

## RSM ROOFING PROCESS ANALYSIS

### ADVANCE QUESTIONS FROM AUDIT COMMITTEE MEMBER MS. CONNIE POU

#### **Observation #2 - Strategic Long-term BCPS Roofing Plan - Response needed from RSM**

In addition to the required five-year District Educational Facility Plan, did RSM look at other school districts i.e., Miami-Dade and Palm Beach to see if they have long-term roofing plans? If yes, do they utilize an Asset Management Company or is it done in house.

#### **RSM's Response:**

RSM's benchmarking efforts for this project did not include evaluation of other school district's strategic long-term roofing plans. As a part of our work with other jurisdictions, we have seen these types of services provided by 3rd party companies like Cannon Design, among many others.

#### **Observation #5 - Roofing Sub-permitting Process is Manual/Printed - Response needed from the Building Department**

In response to the above observation, can management provide an update as to the progress in addressing the recommendation to automate the sub-permitting process.

#### **Building Department's Response:**

The answer to this question is addressed in the response to Observation 4d [(OCA Note: *Please see response to Audit Committee member Dr. Natalie Lynch Walsh*)]. Note that just recently we have researched our own ISS application, which was initiated in 2010 and we are looking to repair and upgrade the system. An ISS System upgrade may be necessary to bridge the gap before implementing and changing over to a new application.

Contingent upon what we learn regarding the duration needed to implement a new system, which could automate the sub-permitting processes and the cost involved to accomplish such, we look forward to improving our system solutions as recommended by RSM. In order to accomplish this recommendation, the BD will require support in the form of funding for hardware, software and maintenance of systems.

#### **Observation #6 – Lack of resources to support Roofing Sub-permitting and Observation #7 – Lack of Formalized Procedure and Resources for Inspections. Response needed from the Building Department**

From management responses to the above observations it does not appear that there is a plan to address these issues. Can management provide us with alternative options to resolve or mitigate the issues.

#### **Building Department's Response to Observation #6:**

Over a year ago the Building Department had repositioned the current 5 staff/contract employees to better align their responsibilities to achieve some of the points listed in the analysis. One (1) handles all administration of the BD's roofing program, a lead Inspector/Plan Examiner provides all technical aspects and manages the workload of the other three (3) Inspector/Plan Examiners. Currently one (1) is learning the Sub-permit process to supplement the Sub-permit review process. One (1) keeps track and provides all other plan review requirements on the GOB roofing projects and the other Inspector/Plan Examiner provides additional field inspections.

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The BD is currently keeping pace with the Roofing Program, performing 15 to 25 inspections daily and completing plan reviews within 14 days of submittal. The concept that the Building Department has failed to perform or is delaying the program is a major misconception. We have always and still do see the need for training and adding qualified staff to continue the competent oversight both for inspections and plans examination.

It is a legitimate concern that finding competent staff to reinforce our existing personnel is essential to the continued success of the program. One of our supplemental code staff providers, CAP Government has spoken in terms of the regional paucity. See the following email:

Reply  
Forward

**From:** Christopher Ellison <cellison@capfla.com>  
**Sent:** Wednesday, July 29, 2020 6:00 PM  
**To:** Robert F. Hamberger <robert.hamberger@browardschools.com>  
**Subject:** CAP Government - Roofing Inspector Request

*Mr. Hamberger,*

*This email is intended to provide you information regarding the limited availability of qualified and licensed Roofing Inspectors (SRI) in the South Florida region. As you know, CAP Government is a consulting firm engaged in providing professional building code compliance, engineering, and inspection services for local governments, school districts, and other governmental institutions. We are leaders in the industry, and we actively and continuously recruit for all building code trades, including those with specialized licenses. Specifically, in recent years the industry has incurred difficulties in recruiting and retaining roofing inspectors, particularly in the region. This difficulty occurs primarily due to the limited number of licensed and qualified roofing inspectors available. Your request for Roofing Inspectors has been diligently pursued; however, a reliable supply of Roofing Inspectors is not consistently available.*

*If you have any questions, please contact me through my email or at the numbers below.*

**Christopher M. Ellison**  
*Human Resources Director*

It is the BD's goal to work toward achieving the technical and personnel recommendations to fortify the department's role in the process. It is our hope that the finances be made available to achieve that end.

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#### **Building Department's Response to Observation #7:**

##### **(OCA Note: RSM's Recommendation for this Observation:**

**"BD should say that they will analyze the staffing and that there will be a request for staffing that the Board will need to consider approving")**

As stated in the response to Observation 6 above, the Building Department has analyzed the existing staffing and have adjusted their responsibilities to better provide the services necessary. We will continue to pursue adding additional third-party roofing inspectors, even reviewing the possibility of issuing another RFP in the hope to get additional Private Provider firms to apply. Next, request the organization chart be revised to include at a minimum the (2) positions recommended by the RSM Roofing Analysis. Similarly, the Building Department could issue an RFQ to individuals who would qualify to the established level for the desired execution of roofing supervision.

##### **(OCA Note: RSM's Recommendation for this Observation:**

**BD response mentions "could look into addition of a roofing phone line for inspections" (This should be more definitive on whether they do/do not intend to explore options for adding a phone line, as well as a clerical/scheduler resource)**

The BD has a phone line for inspection requests, so another phone line would be redundant. We also have an available clerical position, who could serve as a scheduler, if needed. The operation as it is, is efficient. A scheduler sitting in an office working a night shift could have no idea what the inspector is experiencing in the field hour by hour. The scheduler would not be privy to decisions made by the roofing contractor, labor or material delivery problems and changing weather conditions at certain locations. The scheduler also would not be privy to job site conditions revealed during the demolition phase such as compromised substrates, saturated lightweight insulating concrete or corroded metal deck conditions. Many aspects of roofing inspections occur visually on the site and require adjustments either in the form of immediate direction to the contractor, direction suggested to and approved by the consultant or corrective action by the inspector. A scheduler would just be another unneeded layer of management that would serve as redundancy and delay the decision-making process that must happen to maintain fluid operations in the field. It should be obvious then that the scheduler would need to be as knowledgeable as the inspector, since the inspector's decisions are based on so many factors, which occur in the field. The scheduler and the inspector would have to be of the same line of thinking, which would be nearly impossible, since the former doesn't have the experience and the ability to see and understand what the next steps should be. Contractors might easily take advantage of that. Having a few more inspectors in the field would be a far more effective solution as stipulated in the response to Observation 6, which also addresses the challenge of availing the use of third-party inspectors.

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#### **Observation #1:** Response requested from the Office of Capital Programs and/or CBRE Heery

RFP 15-115C is part of the contractual obligations to which Heery agreed in August of 2015. While it was regrettably light on defining the importance of the building department and related processes—a weakness that was addressed in this year’s Program Manager Owner’s Representative RFQ—it did contain some language that suggests Heery should have addressed design issues at the front end of their involvement, rather than at the back end:

##### 6.4.3.5 Design Management

As discussed in Sections 3.2 and 3.5 the OR shall provide day-to-day management of the design process from project definition through the completion of pre-construction. Of critical import is that the OR team be fully capable of developing Design Criteria Packages for all projects which are assigned to the OR. The design criteria packages shall provide a clear scope of work upon which design builders or design professionals can propose and develop projects from. As part of the budgeting process the OR shall ensure that the design professional (or other design entity) produces a design that is within the established budget for construction of the project in question. The OR shall implement the District’s robust process to control changes during the design that necessitate a change in the project budget. Furthermore, the OR shall establish a clear understanding of the cost drivers of the project prior to development of completed construction drawings. This should include understanding the risks related to the scope of work in question, and taking the appropriate steps to assess such risks, such as destructive testing and environmental sampling. Furthermore, the OR shall incorporate collaborative constructability reviews into their design review process to further mitigate the occurrence of foreseeable changes during construction.

##### 6.4.3.6 Master Project Specifications and Guidelines.

The OR is expected to actively contribute to the District’s initiative to continuously improve the master program standards to avail itself of current industry standards and evolving best practices. The process of developing these standards is expected to be iterative and collaborative between the OR, FCM, PPO, Design Professionals and other applicable District departments for the duration of the program.

**Question 1a:** Given that the contractual obligation above has existed since 2015, why weren’t the issues identified in Observation #1 (p. 11) proactively addressed prior to 2018 (see mgt response p. 12)?

#### **Response: 1a:**

In response to proactively addressing design issues prior to 2018, in July 2017, the District issued revised roofing specifications that continued to be followed in the SMART program.

Once designers began submitting their initial documents to the Building Department for review in late 2017 and early 2018, staff observed that several comments were being issued by the Building Department to the designers in response to the reviews. A thorough review was then performed by Heery staff and multiple areas were identified where designers needed to improve on their designs and address review comments for all disciplines, not just roofing. Over the past 2 years, staff has seen

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improvements on many projects by the reduced number of submissions to the Building Department and a shortened timeframe in receiving a Letter of Recommendation from the Building Department.

**Question 1b:** Although roofing is the only area requiring a sub permit, it is not the only discipline requiring additional drawings. Are there similar challenges, obstacles, delays, etc. due to HVAC and fire safety projects? Explain.

**Response 1b:**

Fire Alarm and Fire Sprinkler are the only 2 other trades that require shop drawings/documents to be submitted to the Building Department and the Fire Chief's Office for reviews and approvals. Overall, the timeliness of the reviews and approvals for these two trades has not been an issue, however, there have been individual projects that resulted in more reviews than typical to be approved.

**Observation#2: Q2a/Q2b/Q2d - Response requested from the Office of Capital Programs and/or CBRE Heery; Q2c – Response requested from the Superintendent**

This observation cited the lack of a “strategic roofing plan in place for prioritizing, selecting, or scheduling roofing projects to develop a long-term plan for each of the 241 school facilities managed by BCPS,” and that “while the DEFP is critical to capital outlay planning, it does not contemplate the long-term plans for each BCPS school.”

**Question 2a:** Is the lack of the aforementioned strategic roofing plan and long-term plan overall a primary reason why we are discussing all of these roofing issues now, instead of in 2015 or 2016, or even 2017?

**Response 2a:**

The use of a long-term plan is always beneficial. Under these circumstances, it would have been helpful in clarifying and prioritizing the work for both the renovation work and roofing.

**Question 2b:** Why did the management response on page 14 fail to address the RSM recommendation that “BCPS develop and maintain a long-range plan for all facilities managed”?

**Response 2b:**

The response given was regarding a long-range roofing plan and the use of an Asset Management Company (AMC) which is included in the response to question “2d” below. Regarding a long-term facilities plan, one was not performed in 2014 and the Office of Capital Programs has not been requested to participate in the development of one at this present time. A conversation of a long-term plan can be discussed when this audit report goes to the Board for approval. OCP can offer input but needs approval and direction from the Board and Superintendent prior to embarking on a long-term plan.

**Question 2c:** Given that the Council of Great City Schools PPO report made the same recommendation—a recommendation similarly ignored—please explain why the district attempted a General Obligation Bond program without an underlying long-term plan to guide it, and why now--given lack of planning has led to so many unnecessary delays and costs--why the district seems so unwilling to engage in what

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amounts to be best business practices? Is the problem a failure to understand the difference between a five-year DEFP and long-term facilities planning?

#### **Response 2c:**

Staff is not in a position to speak for those that had made the decisions mentioned in this question. The response given with regards to moving forward with a long-term plan was answered in question “2b”.

**Question 2d:** What steps have been taken to ensure the asset management company will be mobilized by early 2021? Please provide a timeline and status report.

#### **Response 2d:**

The Office of Capital Programs (OCP), AECOM, PPO and Procurement are collaborating on issuing an RFP to acquire an Asset Management Company (AMC) responsible for inspecting all roofs, assessing their lifecycles, and developing an overall management plan. The goal is at the end of this year to have an RFP prepared, reviewed and approved to advertise in CYQ1-2021. An agenda item would first have to go to the board for the approval of the funding source prior to the start of the RFP process. Board award of the selected company would be expected in CYQ2-2021. With regards to any new roofs that are competed and are at the 18 months after completion (1<sup>st</sup> owners 6-month) inspection, these will be completed using our continuing contract for roofers. Once the AMC contract is awarded, this would be part of their scope of services. OCP expects no more than 10-12 of these 6-month inspections to be performed prior to the award of the AMC contract.

#### **Observation #3: Response requested from the Office of Capital Programs and/or CBRE Heery**

**Question 3a:** If you extract roofing, HVAC, and mechanical scopes, what’s left? What is the point based on what would be left--is there anything to be gained in terms of saving time and money, or was the goal to create more CSMP opportunities given the threshold recently [increased to \\$4 million](#)?

#### **Response 3a:**

The scope of work remaining after extracting roofing and HVAC would typically be other building envelope items such as window replacements, exterior wall repairs, door replacements, fire alarm upgrades/replacement, fire sprinkler installation, media upgrades and STEM labs.

The ability to carve out roofing would apply only to the projects that have limited HVAC work since most roofers do not have the capabilities to complete HVAC work in-house and are not general contractors where they can subcontract the HVAC portion of the work. For those projects that could be “carved out”, until the change occurred in state statute, as of July 1, 2020 increasing the CSMP amount to \$4 million dollars, most of the roofs would have exceeded the \$2 million maximum amount governed by State Statute. It will be sometime at the end of this year that OCP expects to have the approved contracts from Procurement to use the \$2-\$4 million CSMP contracts. If there were a case where a roof became an emergency and could be “carved out,” these contracts could be used to expedite a roof replacement, however, this delivery method would likely only result in time saving and not cost-saving since these contracts tend to come in at a higher cost, than a hard-bid procurement.

**Question 3b:** What is the potential impact on Procurement of extracting roofing from the projects?

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#### **Response 3b:**

If a CSMP contract was used in a “carve out”, there should be no impact to Procurement since this is an OCP contract once board approved where the only interaction with Procurement would be the signing of the Notice to Proceed (NTP) by the Director of PWS.

If roofing and HVAC were “carved out” from the scope of work in a project and the hard bid procurement was used for these two scopes of work, the involvement of Procurement could double or triple due to the hard bid process to procure the roofing and/or HVAC scope of work.

An additional concern here is the impact on the PMOR not having the management staff to take on the managing of roofing contractors. The management provided by the CMAR’s and GC’s is needed. It would not only have a cost impact but may also have a schedule impact.

**Question 3c:** Are there contracts and contractors that would be impacted by extracting roofing scopes?

#### **Response 3c:**

It is not anticipated that any scope of work would be removed from a previously Board awarded/approved construction contract. The intent would be to identify these projects during the design/permitting phase and separate work scope prior to bidding.

**Observations #4/#5:** Response requested from the Office of Capital Programs and/or CBRE Heery (Chief Auditor Note: Building Department to also respond to 4c and 4d)

Section 6.1.2 outline the District’s objectives in retaining program managers. One of the objectives included the following: “By implementing, maintaining and upgrading management information systems appropriate for the District’s projects, the owner’s representatives will facilitate the efficient and effective use of information throughout the District’s capital projects.”

**Question 4a:** Given that this was a contractual obligation, and that CBRE Heery has been the District’s Program Manager - Owner’s Representative for the past five years, why wasn’t the building department’s information system (ISS) reviewed initially and upgraded to ensure “the efficient and effective use of information?” Why weren’t the Building Department’s manual tasks and outputs reviewed and automated in 2015, 2016, or 2017?

#### **Response 4a:**

The District’s chosen Project Management system is eBuilder. The Building Department declined to use eBuilder as they have had their own system, ISS.

**Question 4b:** CBRE Heery was tasked with developing standard operating procedures. Are there SOPs associated with ISS comments and clearance?

#### **Response 4b:**

Yes. SOP 3.60 addresses Building Department Plan Review and Permitting.

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**Question 4c:** When the District finally decided to replace Compass with a new asset management system, was the Building Department ever consulted as part of that process?

**Building Department's Response 4c:**

The Building Department was not consulted regarding the potential use of Maximo. At the time we understood that it was more of a data management program that would be replacing COMPASS. ISS did interface with the COMPASS for PPO Work Order Inspections, this function needs to be updated to interface with Maximo if the use of ISS is system is maintained.

**Question 4d:** Is Maximo (provided the right modules are purchased) a potential upgrade to ISS? Can e-Builder and Maximo replace ISS, or do neither of them offer an alternative?

**Building Department's Response 4d:**

Maximo is an asset management solution (equipment, installations, buildings, etc.) with services including: purchasing, inventory, management of locations, service desk, and work planning. After our initial investigation, we believe that Maximo is not a viable solution to be used as a building department permit data base.

From the initial e-Builder implementation it was understood that e-Builder could be adapted to be used as a permit and inspection management program, however it did not have the full capabilities that would be needed without some substantial modeling of the existing modules.

We have had the original programmer research the current ISS program as a self-employed individual and to provide an estimate to fix the glitches and repairs that have accumulated over the past few years of no maintenance. The system functions have become cumbersome and is in need of some upgrades. We have been working with a fragmented system and have made several unsuccessful attempts to correct these problems over that span of time.

In looking for a programming solution we have contacted two software firms recently (Smartgov and Govpilot) for demonstrations of their software systems on September 21 and 22)

These companies may or may not be the solution, but it is a start. Both systems would let us manage all our processes tied to permitting, licensing, inspections and code enforcement in a single web-based system. The cloud-based and mobile solutions could help automate processes around permit applications, public notices, maps, online payments and more

Once we see what new technology may have to offer, we will have a better idea as to what will be availed to us and hopefully an approximate cost/time frame. Certainly, much will hinge on the adaptability of these programs, data migration and how close we can get to what we have in ISS, which is a customized program.



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#### **Observations #6/#7:** Response requested from the Office of Capital Programs and/or CBRE Heery

See also Observations #1, #4, and #5. I've attached a copy of the Building Department's 2019 Policy and Procedure Manual.

**Question 6a:** Given all CBRE's contractual obligations to manage the District's capital program, why was there no plan developed in 2015, 2016, or 2017 to address human capital resources needed in the building department over the life of the program?

**Response 6a:**

In 2015, 2016, and 2017 most of the projects were in design and did not impact the Building Department significantly at that time. CBRE/Heery has made several recommendations to BCPS to assist with the Building Department staffing issues and are currently under consideration. The Building Department has refused the assistance, stating staffing was not an issue. However, it is not the responsibility of CBRE/Heery to plan staff resources that may or may not be required by other departments during the execution of the program. Staffing suggestions were made, but it is clearly a Building Department responsibility.

**Question 6b:** Given all CBRE's contractual obligations to manage the District's capital program, why did Heery not review and make recommendations to streamline, automate, and improve the efficiency of the Building Department's roofing inspection process in 2015, 2016, or 2017, etc.

**Response 6b:**

The Building Department is the sole party responsible for determining any inspection requirements and improvements to their processes and procedures. CBRE/Heery has made recommendations to streamline, automate, and improve efficiencies with regards to roofing, only to have the Building Department refuse the assistance and the CBRE/Heery recommendations.

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#### **Observation #8:** Response requested from the Office of Capital Programs and/or CBRE Heery

At the 8/20/20 special meeting of the Facilities Task Force we spent most of our time addressing unanswered questions related to this observation. The District currently has one roofing assembly consisting of one NOA. If a roofer or someone else wishes to explore the possibility of using multiple NOAs on a reroofing assembly, then it is up to that roofer or other party to make the request to the Florida Building Commission. It was made clear at our meeting that it is not the Building Department's responsibility to request a Declaratory Statement (DEC) as that would amount to them questioning themselves. Additionally, because the District's Building Officials represent the BCPS local Authority Having Jurisdiction, even if Miami Dade were to confirm its use of multiple NOAs in reroofing projects, the final word would still have to come from the State.

**Question 8a:** Given that the OCP was the catalyst for this roofing analysis, is the Office of Capital Programs planning to seek a DEC from the Florida Building Commission?

#### **Response 8a:**

Currently, OCP is not planning on requesting a Declaratory Statement from the Florida Building Commission regarding the use of multiple NOAs. The Building Department, as the local authority having jurisdiction over Broward County Public Schools has said that they will not entertain the use of multiple NOAs to design and construct roofs on BCPS facilities. If multiple NOAs were allowed, this could create more confusion since each NOA used, would have to be a standalone NOA for each part of the roofing assembly and not parts extracted out of other complex NOAs.

**Question 8b:** Are any roofers—particularly those interviewed during this analysis—planning on seeking a DEC from the Florida Building Commission?

#### **Response 8b:**

To the best of CBRE/Heery's knowledge, they are not aware of any roofers that have contacted or intend to contact the State to seek a DEC. RSM would need to respond if any of the roofers they interviewed would be intending to submit for a DEC.

**Question 8c:** Setting aside the question of whether multiple NOAs are even permissible under Florida Building Code, is there any evidence that using multiple NOAs on reroofing projects will save time and money?

#### **Response 8c:**

Since the use of multiple NOAs is not allowed in Broward, CBRE/Heery cannot confirm if there would be a potential in cost savings or time. It seems the only savings if multiple NOAs could be used would possibility be in the time and the amount of Revise & Resubmits during the review process for roofing sub-permits. With regards to material cost savings, the material used would not change, therefore would not affect the cost.

**Question 8d:** Once Johns Manville officially has its NOA, what are the anticipated cost savings from having a second manufacturer in addition to Soprema?

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**Response 8d:**

In conversations with multiple manufactures, the material costs between different manufactures seem to be in-line with each other. The costs saving with having multiple manufactures would be possible due to competition. This is hard to anticipate at this time but could potentially be in a range of 1% to 5% depending on the materials and the specific roofing project.

**Question 8e:** At both the Roofing Workshop and Task Force meeting, it was unclear whether the exclusions listed in the system rider rendered the rider null and void, or whether maintenance and repair would maintain coverage. Has the office of Risk Management obtained clarification on the system rider, as well as the warranty coverage? Explain.

**Response 8e:**

The Director of Risk Management met with the District's insurance broker via a telephone conference to discuss purchasing roofing wind riders. General Counsel's office provided documents from roofing manufacturer Johns Manville (JM) and Soprema. Wind riders serve as a product warranty and is not an insurance policy. As of this date, there are no insurance policies which provide coverage similar in nature to a wind rider.

Currently, the District carries a named storm self-insured retention of one-million dollars (\$1,000,000) and a seventy-five million-dollar (\$75,000,000) hurricane self-insured retention per occurrence. The District will be required to fulfill its self-insured obligation prior to seeking recovery from insurance carriers and syndicates.

Insurance policies as well as warranties have limitations and exclusions referencing coverages. Additionally, owners have certain responsibilities which must be upheld such as routine inspections, maintenance, major repairs or modifications to the roof assembly in which a manufacturer must be notified and grant approval.

Soprema's warranty claims must be submitted to the manufacturer within two business days after a leak or other issues are discovered. Wind related claims must be reported within 14 days. Photos of damages are required after an event.

JM's warranty states owners must notify the manufacturer with written notice within 30 days after a leak or major defect is discovered or should have been discovered. Exercising normal diligence, such as maintenance, repairs or modifications without prior approval, could void this warranty.

Both standard warranties contain multiple limitations and exclusions from coverage, including but not limited to tornados, hurricanes or other extraordinary natural occurrences and/or winds speeds in excess of 55 miles per hour. Without a wind rider, the standard warranty excludes a manufactures obligation to repair or replace a roofing system damaged as a result, in whole or in part, of wind speeds exceeding 55 miles per hour.

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Tropical storms may exhibit maximum sustained surface winds ranging from 39-73 miles per hour. Roof damage resulting from a minor tropical storm would not be covered by a standard warranty should wind speeds exceed 55 miles per hour.

Purchasing a wind rider extends coverage up to a nominal wind speed of 180 miles per hour. A wind rider is an addendum to JM's and Soprema's guarantee. Both wind riders are expressly limited in scope to obligate these manufacturers to address leaks, damages and/or blow off to existing roofing systems, which results exclusively from wind speeds generating negative pressure up to and including values of 180 miles per hour.

Please note, exclusions such as tornados, earthquakes, wind-borne debris and lack of maintenance remain in effect regardless of an existing wind rider.

Our Facilities Department has purchased wind riders at a cost of \$2,000 per roof. There are 200 roofs slated for replacement. The District's wind rider total cost is estimated at \$400,000.

As stated earlier, the District has certain contract obligations which must be upheld in order to benefit from this wind rider purchase. A structured maintenance program which adheres to both manufacturers' specifications outlined in their wind rider warranties must be in place in order to garner benefits from this purchase.

**Question 8f:** The District conducted a Roofing Symposium on April 10, 2015. Two of the District's current roofers—Advanced and Atlas Apex—attended (both attached). The topics covered included roofing specifications update, new warranty format, and M/WBE certification and pre-qualification. If this information was shared with the industry back in 2015, why are the same topics being discussed in 2020 as though these are new concepts? Did Heery, along with Bobadilla, fail to pick up where Derek Messier left off on this initiative?

**Response 8f:**

This event took place before CBRE/Heery was hired. The roofing specification was revised in late July 2017 over 2 ½ years after this Roofing Symposium. With the amount of roofing work in the SMART program, there are now approximately 15 roofers who have been hired over the past several years and many of these roofers were not in attendance at the symposium.

Subsequent to Derek Messier's departure, and following the 2015 Roofing Symposium, the Standards Committee continued to pursue the development and refinement of the District's Roofing Specification. While it is difficult to recount the actions of past members of this organization, or the Heery team, the collective recollection is that the Office of Facilities and Construction continued to pursue a standard that met the Florida Building Code, and was based on Miami-Dade County Public School's specifications. They were the same specifications that were discussed at the April 2015 symposium.

While continuing to finalize the roofing specifications, there was a request made to Heery to review the warranty documents that were to be included in the Roofing Specifications. While Heery was researching typical roof warranty submissions, the Standards Committee furthered discussions with General Counsel's Office for specification/warranty approval. A meeting was held in March 2017 with

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Assistant General Counsel for review and recommendations, after which, the roofing sections were completed, including the warranty documents. The final specifications were uploaded to the District's website in July 2017.

Although the specifications were considered revised, they were not a significant deviation from the previous specifications; the main differences being the use of terminology referencing a Roof Assembly, and a more thorough explanation of what constituted the assembly, as well as the manner in which the roof warranty and wind and system riders were to be addressed.

As design consultants continued developing their drawings using the revised specifications, the most common questions from them focused on seeking an understanding of the scope of roofing within the Program, specifically, with respect to understanding that the roof replacement project scopes were not simply roof recovery but rather, roof replacements that were deemed necessary due to code requirements. The other primary question posed by consultants and Heery was the use of polyisocyanurate versus lightweight insulating concrete (LWIC) as an appropriate substrate.

During this period there were discussions with Heery personnel requesting that the Committee consider a change to the standards from LWIC as the preferred substrate to polyisocyanurate. Although the Committee took the request under consideration, it determined that making such a change would not be in the best interest of the District and would not present a sound long-term solution.

Similar discussions continued through the remaining months of 2017 and during the first half of 2018. In July 2018, one of the Heery Deputy Directors and the Director, Pre-Construction held numerous meetings with individual consultants to discuss the progress of their projects. Although there were general discussions on projects status and challenges, many of the issues raised revolved around roofing with respect to interpretation of scope and the use of polyisocyanurate instead of LWIC.

Following this period, Heery continued to work with designers to clarify roofing scopes within the SMART Renovation projects, as well as other scope components, and to facilitate progress on projects. These efforts were conducted in collaboration with Building Department and Pre-Construction staff.

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### ADVANCE QUESTIONS FROM AUDIT COMMITTEE MEMBER DR. NATHALIE LYNCH-WALSH

#### **Observation #9:** [Response requested from the Office of Capital Programs and/or CBRE Heery](#)

**Question 9a:** Has the district factored in the new [5% retainage limit](#) into its payment process?

**Response 9a:**

Yes, for all projects advertised after 10/1/20, the new limit of 5% retainage will be held. For the projects that have been advertised, awarded or are in construction prior to 10/1/20, retainage of 10% will be held until the project reaches 50% completion, at the request of the contractor, the retainage will be reduced to 5%.

**Last question**—Given all the issues noted in the analysis, are there plans to implement a roofing department—why or why not?

**Response:**

The existing PPO roofing department is equipped and staffed to perform emergency repairs to stop roof leaks as they occur. They do not have the staff or the equipment to meet the needs of the district to perform as a complete roofing maintenance department. The intent for the new Asset Management Company (AMC) is to inspect both new and existing roofs and have repairs completed on the new roofs, either warranty repairs or preventive maintenance repairs. Part of the scope of services by the AMC is to train existing staff and help in augmenting the existing department. The cost to develop and maintain a self-sufficient roofing department would be greater than having the AMC.