review of the Contractor’s change order request to validate that each cost item is mathematically accurate and supported by the appropriate documentation.

Further, we recommend the District consider modifying SOP 12.20 to address alternative procedures and workflow overrides in the event of an emergency.

CURRENT OBSERVATION STATUS

RSM tested a sample of three (3) change orders for proper supporting documentation, mathematical accuracy, and compliance with Standard Operating Procedures, and noted no exceptions as part of our testing. Considering the District’s strong control environment for change order review, the controls incorporated into the e-Builder workflow, and additional oversight by CORP, we recommend closure of this observation.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

6. Change Order Process Duration

September 2022

Open

PRIOR OBSERVATION DETAIL

Through our review of the e-Builder workflow history for twenty-five (25) change order items approved in 2022, we noted the average duration between the initial submittal of the 01250 change order forms and final Board approval of the change items was three hundred thirty-five (335) days. Of the twenty-five (25) samples analyzed, thirteen (13) samples had a total process duration of three hundred (300) days or more, including six (6) samples with a total duration of four hundred (400) days or more.

The following table summarizes the results of our analysis, including the duration of key milestones and process steps.

Change Order Process Data	
Process Step	Average (Instances /Days)
Rounds of Review Prior to CORP Approval ¹	5
Number of CORP Meetings	2
Duration Between Initial CO Submittal and Board Approval	335
Duration Between Initial CO Submittal and CORP Approval ²	242
Duration Between CORP Approval and Final Bundle ³	53
Duration Between Final Bundle and Board Approval	35

Individual Process Owner Data		
Process Step	Average Days Per Round	Total Days in Queue (Average)
A/E Review / Submittal	12	64
PM Review / CORP Prep	16	109
GC Revise & Resubmit	9	29
PC Scheduler Review	9	36
PC Cost Estimator Review	8	17

¹ The number of rounds of "Revise & Resubmit" from GC, A/E, PM, and CORP review prior to final CORP approval.

² Based on the CORP approval date in e-Builder workflow.

³ Includes the A/E, GC, and PM Signature/Date and "PM Final Review" process steps. If CORP approves the change order item with comments, additional process steps, including "PM Review Approved with Comments" and "CORP Chair Data Verification" are also included in the e-Builder workflow.

Efficient change order processing is critical to the timely completion of projects and maintaining positive relationships with third-party vendors. Although the current change order workflow is a well-defined process with a strong control environment, current stakeholder response times, bottlenecks within the workflow, and frequency of resubmittals challenge the District's ability to process change orders in a timely manner. Change orders that are left outstanding for an extended period of time may lead to further project delays, potential legal disputes, and/or suspension of work.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

6. Change Order Process Duration (continued)

September 2022

Open

PRIOR OBSERVATION DETAIL

We recommend the PM/OR perform an analysis to identify opportunities to reduce the overall duration of the change order process. For example, the analysis may include an evaluation of the review comments issued by the A/E, PM, and CORP as part of the review process to identify common themes and recurring review comments. Using this information, the PM/OR may consider developing a change order review checklist for project managers to utilize as part of their review to potentially resolve common issues earlier in the process and reduce the frequency of resubmittals.

The PM/OR may also consider developing procedures to monitor and follow-up on aging action items within the change order workflow. Follow-up notifications should be sent to parties with action items left outstanding for a certain period of time, based on a pre-determined threshold. Further, we recommend that a workflow aging report be distributed to team leaders and project managers on a weekly basis.

In addition, we recommend the District consider modifying existing procedures to establish a threshold for change orders requiring Board approval. We understand that revisions to the District's current practice have been proposed by Management and the PM/OR, and these proposed revisions are scheduled for Board review in September 2022. Considering the quantity and quality of the controls within the change order review process, RSM supports the implementation of a specific dollar value threshold.

CURRENT OBSERVATION STATUS

Since the date of our last report, the District has implemented several new processes for change order review and approval. In October 2022, the "Potential Change Order" ("PCO") and "Change Order" processes were launched in e-Builder, which include new workflows for change order processing.

RSM obtained a listing of all PCO's submitted within the new workflow to identify the number of PCO's that have been approved through the new processes. In total, two hundred fifty-nine (259) PCO's have been submitted through the new workflows, eight (8) of which have been approved, as of May 21, 2023. Through our review of the eight (8) approved change orders, we noted that the average duration between the initial submittal of the PCO in e-Builder and final Board or Superintendent approval was eighty-seven (87) days.

Of the eight (8) approved change orders, six (6) were approved by the Superintendent as part of the new workflow. On September 13, 2022, the Board approved revisions to Board Policy No. 8000 ("Approval of Facilities' Construction Contract Change Orders") in an effort to expedite the change order review process. Following the initial revisions to the policy, additional modifications were approved by the Board on December 13, 2022. The revised policy allows the Superintendent to approve change orders up to \$50,000, based on the following cumulative limits of authority:

"For construction projects \$3 Million or less, the cumulative limit of authority shall be 3 percent of the original construction contract amount. For construction projects over \$3 Million, the cumulative limit of authority shall be 3% of the first \$3 Million of original construction contract amount, plus 1% of the balance of the original construction contract amount over \$3 Million, up to a maximum of \$250,000."

(Continued on next page)



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

6. Change Order Process Duration (continued)

September 2022

Open

CURRENT OBSERVATION STATUS

To gain an understanding of the impact of the changes to Board Policy No. 8000, RSM obtained a listing of change orders approved by the Superintendent from e-Builder. According to the data, eighty-five (85) change orders have been approved by the Superintendent since September 2022 (as of May 21, 2023).

In addition, the new e-Builder PCO workflow includes automatic notifications/reminders for tasks that have exceeded a pre-determined time allocation. For example, if a project manager does not complete his/her review of a PCO within five (5) days, he/she will receive a system-generated notification to complete that workflow step. If the workflow step is not completed within that timeframe, a follow up notification would then be sent every two (2) days.

While several improvements have been implemented for change order processing, a limited number of change orders have been approved using the new workflows. As such, we will keep this observation open pending further testing.

MANAGEMENT'S RESPONSE

Q2 2023 Update: AECOM has seen improvements and will continue to collect the data to track the positive progress.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

7. Monthly Schedule Reporting: Monthly Project Updates

September 2022

Closed

PRIOR OBSERVATION DETAIL

Through our review of the Monthly Project Updates (“MPUs”) for ten (10) sampled projects, we noted the following related to the MPUs provided in the SMART Program Monthly Reports for the period of March 2022 through May 2022:

- For four (4) of ten (10) samples, one (1) or more sections of the MPU were not updated by the PM over the 3-month period.
 - For one (1) of four (4) samples, we noted the “Schedule Update Narrative”, “Issues and Concerns”, and “Planned Risk Mitigation” sections of the MPU have not been updated by the PM since September 2021.
 - For one (1) of four (4) samples, we noted the “Issues and Concerns” section of the MPU has not been updated by the PM since December 2021, and the “Planned Risk Mitigation” section was not updated since March 2022.
 - For one (1) of four (4) samples, we noted the “Schedule Update Narrative” section of the MPU has not been updated by the PM since February 2022. Further, the “Planned Risk Mitigation” section was not completed for April 2022.
 - For one (1) of four (4) samples, we noted the “Schedule Update Narrative”, “Issues and Concerns”, and “Planned Risk Mitigation” sections of the MPU were not updated since March 2022.
- Where potential project delays and/or issues and concerns were identified, we noted the narratives provided by the PM did not include specific, actionable steps to mitigate delays and advance the project.
- For one (1) of ten (10) samples, we noted the reported percentage of project completion did not agree to the actual status of the project. The MPU reported the project was 100% complete while the project was still in the substantial completion / closeout phase.
- For one (1) of ten (10) samples, we noted the reported project phase did not align with the current status of the project. The MPU reported the project was in the substantial completion / closeout phase in May 2022, when substantial completion was not achieved until July 2022.

RSM held a meeting with the PM/OR Scheduler on July 27, 2022 to discuss the monthly scheduling and reporting process. During our discussion, the PM/OR noted that the primary source of information used to inform monthly schedule updates are the MPUs provided by project managers. Considering the PM/OR Scheduler’s reliance on the MPUs to update the schedule, updates and narratives should include specific, relevant, and actionable information that can be utilized by the Scheduler. If MPUs are not updated or do not include the necessary information, the PM/OR Scheduler may not have the ability to effectively update project schedules or identify the downstream impacts of current schedule delays.

In addition, we noted a lack of resources currently in place to support the Program’s scheduling function. The PM/OR currently employs one (1) Lead Scheduler who is responsible for reviewing the Monthly Project Updates for over 380 projects, updating the Master Schedule, and generating the various schedule-related deliverables included in the PM/OR’s SMART Program Monthly Reports.

This lack of resources limits active collaboration between the Lead Scheduler and project managers, and the PM/OR’s ability to advise contractors on the management of their project schedules.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

7. Monthly Schedule Reporting: Monthly Project Updates (continued)

September 2022

Closed

PRIOR OBSERVATION DETAIL

We recommend the PM/OR provide supplemental training and/or written guidance to project managers to promote more impactful monthly project updates. In addition, team leaders should review the updates provided by project managers to verify updates are complete and provide sufficient information. If issues and concerns are identified, the team leader should verify the project manager's risk mitigation plan includes actionable steps to resolve outstanding issues and advance the project forward.

CURRENT OBSERVATION STATUS

RSM reviewed the Monthly Project Updates ("MPUs") for five (5) sampled projects to verify that schedule updates are provided on a month-to-month basis. For the period of December 2022 through February 2023, we noted that the updates provided by project managers for our five (5) sampled projects contained sufficient detail, and planned risk mitigation steps were documented for associated issues.

In addition, we tested a sample of ten (10) projects in the "6-Substantial Completion" and "7-Final Completion" phases to validate that the reported project phase was reflective of the actual status of the project. For each project, we obtained either the Project Consultant's Letter Establishing the Substantial Completion Date ("Document 01770e") or the Certificate of Final Inspection ("OEF 209" form) issued by the Florida Department of Education as evidence of current project status. No exceptions were noted during our testing.

Since our last report, the PM/OR has hired an additional scheduler to help manage the Master Schedule, and has augmented the scheduling function with additional remote resources from various AECOM offices. As such, we recommend closure of this observation.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

8. Electronic Signatures on Change Order Forms

September 2022

Partially Complete

PRIOR OBSERVATION DETAIL

Through our review of twenty-five (25) change order items approved by the School Board in 2022, we noted that non-verifiable electronic signatures were provided on fourteen (14) executed change items (56%). Further, we noted the following:

- For 4 of 25 change items, a signature date was not provided by one (1) or more signor
- For 23 of 25 change items, signature dates were typed by one (1) or more signor
- For 7 of 25 change items, an incomplete signature was provided by one (1) or more signor (i.e., the signature block was missing the typed name and/or typed firm name)

RSM obtained the 01250g form (“Document 01250g – Construction Change Order Item”) included as part of the agenda item presented to the Board for approval. Non-verifiable electronic signatures, including signatures that were typed directly into the form, and images of signatures copied and pasted into the signature block were often provided by the A/E, Contractor, and/or PM/OR.

While electronic signatures are permissible under the United States “Uniform Electronic Transaction Act”, the signature must be verifiable and/or traceable to the signor through an associated record, including the process used to capture the signature. According to Florida Statute 668.5(2)(h), an “electronic signature” means an electronic sound, symbol, or process attached to or logically associated with a record and executed or adopted by a person with the intent to sign the record.”

The District’s construction management software, e-Builder provides a detailed record of each process step within the change order workflow, including a step for GC, A/E, and PM signatures. However, through our analysis of the e-Builder “Routing History”, we noted instances where the signor of the 01250g was not the actor who completed the signature workflow step in e-Builder.

While an electronic signature constitutes a legally binding substitute for a handwritten or “wet” signature, a digital audit trail linking the signor to the signature may strengthen the District’s position in the event of a potential legal dispute. If a dispute arises with a third-party over the performance of their contractual obligations, having a “wet” signature or electronic signature with a sufficient audit trail may prevent a third- party from challenging the validity of their signature.

We recommend OCP, in conjunction with the PM/OR, consult with the Office of The General Counsel to evaluate the District’s process for obtaining third-party signatures and identify other contracts and documents in which electronic signatures are currently being utilized.

Further, as part of the “PM Final Review” step in the current change order workflow, project managers should verify that all required signature fields on the 01250g form are complete prior to the final bundle.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

8. Electronic Signatures on Change Order Forms (continued)

September 2022

Partially Complete

CURRENT OBSERVATION STATUS

As noted in **Prior Observation #6**, several new e-Builder processes have been implemented by the PM/OR, including the potential change order (“PCO”) and change order processes. The new change order workflow now automatically generates standardized electronic signatures on 01250g forms, which are substantiated through e-Builder's workflow routing history. When an authorized user completes the “Review and Sign” step within the workflow, an electronic signature is generated with the user's name and the date in which the step was completed. RSM reviewed the e-Builder routing history and 01250g forms for the eight (8) change orders approved through the new workflow, as of May 21, 2023. We noted that uniform electronic signatures were generated for all signers, which agreed to the e-Builder routing history.

RSM inquired with the Office of the General Counsel to determine if the District's legal team has reviewed the new method of obtaining signatures. Counsel noted that additional investigation would be required to determine the legal sufficiency of the new method. As such, this observation will remain open, pending additional review from the Office of the General Counsel.

MANAGEMENT'S RESPONSE

Q2 2023 Update: The District continues to explore options for using DocuSign for electronic signatures. e-Builder currently uses electronic signatures and logs the complete history of each signature with a date and time that is fully trackable and auditable.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

9. Monthly Schedule Reporting: Contractual Completion Dates

September 2022

Open

PRIOR OBSERVATION DETAIL

Through our review of the project schedules for ten (10) sampled projects, we noted that three (3) of six (6) projects in active construction have surpassed their contractual substantial completion date and change orders have not been executed to modify the construction duration.

The table below illustrates the number of days in which each project has surpassed the contractual substantial completion date, as of July 31, 2022.

School Name	Current Phase % Complete (May 2022 MPU)	Contractual Substantial Completion Date (per NTP)	Days Extended by Executed Change Orders	Revised Contractual Substantial Completion Date	Days Passed Contractual Substantial Completion Date
Deerfield Beach HS (P.002694)	39%	3/21/22	0	3/21/22	132
Ramblewood MS (P.001867)	92%	5/22/21	0	5/22/21	435
Maplewood ES (P.001639)	93%	2/5/21	72	4/18/21	469

According to Article 4 of the District's Construction Agreement ("Time for Contractor's Performance"), the Contractor is required to accomplish substantial completion on or before the date stipulated in the Notice to Proceed ("NTP"). The Agreement also includes a provision for "Liquidated Damages for Substantial Completion" which states that the Owner is entitled to \$500 in liquidated damages for each day the project extends past the contractual substantial completion date.

Monitoring the accuracy of project schedules is critical to the successful and timely completion of projects. While the PM/OR's baseline schedule may include sufficient time to complete the project, the Contractor is contractually obligated to complete the project within the specified construction duration outlined in the NTP and Agreement. By executing a formal change order, the District is establishing revised expectations with the Contractor. If the Contractor is aware they have missed their contractual completion date and will not be penalized for delays, they are more likely to operate with a lower sense of urgency.

We recommend the PM/OR develop procedures to monitor the contractual completion dates outlined in the Construction Agreement and Notice to Proceed ("NTP"). If projects are at risk of schedule delays, change orders should be executed to modify the contractual completion dates to reflect a more reasonable project timeline.



PRIOR OBSERVATIONS FOLLOW UP (CONTINUED)

INTERNAL AUDIT – PROGRAM MANAGEMENT

9. Monthly Schedule Reporting: Contractual Completion Dates (continued)

September 2022

Open

CURRENT OBSERVATION STATUS

RSM tested a random sample of four (4) projects in active construction to validate compliance with contractual construction schedules. Through our testing, we noted that three (3) of four (4) sampled projects have surpassed their contractual substantial completion dates and change orders have not been executed to modify the construction duration.

The table below illustrates the number of days in which each project has surpassed the contractual substantial completion (“SC”) date, as of April 30, 2023.

School Name	Contractual SC Date (per NTP)	Days Extended by Executed Change Orders	Revised Contractual SC Date	Days Passed Contractual SC Date
North Side ES (P.001992)	5/15/2020	0	5/15/2020	1080
Larkdale ES (P.002073)	11/28/2021	0	11/28/2021	518
Gulfstream Early Childhood Center of Excellence (P.002055)	4/23/2022	75	7/7/2022	297

As noted in their management’s response in the FY 2022-23 Q1 report, the PM/OR now requires that every change order that may impact the construction schedule include a formal Time Impact Analysis (“TIA”). During interviews, the PM/OR noted that the District is still working through a backlog of TIA reviews. The PM/OR also noted that the District is pursuing liquidated damages for delays caused by contractors. As of May 2023, the District has withheld payment for liquidated damages on 37 projects, according to the PM/OR.

This observation will remain open, pending further testing.

MANAGEMENT’S RESPONSE

Q2 2023 Update: Time Impact Analysis (TIA)'s have been submitted for all three of these projects, below is the current state of the TIA review.

- North Side ES – A TIA for 911 days has been submitted and is currently in review.
- Larkdale ES – A TIA has been reviewed by the Forensic Claim Analyst / Schedulers who recommends 534 days, currently in the A/E step for 1250g signature.
- Gulfstream ECC – A TIA has been submitted requesting 338 days, the Forensic Claim Analyst / Scheduler has returned it Revise and Resubmit to the Contractor requesting, the pre and post schedule impact as well as the TIA narrative.



OBJECTIVES AND APPROACH

Objectives

The objective of our work was to verify that the District's Cost and Program Controls Manager ("CPCM" - Atkins) and Program Manager - Owner's Representative ("PM/OR" - AECOM) are providing deliverables and services in conformance with the terms and conditions of their respective agreements / RFP / RFQ. Further, our procedures included testing of PM/OR compliance with District standard operating procedures and industry leading practices.

Approach


Our audit approach consisted of the following:

Quarterly Cycle Audit Procedures

- Obtained and reviewed deliverables submitted in accordance with CPCM and PMPM monthly reporting requirements derived from each respective RFP/RFQ
- Reviewed CPCM and PM/OR monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Followed up on prior findings, including the following prior observations:
 - Contract Time Modifications and Schedule Updates
 - PM/OR Compliance with Reporting Requirements
 - e-Builder System Access
 - PM/OR Monthly Invoicing
 - Change Order Review and Adherence to SOP for Change Management
 - Change Order Process Duration
 - Monthly Schedule Reporting: Monthly Project Updates
 - Electronic Signatures on Change Order Forms
 - Monthly Schedule Reporting: Contractual Completion Dates

Reporting

At the conclusion of our procedures, we summarized our findings into this report. We have reviewed the results of our testing with OCA, the CPCM and PM/OR teams, and incorporated management's response herein.



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