# Internal Audit of
# Program Management
# FY 2020-2021 Q1-Q2

January 2021

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# TRANSMITTAL LETTER

January 19, 2021

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Pursuant to the approved internal audit scope of work, submitted August 24, 2020, we hereby submit our FY 2020-2021 Q1-Q2 internal audit report of the Program Management function. We will be presenting this report to the Audit Committee at the next scheduled meeting on January 28, 2021.

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. |
| **Current Period Observations** | This section presents descriptions of the observations noted during our internal audit, recommended actions, as well as responses from the Program Management team. |
| **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. |
| **Appendix - OR Staffing Plan Analysis** | This section presents analytical data related to the OR staffing plan, as of November 2020. |

We would like to thank all those involved for their assistance in connection with the FY 2020-2021 Q1-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 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 Facilities and Construction ("OFC"). During our engagement we worked closely with OFC 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 OFC, back to the OCA. RSM works with OCA on a quarterly basis to define an audit plan for upcoming quarter.

The objective of our engagement is to verify that the District's Program Management Consultant ("PM" - Atkins) and Owner's Representative ("OR" - CBRE-HEERY & AECOM) are providing deliverables and services in conformance with the terms and conditions of their respective agreements / RFP. Our procedures included testing of PM/OR compliance with District standard operating procedures and industry leading practices. Our scope included activities performed during the period April – November 2020.

## Observations

The observations identified during our assessment are summarized on the pages that follow, and include management action plans with estimated completion dates.

We conducted analytical procedures related to the current AECOM staffing plan and Project Manager assignments in an effort to identify alignment to staffing strategies communicated during the mobilization plan. During our work, we identified that the staffing plan had not been finalized by the PMOR, and that assignment of projects to project managers was still in process.

As changes to SOP documents and the staffing plan are finalized, we will conduct additional testing in our next quarter's procedures.

## Approach

Our audit approach consisted of the following:

*Administration and Governance*

- Conducted interviews with District Management and reviewed the relevant documentation to obtain and understanding of the following: District's project management transition plan, CBRE-Heery demobilization plan, AECOM onboarding and staffing plan, and RFQ requirements for AECOM
- Developed future audit plan based on the information obtained during interviews and review of documentation

*Program Manager (Atkins)*

- Obtained and reviewed deliverables submitted in accordance with PM monthly reporting requirements derived from RFP Article 6.4.2.6.
- Reviewed Atkins monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Followed up on prior findings

*Owner's Representative (CBRE-Heery & AECOM)*

- Conducted labor analysis of Prime OR firms, including subconsultants PM assignments
- Obtained and reviewed deliverables submitted in accordance with PM monthly reporting requirements derived from RFP Article 6.4.3.10 & 6.7
- Reviewed CBRE-HEERY monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Followed up on prior findings

*Reporting*

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

**RSM**

# CURRENT PERIOD OBSERVATIONS

# DETAILED OBSERVATIONS

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2020-2021 Q1-Q2 | |
|---|---|
| **OBSERVATION** | **1.  AECOM Staffing Plan** |
| **DETAIL** | In our detailed testing of the OR transition documentation, we noted the following:<br><br>• An AECOM staffing plan was submitted within the mobilization plan timeframe (as detailed in the Sections 6.3.2 and 6.7.7(1)(A) of RFP requirements); however, in further discussions on 12/10/20 (115 days after the notice to proceed) AECOM noted the project manager (PM) project assignments have not been finalized.<br>• In reporting derived from P6 scheduling data, which is maintained by AECOM and used to populate/update e-Builder reporting, 14 project managers were assigned 10 or more projects. See Table 1 below.<br>• AECOM project manager assignments did not change from CBRE-Heery project manager assignments for 144 of 228 projects (63%). See Table 2 below.<br><br>The following tables are excerpted from the OR Staffing Plan Analysis section below, where further data is provided. Table 1 below shows the current project assignment totals by project manager for instances where project assignments were greater than or equal to 10 as of the November 30, 2020 P6 schedule. Table 2 summarizes changes in project manager assignments: |

| Table 1 | Vendor | Project manager status | Total projects assigned |
|---|---|---|---|
| | AECOM PM-1 | New PM under AECOM | 24 |
| | BACH PM-1 | PM under Heery & AECOM | 16 |
| | Corradino PM-1 | PM under Heery & AECOM | 15 |
| | Garth PM-1 | PM under Heery & AECOM | 12 |
| | BACH PM-2 | PM under Heery & AECOM | 12 |
| | BACH PM-3 | PM under Heery & AECOM | 11 |
| | AECOM PM-2 | New PM under AECOM | 11 |
| | BACH PM-4 | PM under Heery & AECOM | 11 |
| | Keith PM-1 | PM under Heery & AECOM | 11 |
| | Keith PM-2 | PM under Heery & AECOM | 10 |
| | Corradino PM-2 | PM under Heery & AECOM | 10 |
| | AECOM PM-3 | New PM under AECOM | 10 |
| | Keith PM-3 | PM under Heery & AECOM | 10 |
| | AECOM PM-4 | PM under Heery & AECOM | 10 |

| Table 2 | Project manager status | Number of projects |
|---|---|---|
| | No Change in Project Manager | 144 |
| | New Project Manager | 84 |
| | **Project Total** | **228** |

## DETAILED OBSERVATIONS – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2020-2021 Q1-Q2 | |
|---|---|
| **OBSERVATION** | **1. AECOM Staffing Plan** |
| | To stress the importance of a timely and efficient transition, the Mobilization Plan requirement detailed in Section 6.3.2 of the RFP required respondents to propose a mobilization plan with key activities detailed in a 30, 60, and 90 day timeline. The mobilization plan developed by AECOM included final adjustments to the OR team as an activity to be delivered with the first 60 days. Although a staffing plan was provided to the District, AECOM noted that project staffing was still being modified, and that P6 and e-Builder data related to project assignments would also require further updates.

Currently, 10 or more projects have been assigned to 14 project managers. Considering the commitment required to effectively manage a project, when a PM has a significant assignment load, the individual projects within the PM's portfolio are at increased risk for additional project delays.

While we understand that mobilization for a program of this size requires significant coordination and contains several complexities, we also note that assignment of projects to PMs is a critical early step in the mobilization process to allow for the continued advancement of projects during the onboarding timeline. Without timely reorganization and assignment of projects, the risk of further schedule delays is significantly increased. |
| **RECOMMENDATION** | In conjunction with efforts to finalize the AECOM staffing assignments, we recommend the OR update P6 schedule and e-Builder data to reflect final project assignments. We further recommend the OR provide a plan detailing the methodology for project assignments to project managers, including how the plan will mitigate the risks of incurring project delays and overloading Project Managers. |
| **MANAGEMENT'S RESPONSE** | **Response:** As noted in the observation, "assignments of projects to PMs is a critical early step in the mobilization process to allow for the continued advancement of projects during the onboarding timeline".

The OR-PM (AECOM) strongly agrees with and has acted with a sense of urgency. Beginning with August 1, 2020, the transition staffing schedule assignments were in place to support the preparations for the opening of school year 2020-2021.

In order to support the turnover to AECOM, a parallel process of identifying, retaining or replacing PMs was conducted. At no time did a project under construction go without an assigned PM.

As is noted in the recommendation, the interdependency of schedule and assignment was a consistent factor of the trend analysis, the 2020 re-set and support of the schedule via the necessary level of PM staffing.

The re-set schedule was shared with the SBBC at the "State of the Program" on December 17th, 2020. As of that date, the leveling of the PMs to projects in construction was set at eight (8). In addition, since the re-set schedule was created, the OR-PM was directed to consider how to accelerate work and as such, this analysis is currently underway. |

## DETAILED OBSERVATIONS – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2020-2021 Q1-Q2 | |
|---|---|
| **OBSERVATION** | **1.  AECOM Staffing Plan** |
| **MANAGEMENT'S RESPONSE** | The OR-PM fully understands and agrees with the critically of managing staff resources at a level that supports the quality and flow of the work.<br><br>The OR-PM wants to make sure it is understood that the assignment to schedule is constant. In fact, AECOM's contract states that the OR-PM "strive for flexibility through our capacity to engage professionals with specific expertise at appropriate points in the planning and implementation of projects and consistently evaluate the staffing assignments, and the organizational structure. This is cost-effective in that staffing is scalable according to the volume of work. Scalable staffing is of interest to the District as the capital needs and available funding varies from year to year."<br><br>To that end, the schedule to staffing interdependency will be under constant review and revision. The prominent reason for this review is that the process is dynamic and must adjust to the variables that present themselves throughout the entire construction process.<br><br>In summary, we have updated the P6 schedule and e-Builder data to reflect current PM assignments, and will continue to update on a quarterly basis. Regarding the plan to support projects through the applied staffing model will continue to be set at eight (8) projects in construction per PM at any one time. This of course can fluctuate to meet short term stresses, and will always include the capacity and skillsets of any singular PM. The staffing model coupled with the 2020 re-set schedule and a procurement cycle that supports the schedule is designed to manage prevention of delays due to over-loading of project managers. As such, the monthly monitoring and corrective course of action will continue to mitigate and prevent delay caused by insufficient PM staffing.<br><br>A formal staffing will be in place by February 1, 2021.<br><br>**Estimated completion date**: February 1, 2021 |

# PRIOR OBSERVATIONS FOLLOW UP

## PRIOR OBSERVATIONS FOLLOW UP

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2018 -2019 Q4 | |
|---|---|
| **OBSERVATION** | **FY 2018-19 Q4 (Observation #2) Construction Invoice Supporting Documentation** |
| **DETAIL** | During our testing of Construction Manager at Risk "CMAR" invoicing, we noted insufficient supporting detail was provided for the sample of invoices tested from 3 active CMAR projects. All three projects were considered cost-plus contracts, with the subcontractors classified as a direct cost. We noted the following instances of insufficient support:<br><br>• For 2 of 5 applicable invoices, subcontractor pay applications were not included in supporting documents<br>• For 1 of 3 applicable invoices, a cover was provided, but no corresponding schedule of values was provided with the subcontractor pay applications<br>• For 1 of 5 invoices, no lien releases were provided for either the prime contractor or subcontractors<br>• For 2 of 5 invoices, the prime contractor's lien release did not agree to the pay application<br>• For 1 of 4 applicable invoices, signed subcontractors lien releases for $10 were provided as supporting documentation, although no related subcontractor costs were invoiced<br><br>For five (5) sample projects related to non-CMAR invoices, we obtained all approved pay applications as of our testing date to complete a rollforward and review of supporting documentation. The following instances of insufficient support were noted:<br><br>• For 2 of 5 projects, project management did not obtain general contractor lien waivers in a timely manner for any of the pay applications approved.<br>    ○ Per review of the lien releases provided, the liens were dated after RSMs request date for the missing documentation. Additionally, for one (1) of the projects, the lien release provided was the amount due for the three pay applications combined<br>• For 1 of 5 sampled projects, subcontractor lien releases were not provided for 1 of 4 of the project's approved invoices<br>• For 1 of 5 sampled projects, subcontractor lien releases were not provided for 1 of 3 of the project's approved invoices. However, five (5) subcontractor lien releases were provided for $10.00 for services through 2/28/19. This occurred before the first pay application period of 3/1/19 – 3/31/19. |
| **RECOMMENDATION** | We recommend the OR-PM enforce the supporting documentation requirements of the CMAR and non-CMAR agreements, and require contractors to provide subcontractor invoices, and all related lien releases with each application for payment. Invoices should not be approved or processed for payment prior to receipt of all appropriate supporting documentation. To aid in the completeness of review a checklist should be utilized by the OR-PM, and all reviewers to document receipt and review of all applicable supporting documents.<br><br>Further, we recommend for the projects where this support has not been provided, a retrospective audit be performed to ensure the District has not been overbilled for tradework actually performed. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2018 - 2019 Q4 | |
|---|---|
| **OBSERVATION** | **FY 2018-2019 Q4 (Observation #2) Construction Invoice Supporting Documentation** |
| **MANAGEMENT'S RESPONSE** <br><br> **(SEE APPENDIX A FOR MEMORANDUM)** | **Response:** The Checklist has been reviewed by staff, cross-referenced with the General Condition requirements for CMAR and ITB projects and are in the process of being revised. A review/refresher of pay invoice document requirements is planned for Friday, October 25th, 2019 as part of the weekly Project Managers meeting. In the long term, the invoice workflow in e-Builder is in the process of being improved. The end result is to increase checks and balances at the submittal stage for the vendor, thus reducing the opportunity for submitting invoices lacking complete supporting documentation. The outcome is expected to reduce rejected pay-applications and thus increase the speed of vendor payment processing. The target for completion and roll-out in January 2020. In addition, Capital Budget and staff have provided training on the proper processing of Direct Owner Purchases in the invoice system to project managers and contractors. This was another area where improper processing caused rejections of pay-applications. <br><br> **Q3 2020 Update:** The original observation identified opportunities to improve checks and balances by insuring that additional supporting documentation are included by the contractors requesting payment. Specifically, the recommendation that resulted was to require contractors to provide sub-contractor invoices and all related lien releases with each application for payment. <br><br> Subsequently, Pay-Application check lists were revised and targeted to satisfy this recommendation. Since that time, the checklists were posted and were used live in the e-Builder process work flow. Training was conducted with Project Manager's and other members of the Project Manager's team. Furthermore, the check lists generated input from a number of the design teams and a round table discussion ensued. The result of the round table was another fine-tuning of the check lists. <br><br> There has been on-going work with contractors regarding processing of Pay-Applications, the use of check lists and related requirements for contractors, designers and project managers. <br><br> A memorandum was recently prepared to create a final cut-off for including the sub-contractors' documents and is to be issued via e-Builder the week of June 8, 2020. This memorandum dictates that the documentation as required is not just reviewed in draft form but uploaded into e-Builder as part of the Pay-Application work flow. <br><br> This memorandum will be reviewed at construction progress meetings <br><br> **Original Estimated completion date:** October 2019 <br><br> **Estimated completion date**: March 2020 <br><br> **Revised Estimated completion date:** August 2020 |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2018 - 2019 Q4 | |
|---|---|
| **OBSERVATION** | **FY 2018-2019 Q4 (Observation #2) Construction Invoice Supporting Documentation** |
| **OBSERVATION STATUS** | **Closed** – RSM reviewed the most recent pay application for 3 CMAR projects to verify project management utilization of the new pay application checklist and noted no exceptions. In our testing, we noted the new checklist was completed for the samples tested. The supporting documentation included the general contractor/subcontractor lien releases and subcontractor pay applications to support the actual costs. As a result, we note this observation as closed. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q2 | |
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| **OBSERVATION** | **FY 2019-2020 Q2 (Observation #2) Change Order retention in e-Builder (Repeat Finding)** |
| **DETAIL** | We previously reported a finding related to design procurement document retention in e-Builder (FY 2018-2019 Q3 report). In the current quarter, we noted similar exceptions related to change order document retention. To conduct our testing for SOP compliance, we first reviewed documents available on e-Builder, and subsequently followed up with the PM/OR and District personnel to obtain those documents which were not originally uploaded therein. All documentation requested was provided and uploaded to the appropriate location in e-Builder after our request; however, the following documents were consistently missing from e-Builder:<br><br>• Change Request/Proposal form (document 1250b) for 5 of 9 applicable change orders<br>• Proposal Worksheet Detail (document 1250c) for 5 of 9 applicable change orders<br>• Proposal Worksheet Summary (document 1250d) for 5 of 9 applicable change orders |
| **RECOMMENDATION** | We understand the e-Builder workflow for change orders was implemented/effective as of 5/31/2019, and requires that all documentation be attached in order to complete the review process. We recommend the PM/OR team evaluate the current maintenance of legacy documentation. Pending results of this analysis, the PM/OR team should consider migration of the legacy documentation created prior to the implementation date of 5/31/2019 into e-Builder for purposes of document retention. |
| **MANAGEMENT'S RESPONSE** | **Response:** OR-PM document control staff is currently, retroactively, migrating change order files along with 1250b, c, and d documents into e-Builder (folder G05-08-CO). The file migration of retroactive projects should be completed no later than the end of April 2020.<br><br>**Estimated Completion Date:** April 2020 |
| **OBSERVATION STATUS** | **Closed** – In discussions, the OR-PM noted that all available historical change order documentation has been uploaded to e-Builder, and was completed in April 2020. RSM conducted testing of 4 samples to validate completeness of change order documentation in e-Builder and noted no exceptions. As a result, we note this observation as closed. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q2 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q2 (Observation #3) Contract time modifications and schedule updates** |
| **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).<br><br>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 with 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 4 of our sample selections. |
| **RECOMMENDATION** | 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. |
| **MANAGEMENT'S RESPONSE** | **Response:** Currently, the e-Builder workflow for GC Invoices, which went live in Q1 2019 includes a requirement for the raw schedule file which subsequently gets reviewed by the OR-Scheduler to ensure schedule integrity including validation of an approved change order in the subsequent payment application period. Additionally, OR-PM is currently updating the SOP to include that step in the pay application process to show how this is done. This will formalize and memorialize this process. Work is projected to be completed by end of March 2020.<br><br>**Q3 2020 Update:** SOP 12.20a-Construction Change Management-Construction Change Order has been revised incorporating this Observation in Step 5 of the SOP.<br><br>OR-Scheduler and/or PC-Scheduler will review Pre-Impact and Impact Electronic Construction Schedules including required narrative for schedule integrity. Upon review the OR-PM has the option to revise and resubmit back to the GC or submit to the A/E, OR-Sch, and/or PC-Sch.<br><br>SOP 12.20a was sent to the District for review. The District had comments. Those comments have been incorporated into the SOP and now the SOP 12.20a has been sent back to the District for their review.<br><br>Also, SOP 11.20a-Contractor Pay Application Review Process-Hard Bid ITB and CSMP and 11.20b-Contractor Pay Application Review Process CMAR AND CC CMAR revisions have taken place incorporating this observation in Step #4 of the SOP and the SOPs are under review with the District. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q2 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q2 (Observation #3) Contract time modifications and schedule updates** |
| **MANAGEMENT'S RESPONSE** | The OR-Scheduler receives notification through e-Builder that an electronic Construction Schedule has been submitted to review in tandem with A/E and/or OR-PM for schedule integrity, i.e. if applicable, implemented approved Change Order(s). OR-Sch, A/E and/or OR-PM.<br><br>**Estimated Completion Date:** March 2020<br><br>**Revised Estimated Completion Date:** August 2020 |
| **OBSERVATION STATUS** | **Partially Complete** - RSM tested a sample of 4 change orders to verify inclusion of change order time extensions/reductions. Through our testing we noted discrepancies between the scheduled final completion date noted in the pay application, and the RSM calculated final completion date for 1 of 4 samples. We were unable to test whether updates were appropriately made for 1 sample, as the next pay application and associated schedule update have not yet been produced. We noted no exceptions for 2 of the 4 samples. The OR-PM has updated and provided the Change Management SOP to specifically include a schedule review/comparison procedure. This observation remains open pending further testing of change orders. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q2 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q2 (Observation #4) PM/OR Adherence to SOP for Change Management** |
| **DETAIL** | Through our detailed testing related to the Construction Change Management Standard Operating Procedure ("SOP"), we noted instances of non-compliance with the SOP in effect as of 2/1/2019. We selected ten (10) change orders for testing, and noted the following exceptions.<br>• For 1 of 9 applicable change orders, the contractor included the 1250b and 1250d forms but did not complete the 1250c form. (Step 2)<br>• For 1 of 9 applicable change orders, the contractor did not complete the 1250c,d forms which typically follow the 1250b form, but rather completed the cost proposal through their own format. (Step 2)<br>• For 10 of 10 applicable change orders, the OR-PM did not enter the change order request "COR" status in e-Builder to "potential". (Step 4)<br>• For 10 of 10 applicable change orders, the OR-BD did not prepare an approval letter to be sent to the contractor after the board approved the change order. However, we did note that the OR provided informal email correspondence notifying the contractor of the approved change order for 5 of the 10 samples. (Step 10)<br><br>Through discussions with the OR-PM, the Project Managers had been informally notifying the contractor via email and phone when a change order had been approved by the Board. There is a risk of additional cost and potential delays to the project when there is a delay informing the contractor of additional approved work. |
| **RECOMMENDATION** | We recommend OFC and the PM-OR update step 4 of SOP 12.20 to reflect the current process, which now includes the usage of e-Builder workflows. We further recommend the PM-OR to determine if e-Builder can automatically send change order approval letters to the contractor after the Board's approval to proceed, in an effort to mitigate the risk of untimely notification. |
| **MANAGEMENT'S RESPONSE** | **Response:** SOP 12.20 will be updated, as recommended, and signed off by BCPS. Once complete, the revised SOP will be provided to RSM. Due date set as end of March 2020. In addition, the automated e-Builder workflow of approved change order notification to the contractor is underway. Roll-out is planned for the end of Q2 2020. Until such time the manual process will continue to be utilized.<br><br>**Q3 2020 Update:** SOP 12.20-Construction Change Management has been divided into 3 SOPs:<br>• SOP 12.20a Construction Change Management-Construction Change Order was sent to the District for review. The District had comments. Those comments have been incorporated into the SOP and now the SOP 12.20a has been sent back to the District for their review.<br>• SOP 12.20b Construction Change Management-Construction Change Directive is under development in accordance with the e-Builder process.<br>• SOP 4.29-Contingency Use Directive – is under revision in accordance the e-Builder Process. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q2 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q2 (Observation #4) PM/OR Adherence to SOP for Change Management** |
| | **Original Estimated Completion Date:** March 2020<br><br>**Estimated Completion Date (For automated e-Builder rollout):** June 2020<br><br>**Revised Estimated Completion Date:** July 2020 |
| **OBSERVATION STATUS** | **Closed** – The approved Change Management SOP was provided to RSM which included modifications to the change order approval notification letter procedure.<br><br>RSM tested a sample of 5 recent change orders to confirm completion/transmission of the change order approval notification letters and noted no exceptions. We noted all required forms were completed and attached to the change order as applicable. Through discussions with the OR-PM team, we noted that distribution of the change order approval notifications would remain a manual process, therefore testing of that e-Builder automation is no longer applicable.<br><br>Lastly, RSM previously tested a sample of 3 change orders to verify appropriate forms were included in the e-Builder CO approval workflow and noted no exceptions related to missing documentation. As a result, we note this observation as closed. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q2 | |
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| **OBSERVATION** | **FY 2019-2020 Q2 (Observation #5) PM/OR Adherence to SOP for Project Closeout** |
| **DETAIL** | Through our detailed testing related to the Project Closeout Standard Operating Procedure ("SOP"), we noted instances of non-compliance related to the use of checklists. We selected the two (2) completed projects from the November 2019 OR-PM milestone schedule located in e-Builder for testing.<br><br>The SOP references attachment 5.40-2 (project closeout checklist) which includes a column for the OR-PM to sign-off on each SOP step. Additionally within the project closeout SOP, steps one (1) and two (2) refer to the certificate of occupancy and final acceptance and completion checklists (attachment 5.20-15). Per discussion with the OR team, the checklists noted above are used as a reference or guide to complete project closeout, but are not completed for documentation purposes. We noted through testing that all of the applicable steps within the SOP were completed for our two (2) sample selections.<br><br>Although the checklists are not required, use of the checklists would help mitigate the risk of an incomplete closeout, and would further serve to document which individual verified the completion of each closeout step. Also refer to Observation 6 below, related to the content of the closeout checklist. |
| **RECOMMENDATION** | We recommend the OR-PM team implement the use of the checklists noted above for all project closeouts going forward. The checklists should be evaluated for completeness and clarity of content, as during our review we noted that many documents/procedures were included in a single signoff step. |
| **MANAGEMENT'S RESPONSE** | **Response:** The use of the checklist as listed in the SOP for Closeout will be made a required element to be completed by Project Managers and included in the documents that are monitored by the Closeout Specialist. The SOP will be updated accordingly and signed off by BCPS.<br><br>**Q3 2020 Update:** Our Standard Operation Procedure has been completed and approved by the Broward County Public Schools. See attached signature page. Beginning July 1, 2020, the OR-PM will ensure the utilization of the checklists going forward.<br><br>**Estimated Completion Date:** March 16, 2020<br><br>**Revised Estimated Completion Date:** July 1, 2020 |
| **OBSERVATION STATUS** | **Closed** –The approved SOP was provided to RSM which included the requirement to utilize the project checklist. Further, we understand that Project Managers have been instructed to utilize and complete the closeout checklist for current projects in the closeout phase. We tested two recently closed projects, obtained the related closeout checklists, and noted the OR-PM signed and completed every applicable step. As a result, we note this observation as closed. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q3 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q3 (Observation #1) CBRE–Heery labor invoice review** |
| **DETAIL** | Through our detailed testing of the monthly CBRE-Heery labor invoices that were available during our testing period, we identified instances where a CBRE-Heery employee was self-approving their own timecards, which were used as supporting documents for hours invoiced to the District. Self-approvals were contained within labor invoices from August 2019 - December 2019. Prior to August 2019, the employee's timesheets were approved by a supervisor. <br><br> We informed Capital Payments of the self-approvals prior to the District's receipt of the December 2019 invoice, and understand that Capital Payments directed CBRE-Heery to obtain supervisor approval of the employee's timesheets going forward; however, the December invoice still contained the self-approval of the same employee's timecard. The self-approved timecard transactions totaled 636 hours and $85,860. <br><br> A separate employee, with knowledge of the actual time worked, should be the approver of this employee's timesheet. Without appropriate review of an employee's time, the District is at an increased risk for billings of incorrect and/or overstated time. <br><br> In review of subsequent invoices, we noted the secondary review of this employee's timesheet was documented in the January 2020 invoice, and in 3 of the 4 weeks of the February 2020 invoice. Through discussion with Capital Payments, we understand that an independent review/approval of this employee's timesheets will be verified prior to payment going forward. |
| **RECOMMENDATION** | We recommend that CBRE-Heery modify the timecard review process to include appropriate segregation of duties. We further recommend the District include a review step to verify that all timecards submitted with an invoice include a secondary review and approval prior to acceptance and payment. |
| **MANAGEMENT'S RESPONSE** | **Response:** CBRE/Heery has revised the timecard review and approval process where the Program Director now reviews and approves all timesheets submitted by CBRE/Heery staff. We have gone back and reviewed all of the timesheets where the employee reviewed and approved their own timesheets and have verified and validated all time charged during this period in question was appropriate. This concern will not be an issue moving forward and has been resolved. <br><br> **Estimated Completion Date:** N/A |
| **OBSERVATION STATUS** | **Closed** – RSM noted the Program Director conducted a secondary review and approval of the timesheets in the instances where the employee had previously reviewed and approved his own timesheets. Through our testing of invoices from March 2020 – June 2020, we did not identify any instances where an employee reviewed and approved his or her own timesheet. As a result, we note this observation as closed. RSM will continue to test PM-OR invoices and report as applicable. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q3 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q3 (Observation #2) Subconsultant Fees and Billing Support - Communications** |
| **DETAIL** | We reviewed the CBRE-Heery Subconsultant billings for the team that leads communications efforts for the SMART program. During our review we noted that although some deliverables are specifically defined, other duties performed by the team may not directly correlate with consistently measurable deliverables. Through discussions, we noted that team members perform a variety of duties related to internal and external reporting and public outreach, which include the following:<br><br>• Compilation of the quarterly Bond Oversight Committee reports<br>• Web design for the SMART Futures website<br>• Compilation of other newsletters, circulars, and pamphlets<br>• Graphic design<br>• Photography<br>• Copywriting<br>• Social media updates<br>• Ad-hoc reports requested by various OR-PM and District leadership<br><br>Although we understand the duties performed by the team cover many facets of reporting and professional design, timesheets related to these hours only include the "Communications" description. Considering the size of the team dedicated to communications, and costs associated therewith, District management may not have adequate information to assess reasonableness of hours incurred. |
| **RECOMMENDATION** | In addition to the timesheets provided with the CBRE-Heery invoices, we recommend the Office of Facilities and Construction obtain a monthly description from the Communications team that outlines deliverables and/or tasks performed by individual. This will help provide additional context to the work performed, as support for the hours incurred in this area, and allow the team to repurpose employees if there is variability in workload. |
| **MANAGEMENT'S RESPONSE** | **Response:** The SMART Communications Team, led by Garth Solutions, Inc (GSI), performs a variety of tasks associated with delivering a comprehensive communications program intended to keep a diverse base of stakeholders informed about the Program's progress.  Related deliverables include but are not be limited to a variety of reporting documents such as the Bond Oversight Committee report, community/District presentations, photo documentation, content/graphic development, digital & social media campaigns, web design/maintenance, newsletters and other collateral materials – all of which require diverse skill sets.<br><br>The communication deliverables are currently tracked and monitored internally utilizing GSI's project management tools.  Additionally and as a result of the remote work environment due to the COVID pandemic, GSI has recently implemented a more detailed timesheet documentation process to capture daily activity logs of each staff member. |

## PRIOR OBSERVATIONS FOLLOW UP – CONTINUED

| INTERNAL AUDIT – PROGRAM MANAGEMENT FY 2019 - 2020 Q3 | |
|---|---|
| **OBSERVATION** | **FY 2019-2020 Q3 (Observation #2) Subconsultant Fees and Billing Support - Communications** |
| **MANAGEMENT'S RESPONSE** | GSI will leverage these tools to enhance reporting of activities related to SMART Communications by submitting a monthly communications report that summarizes deliverables and related tasks performed by assigned individuals. This documentation will be submitted beginning with the June 2020 pay application and will continue thereafter throughout the term of the program.<br><br>**Estimated Completion Date:** June 2020 |
| **OBSERVATION STATUS** | **Closed** – Through our detailed review CBRE-Heery labor invoices, we noted that beginning with the August 2020 invoice, timesheets detailing activity performed and the monthly communications report were included within the supporting package. As a result, we note this observation as closed. RSM will continue to test PM-OR invoices and report as applicable. |

# OBJECTIVES AND APPROACH

## Objectives

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

## Approach

Our audit approach consisted of the following:

*Administration and Governance*

- Conducted interviews with District Management and reviewed the relevant documentation to obtain and understanding of the:
    - District's project management transition plan for projects moving from CBRE-Heery to AECOM
    - CBRE-Heery demobilization plan
    - AECOM onboarding and staffing plan
    - RFQ requirements and other documented communications of District expectations of incoming AECOM OR team, including performance monitoring, evaluations, and OR deliverables (weekly, monthly, quarterly, etc.)
- Developed future audit plan based on the information obtained during interviews and review of documentation

*Program Manager (Atkins)*

- Obtained and reviewed deliverables submitted in accordance with PM monthly reporting requirements derived from RFP Article 6.4.2.6 including:
    - Monthly schedule delays / slippage at both program and project level
    - Cash flow – actual vs projected
    - RFI aging and reporting by project
    - Change order reporting – project & program level
    - Vendor performance monitoring
    - Post project completion reporting
    - Project quality – design process revise & resubmits, inspection results
- Reviewed Atkins monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Followed up on prior findings

# OBJECTIVES AND APPROACH – CONTINUED

## Objectives - continued

<u>*Owner's Representative (CBRE-Heery & AECOM)*</u>

- Conducted labor analysis of Prime OR firms, including subconsultants PM assignments
- Obtained and reviewed deliverables submitted in accordance with PM monthly reporting requirements derived from RFP Article 6.4.3.10 & 6.7
- Reviewed CBRE-HEERY monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Reviewed AECOM monthly invoicing for contractual compliance, proper supporting documentation, and mathematical accuracy
- Followed up on prior findings

<u>*Reporting*</u>

At the conclusion of our procedures, we summarized our findings related to the Contract Administration process. We have reviewed the results of our testing with Internal Audit, OFC, the PM/OR team, and incorporated management's response into our report.

# APPENDIX – OR STAFFING PLAN ANALYSIS

## APPENDIX – OR STAFFING PLAN ANALYSIS

The following information is derived from program reporting which consists of data from the P6 project schedule that is used to upload/update e-Builder. It provides summary data of the AECOM staffing plan, project manager assignments, schedule variances, and e-Builder activity.

The table below represents a comparison between the AECOM and CBRE-Heery staffing plans. FTE calculations are based on 1,920 hours/year.

| AECOM Staffing Plan | | CBRE Heery Staffing Plan (6/17/19) | | |
|---|---|---|---|---|
| Category | FTE | Category | FTE | Variance |
| Program Leadership | 3.00 | Program Leadership | 1.92 | 1.08 |
| Administration | 16.95 | Administration | 15.57 | 1.38 |
| Project Controls (scheduling, e-Builder, dashboard and reporting) | 2.55 | Project Controls (SOPs, scheduling, contracts admin, e-Builder, dashboard and reporting) | 5.07 | -2.52 |
| Design Coordination | 4.95 | Design Coordination | 4.07 | 0.88 |
| PM Team Leads | 6.00 | PM Team Leads | 3.69 | 2.31 |
| Project Managers | 17.89 | Project Managers | 28.00 | -10.11 |
| Assistant PM | 13.89 | Assistant PM | 11.5 | 2.39 |
| Construction Coordinator | 16.73 | Construction Coordinator | 15.61 | 1.12 |
| Safety, Health and Environment | 1.00 | Safety, Health and Environment | 1.83 | -0.83 |
| SMWBE Team | 3.00 | SMWBE Team | 3.96 | -0.96 |
| EDDC Support | 1.90 | EDDC Support | 0.00 | 1.9 |
| Communications | 5.00 | Communications | 6.53 | -1.53 |
| Procurement | 7.88 | Procurement | 7.74 | 0.14 |
| Commissioning | 2.00 | Commissioning | 6.69 | -4.69 |
| Roofing Code Compliance | 2.15 | Roofing Consultant | 0.00 | 2.15 |

The following table compares the CBRE-Heery May 2020 Milestone Schedule to the AECOM November 2020 Milestone Schedule to identify changes in assignment of projects to project managers during the transition:

| Project Manager Status | Number of Projects | Total Quarters Delayed |
|---|---|---|
| No Change in Project Manager | 144 | -561 |
| New Project Manager | 84 | -383 |
| **Project Total** | **228** | **-944** |

## APPENDIX – OR STAFFING PLAN ANALYSIS – CONTINUED

The following table shows project manager total project assignments, by current project phase:

| Project Manager | Total projects within each project phase | | | | |
| --- | --- | --- | --- | --- | --- |
| | Design | Procure Contractor | In Construction | Final Completion | Contract Closeout |
| AECOM PM-1 | 18 | 6 | | | |
| BACH PM-1 | | 1 | 10 | 4 | 1 |
| Corradino PM-1 | 2 | 2 | 11 | | |
| Garth PM-1 | 5 | 3 | 4 | | |
| BACH PM-2 | 2 | 8 | 2 | | |
| BACH PM-4 | 2 | 3 | 5 | 1 | |
| AECOM PM-2 | 4 | 3 | 3 | 1 | |
| BACH PM-3 | 3 | 4 | 3 | 1 | |
| Keith PM-1 | 3 | 1 | 7 | | |
| Corradino PM-2 | 3 | 3 | 4 | | |
| AECOM PM-4 | 2 | 2 | 6 | | |
| Keith PM-2 | | 4 | 6 | | |
| AECOM PM-3 | | 6 | 4 | | |
| Keith PM-3 | 2 | | 7 | 1 | |
| Keith PM-4 | 3 | 2 | 4 | | |
| Corradino PM-4 | 1 | 3 | 5 | | |
| Corradino PM-5 | 1 | 3 | 4 | | |
| Corradino PM-6 | 1 | 3 | 4 | | |
| Corradino PM-7 | | | 7 | | |
| BACH PM-5 | 3 | 1 | 1 | 1 | |
| Keith PM-5 | | 3 | 2 | | |
| AECOM PM-5 | | | 1 | 1 | |
| AECOM PM-6 | | | | | 1 |
| **Grand Total** | **55** | **61** | **100** | **10** | **2** |