# OVERSIGHT OF THE RENOVATIONS OF THE CANNON HOUSE OFFICE BUILDING

## **HEARING**

BEFORE THE

## COMMITTEE ON HOUSE ADMINISTRATION HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

SEPTEMBER 10, 2019

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### OVERSIGHT OF THE RENOVATIONS OF THE CANNON HOUSE OFFICE BUILDING

#### TUESDAY, SEPTEMBER 10, 2019

House of Representatives, COMMITTEE ON HOUSE ADMINISTRATION, Washington, DC.

The Committee met, pursuant to call, at 10:06 a.m., in Room 1310, Longworth House Office Building, Hon. Zoe Lofgren [Chairperson of the Committee presiding.

Present: Representatives Lofgren, Raskin, Davis of California, Aguilar, Davis of Illinois, Walker, and Loudermilk.

Staff Present: Jamie Fleet, Staff Director; Sean Jones, Legislative Clerk; Eddie Flaherty, Chief Clerk; Daniel Taylor, General Counsel; David Tucker, Parliamentarian; Khalil Abboud, Deputy Staff Director; Lisa Sherman, Chief of Staff for Mrs. Davis of California; Peter Whippy, Communications Director; Matthew Schlesinger, Oversight Counsel; Jesse Roberts, Minority Counsel; Cole Felder, Minority General Counsel; David Ross, Minority Professional Staff; Susannah Johnston, Legislative Assistant for Mr. Loudermilk; Jennifer Daulby, Minority Staff Director; Courtney Parella, Minority Communications Director; Timothy Monahan, Minority Director, Oversight; and Nicholas Crocker, Minority Professional Staff.

The Chairperson. Well, good morning, everyone. The Committee will come to order. We welcome you to this hearing, which will provide oversight on the renovations to the Cannon House Office Building. It has been over a decade since this Committee held its first, and I will say, only hearing on the Cannon Renovation Project. As a project with an initial budget of more than \$752 million, it is important for this Committee to conduct appropriate oversight. It is our job to ensure the project is completed on time, and to the standard befitting a building essential to our history and the day-to-day operations of Congress.

The Cannon House Office Building is the oldest Congressional office building. Its doors opened for the first time in 1908, and over a century later, it is home to the offices of more than 140 Members of Congress, several committee hearing rooms, the historic Cannon Caucus Room, the rotunda, as well as space for Congressional sup-

port services.

Going into this project, the Cannon House Office Building had reached a critical stage in its life and was in desperate need of a comprehensive renovation. To put the building's age in historical perspective, when construction of the Cannon House Office Building was authorized, there were 45 States. Of those, seven States were less than 15 years old. When the building opened, it had what were considered modern amenities at that time. That meant that the building had a telegraph office but no parking garage. It had

a forced-air ventilation but no air conditioning.

Although a parking garage and air conditioning were subsequently added, by the time this project began, the building was plagued by operational safety, health, and environmental issues. Defects to key elements of the building, like the HVAC systems, plumbing systems, mechanical, and electrical equipment, life safety and fire protection systems, and exterior stone had been accumulating rapidly. Ad hoc fixes to these issues were often intrusive, disruptive, as well as expensive.

In addition, as a 100-year-old-plus structure without a prior major renovation, the Cannon House Office Building required a variety of upgrades to windows, doors, lighting, and insulation, to comply with accessibility requirements and energy-consumption standards. Since our last hearing on this topic in 2009, significant progress has been made on Cannon, including the completion of the planning design and preconstruction stages, as well as the com-

mencement of actual construction.

I am also pleased to note that as of the beginning of this Congress, newly renovated office suites in 25 percent of the building are occupied. As I mentioned back during the 2009 hearing, the Cannon House Office Building is a historic building and a national treasure. We are here taking care of it right now, but it belongs to the American people, and they are the ones paying the tab. So I am eager to hear from our witnesses about the progress that has been made now that we are in phase 2 of the construction.

Most of the occupants of the renovated office suites that I have heard from indicate that on balance, their experience in the renovated space has been positive. However, there are a number of issues with the renovated space that I am looking forward to exploring during this hearing. These include issues related to the HVAC system, the operation of the elevators, and improved communication between the building management and its occupants.

I am also interested in discussing the reasons behind any cost overruns, justification for any increases in the project's budget, and getting clear answers as to what the final project costs will likely be now that we are right around the halfway point of the renovation

With that, I would like to recognize our Ranking Member, Mr. Davis, for any comments he might like to make.

[The statement of the Chairperson follows:]

ZOE LOFGREN, CALIFORNIA

Congress of the United States House of Representatives

RODNEY DAVIS, ILLINOIS

JAMIE RASKIN, MARYLAND

SUSAN DAVIS, CALIFORNIA G.K. BUTTERFIELD, NORTH CAROLINA MARCIA FUDGE, OHIO PETE AGUILAR, CALIFORNIA

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#### Chairperson Zoe Lofgren Oversight of the Renovations of the Cannon House Office Building **Opening Statement** September 10, 2019

The Committee will come to order. Good morning and welcome to this hearing providing oversight of the renovations to the Cannon House Office Building. It has been over a decade since this Committee held its first and only hearing on the Cannon renovation project. As a project with an initial budget of more than \$752 million it is important for this Committee to conduct appropriate oversight. It is our job to ensure the project is completed on time, and to the standard befitting a building essential to our history and the day-to-day operations of Congress. The Cannon House Office Building is the oldest Congressional office building.

Its doors opened for the first time in 1908, and over a century later it is home to the offices of more than 140 Members of Congress, several Committee hearing rooms, the historic Caucus Room, the Rotunda and space for Congressional support services. Going into this project, the Cannon building had reached a critical stage in its life and was in desperate need of a comprehensive renovation.

To put the building's age in historical perspective, when construction of the Cannon Building was authorized, there were 45 States. Of those, 7 States were less than 15 years old. When the building opened, it had what were considered modern amenities at the time. That mean that the building had a telegraph office, but no parking garage. It had a forced air ventilation system, but not air conditioning. Although a parking garage and air conditioning were subsequently added, by the time this project began the building was plagued by operational, safety, health and environmental issues.

Defects to key elements of the building like H-VAC systems, plumbing systems, mechanical and electrical equipment, life-safety and fire protection systems and exterior stone had been accumulating rapidly. Ad hoc fixes to these issues were often intrusive, disruptive, and expensive. In addition, as a one hundred plus year old structure without a prior major renovation, the Cannon building required a variety of upgrades to windows, doors, lighting and insulation to comply with accessibility requirements and energy consumption standards.

Since our last hearing on this topic in 2009, significant progress has been made on Cannon, including the completion of the planning, design and preconstruction stages, as well as the commencement of actual construction. I am also pleased to note that as of the beginning of this Congress, newly renovation office suites in 25% of the building are occupied. As I mentioned back during the 2009 hearing, the Cannon Building is a historic building and a national treasure.

We are here taking care of it right now, but it belongs to the American people, and they are the ones paying the tab. So, I am eager to hear from our witnesses about the progress that's been made now that we are in Phase 2 of construction. Most of the occupants of the renovated office suites that I have heard from indicate that on balance their experience in the renovated space has been positive. However, there are a number of issues with the renovated space that I am looking forward to exploring during this hearing. These include issues related to the H-VAC system, the operation of the elevators, and improved communications between the building management and its occupants. I am also interested in discussing the reasons behind any cost overruns, justifications for any increases to the project's budget and getting clear answers as to what the final project cost will likely be now that we are right around the halfway point of the renovation.

Mr. DAVIS of Illinois. Thank you, Chairperson Lofgren. I would like to give a special thanks to our colleague, Mrs. Davis, who announced she was not going to run again. I certainly hope it wasn't me, but clearly, clearly it could have been Mr. Aguilar. I would like to recognize you for your service and recognize you for the work we have been able to accomplish together over the last few Congresses.

So thank you for everything you have done.

Welcome to our witnesses, and today's hearing on the Cannon House Office Building Renovation is something that I am happy that the Chairperson agreed to. This decade-long, three-quarter of a billion dollar project is the most expensive project ever taken on by the Architect of the Capitol. And it is imperative that we deliver a building, post renovation, that not only meets the needs of the Members and staff and visitors of today, but for many decades to come. That is a goal that both Republicans and Democrats, not just on this Committee, but in this Congress, are aligned on.

As the Chairperson said, this building was built in 1908 as the first House Office Building named after former Speaker Joseph Gurney Cannon, a Member of Congress from my home State of Illinois, Mr. John Shimkus' district in Danville, Illinois, to be exact.

He served in this institution for 46 years.

Subsequent to the completion of Cannon, as Congress' needs grew, the Longworth and Rayburn House Office Buildings were built and, of course, later, two additional buildings were acquired, the Ford and the O'Neill buildings. However, as our footprint expanded, the last significant renovation of Cannon was in 1932.

Starting in the early 2000s, there was a realization that many of the building's systems were starting to fail and were well beyond their useful life. As discussions progressed, the decision was made to renovate the entire building in the phased approach that we are seeing today. This approach meant the project would take longer and cost more, but would be least impactful to Congress's ability to conduct business.

Fast forward to today, phases 0 and 1 are complete. Congress has appropriated \$565 million, and we are 9 months into phase 2. In my role as the top Republican on this Committee, who has had many conversations and meetings with Members about the Cannon Building, I believe I am uniquely suited to offer my observations today. I will start with saying that much of the completed phase 1 space looks great. The corridors seem brighter and cleaner, and the fifth floor Member suites are now desirable office space.

And speaking as a former staffer who worked out of fifth floor Cannon in the late 1990s, I can attest it looks much nicer up there. And Phase 1 was delivered on time in conjunction with the bian-

nual transition moves.

Unfortunately, not all of the feedback has been positive. I personally had to spend a significant amount of my time trying to help Members in Cannon that have had major issues with heating, cooling, and lighting systems. I joked with my staff a minute ago when Chairperson Lofgren talked about AC being installed. And there are some Members that really think AC still hasn't been installed in the Cannon House Office Building. I can't understate how much of an inconvenience this has been for offices and has impacted their ability to carry out their work. We must do better.

I am aware of the projected cost overruns of \$75 to \$110 million. I also understand that one of the drivers for that increase is the enormous amount of change orders. My expectations for both the Architect of the Capitol and Clark Construction moving forward are: improved transparency, not only with this Committee, but also with building occupants; better coordination with stakeholders, such as the United States Capitol Police and the House CAO in an effort to reduce the amount of required change orders in the out phases; and a commitment to deliver for Congress an office building that is going to stand the test of time, and be a model for future campus renovations.

Thank you again, Madam Chairperson, and thank you to the wit-

nesses. I yield back.

ZOE LOFGREN, CALIFORNIA

Congress of the United States House of Representatives

RODNEY DAVIS, ILLINOIS

JAMIE RASKIN, MARYLAND VICE CHAIRPERSON

MARCIA FUDGE, OHIO PETE AGUILAR, CALIFORNIA

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Ranking Member Rodney Davis Oversight of the Renovations of the Cannon House Office Building **Opening Statement** September 10, 2019

Thank you, Chairperson Lofgren, and welcome to our witnesses. Today's hearing on the Cannon House Office Building renovation is something that I am happy the Chairperson agreed to do. This decade-long, three quarter of a billiondollar project is the most expensive project ever taken on by the Architect of the Capitol and it is imperative we deliver a building post-renovation that not only meets the needs of the Member, staff, and visitors of today, but for many decades to come. That is a goal both Republicans and Democrats are aligned on.

The Cannon building was built in 1908 as the first House Office Building, named after Speaker Joseph Gurney Cannon, a Member of Congress from my home State of Illinois who served in this institution for 46 years. Subsequent to the completion of Cannon, as Congress's needs grew, the Longworth and Rayburn House Office Buildings were built and later two additional House Office Buildings were acquired, the Ford and O'Neill buildings.

However, as our footprint expanded the last significant renovation of the Cannon House Office Building was 1932. Starting in the early 2000s there was a realization that many of the building's systems were starting to fail and were well beyond their useful life. As discussions progressed, a decision was made to renovate the entire building in a phased approach. This approach meant the project would take longer and cost more but would be least impactful to Congress's ability to conduct business. Fast-forward to today, phases zero and one are complete, Congress has appropriated \$565 million dollars, and we are nine months into phase two.

In my role as the top Republican on this Committee, who has had many conversations and meetings with Members about the Cannon building, I believe I am uniquely suited to offer my observations to date. I will start with saying that much of the completed phase one space looks fantastic. The corridors seem brighter and cleaner, the fifth floor Member suites are now desirable offices spaces, and phase one was delivered on-time in conjunction with the bi-annual transition moves.

Unfortunately, not all of the feedback has been positive. I have personally had to spend a significant amount of my time trying to help Members in Cannon that have had major issues with the heating, cooling, and lighting systems. I can't understand how much of an inconvenience this has been for offices and has impacted their ability to carry-out their work. We must do better.

I am aware of the projected cost overruns of seventy-five to one hundred and ten million dollars, and I also understand that one of the drivers for that increase is the enormous amount of change-orders. My expectations for both the Architect of the Capitol and Clark Construction moving forward are: improved transparency, not only with this Committee but also with building occupants; better coordination with stakeholders, such as the United States Capitol Police and House CAO in an effort to reduce the amount of required change-orders in the out phases; and a commitment to deliver for Congress an office building that is going to stand the test of time and be a model for future campus renovations. Thank you and I yield back.

The CHAIRPERSON. The gentleman from Illinois yields back. If other Members have opening statements, without objection, they will be put into the record.

I would also now like to welcome our witnesses. Joining us this morning are Acting Architect of the Capitol, Thomas Carroll; Architect of the Capitol Inspector General, Christopher Failla; Government Accountability Office Managing Director of Infrastructure Operations, Terrell Dorn; and Clark Construction mid-Atlantic region CEO, Brian Abt.

Acting Architect of the Capitol, Thomas Carroll, was appointed Acting Architect in August of this year. As Acting Architect of the Capitol, Mr. Carroll is responsible for facilities maintenance and operation of the Capitol Building, the Supreme Court, congressional office buildings, and the grounds of the Capitol. Mr. Carroll has worked for the Architect of the Capitol since 2009, when he was hired as deputy superintendent for the House Office Buildings. In 2011, he became the agency's Chief Financial Officer, and in 2018, he was promoted to Assistant to the Architect. Before his time at the Architect of the Capitol, Mr. Carroll served in the U.S. Air Force, most recently as commander of the 11th Civil Engineer Squadron.

Architect of the Capitol Inspector General Christopher Failla was appointed as third Architect of the Capitol Inspector General in April of 2017. He is responsible for promoting the integrity, efficiency, and effectiveness of Architect of the Capitol operations and programs. Mr. Failla and his staff conduct independent audits, evaluations, and investigations, and recommend policies to detect and prevent fraud, waste, and abuse. Before joining the Architect of the Capitol, Mr. Failla completed a 26-year naval aviation career, retiring at the rank of Captain. During his last assignment, he was detailed as Director for Technical Assessment Directorate, leading 19 engineers conducting inspections and evaluations on major acquisition defense programs, military facilities, and overseeing hotline complaints and Congressional inquiries.

Terrell Dorn is Managing Director of Infrastructure Operations at the Government Accountability Office. Mr. Dorn has held his current position since 2012 and has worked on physical infrastructure issues for the GAO since 2001, following many years as a civil engineer and construction manager. He is responsible for the GAO's second largest budget, and a team of over 60 employees and contractors to provide facilities management, emergency preparedness support, and safety and security services for all GAO facilities. He also provides consulting advice on facilities management and construction issues to Congress, including this Committee. As a witness at our last hearing on this topic in 2009, we welcome you back.

Finally, Clark Construction Mid-Atlantic Region CEO Brian Abt is here representing Clark Construction. Mr. Abt is responsible for day-to-day operations of Clark's Construction operations in the mid-Atlantic region. He has been with the company for nearly 35 years and has provided executive management for more than \$2 billion worth of construction operations in Maryland, Virginia, and D.C.

Notable projects under his leadership include the National Museum of African American History and Culture, the National Museum of the American Indian, the Walter Reed National Military Medical Center Renovation and Expansion, and the National Park and U.S. Department of Transportation Headquarters.

I ask unanimous consent that all Members have five legislative days to revise and extend their remarks and that all written statements be made part of the record. And without objection, that is

ordered.

I will remind our witnesses that their full written statements will be made part of the record and that the record will remain open for at least five days for additional material, or for you to answer our questions. We have a system where we ask that your testimony be about five minutes. When the orange light goes on, it means you have just got one minute left and we ask that you try and summarize so that you can stay within your five minutes. So, first, let me turn to you, Mr. Carroll.

STATEMENTS OF THOMAS J. CARROLL III, ACTING ARCHITECT OF THE CAPITOL; CHRISTOPHER P. FAILLA, ARCHITECT OF THE CAPITOL INSPECTOR GENERAL; BRIAN A. ABT, CHIEF EXECUTIVE OFFICER, MID ATLANTIC REGION, CLARK CONSTRUCTION, LLC; AND TERRELL DORN, MANAGING DIRECTOR, INFRASTRUCTURE OPERATIONS, GOVERNMENT ACCOUNTABILITY OFFICE

#### STATEMENT OF THOMAS J. CARROLL

Mr. CARROLL. Chairperson Lofgren, Ranking Member Davis, and Members of the Committee, I appreciate the opportunity to testify before you. As an engineer and public servant for more than 30 years, I am honored to be here. But it occurred to me, as was mentioned, I was in the Air Force, serving both in Korea and the Middle East and in war zones, and that was challenging. But I have to confess, I am a little nervous today before this distinguished body. So I would appreciate if you would forgive the jitters, my first-time jitters here.

So—but in all seriousness, this is a very important project with historical significance, and I fully understand and appreciate the magnitude of the Cannon Renewal. I want to thank my colleagues sitting beside me, each of whom has an important role in the

project.

The Cannon Renewal Project is one of the Architect of the Capitol's largest and most complicated projects in its 226-year history. Many of Cannon's systems are original, dating back to 1908, or even earlier. In 1908, having indoor plumbing was considered an extravagance. Materials were delivered by horses, and construction workers were bowler hats instead of hard hats.

In the 110-plus years since then, as the world changed around it, we have updated the Cannon Building to the best of our abilities to meet the needs of Members. But every system has its limits, and every system has a life span.

As we move forward with the project, we encountered serious challenges—limited building records, advances in technology, security enhancements and code changes added to the project's scope.

In addition, investigative demolition, a best practice, could not be

done in an occupied building.

But with our largest and most complicated phases behind us, this is what we know: The rigid schedule developed to accommodate the two-year Congressional move cycle is extremely challenging. Early identification, review, and incorporation of scope changes is critical to containing costs; and, yes, the project's overall cost will increase. Some will say the Cannon is already too expensive, I can construct a whole new building for less than the budget. And my response is, yes, you probably can. A brand-new office building would definitely be easier and less costly, but displacing 142 Members, three hearing rooms, and tearing down a historic structure to build a new facility was never really an option.

The team is operating under difficult constraints. I commend the staff and contractors who are working hard to upgrade this facility for Congress, and I thank them for their service. But moving forward, this I can promise you, we are committed to the successful completion of this project, and lessons learned are being incorporated into future phases. We are encouraging a more empowered management team to elevate project concerns as soon as they are discovered and implementing hard deadlines through a new change management process. This process alone will help us avoid delays and premium costs associated with change orders of future

projects.

I mentioned earlier the costs will be increasing. A detailed analysis of the project's working estimate is ongoing. Furthermore, an integrated cost schedule, risk analysis final report is expected later this fall. The project team will use the final results of these two reports to recommend a revised program strategy to the executive working group. Until the risk analysis is complete and the final report is issued, we must refrain from making cost assumptions on future funding needs. Additional changes will be presented to the

EWG in the coming months.

Changes could include combining phases, restructuring deadlines, or moving additional offices out of the building for longer periods of time. The strategy may also reveal additional mitigation efforts in need of your support. Again, until further analysis is complete, it is imperative that we refrain from making cost assumptions. With your support, this project will successfully meet congressional needs, while also being a good steward of the taxpayer dollars. Thank you for the opportunity to testify today, and I am happy to answer any of your questions.

The statement of Mr. Carroll follows:

## Statement of Thomas J. Carroll III Acting Architect of the Capitol



### Architect of the Capitol

## Statement before the Committee on House Administration United States House of Representatives

September 10, 2019

Chairperson Lofgren, Vice Chairperson Raskin, Ranking Member Davis, and members of the Committee, I appreciate the opportunity to testify today and to provide an overview of the Architect of the Capitol's (AOC) Cannon Renewal Project. The Committee's continued interest in and support for this project is essential to the AOC's efforts.

The need for this project is well documented. The Cannon House Office Building is the oldest congressional office building outside of the U.S. Capitol and has not received a comprehensive infrastructure upgrade since the 1930s. Many of the building's systems are original, dating back to 1908 or earlier. The AOC, with the support and cooperation of Congress and our legislative branch stakeholders, recognized the importance of correcting serious safety, health, environmental and operational issues impacting members, staff and constituents. When completed, the Cannon Renewal Project will provide an updated workplace for the next century to serve the needs of the U.S. House of Representatives and support congressional operations. The updates will improve the functionality of the building for both members and staff, making it far more efficient, comfortable and safe, while retaining the historic grandeur of the building.

Studies for developing this project began in 2009. During the early planning phase of the project, we accepted that it would be extremely complex and involve stringent schedule, logistical and budgetary parameters that are inconsistent with many industry standards and best practices. While the AOC's mission to Serve, Preserve and Inspire thrives on balancing the needs of our aging infrastructure while mitigating the impact on congressional operations, this project involves unprecedented challenges that we have and will continue to overcome.

First and foremost, the project centered around the practical inability to completely relocate all 142 member offices, three hearing rooms and the essential services working within the building. Construction of this magnitude rarely occurs in an occupied building, yet we believe that we developed a workable plan to address this unique situation. The result is a rigid, 10-year renewal process where each phase is aligned to begin and end between the two-year congressional move cycles.

To support this plan, an initial Rough Order of Magnitude (ROM) estimate was prepared by the AOC and provided to Congress by the Government Accountability Office (GAO) in 2009. At that time, the GAO said that the project's scope and cost estimate were expected to change and that the expected accuracy of such a planning stage estimate is generally plus or minus 40 percent. However, this ROM was used to formally establish a firm \$752.7 million project budget.

The 2012 project design was subsequently developed within this budget while building in as much flexibility as possible to address likely unforseen conditions, such as hazardous materials that are found in older facilities across campus and expected future design alterations that commonly occur as a part of all renovation projects. As the project progresses, and we continue to address any identified issues and incoroprate lessons learned, we continue to refine and update this estimate while investigating ways to control costs.

Again, the AOC welcomed the challenges of this project. The project team worked diligently to prepare for construction to begin in 2015 on the initial two-year phase. Congress fully funded the project budget for this work, which included upgrading the building's utilities and infrastructure systems in the basement and areas of the courtyard. This foundational work included adapting the systems to completely isolate each wing so that each of the four subsequent phases could simultaneously occupy a completed wing and vacate an adjacent wing for construction.

This was the lynchpin phase, and I commend the project team for its foresight in the planning and design and the team's hard work to complete it on time and within budget.

Renewal of the building's occupied spaces began in 2017 with the largest and most complex phase of all the project phases. This was the first opportunity to test our logistical plan to relocate members and staff in conjunction with the congressional move cycle. The move cycle occurs in the post-election recess period to ensure that the new Congress is fully operational on January 1. The 30-day window proved to be a difficult process, but many stakeholders, such as the Chief Administrative Officer of the House, came together to assist in the effort. The renewal project team was supported by the AOC's House Office Buildings jurisdiction, AOC's centralized support services, as well as the Cannon Renewal's Executive Working Group (EWG).

Established in 2016, the EWG is comprised of the Speaker's Office, the Committee on House Administration, the House Committee on Appropriations Subcommittee on Legislative Branch, the Office of the Clerk, the Chief Administrative Officer of the House, the House Sergeant at Arms and the U.S. Capitol Police. The EWG meets regularly to receive project updates and to assist with high-level decisions impacting the project's progress. This group is critical to the renewal's success.

The EWG closely monitored Phase 1, as it contained the largest project impacts to the building and to building occupants. This phase included the relocation and renewal of 31 member offices, two of the building's three historic committee hearing rooms, the renewal of the Cannon Rotunda as well as the beginning of the construction for a completely new fifth floor that will be constructed during each successive phase.

Throughout Phase 1, construction work occurred around the clock, with activities including demolishing and rebuilding the fifth floor, conserving the exterior stonework and rehabilitating the individual office suites. To the extent possible, the Cannon Renewal team works to minimize the noise impacts of jackhammering, grinding, sawing, hammering, scraping and drilling activities. We know that this is disruptive to congressional activity and office operations, and we appreciate everyone's support and patience.

Changes in any infrastructure project are inevitable and driven by the need to address unforseen conditions, code updates, design flaws and/or required scope additions. Changes can be minor, but some are disruptive to the overall project schedule and cost. This is particularly true when working on historic renovations. The unique characteristics of each historic project, including archaic construction materials, hidden details and outdated construction techniques, require innovative thinking and creative approaches that are not obvious at first glance and can not be anticipated in the design. While there may be some ideas that can be used from project to project, specific details differ greatly.

As you are aware, there was limited original documentation on Cannon, so surprises in the original structure were bound to arise. Unforeseen site conditions such as the unexpected need for hazardous material removals and more extensive exterior stone restoration were significant. Complications installing new ducts and conduit in the basement impacted constructability. And numerous scope changes, including code-driven updates and stakeholder requests, were persistent throughout the two-year phase.

Normally, many of these issues could have been identified and prevented by a thorough pre-construction destructive investigation. This was impossible to accomplish while members were still in their offices, which meant it could not be done until the wing was vacated and construction began. This was a great challenge during the past two years, however, we believe that we have now uncovered the majority of those construction and design surprises and we are better prepared to mitigate similar issues in the future.

To the extent possible, we incorporated Phase 1 design and construction changes into the remainder of the project to minimize time delays and premium costs associated with change orders. Implementing a new change management process and more aggressive schedule management will more quickly identify the schedule impacts of changes and better control acceleration costs. Projects need to be agile enough to respond to emerging requirements, but must also be disciplined enough to protect against unnecessary impacts to the schedule and budget. The AOC needs this Committee's support as an integral member of the EWG to ensure these efforts are successful.

In addition, because the schedule for each phase of this project is tied to the move processes associated with each two-year congressional election cycle, very little schedule flexibility can be given to accommodating changes. I intend to ask the EWG to work with the project team to consider options to ease the scheduling constraints. From adjusting how the phases are aligned with the move cycles, to potentially combining work spanning future phases, the project team stands ready to evaluate and assess the impact of all options.

As mentioned earlier, the 2009 estimate must be updated to better reflect project realities. The project's overall cost will increase. To address this, a detailed analysis of the project's working estimate is ongoing. And the Integrated Cost Schedule Risk Analysis (ICSRA) final report, performed per GAO guidelines, is expected later in the fall. The project team will utilize the results of these two work products to recommend a revised program budget to the EWG. Until the ICSRA is completed and the final report is issued, it is imperative that we refrain from making assumptions on the future funding need.

Additional lessons learned arose as the project transitioned from construction to our facility operations mission. A large part of understanding the operations of the newly constructed wing includes ongoing communication with and feedback from impacted members and staff. The AOC's House Office Buildings' service center manages the work orders received and then routes them to the Cannon Renewal's project team for review. The project team determines if the issue is the responsibility of the project contractor or if it is in the purview of general facilities maintenance performed by the AOC.

Thus far, input from offices generally falls into three categories: temperature adjustments, light fixture modifications and general repairs. General repairs are those typically associated with punch-list and warranty work on construction projects. This work also includes the testing, or commissioning, of the HVAC systems. It wasn't possible to test the systems prior to occupying the offices, so

simulations were made. This is not a best practice, as simulations cannot mimic the exact conditions to address potential problems the testing seeks to identify, but was a necessary modification to adhere to schedule constraints. The testing schedule for future phases is another area the project team and the EWG will consider as we seek additional improvements from lessons learned.

Feedback related to temperature adjustments and light fixture modifications have shown that the Cannon team must improve our pre-move-in education for member offices to ensure they know how to use the new systems. AOC staff has visited all of the new office occupants to offer an instructional tutorial on the thermostat controls and we have disabled new light fixture motion detectors in Phase 1 offices upon request. We will continue to work with these offices and plan to be better prepared for the new offices that will be moving in following the completion of future phases.

From the first studies, through design, construction and operations of the new infrastructure, the Cannon Renewal Project continues to redefine how the AOC addresses our aging infrastructure and will combat ever-increasing operational and capital needs across campus. Our commitment to our unique mission to Serve, Preserve and Inspire is deeply rooted in our interdependent relationship with Congress and our legislative branch stakeholders. We look forward to working with you, and we greatly appreciate your continued support.

The CHAIRPERSON. Thank you very much for your testimony. We will turn to you, now, Mr. Failla. You are recognized for five minutes.

#### STATEMENT OF CHRISTOPHER P. FAILLA

Mr. Failla. Chairperson Lofgren, Ranking Member Davis, and Members of the Committee, good morning. I am pleased to testify today regarding oversight of the renovations of the Cannon House Office Building. Since becoming the Architect of the Capitol Inspector General in April 2017, I have implemented many of the changes I testified that I would take when I sat before you in May 2017. My written statement highlights these changes and the work my office has done over the last two and a half years, but today, I would like to concentrate my oral statement on work completed concerning oversight of the Cannon Renewal Project.

Two-and-a-half years ago, my audit division consisted of two auditors and, at the time, were not equipped to conduct audits of large, complex, construction projects, as well as audit many other programs and projects at the Architect of the Capitol while still fulfilling statutory requirements. In fact, due to my limited audit staff, I was forced to suspend an audit on the Cannon Renewal Project last summer and find another way to provide oversight of

this \$752.7 million construction project.

Since that time, with the help of many Congressional oversight committees, including the Committee on House Administration, we have grown the audit staff from two to five auditors, and most recently, completed a year-long search for an independent contractor to aid us in conducting construction audits. I am happy to report that we are now partnered with Cotton & Company to begin two Cannon construction audits this year. The first of these two audits was announced August 13th, and is scheduled to have a final report published in April 2020. The objective of this audit is to assess the effectiveness of phases 0 and phase 1 contract modifications.

Our second Cannon Renewal audit of the year was announced yesterday and will have Cotton & Company auditing the project's invoices. Our objective here is to assess the Cannon Renewal Project's invoices for phases 1 and 2, and to ensure the cost and payments were made in accordance with contract requirements,

AOC policies and procedures, and industry standards.

Our goal with this newly formed relationship is to conduct two audits per year under this contract until the Cannon Renewal Project is completed. These audits will account for 50 percent of my audits for the year. Other audit areas could assess the Cannon Renewal Project's labor cost, and look for product substitution, or include any other guidance the Committee wishes for us to review.

In addition to these audits, the audit division has continually fulfilled the explanatory statement accompanying the fiscal year 2016 Legislative Branch Appropriations Act obligation that instructed the AOC OIG to provide the Committee a report on the Cannon Renewal Project quarterly, which has since been changed to semi-annually. Our seventh report of my tenure is due out at the end of this month.

In these reports we provide an assessment of seven categories that we feel would be important to the Committee. These seven categories are safety, security, schedule, budget, client satisfaction, contract management, and risk management. Within these reports over the last two years, we have cautioned about growing costs stemming from change modifications and client requests, uses of personnel from other jurisdictions to supplement contractor work, and the use of contingency funds from other phases to supplement the cost of prior phases.

Additionally, when it was discovered that phase 1 was trending over budget, we requested that the AOC provide the OIG with a recovery plan that would keep the project within the planned budget. I contracted to have this recovery plan reviewed by the U.S. Army Corps of Engineers. However, after many delays and changed delivery dates, the recovery plan was provided post phase 1 and

was of no value and, therefore, not reviewed.

In July 2019, I requested an estimated cost update of the Cannon Renewal Project and received a new working estimate on July 5th. In preparation for this hearing, the AOC has shared that the project was trending to run \$75 million to \$100 million over budget, or 10 to 15 percent above original cost estimates. Current briefings that I have had with the Cannon project managers have projects increasing approximately \$79 million, or 10.5 percent. I believe that this is a conservative estimate, especially with requests for equitable adjustments in phase 1 possibly adding as much as \$26 million to this new budget estimate.

Additionally, the contingency rate, currently set at 9 percent, is expected to increase. The final percentage rate will not be known until the cost and risk assessments are completed this fall. My staff and I have reviewed a draft Cannon Renewal budget estimate with project managers line item by line item and found little or no room to descope the project further without a change in schedule, security, or staffing.

In closing, I have placed an emphasis on audit work to oversee the Cannon Renewal Project and believe continuation of our Cannon semi-annual reports to Congress will be an effective tool to provide transparency, while Cotton & Company's two construction audits per year aid me in fulfilling my obligation to provide oversight

of this important, costly project.

I look forward to working with Cannon project managers to gain greater insight into the raw data that will help me provide meaningful recommendations. Thank you for the opportunity to address the Committee today, and I look forward to answering your questions.

[The statement of Mr. Failla follows:]

### STATEMENT OF CHRISTOPHER P. FAILLA, INSPECTOR GENERAL ARCHITECT OF THE CAPITOL

Regarding Oversight of the Renovations of the Cannon House Office Building

#### Committee on House Administration, U.S. House of Representatives

#### **SEPTEMBER 10, 2019**

#### Introduction

Chairperson Lofgren, Ranking Member Davis and members of the Committee, I am pleased to submit this testimony regarding oversight of the Cannon House Office Building Renewal Project.

I am excited to be at the helm of the Architect of the Capitol (AOC) Office of Inspector General (OIG) as its third statutory Inspector General. Created in 2008, the OIG is a relative newcomer to the Inspector General (IG) community, overseeing a legislative branch agency that is over two centuries old. I want to thank the committee for its continued support during my two and half years as the IG and for seeing the enormous potential an IG brings to strengthen our organizations by adeptly overseeing the agency's programs and operations with independence and objectivity.

When I last testified in May 2017, my office was riddled with vacancies, had an employee morale problem, and was recovering from a less than flattering Government Accountability Office (GAO) report. Since that time, the office has addressed all of the GAO recommendations, filled the many vacancies as well as realigned jobs and created new billets to drive mission efficiency and effectiveness. Our current OIG operates independent of the agency and is a model for legislative IGs with a staff devoted to the mission. We are an active voice and participant with the Counsel of Inspectors General on Integrity and Efficiency (CIGIE). Additionally, we have stood up a new Inspection and Evaluation division, passed three CIGIE peer reviews, produced six quarterly/semiannual Cannon Renewal Project reviews for Congress and closed eight audits, five evaluations, and 43 investigations as well as produced a comprehensive sexual harassment inquiry covering the last 10 years of harassment claims at the AOC. Additionally, we have announced two new evaluations with final reports due in April 2020 and have 10 ongoing investigations, eight ongoing complaints, and three ongoing audits. Finally, we are currently conducting a CIGIE audit peer review of the Library of Congress OIG and are acting as the contracting officer's technical representative for the ongoing financial statement and Cannon Renewal Project Modification audits conducted by an independent auditor.

Today's hearing will discuss the oversight that my audit division has done of the Cannon Renewal Project.

At the beginning of summer 2018, due to staffing issues in the Audit division, I was forced to suspend an audit on the Cannon Renewal Project and find another way to provide oversight of this \$752.7 million dollar construction project.

Since that time, and with the help of many congressional oversight committees including the Committee on House Administration, we have grown the audit staff from two to five auditors and most recently completed a yearlong search for an independent contractor to aid us in conducting construction audits. I am happy to report that we are now partnered with Cotton & Company LLP to begin two construction audits for the Cannon Renewal Project this year. The first of these two audits was announced August 13, 2019, and is scheduled to have a final report published in April 2020. The objective of this audit is to assess the effectiveness of contract modifications. Specifically, the audit will determine whether change orders, which have in part driven Phase 1 costs to increase by approximately \$38 million, were reasonable, authorized, supported and complied with contract requirements. The scope of the audit will include contract modifications from the project's preconstruction services or Phase 0 and Phase 1. Our second audit will have Cotton & Company LLP auditing the Cannon Renewal Project's invoices. Our objective here is to assess the AOC's review of the Cannon Renewal Project's invoices for Phases 1 and 2 to ensure the costs and payments were made in accordance with contract requirements, AOC policies and procedures, and industry standards.

Our goal with this newly formed relationship is to conduct two construction audits per year under this contract until the Cannon Renewal Project is completed. These audits will account for 50 percent of my audits for the year. Other audit areas could assess the Cannon Renewal Project's labor costs and look for product substitution or include any other guidance the committee wishes for us to review.

In addition to these new construction audits, the Audit division has fulfilled the obligation placed upon it by the Explanatory Statement accompanying the Fiscal Year 2016 Legislative Branch Appropriations Act that instructed the AOC OIG to provide the committee a report on the Cannon Renewal Project quarterly and which has since been changed to semiannually. Prior to my arrival, the office had only produced one quarterly report. Since my arrival, we have provided six reports, all on time, and have our seventh due out this month covering a six-month period ending in June 2019.

In these reports, we provide an assessment of seven categories that we feel would be important to the committee. These seven categories are: safety, security, schedule, budget, client satisfaction, contract management and risk management. Within these reports over the last two years, we cautioned about growing cost stemming from change modifications and client requests, usage of personnel from other jurisdictions to supplement contractor work, and the use of contingency funds from other phases to supplement the costs of prior phases.

Additionally, when it was discovered that Phase 1 was trending over budget, we requested the AOC provide the OIG with a recovery plan that would keep the project within the planned

\$752.7 million budget. The OIG contracted to have this recovery plan reviewed by the U.S. Army Corp of Engineers. After many delays and changing delivery dates by the contractor and the AOC, the recovery plan was provided post Phase 1 completion and was of no value and therefore not reviewed. In July 2019, the OIG requested an estimated cost update of the Cannon Renewal Project and received a new working estimate on July 5, 2019. In preparation for this hearing, the AOC has become much more transparent with the OIG and has shared that the project was trending to run \$75 to \$100 million over budget or 10-15 percent above original cost estimates. Current briefings that I have had with the Cannon project managers have the project increase at approximately \$79 million or 10.5 percent. The AOC OIG believes that this is a conservative estimate, especially with Request for Equitable Adjustments estimated in Phase 1 possibly adding as much as \$26 million to this estimate. The contingency rate currently set at nine percent is expected to increase as well. The final percentage rate will not be known until the final risk assessment is completed by MBP-AECOM and Hulett & Associates, which is expected in the fall of 2019.

My staff and I have reviewed a draft Cannon Renewal Project Budget estimate with Cannon Renewal project managers line item by line item and have found little or no room for descoping the project further without affecting schedule, security or staffing.

In closing, the AOC OIG has placed an emphasis on our audit work to oversee the Cannon Renewal Project and believes continuation of our Cannon Semiannual reports to Congress will be an effective tool to provide transparency. Additionally, I am very excited to have Cotton & Company LLP conducting a minimum of two construction audits of the Cannon Renewal Project per year and aiding the OIG in fulfilling our obligation to provide oversight of this important and costly project. My written statement provides expanded details of the accomplishments and ongoing OIG work being completed by my relatively small IG office and I will be happy to brief the committee in further detail on any of our efforts.

Thank you for the opportunity to address the committee. I look forward to answering your questions.

The CHAIRPERSON. Thank you very much. We will turn now to Mr. Dorn. You are recognized for five minutes.

#### STATEMENT OF TERRELL DORN

Mr. DORN. Thank you. Chairperson Lofgren, Ranking Member Davis, and Members of the Committee, thank you for the opportunity to come here today and join in this discussion about the Cannon House Office Building Renovation. In spite of regular appropriations by Congress and good maintenance by the Architect of the Capitol, there came a time when the Cannon Building's infrastructure was just worn out, and no longer compliant with numerous codes. The best way to preserve this asset and protect the people who use it every day was to fund a major renovation, and that is just what Congress did.

Chairperson Lofgren, as you may remember, just a little over 10 years ago, I testified before this Committee about this project at a very early design stage, and GAO recommended at the time that the construction estimate was much too preliminary for funding, and that finishing the design was necessary in order to get a better idea of budget needs. Your comments were something along the lines of, it is important that we adequately map out the program before we begin the actual project. Very appropriate. But unfortunately it doesn't appear that that happened.

Sometime later, the AOC reports, the budget was set at the same \$753 million that we had discussed. The AOC then began the very prudent exercise of trying to adjust scope and design to that budget. And even though the planned duration of the project doubled, and the design was not complete, they attempted to hold to that same budget and started construction in 2015.

In 2018, they performed a cost and schedule risk assessment that confirmed there was a high likelihood that they would still finish within budget, but their consultant also warned that inaccurate, or overly optimistic assumptions about their ability to mitigate project risks could lead to higher costs. Phases 0 and 1 are now substantially complete, and phase 2 is underway. Some of the risk that the project team anticipated, such as hazardous material abatement, have occurred, and cost or schedule mitigation efforts may not have been as successful as anticipated.

Based on current projections provided by the construction team, it appears that without a significant reduction in scope, their project will be under significant cost pressure that could make it very difficult to complete this renovation within the allotted budget.

Ongoing efforts by the AOC to perform a new cost and schedule risk assessment are a best practice and an excellent step in determining what it is going to take to finish this renovation and preserve the historic Cannon Building for another 100 years.

Chairperson Lofgren, that concludes my statement. Thank you for your time. I am available to answer any questions.

[The statement of Mr. Dorn follows:]

Chairperson Lofgren, Ranking Member Davis, and Members of the Committee:

Thank you for the opportunity to discuss the Architect of the Capitol's (AOC) efforts to renovate the Cannon House Office Building (Cannon project). AOC intends to preserve the historic character of and address deterioration to components and systems in the 111 year-old Cannon Building, and improve the functionality of suites for members of the House of Representatives (Members). The Cannon project is nearing the mid-point of its planned 10-year duration.

My statement today provides information on (1) the status of the Cannon project and (2) changes to the project's estimated cost at completion. It is based on our 2009 and 2014 assessments of AOC's planning and cost estimating for the Cannon project prior to the start of construction as well as our observations made during construction to support congressional oversight of the project. Detailed information on the scope and methodologies for our 2009 and 2014 reports can be found in GAO's published products, which are cited throughout this testimony. Our ongoing observations of the construction have included reviews of AOC's project summary reports, construction contractor reports, and other project documentation and recurring discussions with AOC and contractor officials as well as other project stakeholders.

We conducted the work on which this statement is based in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

#### **Background**

The Cannon Building, completed in 1908, is the oldest congressional office building and occupied by Members and their staffs. (See fig. 1.) The Cannon Building houses 142 office suites, five conference rooms, four hearing rooms, and the Caucus Room, which can

¹GAO, Architect of the Capitol: Plans for Renovating the Cannon House Office Building and Garages, GAO-09-673T (Washington, D. C: May 6, 2009) and Architect of the Capitol: Incorporating All Leading Practices Could Improve Accuracy and Credibility of Projects' Cost Estimates, GAO-14-333 (Washington, D. C.: Mar. 25, 2014). In our 2014 report, we found that AOC's cost estimating policies and guidance did not require a quantitative risk and uncertainty analysis nor the reporting of the resulting confidence level of the estimate. We made recommendations for AOC to incorporate leading practices into agency guidance and submit confidence levels of cost estimates to Congress. AOC implemented our recommendations. These leading practices are listed in GAO, Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs, GAO-09-3SP (Washington, D. C.: Mar. 2, 2009).

accommodate large meetings. The building also includes a library, food servery, and a health unit.

Figure 1: Cannon House Office Building, Washington, D. C.



Source: Architect of the Capitol. | GAO-19-712T

AOC began developing the scope for the Cannon project in approximately 2004 when its consultant conducted a facility condition assessment that identified the building's deficiencies. This condition assessment identified, for example, that the hot water, heating and air-handling systems had components dating back to the 1930s that are in need of replacement. In addition, the assessment identified deficiencies such as an outdated fire alarm system for which repair parts were difficult to obtain, worn and damaged marble tile in corridors, and original windows that were damaged and often nonfunctional.

AOC continued its planning and design work through 2014 to establish the final scope of the Cannon project, which entailed correcting most of the identified deficiencies and addressing current requirements such as for energy conservation, physical security, hazardous materials abatement, and historic preservation. Key components of the project, among other things, include:

- substantial reconfiguration of member suites and the reconstruction of the building's top floor to convert storage space into new suites,
- refurbishment of windows and installation of a new roof,
- · preservation of the building's stone exterior,
- replacement of all plumbing, heating and cooling, fire protection, electrical, and alarm systems, and

refurbishment of restrooms to make them more accessible to people with disabilities.

As part of the development process for the Cannon project, AOC established a budget of approximately \$753 million. Key components of the budget include costs for the construction contract; architect and engineering (A/E) design services; construction management support; security; furniture and fixtures; swing space design and construction; contractor incentive bonuses; and contingency.<sup>2</sup>

AOC is using the Construction Manager as Constructor (CMc) delivery method to implement the Cannon project. Under this approach, AOC:

- · contracted with a construction contractor that consulted on the project's design, and
- negotiated with the construction contractor to set a "guaranteed maximum price" for the construction work based on the completed design.<sup>3</sup>

AOC also contracted with an A/E firm, which produced the design for the project and is providing consultation during construction, and with a Construction Manager as Agent (CMa), that provides administrative and technical support to AOC in managing the construction work.

AOC scheduled the Cannon project's construction in five sequential phases with an initial phase (Phase 0) for utility work and four subsequent phases (Phases 1 through 4) to renovate the north-, south-, east-, and west-facing sides of the building. Each phase is scheduled around a 2-year congressional session. As the project progresses, tenants displaced during construction (Phases 1 through 4) are to move to temporary offices while other occupants are to remain in the building sections not affected by construction.

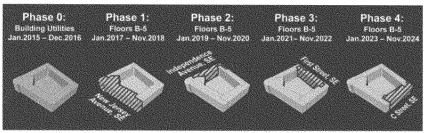
#### AOC Has Completed Two of Five Phases of the 10-Year Cannon Project

Currently, AOC has substantially completed Phase 0 and Phase 1 of the five phases planned for the Cannon project and is progressing with work on Phase 2, which it expects to complete in November 2020. (See fig. 2.)

<sup>&</sup>lt;sup>2</sup>We are not providing details on project costs because some costs relate to open contracts, and information about contract costs is procurement sensitive.

<sup>&</sup>lt;sup>3</sup>A guaranteed-maximum-price contract sets the maximum price (GMP) that the AOC will pay the CMc for work associated with the Cannon project. The GMP does not include changes to the project's scope that require modifications to the design and an upward or downward price adjustment. For example, if the A/E modifies the design, the AOC negotiates the cost of changes in the project's scope with the CMc.

Figure 2: Planned Cannon Office Building Renewal Phases



Source GAO | GAO-19-7127

AOC completed Phase 0, as planned and under its budget estimate, from January 2015 through December 2016. This work primarily included the construction contractor's replacement of the utility infrastructure and distribution systems in the basement, garage, and courtyard. During this time, AOC also managed the work of its Construction Division to build 31 additional Member Suites to offset the suites that would be inaccessible when sections of the building were under construction.

From January 2017 through December 2018, AOC managed the renovation of the first of four building sections, consisting of the building's West side (facing New Jersey Avenue) and Rotunda (Phase 1). AOC substantially completed Phase 1 to enable occupancy of the building section, as planned, on January 3, 2019, at the start of the 116th Congress. However, it is continuing to address "punch-list" items of incomplete or corrective work from Phase 1. AOC expects to complete the punch-list items by December 2019. Further, AOC encountered several issues during the Phase 1 renovation that have prevented it from settling the costs for this phase and that will affect the cost of the project's later phases. According to AOC's most current (July 2019) Executive Summary, unforeseen conditions, design issues, and scope changes have increased both the estimated cost for Phase 1 and the project's three remaining phases. For example, AOC found that more extensive exterior stone restoration was needed than planned and encountered some unforeseen asbestos-containing materials in the roof that it needed to mitigate. Further, AOC needed to provide additional security features to address U.S. Capitol Police requests. Collectively, these issues are creating cost pressures that have caused AOC to reassess the cost to complete the project. We discuss the project's costs in greater detail later in this testimony.

AOC is currently progressing, as planned, in renovating the north side of the building (facing Independence Avenue), which is the second of the four building sections to be renovated (Phase 2). Because the work in this phase and the Cannon project's remaining phases is similar to work completed in Phase 1, AOC expects to benefit from its application of lessons learned. For example, AOC reported that its construction contractor experienced challenges installing the temporary roof enclosure that it used in Phase 1. Based on this experience, AOC officials told us that the contractor developed a new design for the temporary roof enclosure that the contractor expects to install more rapidly in the project's remaining phases than in Phase 1.<sup>4</sup> Further, because the materials in Phases 2 through 4 are the same as in Phase 1, AOC officials expect that the process of approving the construction contractor's use of these materials should proceed faster in these later phases and enable construction to progress more efficiently.

## AOC Had Consistently Estimated the Cannon Project Cost to be \$753 Million, But Recently Increased Its Estimate

In 2009, we reported that AOC expected to request approximately \$753 million for the Cannon project.<sup>5</sup> At the time, AOC expected the project to be in five phases over 5 years. Because the project was in an early development stage at that time, we said:

- · that AOC's estimate should not be considered sufficiently accurate for funding purposes,
- · that the cost and scope were likely to change, and
- that it would be important for AOC to continue to refine the project's scope and cost estimate to provide Congress with the information it needed to make decisions about the project.

When we next reported on the Cannon project in 2014, AOC had completed most of the planning and design and was preparing to award the contract for construction, which was to

In Phase 1 of the Cannon project, the contractor's approach was to anchor the temporary roof enclosure to the building, a process that necessitated a lengthy engineering analysis to determine the amount and location of anchor points. In Phase 2 of the project, the contractor intends to anchor the temporary roof enclosure to the scaffolding placed adjacent to the building. The contractor expects that the engineering analysis to determine how to anchor the roof enclosure to the scaffolding will be comparatively simpler and take less time.

<sup>&</sup>lt;sup>5</sup>GAO-09-673T.

begin in January 2015.6 As part of our 2014 review of AOC's cost estimating policies and guidance, we compared AOC's cost estimate for the Cannon project-still \$753 million-to our leading practices for developing high-quality, reliable cost estimates.7 We found the AOC's cost estimate reflected several, but not all, of our leading practices. In particular, we found that AOC's estimate included ground rules and assumptions; provided a reasonable explanation of the basic estimation methodologies; and integrated separately produced estimates from AOC's architect, construction manager, and construction contractor to enable a reasonably accurate assessment of estimated costs. Further, we found AOC had conducted a cost risk and uncertainty analysis in accordance with a key leading practice.8 This analysis concluded that based on AOC's inputs and assumptions, there was a high probability (over 90 percent) that actual costs would be equal to or less than AOC's \$753 million estimate.9 This estimate included contingency factors to account for risks and uncertainties. However, our review of AOC's guidance for developing cost estimates found that the guidance did not provide documented reasons explaining how the actual contingency amounts were developed. In addition, we found that the method AOC used to model the project's risks in its cost risk and uncertainty analysis (1) resulted in an unusually narrow range of estimated costs and (2) provided managers limited ability to understand the effects of individual risks. We recommended that AOC improve its costestimating process, such as by incorporating leading practices we identified as lacking for cost estimating into its cost-estimating guidance and policies. AOC has since implemented our recommendations.

In January 2018, while Phase 1 of the Cannon project was in progress, AOC updated its analysis of risks by undertaking a study (termed an integrated cost-schedule risk analysis) to

<sup>&</sup>lt;sup>6</sup>GAO-14-333.

<sup>&</sup>lt;sup>7</sup>GAO-09-3SP.

<sup>&</sup>lt;sup>8</sup>AOC, Cannon House Office Building Renewal: Cost Risk and Uncertainty Analysis; Sensitivity Analysis (Jan. 17, 2014 – Draft).

<sup>&</sup>lt;sup>9</sup>The probability of an estimate's likelihood of occurrence can be used to establish confidence levels for budgeting purposes. While no specific confidence level is considered a best practice, experts agree that cost estimates should be budgeted to at least the 50 percent confidence level, but budgeting to a higher level (for example, 70 percent to 80 percent, or the mean) is common practice. Moreover, experts stress that contingency reserves are necessary to cover increased costs resulting from unexpected design complexity and incomplete requirements, among other factors. (See GAO-09-3SP).

determine the potential effects of these risks on the project's cost and schedule. <sup>10</sup> Updating risk analyses and their effect on project cost estimates is consistent with leading practices for developing both a high-quality, reliable cost estimate and schedule. <sup>11</sup> AOC's 2018 analysis arrived at the same conclusion as its 2014 analysis—that the estimated \$753 million total project cost was adequate and that there was a high probability (over 80 percent) that actual costs would be equal to or less than the \$753 million estimate. However, this analysis was qualified on the assumption that AOC and project stakeholders are able to adequately mitigate risks identified through the analysis. Additionally, the analysis indicated that inaccurate estimates of costs for risk mitigations, currently unknown risks, and optimistic assumptions about the impact of risk mitigations on the project's cost and schedule could affect the project's total cost.

As noted previously, the project is experiencing cost pressures from the greater-than-anticipated risks and ineffective mitigations stemming from unforeseen conditions, design issues, and scope changes. In June 2019, AOC reported that it expects that the cost to complete the Cannon project will increase by 10 to 15 percent over its initial estimate of \$753 million, resulting in a final cost between approximately \$828 million and \$866 million. AOC reported that the following key factors affect the project's cost:

- Phase 1 completion costs. While Phase 1 work has been substantially completed, AOC
  has yet to settle all outstanding change proposals. AOC reported that the cost to
  complete Phase 1 is greater than it initially planned and that it will not know the final cost
  for this phase until it completes negotiations of the cost of unsettled change proposals.
- Phase 2 modifications. While Phase 2 work has begun, AOC is awaiting the contractor's
  proposal on the costs to address the requirements outlined in four "design bulletins"
  issued by AOC that, in part, describe changes to the project's scope based on lessons
  learned in Phase 1. AOC estimates that the contract modifications described by the
  design bulletins will increase the cost of Phase 2.

<sup>&</sup>lt;sup>10</sup>AOC, Cannon House Office Building Renewal: Integrated Cost-Schedule Risk Analysis 2017 (Jan. 2018 – Prefinal Draft).

<sup>&</sup>lt;sup>11</sup> GAO-09-3SP and Schedule Assessment Guide: Best Practices for Project Schedules, GAO-16-89G (Washington, D. C.: Dec. 22, 2015).

<sup>&</sup>lt;sup>12</sup>AOC, Program Budget Review (June 30, 2019 Draft).

Phase 3 and 4 modifications. AOC expects that it will award these future phases of the
project at higher amounts than it initially planned based, in part, on the estimated cost of
incorporating the additional work described in the design bulletins.

In August 2019, AOC began updating its integrated cost-schedule risk analysis, with the aim of more accurately determining the extent to which the project's costs are increasing and its estimated cost at completion. By updating the analysis, AOC should be better able to make informed decisions as construction progresses. Further, updating the analysis should enable AOC to more precisely estimate the Cannon project's cost at completion and better position AOC to make a more accurate budget request to Congress for remaining costs.

Chairperson Lofgren, Ranking Member Davis, and Members of the Committee, this concludes my prepared statement. I would be pleased to respond to any questions that you may have at this time

#### **GAO Contacts and Staff Acknowledgments**

If you or your staff has any questions concerning this testimony, please contact Terrell Dorn at (202) 512-6923 or dornt@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. In addition to the contacts named above: Michael Armes (Assistant Director); George Depaoli (Analyst-in-Charge); Geoffrey Hamilton; Malika Rice; Kelly Rubin, Steve Schluth, and Amelia Michelle Weathers made key contributions to the testimony. Other staff who made contributions to the reports cited in the testimony are identified in the source products.

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The CHAIRPERSON. Thank you very much. We will turn now to you, Mr. Abt, for your testimony.

#### STATEMENT OF BRIAN ABT

Mr. ABT. Chairperson Lofgren, Ranking Member Davis, and Members of the Committee, thank you for inviting me to discuss the renovation renewal of the Cannon Office Building. My name is Brian Abt. I am the Chief Executive Officer of Mid-Atlantic Region for Clark Construction Group. We are an American-owned and operated company headquartered in Bethesda, Maryland. Today, we are one of the largest privately held, U.S.-owned contractors in the Nation with more than 4,000 employees and offices and job sites across the country.

In 2012, Clark partnered with Michigan-based Christman Company to form the Clark/Christman Joint Venture, or CCJV. Christman is known for its work on numerous historic renovation projects. Our joint venture brings together our companies' com-

bined talents to support the Cannon Renewal Project.

The project was conceived as a 13-year program aimed at modernizing the Cannon House Office Building, while preserving its historic character and assuring its efficiency, safety, and sustainability. CCJV is responsible for the construction of the renovation work in collaboration with the Architect of the Capitol, the third-

party design team, and members of the team.

The Architect of the Capitol was truly innovative in establishing a process to encourage team work and problem-solving by all parties. From the outset, the project partners committed to a one-team approach. We and the other stakeholders committed to work under a common charter to further one mission—to create a 21st century building that preserved the 20th century historic fabric of this national treasure.

Moreover, as we have carried out our construction activities, we have sought always to keep the safety of those who use the Cannon Building and the safety of our workers first, and to minimize any disruptions to the important, ongoing operations of the Congress.

The Cannon Renewal Project was planned to be delivered in phases organized around two-year Congressional cycles. Following a two-year design phase, the renovation proceeded as follows. Phase 0 was the enabling phase and ran from January 2015 to November 2016. This phase consisted of putting in place the infrastructure backbone for the renovation, much of it in the basement. Phase 1 was constructed between January 2017 and December 2018. It included renovations to the west side of the building along New Jersey Avenue. This phase was the largest and most complex of the above-grade phases.

Phase 1 included numerous specialty areas like the historic fourstory rotunda, the sizeable Caucus room, budget hearing room, Homeland Security hearing room, and the food servery. Phases 2, 3, and 4 are scheduled to be completed in two-year periods between January 2019 and November 2024. They each involve renovations similar to those in phase 1, although each involves a smaller over-

all building area and fewer specialty spaces.

We are well into phase 2 and have made positive and significant progress. I am proud of the notable successes we have delivered so far. The initial phase, phase 0, was completed on time and within

budget.

Phase 1, the largest and most ambitious phase, was completed in time for the opening day of the 116th Congress. This was due to the Herculean effort of the entire team, especially our subcontracting partners and hundreds of craft workers whose dedication and hard work, much of it at night, on weekends and holidays, enabled us to open phase 1 in time to welcome Members of Congress and their staffs.

We achieved this despite challenges the team faced with unforeseen conditions in the 110-year-old Cannon House Office Building and with changes required by the owner. And during each phase, we and the other team members have worked together to incorporate lessons learned, improve performance, and meet our mission more efficiently.

It is important to note that as we sit here today at approximately the halfway point of this 13-year program, we are on track with the overall schedule as originally envisioned by the Architect of the Capitol at the outset of the program seven years ago.

Capitol at the outset of the program seven years ago.

The team has certainly experienced challenges. However, despite those challenges, the Cannon Renewal One team has completed each of the phases so far in time to meet congressional cycles. This

is a significant and important accomplishment.

We understand the trust placed in CCJV and the entire Cannon Renewal team to preserve the historic fabric of the Cannon Building, while delivering these important renovations in a manner that meets the expectations of the Architect of the Capitol, key stakeholders such as each of you, and many members of the public who visit the Cannon Building. We are honored to be working on this landmark project and supporting the important work that all of you do as Members of Congress. Thank you, again, for the opportunity to discuss this important project, and I look forward to answering any questions the Committee may have.

[The statement of Mr. Abt follows:]

### Testimony of Brian Abt Chief Executive Officer, Mid-Atlantic Region, Clark Construction Group, LLC

### Before the U.S. House of Representatives Committee on House Administration

### For a Hearing Concerning Oversight of the Renovations of the Cannon House Office Building

September 10, 2019

Chairperson Lofgren, Ranking Member Davis, and Members of the Committee, thank you for inviting me to discuss the renovation and renewal of the Cannon House Office Building.

My name is Brian Abt, and I serve as Chief Executive Officer, Mid-Atlantic Region for Clark Construction Group, an American-owned and operated company headquartered in nearby Bethesda, Maryland. Clark was founded by George Hyman, a Lithuanian immigrant, in 1906, two years before the historic Cannon building was completed. Our company's history is an American success story with Mr. Hyman's small company starting right here in Washington, DC and growing into one of the largest privately held, U.S.-owned general contractors. Overall, we have more than 4,000 employees in offices and jobsites across the United States. I am including a history of our company and an overview of our work as a supplement to my testimony (Exhibit 1).

We are proud to have built many of the significant landmarks in the Greater Washington Region and around the country. Our work has included new construction as well as renovation of important federal projects, such as the Walter Reed National Military Medical Center in Bethesda, Maryland; the Smithsonian's National Museum of African American History and Culture on the National Mall; the Women in Military Service for America Memorial at the entrance to Arlington National Cemetery; the new U.S. Coast Guard Headquarters just across the river in Southeast DC; the expansive headquarters for the National Geospatial-Intelligence Agency at Fort Belvoir, Virginia; the San Antonio Military Medical Center in Texas; and the Camp Pendleton Replacement Hospital near San Diego, California. In addition, we have completed other major projects such as The Wharf and Nationals Park in Southwest Washington, DC; and the new Stanford Hospital project in Palo Alto, California. Through our subsidiaries, we further support critical infrastructure projects to build roads, bridges, and tunnels.

One of our company's core values is giving back to the communities where we live and work. We do this both through financial support for nonprofit organizations and through thousands of hours of volunteer time generously donated by our employees. In 2018, our employees donated thousands of volunteer and pro bono hours in the community. We support organizations such as Mary's Center, Samaritan Inns, DC Central Kitchen, Boys Clubs and Girls Clubs of Greater Washington, and Martha's Table – all of which are doing their part to help local families and children, especially those facing food insecurity or homelessness. We support the needs of

veterans through organizations such as Team River Runner. In short, we are committed not only to building important projects but also building better communities.

In 2012, Clark partnered with Michigan-based The Christman Company to form the Clark/Christman Joint Venture or "CCJV." The Christman Company brings deep experience with historic buildings and has worked on hundreds of historic sites and national landmarks, including renovations to the Maryland, Virginia, and U.S. Capitol buildings. Both Clark and The Christman Company are built around the values of integrity, teamwork, mutual respect, recognition of excellence, a passion for our work, a competitive spirit, and a focus on developing long-term relationships. The CCJV partnership brought together the two companies' talents, expertise, and ethic to support the Cannon Renewal project.

As you know, Cannon was originally completed in 1908 and is the oldest House office building. Cannon has served Members of Congress and the American public for more than 110 years and stands as a symbol of our democracy and our representative government. While we are proud of all our projects, the members of the CCJV team – from the senior most project leader to each craftworker on site – share a special pride and are honored to have the opportunity to work on this important and historic American building.

The Cannon Renewal project brings together numerous partners, including the Architect of the Capitol, CCJV, and other companies, in a 13-year effort to ensure the long-term integrity, efficiency, safety, and sustainability of the Cannon building. Together, the project partners operate in what is known as a "One Team" approach where all of the stakeholders work to further a single mission: to create a 21<sup>st</sup> century building that preserves the early 20<sup>th</sup> century historic fabric of this national treasure.

From the beginning, all members of the Cannon Renewal project were committed to operating and collaborating as "One Team." The Architect of the Capitol was truly innovative in establishing a process to encourage teamwork and problem-solving by all parties. Moreover, from the earliest stages of the project, we established a common team charter, an integrated project governance structure, and regular team partnering meetings to identify and address critical issues together. I am including the Cannon Renewal project One Team Charter as a supplement to my testimony (Exhibit 2).

On the Cannon project team, CCJV serves as the Construction Manager as Constructor (CMc) responsible for implementing the renovation of the building using design plans and specifications developed by a third-party design team engaged by the Architect of the Capitol. To perform this work, CCJV installed a robust project leadership team of nearly 40 managers and superintendents. To date, CCJV has overseen the work of more than 800 craft workers and apprentices and provided more than \$100 million in subcontracts to small, minority, and women-owned, businesses.

The Cannon Renewal project was designed to be delivered in phases tracking two-year Congresses. I am including with my testimony a copy of an overall program schedule for the 13-year Cannon Renewal program as issued by the Architect of the Capitol in early 2012 (Exhibit 3). This overall program schedule shows the different phases of the Cannon Renewal program as

planned around immovable two-year Congressional election cycles. Figure 1 below further illustrates this phased project approach.

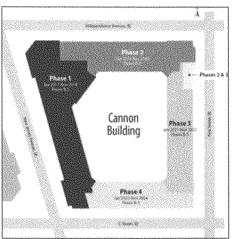


Figure 1 - Cannon House Office Building Renovation Phases Diagram

Following a two-year design and preconstruction period, the renovation proceeded as follows:

- Phase 0 was the enabling phase for the Cannon Renewal and ran from January 2015 to November 2016. This phase consisted of putting in place the infrastructure backbone for the renovation project, including the extensive mechanical, plumbing, and electrical systems that are now located in the basement and garage areas of Cannon, as well as work within the moat area of the courtyard. The exterior Southwest Terrace and accessible entrance on C Street were also restored in this phase. Phase 0 was completed on time and within the budget for this phase.
- Phase 1, which was constructed between January 2017 and December 2018, included renovations to the west side of the building along New Jersey Avenue. Work in this phase included repair and preservation of the historic façade and interior finishes; upgrades to aging and inefficient building systems, including mechanical, electrical, fire protection, telecommunications/information technology, and audio-visual systems; and bringing the building up to current building codes and Architect of the Capitol standards. Additionally, the existing fifth floor structure was demolished and rebuilt, with new Member offices now flanking both sides of the corridor as they do on the lower floors. As shown in Figure 1 above, this phase is the largest of the above-grade phases, encompassing more than 191,000 square feet of active renovation. Phase 1 is also the most complex of the phases due to the specialty spaces located within this area, including the historic, four-story Rotunda, the sizable Caucus Room, Budget Hearing Room, Homeland Security Hearing Room, and the Food Servery, among others.

- Phase 2, Phase 3, and Phase 4 involve similar renovations to the remaining areas of Cannon, though each involves a smaller overall building area than Phase 1 and fewer specialty spaces.
  - Phase 2, which began in January 2019 and runs through November 2020, includes the area to the north side of the building along Independence Avenue. It will encompass more than 122,000 square feet of finished space.
  - Phase 3 is scheduled from January 2021 to November 2022, and includes the area to the east side of the building along First Street, SE. It will encompass more than 129,000 square feet of finished space.
  - Phase 4, the final phase, is scheduled from January 2023 to November 2024 and includes the area to the south side of the building along C Street, SE. This phase encompasses approximately 93,000 square feet of finished interior space and approximately 58,800 square feet of courtyard renewal.

In addition to the actual construction work performed during each project phase, CCJV's work must account for the unique nature of the initiative and the purpose of the Cannon building. Specifically, this project requires that Cannon remains open for use during the renovation, allowing Congress to safely and securely conduct its important work for the Nation.

To this end, every person employed by CCJV and its subcontractor workforce is required to attend CCJV's comprehensive orientation training sessions before accessing the building. The purpose of the orientation training is to set and align expectations as to why we are performing the work, how we will perform the work, and the importance of conducting our work in a manner deserving of working on the United States Capitol grounds.

These orientation training sessions are given in two parts. One part of the training focuses on safety, security, site logistics, access, and work restrictions. The training describes the nature of the work being performed, the security protocols when accessing and working in the building, work restrictions, safety hazards within the work environment, and the importance of planning the work to avoid incidents. The other orientation training session focuses on working in historic buildings. This training covers various topics including quality of workmanship, historic preservation guidelines, and behavioral standards for working in the building. I am including the *Tradesperson Orientation Program for Working in Historic Buildings* outline provided to our workforce to supplement my testimony (Exhibit 4).

We have also organized tasks with the goal of preserving a Congressional work environment free of undue noise, debris, risk, and disruption. This is why a significant portion of our work takes place at night and on weekends. We also coordinate with the other members of the Cannon Renewal project team to provide clear and timely communications to help occupants prepare for construction activities. And finally, to meet our mission and expectations, CCIV has dedicated highly experienced leaders to this project and developed a transition plan to ensure workforce continuity over the 13-year effort.

Now, seven years into the 13-year Cannon Renewal project, our partnerships with the members of the Cannon project team are working well, and we have made positive and significant progress on Phase 2 work. Further, I am proud of the notable successes we delivered in earlier stages of the project. As previously mentioned, the initial phase, Phase 0, was completed on time and within budget. The next phase, Phase 1, the largest and most ambitious phase, was completed in time for opening day of the 116<sup>th</sup> Congress. CCJV worked hard to preserve the project schedule and meet this Phase 1 deadline despite challenges, including change requests and unforeseen conditions, that arose during this period and impacted the construction schedule. Through it all, our safety record is strong with injury rates well below national averages. And, during each phase of the project, we have successfully collaborated with the other stakeholders as One Team to incorporate lessons learned, improve performance, and meet our mission.

This collaboration with the project team has proven integral to managing challenges. Specifically, we have encountered two significant types of challenges while constructing Phase 1 that impact project timing and costs: (1) owner-requested changes to the design plans and (2) unforeseen building conditions.

Owner-Requested Changes: First, through each project phase we have received numerous owner-requested changes to the original design plans. Owner-requested changes are communicated through requests for proposal and change directive bulletins issued to CCJV by the Architect of the Capitol. To explain what we mean by a "owner-requested change," I am providing a few examples:

- Request for a new food servery to accommodate hot food. The original plans called for a food service space to accommodate limited service and prepackaged foods. As such, the One Team budgeted for limited food service equipment. During Phase 1, a decision was made to pursue a hot food service vendor. This decision led to a change request to install additional food service equipment, including a walk-in cooler and hot and cold service tables. The work entailed significant additional mechanical and electrical improvements to the space to serve the new equipment. The authorization to proceed with this change occurred in September 2018. CCJV completed the work by March 1, 2019. I am including materials reflecting this owner-requested change to supplement my testimony (Exhibit 5).
- New electrical systems in the Budget and Homeland Security Committees Hearing Rooms. In August 2018, 20 months into Phase 1, additions to existing design plans for the Budget Committee and Homeland Security Committee Hearing Rooms were provided. The additions included new infrastructure for power, lighting, audio/visual connectivity, and display. This change required CCJV to channel plaster walls in finished spaces to accommodate the new services. The existing plaster walls contained hazardous materials. At each area, where the walls were channeled, work enclosures were installed to contain the hazardous materials during the removal process. The new electrical services were then installed. Once the electrical services were installed, the walls were finished with plaster and repainted. We received authorization to proceed with these changes to the Hearing Rooms in August 2018, and the spaces were completed by January 31, 2019. I am including materials reflecting this change to supplement to my testimony (Exhibit 6).

- Request to add connectivity for card readers at suite entry doors. Card readers were not included in the original contracting documents but were added as a security and access control upgrade for Member suites. This change required CCJV to provide demolition, rework the electrical service, and provide new door hardware preparation. Prior to this change, CCJV was installing the electrical pathways for the suites. We had to stop the work until the final design and authorization was provided. We were authorized to proceed with this change in October 2017, at which time we resumed with providing this electrical service at the suite entry doors. Materials related to this change are appended to support my testimony (Exhibit 7).
- Additional fire extinguisher cabinets in corridors. During the final stages of Phase 1, the Fire Marshall inspection resulted in a requirement to place additional fire extinguishers throughout the corridor spaces. These fire extinguishers are housed in recessed cabinets. CCJV was authorized to proceed in October 2018. At the time of this directive to proceed, the corridors were complete and final painted. To install the recessed cabinets, work enclosures were installed at each location to contain the hazardous materials during the removal process of the plaster. The cabinets were then installed, and the walls refinished and repainted. I am including materials related to this change to support my testimony (Exhibit 8).

Unforeseen Building Conditions: In addition to owner-requested changes to the design plans, given the age of the building, we also encountered unforeseen building conditions that required changes. While project preparation included review of historical designs and testing, these conditions were unknown to the entire team, including the designers, until we identified them during core renovation tasks. To explain how we encountered unforeseen conditions, I am providing the following examples:

- Unforeseen penetrations of the basement corridor walls. The basement corridor ceiling was hung from a concrete slab that was originally constructed to provide space for piping and utilities above the ceiling. The design documents show the removal of the slab to create space for new mechanical, electric, and plumbing lines over a new suspended ceiling. The intent of the mechanical and electrical design was to route the new installation through many of the existing penetrations in the basement walls. Upon removal of the slab, CCJV discovered unforeseen conditions in which the existing penetrations were not properly supported. Many of the existing penetrations were insufficiently sized and located to accommodate the new mechanical and electrical services. Thus, 48 new penetrations were coordinated and provided. Significant re-design and re-coordination was required and occurred over an eight-month period. Ultimately, this change delayed the installation of the mechanical and electrical installation in the basement. I am including materials reflecting this condition as a supplement to my testimony (Exhibit 9).
- Unforeseen terra cotta ceiling slab over Suite 203. In September 2017 as part of the
  mechanical, electrical, and plumbing installation for Suite 203, CCJV discovered that the
  floor slab in the room above was constructed with a flat arch structural detail that was
  different from the floors found throughout the rest of Phase 1. Extensive re-design and

re-coordination was required to support these services since the terra cotta was insufficient to support the necessary systems. The redesign detailed additional support members to span the terra cotta arch. CCJV was authorized to proceed with the corrective changes in August 2018, and the work was completed in late October 2018. Materials reflecting this unforeseen condition are included to supplement to my testimony (Exhibit 10).

• Unforeseen hazardous materials encountered in mortar of the exterior stone façade. The design documents included cleaning, tuckpointing, and restoration of the original historic façade of the building. During this work, caulking containing hazardous materials was discovered in masonry joints of certain areas of the façade. CCJV tested, removed, and disposed of the hazardous materials in compliance with federal standards. This unforeseen condition disrupted the planned work sequence and required the scaffolding used to access the work to remain in place much longer than originally planned, which ultimately delayed the site restoration. Please find materials related to this unforeseen condition included with my testimony (Exhibit 11).

Each owner request and/or unforeseen condition requires changes to the design and construction plans. These changes necessarily affect the timing and cost of the work by complicating workflows, causing re-work, compressing schedules, and often requiring extra crews or overtime to complete. Changes also tend to create a cascading effect as delays and overruns in one area of work affect the next.

Given that Phase 1 was the largest and most complicated phase, we experienced the most changes in this period. Of the Phase 1 changes, approximately 73 percent by dollar volume were incorporated during the final 12 months of the phase. These changes, and the cascading impacts on schedule and cost, were realized against the backdrop of an immovable two-year construction schedule for Phase 1 that culminated in an immovable move-in date for the 116<sup>th</sup> Congress. Members of the Committee, we, like you, understand that the people's business comes first, and we responded accordingly.

Thanks to the "One Team" approach and the high degree of collaboration among the Architect of the Capitol, the CMa, the design team, and the other stakeholders engaged on the Cannon Renewal project -- and thanks in large part to the hard work and sacrifice of our subcontractors who worked nights, weekends, and holidays -- the Phase 1 renovation was completed in time for Members of Congress and their staffs to move in at the start of the 116<sup>th</sup> Congress. Despite all the challenges, the team got it done. We successfully delivered Phase 1 by "Opening Day," thus fulfilling our commitment and enabling the important work of Congress to proceed without interruption. This was a herculean effort that we and all our front-line workers are proud to have accomplished. We view it as our small contribution to the American democratic process. Now, all that remains of Phase 1 is the completion of approximately 150 "punch-list" items, out of thousands already completed, which we are working to finish with minimal inconvenience to occupants. Many of these items involve long lead materials such as door hardware and require special access to perform the work.

We have identified several lessons learned from Phase 1 to improve efficiency and performance across subsequent phases. The benefits of these lessons are already emerging on Phase 2 construction. For example, during Phase 2, improvements are found in the following:

- Installation of the Temporary Roof Enclosure (TRE). The TRE covers the entire fifth floor of that phase and allows the building to remain dry as the existing fifth floor is removed and rebuilt. In Phase 2, we changed our approach for how the TRE is supported and anchored. The change in approach resulted in the TRE installation completing three months ahead of when the installation was completed on Phase 1. Presently, the schedule is forecasting the TRE to be removed four months ahead of when it was removed on Phase 1. This improved performance will allow the follow-on work for demolition of the existing fifth floor, installation of the new structural steel, and interior finishes to begin ahead of when these similar activities began in the earlier phase, which ultimately provides more certainty as to when the fifth floor suites will be ready to occupy.
- Erection of the new structural steel for the fifth floor. The erection of the new structural steel for the fifth floor is presently forecast to complete three months ahead of when the structural steel was completed on Phase 1. This is due to the revised approach to the TRE installation, as well as our revised approach for when we verified the exact location of the fourth floor existing structural steel, which supports the fifth floor. In Phase 1, we verified the exact locations of the structural beams and columns supporting the fifth floor after the fifth floor was removed. We found that the exact location of the structural steel, which was installed in 1908, was in slightly different locations than what appeared on the contract drawings. We then had to correct our structural steel fabrication and installation drawings to coordinate with the exact locations of the fourth floor steel. This resulted in the Phase 1 structural steel installation beginning six weeks after the demolition of the existing structure occurred. For Phase 2, we have verified the exact location of the fourth floor structural steel prior to the demolition of the existing structure. This revised approach enabled us to start the structural steel immediately following the demolition activities, which is two months ahead of when this activity started on Phase 1.
- Restoration of existing stone floors in corridors. The Cannon Renewal Program includes restoring the existing stone floors within the corridors on floors one through four. For Phase 1 we planned for this work to occur near the completion of the phase. When we established the Phase 1 plan, we could not have anticipated the volume and timing for when changes would occur. Most of the Phase 1 changes occurred in the last 12-months prior to occupancy. As such, there was considerably more activity and workers in the corridor spaces than planned in the lead up to the opening of the 116th Congress. This required us to perform the floor restoration at night over a four-month period. As part of the floor restoration installation we had to remove floor protection every night to allow for the floor restoration to occur, then replace floor protection before the early morning work shift. This was a very time-consuming and inefficient process. In Phase 2, we have completed the floor restoration before the demolition activities. We are protecting the floors throughout the remaining work duration. This revised approach has proven to be more efficient than what we experienced in Phase 1.

I am including timelines demonstrating these examples of lessons learned to support my testimony (Exhibit 12).

Based on what we know now, at this point in the project, we believe that the most difficult phase is behind us. The work allocated for Phases 2, 3, and 4 involves fewer square feet of active renovation and fewer complex specialty areas than Phase 1. We also now know more about owner requests and what is behind the walls of this 110-year old historic building, allowing us to approach the rest of the project with greater insight and predictability.

We understand the trust placed in CCJV and the entire Cannon Renewal project team to preserve the historic fabric of the Cannon building while delivering important renovations in a manner that meets the expectations of the Architect of the Capitol, key stakeholders such as each of you, and everyone who uses and visits Cannon. It is important to note that, as we sit here today seven years into this 13-year program, we are on track with the overall plan and schedule as originally envisioned by the Architect of the Capitol at the outset of this program. We have certainly experienced challenges; however, despite those challenges, the Cannon Renewal "One Team" has completed each of the phases so far in time to meet Congressional cycles and operations. This is a significant and important accomplishment.

I am proud of the team's performance to-date and look forward to continuing to work with our project partners and stakeholders to complete the remaining phases of the Cannon Renewal as planned. We are honored to be working on this critically important project and, in our own way, supporting the important work that you all do as Members of Congress.

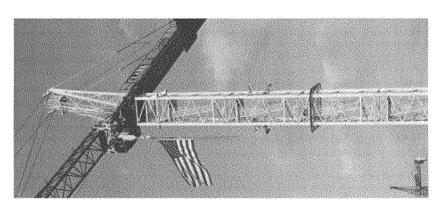
Thank you for this opportunity to discuss this project with you, and I look forward to answering any questions the Committee may have.

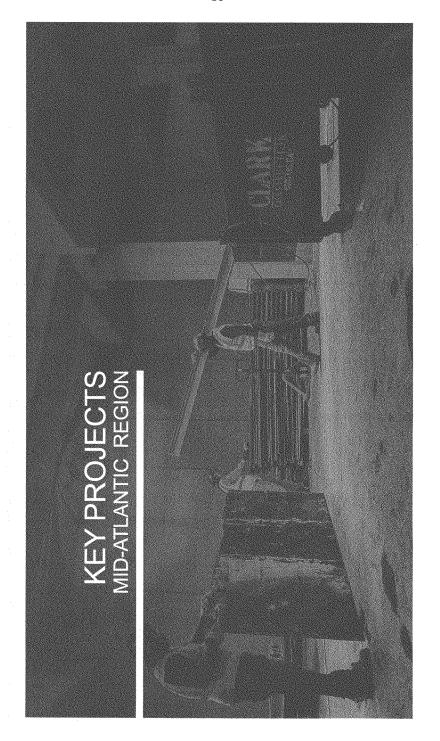
### **EXHIBIT 1**

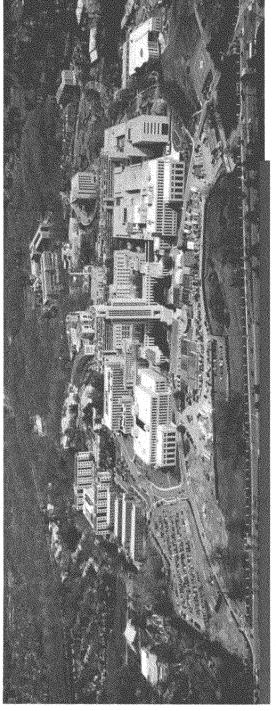


## CLARK CONSTRUCTION GROUP, LLC

Clark Construction Group, LLC is one of the nation's most experienced and respected providers of construction services. Headquartered in Bethesda, Maryland and American-owned and operated since 1906, Clark is consistently ranked by leading industry organizations as one of the country's largest general building and civil construction companies. With annual revenues of approximately \$5 billion, the firm's portfolio features projects of all sizes and levels of complexity — from intricate interior renovations to some of the most complex civil operations in the country. Clark's projects have been successfully completed for both public and private clients under a variety of project delivery methods, including general contracting, construction management, design-build, and turnkey development.







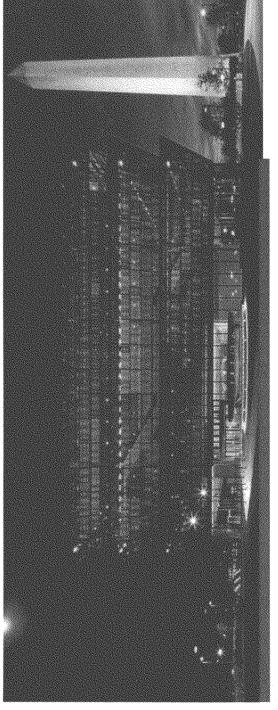
# WALTER REED NATIONAL MILITARY MEDICAL CENTER EXPANSION & RENOVATION

C potologo

506,000 SF of occupied renovation / 1.3 million Healthcare SF / 1.9 million GSF

Delivered on time, including added site work and major equipment changes.

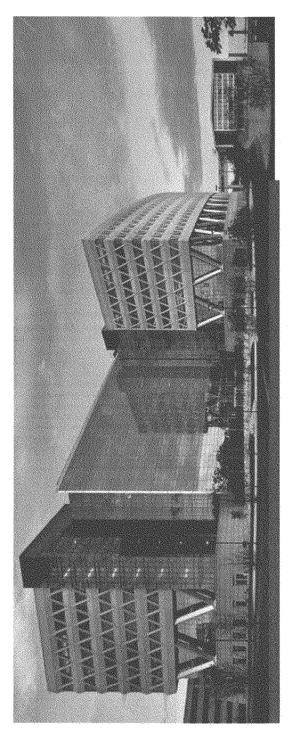
a di cono molto i attorno via



# NATIONAL MUSEUM OF AFRICAN-AMERICAN HISTORY & CULTURE

Completed 2016 409,000 GSF

Delivered on time, aided by VDC modeling and mock-ups.



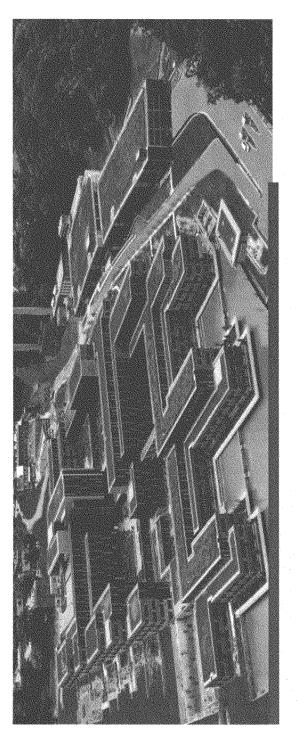
# NATIONAL GEOSPATIAL AGENCY (NGA) CAMPUS EAST

Completed 2011

2.1 million Office SF / 3.9 million GSF

Delivered on time, including a fast-track Central Utility Plant and significant Owner change requests.

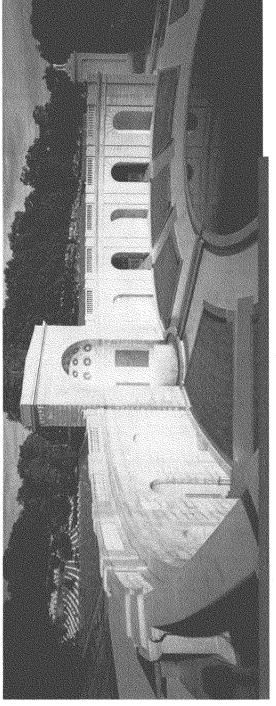
CLARK CONSTRUCTION GROUP, LLC



### U.S. COAST GUARD HEADQUARTERS

Completed 2013 1.2 million Office SF / 2.1 million GSF

Delivered on time, including large-scale abatement/removal of contaminated soil and fit-out redesign mid-project.

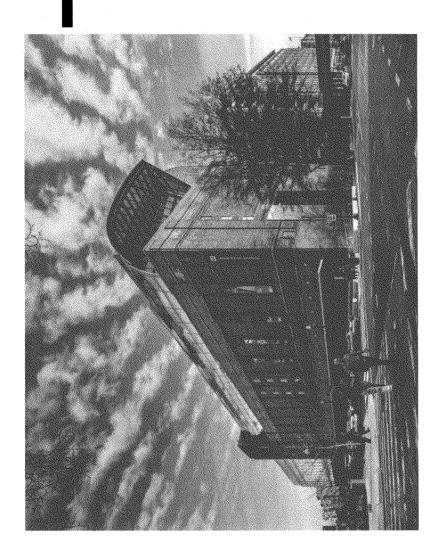


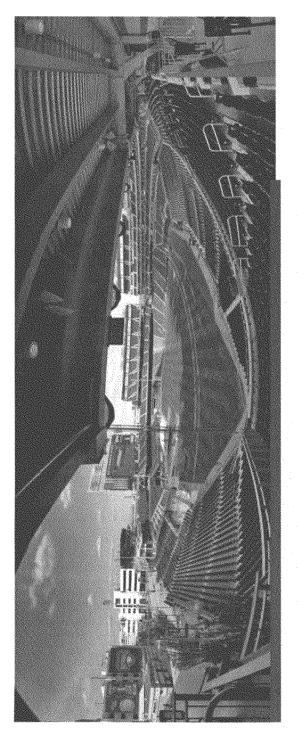
## WOMEN IN MILITARY SERVICE FOR AMERICA MEMORIAL Completed 1997 33,000 GSF

Construction of new memorial and theater, with restoration of historic entrance to Arlington National Cemetery.

### MUSEUM OF THE BIBLE

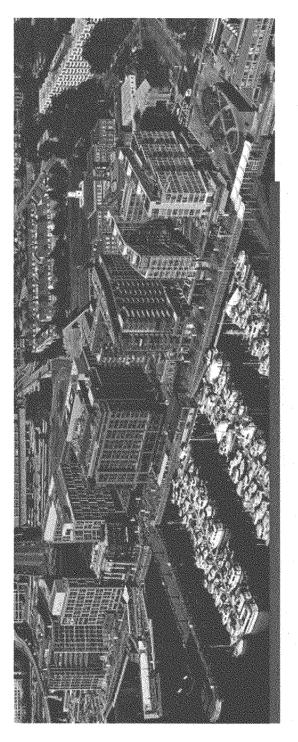
Completed 2017
430,000 GSF
Historic restoration and
conversion of an existing
1920s warehouse,
adjacent to occupied
SBA Headquarters.
Added a new top floor.





### NATIONALS PARK

Completed 2008
1.6 million GSF
Delivered four weeks earlier than contracted completion date.



### THE WHARF - PHASE ONE

Completed 2017 1.2 million GSF

Delivered on time through collaborative planning with the Owner.

### **EXHIBIT 2**

### Cannon House Office Building Renewal Project

### **Overall Project Vision**

To create a 21st Century building that will function as a modern, efficient, flexible, and safe office space for the next 100 years, while respecting the historic integrity of the building and preserving the Cannon House Office Building as a representation for Congress Members and the American Public as a National Treasure and symbol of American Democracy.

### **Our One Team Charter**

### Our Charter is to . . .

- 1. Infuse 21st Century technology and performance while preserving a historic 20th Century building that is inspiring, innovative, flexible, high-performing, efficient,
- 2. Meet the agreed upon budget.
- 3. Deliver the project phases on-schedule consistent with Congressional cycles.
- 4. Exceed stakeholder expectations with regard to communication and quality.
- 5. Exceed Congressional Members and staff expectations during and following the Cannon Renewal.
- 6. Set the standard for high quality renewal of Capitol buildings.
- 7. Deliver the project safely.

### In a way that . . .

- 1. Minimizes disruptions to Congress and the public.
- 2. Preserves the safety and security of Congressional members, staff, visitors, and
- 3. Preserves the historic fabric and features of the building and exemplifies the stewardship of the Architect of the Capitol.
- 4. Manages risk and communicates information in a proactive, efficient and structured manner, so that there are no surprises.
- 5. Enhances all team members' reputations and inspires trust.
- 6. Fosters a team-based culture that encourages innovative ideas and continual
- 7. Creates a model for project delivery that is collaborative, integrated, transparent and enables seamless integration of new members over time
- 8. Is enjoyable for all team members, celebrates success and game

### And achieve...

- 2. Strong safety culture and zero lost time incidents.
- 3. World-class client and occupant satisfaction survey results.

### **EXHIBIT 3**

2011	1 2012 2013 2014 2015 2016 2017	2016 2019	2020 2021	2022	2023	2024 2025	
	♦ CMa Award Cycle Cycle Cycle Chic Cycle Cycle Chic Award Moves	Election- Cycle Moves	Election- Cycle Moves	Election- Cycle Moves	B -	Election- Cycle Moves	7.12.00
Base Period Part One	POR/Schematic Design Vetting, Review, and Cost Estimating (6 months)  1e	stimating (6 months)					
Base Period Part Two	Base Period Part Two (Option)  Complete Phase 0 CD's to 100%, Phases 1-4 CD's to 35%. Develop and Submit Phase 0 GMP.	neering Workshop, and , Phases 1.4 CD's to 359	Final Review (4 mont 6. Develop and Submi	hs) t Phase 0 GMP,	1		NATIONAL PROPERTY.
Option Phase Zero	Phase 0 Mobilization	Phase 0 Construction and Commissioning Phase 1 CD's to 100%. Develop and Submit Phase 1 GMP	oning nt Phase 1 GMP				
Option Phase One	Phase 1 Mobilization	Phase 2 CD's to 100	Phase 1 Construction and Commissioning Phase 2 CD's to 100%. Develop and Submit GMP's for Phases 2, 3, and 4	ssioning ut GMP's for Ph	ases 2, 3, an	10.4	- ACCESSOR OF THE SECOND
Option Phase Two	Phase 2 Mobilization	ulization T	Phase 2 Const	Ē	Commissio	Bulu	
Option Phase Three		Phase 3 Mobilization Phase 4 CD's to 100	iase 3 Mobilization Phase 4 CD's to 100%	40	Phase 3 Constru Commissioning	Phase 3 Construction and Commissioning	
Option Phase Four			Phase 4 Mobilization	bilization		Phase 4 Construction and Cx	C C
Option Phase Five (Closeout)	(oseout)		Phase 5 Final Project Commissioning and Closeout	oject Commissi	oning and C	oseout	200000000

### **EXHIBIT 4**



### Cannon House Office Building Renewal Washington, DC



### TRADESPERSON ORIENTATION PROGRAM FOR WORKING IN HISTORIC BUILDINGS





"Over a century ago Washington laid the corner stone of the Capitol in what was then little more than a tract of wooded wilderness here beside the Potomac. We now find it necessary to provide great additional buildings for the business of the government." President Theodore Roosevelt, at the comerstone-laying ceremony, April 14, 1906



Joseph Gurney Cannon (May 7, 1836 – November 12, 1926), the chairman of the House Office Building Commission and for whom the Cannon House Office Building (CHOB) is named, is considered to have been one of the most dominant Speakers in U.S. history. He was the second-longest continuously serving Republican Speaker in history, and the longest serving Republican House of Representatives member ever, ending his career with 46 years of cumulative congressional service, a record that held until 1959. He was the

subject of the first Time Magazine cover ever published, appearing on March 3, 1923.



Since the laying of the Capitol cornerstone by George Washington in 1793, the Architect of the Capitol (AOC) has served the United States as builder and steward of many of the nation's most iconic and indelible landmark buildings. These include

the U.S. Capitol, Capitol Visitor Center, Senate Office Buildings, House Office Buildings, Supreme Court, Library of Congress, U.S. Botanic Garden and Capitol Grounds. The mission of the AOC is to provide Congress and the public a wide range of professional expertise and services to preserve and enhance the Capitol complex and related facilities.

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- b. Secretary of Interior's Standards

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- b. Salvage Materials
- c. Artifact Identification and Disposition
- d. Select Demolition, Cut and Patch Procedures
- e. Project Recycling
- f. Sensitivity to Existing Structure
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  - 1. By separate formal orientation

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8. Acknowledgement of Orientation by Tradesperson

### 1. Historical Significance of the CHOB

### a. Historical Summary

The CHOB, completed in 1908, is the oldest congressional office building as well as a significant example of the Beaux Arts style of architecture. It occupies a site south of the United States Capitol bounded by Independence Avenue, First Street, New Jersey Avenue, and C Street S.E. It is under the ownership of the AOC.

The first congressional office buildings were constructed immediately after the turn of the century to relieve overcrowding in the Capitol. Previously, members who wanted office space had to rent quarters or borrow space in committee rooms. In March 1901, plans were drawn for fireproof office buildings adjacent to the Capitol grounds. In March 1903, the acquisition of sites and construction of the buildings was authorized. In April 1904, the prominent New York architectural firm of Carrère and Hastings was retained. Thomas Hastings took charge of the House Office Building project, while John Carrère oversaw the construction of an almost identical office building (now named the Russell Senate Office Building) for the Senate. Their Beaux Arts designs were restrained complements to the Capitol.

The Cannon is faced with marble and limestone. Modern for its time, it included such facilities as forced-air ventilation systems, steam heat, individual lavatories with hot and cold running water and ice water, telephones, and electricity. Originally there were 397 offices and fourteen committee rooms in the Cannon Building; the 1932 remodeling resulted in 85 two- or three-room suites, 10 single rooms, and 23 committee rooms.

Of special architectural interest is the rotunda. Eighteen Corinthian columns support an entablature and a coffered dome, whose glazed oculus floods the rotunda with natural light. Twin marble staircases lead from the rotunda to an imposing Caucus Room, which features Corinthian pilasters, a full entablature, and a richly detailed ceiling. The Cannon Building was occupied during the 60th Congress in January 1908. By 1913, however, the House had outgrown the available office space, and 51 rooms were added to the original structure by raising the roof and constructing a fifth

floor. In 1962, the building was named for former Speaker Joseph Gurney Cannon.

b. Preservation Policy and Standards
The AOC follows the Preservation Policy and Standards
for the AOC Standards. These Standards are one of the
bases for the architect's design and apply to the
implementation by the contractor's personnel. All work
must be performed to meet these standards.

If at any time you do not understand in detail the desired outcome of a work effort, or if you believe harm may be done to the historic fabric of the CHOB, contact Clark | Christman's superintendent.

### 2. Exposure

### a. Media Attention

All work on Capitol Hill is ALWAYS under intense media attention. Be aware any of your actions can become a significant news story and focus of public attention.

If any member of the media, or anyone you do not know, starts asking questions about the project, do not engage in dialogue, but immediately contact Clark | Christman's superintendent. It is important the AOC have one voice to the public about any issues on this project.

In an emergency situation, i.e. fire, injury, collapse, etc., immediately contact Clark | Christman's superintendent. Do not talk to the media. All outside communication will be by the AOC only.

### Remember:

- Many influential persons work in the occupied portions of the CHOB.
- Many high profile national and international guests will visit the site.
- · Be professional and respectful at ALL times.
- · Be aware for their safety.
- Refer any guests to the Clark | Christman superintendent or project manager for any and all questions.

<sup>\*</sup> From http://aoc.gov/cc/cobs/chob.cfm

- Clark | Christman will refer them to the appropriate AOC representative.
- All visitors are required to check-in at the Clark | Christman project office.

### b. Tour Groups

- Tours of AOC-lead guests may be active throughout the duration of the project.
- · No unnecessary noise during tours.
- Keep the work area clean and safe.

### 3. Preservation, Restoration and Reuse Guidelines

### a. Protection of Historic Fabric

- All existing building materials are of historical significance and are considered "historic fabric."
- · Historic fabric cannot be replaced.
- All historic fabric shall be protected from being damaged by construction activities.
- Pay particular attention to stone, woodwork, light fixtures, railing, and decorative finishes.
- Do not cut into the building without specific Clark | Christman superintendent approval.

### b. Salvage Materials

- Coordination of materials to be salvaged shall be with the Clark | Christman superintendent.
- Salvage materials must be handled with great care to prevent damage.
- Salvage or surplus material cannot be sold or donated for resale in any form.

### c. Artifact Identification and Disposition ("Don't Pocket the Past" Program)

- Any artifact which appears historic, material or item, discovered during demolition or other construction operations shall be immediately turned over to the Clark | Christman superintendent.
- The superintendent shall immediately contact the AOC representative for proper handling.

### d. Selective Demolition, Cut and Patch Procedures

- Limits of demolition shall be approved by Clark | Christman and project architect prior to work being performed.
- All cut and patch (including wall channeling) shall be approved by Clark | Christman prior to work being performed.

### e. Project Recycling

- All construction debris must be recycled.
- All debris must be sorted by material classification and deposited in the correct Recycle Container.
- · Refer to Waste Management Plan.

### f. Sensitivity to Existing Structure

- Protect existing building elements that are to remain from being damaged.
- All employees shall treat the building and grounds with the utmost respect and sensitivity to assure its long-term preservation.
- Do not construct any new materials in such a way that would cause detrimental effect to the building or site.

### g. Sensitivity to Historical Accuracy

- · Details are important to historic preservation.
- Details can only be varied when approved in writing by the architect.

### 4. Construction Procedures

- a. Strict Adherence to Plans and Specifications
  - No changes without written direction of architect's representative.
  - Notice of all cost changes must be immediately communicated to Clark | Christman for authorization, prior to proceeding.

### b. Quality of Workmanship

- No substandard work will be accepted.
- Workmanship shall be of the highest quality in the industry.

- Take pride in this project and in your work. This is your legacy.
- Please let the Clark | Christman superintendent know if you see faulty workmanship or constructability issues.

### c. Schedule Concerns

- · The completion date is critical.
- Sequence of construction by area is important.
- Cooperation by all is important for a successful project.

### d. Chain of Command

 Direct all construction questions to the Clark | Christman superintendent who will contact the architect and/or AOC representatives for resolution.

### e. Maintenance of Work Areas

 All debris and loose construction materials shall be pickedup on a daily basis.

### 5. Restricted and Historically Significant Work Areas

### a. Restricted Areas

- Do not enter the operational potion of the CHOB without permission of your foreman or Clark | Christman's superintendent.
- The CHOB will remain in full operation during construction and significant portions are off limits to construction personnel except designated work zones.

### b. Highly Sensitive Areas (as defined)

- Protect all areas (areas not scheduled for work and work in place) from being damaged by your work.
- Look left, right, up, and DOWN! Be aware that marble and tile surfaces are just as susceptible to damage as wood, metals, and glass.

### 6. Working Guidelines

### a. Behavior Standards

- 1. Professional behavior and appearance at all times
  - · No profane or ratty clothing

 Address all project team members, building occupants, and the general public with respect – as you would like to be treated

### 2. No Smoking and Tobacco Policy

- · No Smoking inside the building.
- · No smoking on roofs.
- · No smoking in the attics.
- · Smoking in designated areas ONLY.
- This is a Zero Tolerance policy.
- Smokeless tobacco shall only be consumed in designated smoking areas.

### 3. Noise Control

· Music and radios will not be permitted

### 4. Political Awareness and Respect.

- The CHOB houses the elected leaders of our great country and nation. Your political affiliations and opinions are not to be discussed or debated while on the project. One overheard negative comment can create considerable political issues and serious problems for the project. You are free to practice politics at any time outside this workspace!
- 5. Food and Drink in the workplace
  - No food or drink is allowed outside designated break
    areas.
- b. Safety
  Each employee shall attend a separate Safety Orientation.
- c. Project Site Rules
  Each employee shall attend a separate Site Orientation.

### 7. Employee Dismissal and Removal From Site

Clark | Christman strives to employ contractors who employ high quality, highly skilled tradespeople. This will result in delivering a project to the AOC of the highest quality achievable in the construction industry.

It is our expectation that the contractors and personnel employed to perform the work will realize the significance of the project and respect the intent of the work rules for their value in maintaining a quality work environment.

All persons must comply with the work rules. In the unfortunate event that anyone refuses to comply, threatens the safety of other workers or guests, or willingly damages the building or grounds, they will be removed from further participation and employment on this project.

### 8. Trades' Legacy

Trade contractors are the backbone of this project, and their pride in their work is the single best way to ensure a healthy site and historic preservation program. You are critical to the success of this project!

- a. Leaving your mark. In the time-honored traditions of "leaving your mark," we invite you to sign your name in the designated location(s). Ask your foreman or a CCJV superintendent where your trade's designated location is. These marks will not only serve to connect you to the next project, but the AOC photographers are able to record and capture the names for the AOC archives.
- b. Showing off. We invite you to bring your family to the site to show them where you work and what you do. These days will be periodically scheduled through the project. Ask about the next tour date and what requirements visitors must meet and follow.

# Acknowledgement of Orientation by Tradesperson

I have attended and received a copy of the Tradesperson Orientation Program for the CHOB project.

I understand and agree to comply with all of the requirements of this Orientation.

Tradesperson signature	
Print Name	apadicio.
Company Name	
Date	-
Clark   Christman Representative Signature	ussani)

Your Copy of the Signature Page (Please sign next page and turn in)

# **Acknowledgement of Orientation by Tradesperson**

I have attended and received a copy of the Tradesperson Orientation Program for Historic Preservation Trades for the CHOB project.

I understand and agree to comply with all of the requirements of this orientation.

Tradesperson signature		
Print Name		una del constante del cons
Company Name		beckerenge trade
Date		Bairca d'Amiricántis y
Clark I Christman Represent	ativo Signatura	

Clark | Christman Copy (Please sign this page and turn in)

Phase 1

### **Project Change Detail:**

Category: Owner Requested Change
Description: New Food Service space

Location: Phase 1 – 1<sup>st</sup> Floor Food Service Space

• Request for a new food servery to accommodate hot food. The original program called for a food service space to accommodate limited service and prepackaged foods. The One Team budgeted for limited food service equipment. During Phase 1, a decision was made to pursue a hot food service vendor. This decision led to a change request to install additional food service equipment, including a walk-in cooler and hot and cold service tables. The work required significant additional MEP infrastructure to service that equipment, as well as hazardous materials abatement and new structural openings. Final Notice to Proceed was issued for this work on September 12, 2018

• Request for Proposal: AOC Stop Work Order August 15, 2017

Bulletin 41 Parts 1 – 3 - Issued April 17, 2018

RFP for additional food Service Equipment - issued July 16, 2018

Notice to Proceed:

September 11, 2018

Final Directive:

February 1, 2019

Work Complete:

February 28, 2019 (Turnover date for vendor FF&E)



Acquisition and Material Management Division. Ford House Office Building, Room H2-265 Washington, DC 20515 202-236-2557

уод, конлини

September 11, 2018

Clark/Christman A Joint Venture (CCJV) 7500 Old Georgetown Road Bethesda MD 20814 ATTN: Jim Johnston, Project Executive

Subject: Notice to Proceed (NTP) Contract No. AOC13C2002, Cannon House Office Building Renewal, Phase 1 GMP, AOC PCO 1289 & 1289a – Food Servery Consolidated Set

Mr. Johnston,

The purpose of this letter is to issue a Notice to Proceed (NTP) for CCJV for the Consolidated Construction Drawings Set for the Food Servery. This Consolidated set pulls together all documents related to the Food Service into one overall set. This includes previously issued Bulletin 41, 41A, and ASI 22 documents as they relate to the Food Service. This consolidated set DOES NOT supersede previous Bulletins and ASIs, but seeks to organize all information related to the Food Service together for use by CCJV. Bulletins 41 and 41A does have other scope unrelated to Food Service and must be incorporated into the Project.

Please note, two pages, as detailed below have been changed in the Consolidated Set. Sheets E444-1 & E703-1 provide direction on additional scope for menu boards:

- E444-1: Added notes 59 & 60 which include directions for a flush ceiling outlet
  off of back wall to kitchen with a junction box and a 20A-1PH-120V toggle switch
  and plate.
- E703-1: Added circuit 70 to panel SL-BB1-192A for rough-in of track lights to be provided and installed by the vendor.

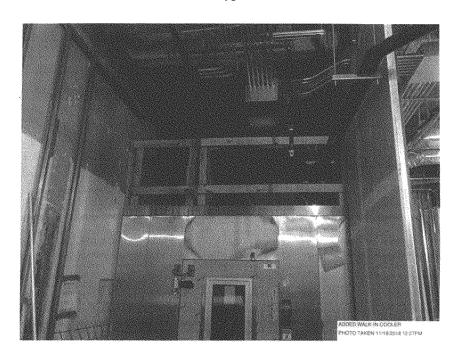
Please proceed as per Consolidated Drawings set transmitted to CCJV via thumb drive on Friday August 31, 2018 and provide price proposal for the Food Service to include two changes listed above.

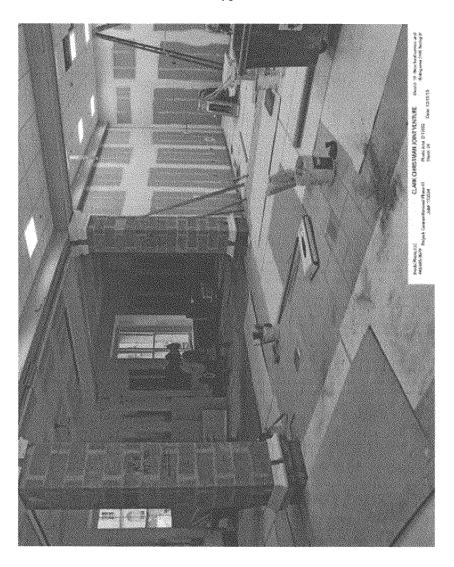
Sincerely,

Falvasha Alghussain Contracting Officer

ENCL

CC: Bruce Pitts, Susan Wong, Donna Klee







Phase 1

## **Project Change Detail:**

Category: Owner Requested Change

Description: Redesign of the Budget and Homeland Security Committees

• Redesign of the Budget and Homeland Security Committees Hearing Rooms. In August 2018, 20 months into Phase 1, additions to existing design plans for the Budget Committee and Homeland Security Committee Hearing Rooms were provided. The additions included new infrastructure for power, lighting, audio/visual connectivity, and display. This change required CCJV to channel plaster walls in finished spaces to accommodate the new services. The existing plaster walls contained hazardous material. At each area, where the walls were channeled, work enclosures were installed to contain the hazardous materials during the removal process. The new electrical services were then installed. Once the electrical services were installed, the walls were finished with plaster and repainted.

Change Directive: August 23, 2018

Notice to Proceed: August 24, 2018

Final Directive: May 6, 2019

Work Completed: January 31, 2019



Architect of the Capital Exclusion by social inweshings on the 2002's 2-Capital St.

August 24, 2018

Clark/Christman a Joint Venture (CCJV) 7500 Old Georgetown Road Bethesda, Maryland 20814 Attn: Jim Johnston, Project Executive

Subject: Revised Request for Proposal (RFP), Cannon House Office Building Renewal Project (CHOBr), Construction Management as Constructor Services, AOC13C2002, Phase 1, AOC PCO 1480 – BHR(210) & HSHR(310) Redline Revisions

#### Dear Mr. Johnston:

The purpose of this letter is to issue a Revised RFP for AV changes to the Budget Hearing Room (210) and Homeland Security Hearing Room (310). This RFP supersedes the RFP dated July 23, 2018, July 25, 2018, August 3, 2018 and August 10, 2018 for ASI 35, ASI 35R and ASI 37. This RFP is accompanied by a redlined consolidated set of plans for each room that includes all work shown in ASI 35 and 37 as well as additional coordination items that have resulted. Due to large size of the drawings, AOC delivered two consolidated sets titled BHR Consolidated Set Dated August 23, 2018 and HSHR Consolidated Set Dated August 23, 2018 on thumb drive to CCJV on August 24, 2018.

Please proceed as per released funding for total of \$85,000 under previously issued Not to Exceed (NTE) Letters. CCJV has provided a ROM value of \$80,000 for this work. Please provide a detailed proposal no later than September 7, 2018.

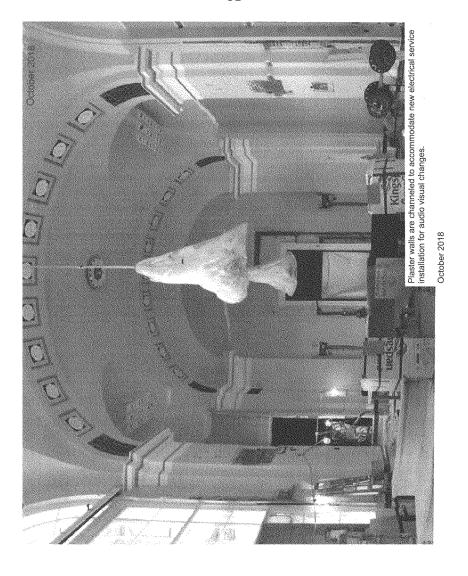
Please note, as discussed in the daily 3pm coordination meetings with CCJV, as well as Principle's Meeting on August 22, 2018, the Contract completion date for the Hearing Rooms is set as November 16, 2018. The Hearing Rooms must be ready for stakeholder follow on work NLT October 1, 2018. Please provide an updated SIPs schedule as well as CPM which shows stakeholder readiness of October 1, 2018 and contract completion on November 16, 2018.

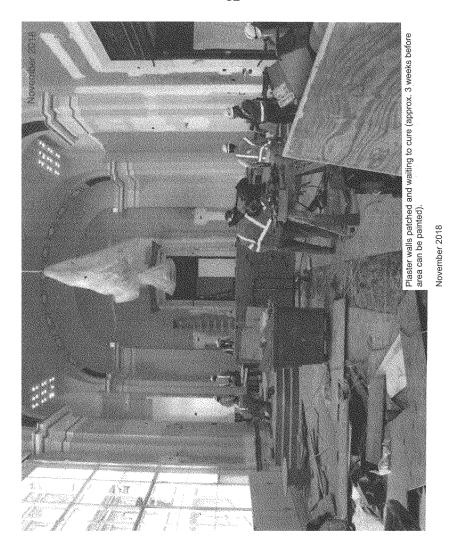
Sincerely,

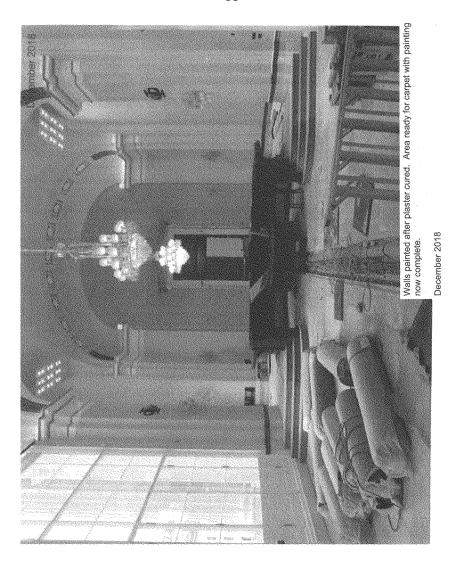
Faivasha Alghussain Contracting Officer

ENCL:

CC: Bruce Pitts, COTR, Susan Wong, Donna Klee







Phase 1

# **Project Change Detail:**

Category: Owner Requested Change

Description: Request to provide rough in for card readers at suite entry and other doors

Location: Phase 1-4 Member Suite Entry and Other Doors Floors 1-5

Request to add connectivity for card readers at suite entry doors. Access control card readers were not required in the original contract documents but were added as a security and access control upgrade for member suites and other select openings. In all, 91 openings (Phase 1 only) were prepped for card readers. Additional rough-ins for crib boxes and door contacts were also included for 75 openings (Phase 1 only).

Fulfillment of this change required CCJV to provide demolition, electrical rough-ins, and door hardware preparation.

Request for Proposal: April 19, 2017

August 22, 2017 (R1)

September 21, 2017 (R2)

October 3, 2017 (R3)

Notice to Proceed: October 24, 2017

Final Directive: December 22, 2017

Work Complete: March 2018



Acquisition and Material Management Division Ford Hosse (20th e Hodding Hoson 342-268) Nashington, DO: 203-15 202-220-2557

to to as above about

October 24, 2017

Clark/Christman A Joint Venture (CCJV) 7500 Old Georgetown Road Bethesda MD 20814 ATTN: Steven Blanton

Subject: Notice to Proceed (NTP) & Partial Final Directive (FD) - Contract No. AOC13C2002, Cannon House Office Building Renewal, Phase 1 GMP, AOC PCO 1012 - Card Reader Rough-In, CCJV PCO 810107

Mr. Blanton,

This letter serves as Notice to Proceed (NTP/NTE) and Partial Final Directive (FD) for CCJV to proceed with the Card Reader Rough-in scope of work as per CCJV Proposal dated October 11, 2017 and AOC Proposal Review letter dated October 20, 2017 and subsequent meeting held with CCJV/ACECO/Mona/Craftsmen on October 23, 2017. This Partial Final Directive in the amount of \$112,961.00 releases card reader rough-in work with current ongoing rough-in work at Floors 1-4 for the following trades:

ACECO, \$19,915.00 Craftsmen Group, \$17,346.00 Mona Electric, \$75,700.00

These figures are based on 10% of cost for the respective tradework per CCJV Proposal 10/11/17 for Phase 1. Pursuant to the Contract Clause 52.243-4, Construction Change Clause and the provisions for a "Request for Equitable Adjustment", the Government requests this work to proceed per the guidance of the Contracting Officer Technical Representative with a not to exceed amount of \$112,961.00 against 020245D P3500 Owner Construction Contingency. Under no circumstances shall the contractor commit to or expend costs to the Government that will exceed \$112,961.00 without prior authorization from the CO. If at any time during the Contractor's performance of this changed work the Contractor anticipates the cost to the Government may exceed the \$112,961.00 amount approved, the Contractor shall immediately provide written notice to the CO.

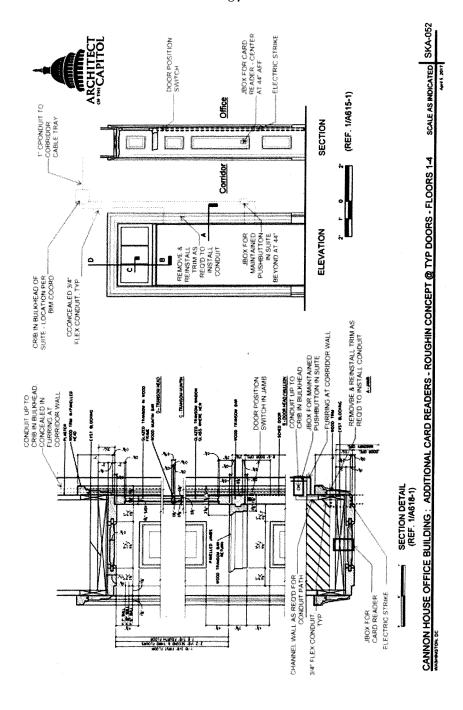
This directive is based on CCJV Proposal dated October 11, 2017 for work to start. AOC provided proposal review comments on October 20, 2017 and met with CCVJ and respective trades on October 23, 2017 to discuss comments and de-scoping items issued in the October 20, 2017 correspondence. In order for work to occur within construction schedule and invoicing, AOC is providing Partial Final Directive in amount of \$112,961.00 for roughin work. This is a change outside the GMP, and will be followed up with formal modification to the Contract to allow for invoicing to take place. CCJV has committed to revised proposal by early week of October 30, 2017 to allow for finalization of this change work and subsequent modification to the Contract and invoicing for above amount.

In addition to the above, at October 23, 2017 meeting, several questions were raised by CCJV regarding scope. Below are responses/elarifications to those questions:

- 1. CCJV is not to install door position switches (DPS)s.
- CCIV is not to install door strikes on floors 1 through 4, however we would like for CCIV to coordinate
  with their door supplier to determine if the new doors can be prepped for the electric strikes on the 5<sup>th</sup>
  floor, but do not install the electric strikes.
- CCJV is not to install door contacts.

Falvesha Alghussain Contracting Officer

Attachment: CCJV 10/11/17 Proposal Summary CC: Bruce Pitts, COTR, Susan Wong, S. Barbehenn





August 1, 2017

Phase 1

### **Project Change Detail:**

Category: Owner Requested Change

Description: Addition of fire extinguishers in corridors

Location: Throughout Phase 1 Public Corridors

Redesign of fire extinguisher locations in public spaces. During the final stages of Phase 1, the Fire
Marshall inspection resulted in a requirement to place additional fire extinguishers throughout the
corridor spaces. These fire extinguishers are housed in recessed cabinets. At the time of this
directive to proceed, the corridors were complete and final painted. To install the recessed
cabinets, work enclosures were installed at each location to contain the hazardous materials during
the removal process of the plaster. The cabinets were then installed, and the walls refinished and
repainted.

Change Directive: October 12, 2018

Notice to Proceed: October 15, 2018

Final Directive: May 14, 2019

Work Complete: October 31, 2018



Acquisition and Material Management Division Ford House Office Budding, Resm. J42,265 Wishington, DC, 20545 262,226,557

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October 15, 2018

Clark/Christman A Joint Venture (CCJV) 7500 Old Georgetown Road Bethesda MD 20814 Attn: Jim Johnston, Project Executive

Subject: Notice to Proceed, Contract No. AOC13C2002, Phase 1 GMP, Cannon House Office Building Renewal, AOC PCO 1544, ASI 038 Addition of Portable Fire Extinguishers and Fire Extinguisher Boxes

Dear Mr. Johnston.

The purpose of this correspondence is to provide CCJV notice to proceed with a REVISED Not to Exceed (NTE) amount for change order work to install additional portable fire extinguishers and fire extinguisher cabinets. The attached "PH1-ASI-038" document illustrates the locations where the additional fire extinguishers and fire extinguisher cabinets will be installed. CCJV is to add the additional portable fire extinguishers and fire extinguisher cabinets according to the revised layout shown in the drawings.

Pursuant to the Contract Clause 52.243-4, Construction Change Clause and the provisions for a "Request for Equitable Adjustment", the Government requests this work to proceed per the guidance of the Contracting Officer Technical Representative with a not to exceed amount of \$37,500 against Owner Allowance #93. Under no circumstances shall the contractor commit to or expend costs to the Government that will exceed \$37,500 against Owner Allowance #93 without prior authorization from the Contracting Officer. If at any time during the Contractor's performance of this changed work the Contractor anticipates the cost to the Government may exceed the \$37,500 amount approved, the Contractor shall immediately provide written notice to the CO.

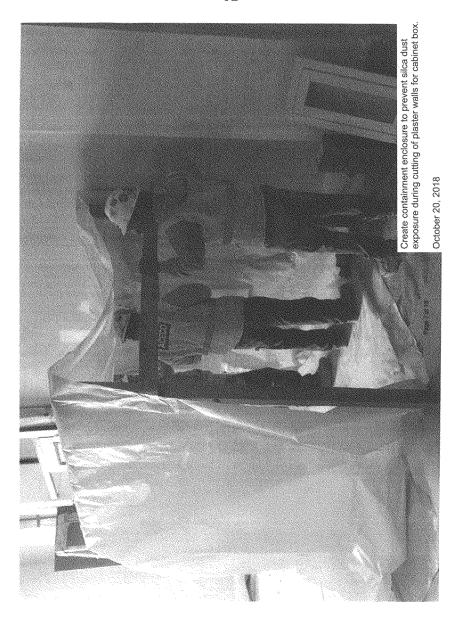
This NTE is issued based on ROM value provided by CCJV via email on October 12, 2018 in response to AOC correspondence. This notice supersedes the AOC NTE dated October 12, 2018 for this work. Please provide finalized proposal as soon as possible for this work.

Respectfully,
Fullyasha Algaussain

Contracting Officer

ENCL

CC: Bruce Pitts, Susan Wong, Donna Klee





October 22, 2018

Phase 1

#### **Project Change Detail:**

Category: Unforeseen condition

Description: Unforeseen penetrations at existing basement walls

Unforeseen Penetrations of basement corridor walls. The existing basement corridor
ceiling was hung form a concrete slab that was originally constructed to provide space
for piping and utilities above the ceiling. The renewal contract documents called for
removal of that slab to create space for new mechanical, electrical, and plumbing
("MEP") systems over a new suspended ceiling. Upon removal of the slab, CCJV
discovered unforeseen and improperly created penetrations of the corridor walls that
limited access to basement mechanical spaces.

Significant re-design and re-coordination was required, resulting in re-planning of the work of Phase 1 leading to inefficiencies in production by MEP subcontractors. After extensive investigation a total of 48 openings were redesigned and re-coordinated to allowed MEP piping systems to be installed.

Change Directive (Bulletin 16) issued: May 18, 2017

June 21, 2017 (Bulletin 16R)

Notice to Proceed: June 21, 2017 Final Directive: August 9, 2019 Work Completed: May 2018



Acquisition and Material Management Division Local House Offic, Buckling, Rossn 132, 263 Washington, Dr. 2051 5 202, 225 255

www.as.gis

June 21, 2017

Clark/Christman A Joint Venture (CCJV) 7500 Old Georgetown Road Bethesda MD 20814 ATTN: Steve Blanton

Subject: Request for Proposal (RFP) - Contract No. AOC13C2002, Cannon House Office Building Renewal, Phase 1 GMP, AOC PCO 1105, PH1-016 Final rev, Penetration Details for Overhead Services in Basement

Mr. Blanton,

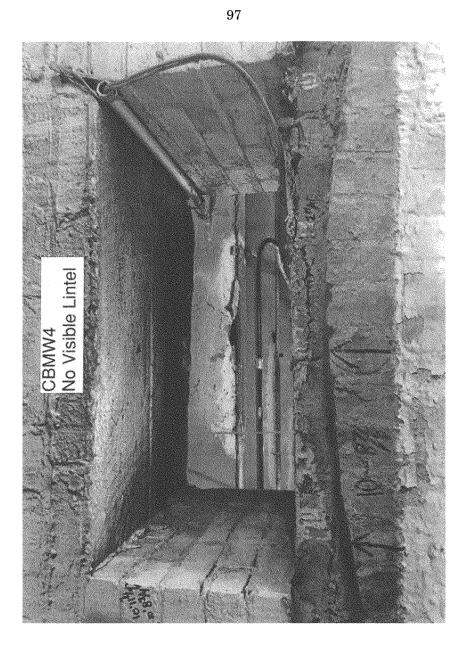
A draft of Bulletin 16 was issued to CCJV on May 19, 2017 with a Not to Exceed amount of \$25,000 to proceed with critical work which may affect schedule. This Bulletin is now finalized and published in Prolog on June 6, 2017 by SBA. Please provide a proposal for work shown in final Bulletin 16. As noted in the NTE, all costs for this Bulletin will be tracked against Owner Allowance #52 for Bearing Wall Openings. Please assemble the proposal and provide to AOC no later than July 7, 2017.

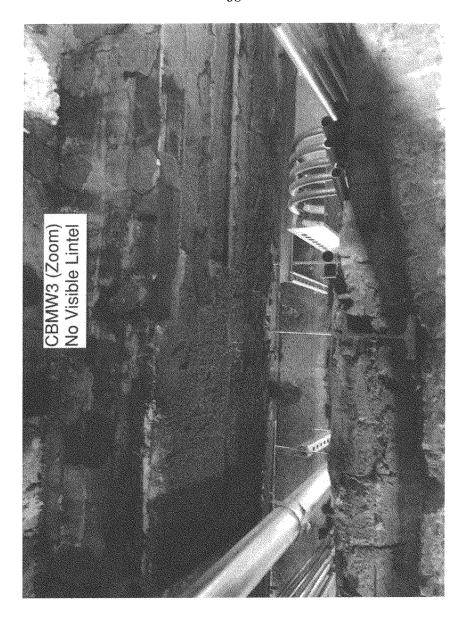
Sincerely.

Falvasha-Alghussain Confracting Officer

Attachment - Bulletin #16 Narrative dated June 6, 2017

CC: Bruce Pitts, COTR Susan Wong Robert Williams Steve Barbehenn Aaron Hunter





Phase 1

### **Project Change Detail:**

Category:

**Unforeseen Conditions** 

Description:

Unforeseen terra cotta ceiling slab over Suite 203

Location:

Phase 1 - 2<sup>nd</sup> Floor Suite 203

Phase 1 - 3<sup>rd</sup> Floor Conference Room 303

• Unforeseen terra cotta ceiling slab over Suite 203. In September 2017 as part of the mechanical, electrical, and plumbing installation for Suite 203, CCJV discovered that the floor slab in the room above was constructed with a flat arch structural detail that was different from the floors found throughout the rest of Phase 1. Extensive re-design and re-coordination was required to support these services since the terra cotta was insufficient to support the necessary systems. The redesign detailed additional support members to span the terra cotta arch.

Notice of Changed Condition: September 12, 2017

Notice to Proceed:

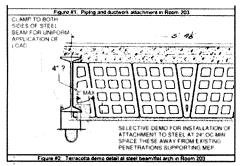
August 16, 2018

Final Directive:

April 4, 2019

Work Complete:

November 16, 2018



Detail shows a solution for supporting the mechanical, electrical, and plumbing systems from existing steel to avoid anchoring support system for these systems into the 3rd Floor terra cotta slab. The solution required select demolition and supplement steel be added to bridge the terra cotta slab to maintain the required spacing of the systems. This condition was unforeseen until the existing ceiling in Suite 203 was removed. This is the only location within Phase 1 in which a terra cotta slab was encountered.

Ania Firsowicz, AIA LEED BD+C

Associate

shalom baranes associates | eronece

1910 Wisconsin Ave NW, Buile 900, Washington, DC 20007

Traffer 202 971-7445 C 301.787-0569 T 202.342 2200 D 202.719.8102

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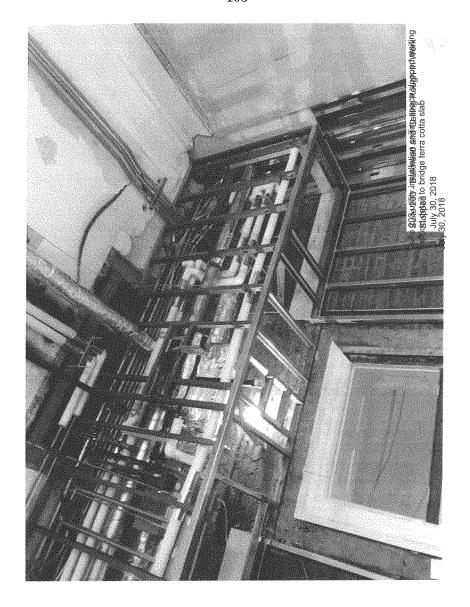
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Unexpectedly encountered terra cotta slab during demolition of existing ceiling in Suite 203. This condition resulted in a Change in how the mechanical, electrical, and plumbing systems were supported within the new utility chase.



#### **Cannon House Office Building**

Phase 1

#### **Project Change Detail:**

Category: Unforeseen Condition

Description: Unforeseen hazardous materials in areas of the exterior façade

Location: New Jersey Avenue Façade Restoration

Unforeseen hazardous materials encountered in mortar of the exterior stone façade.
 The design documents included cleaning, tuckpointing, and restoration of the original historic façade of the building. During this work, caulking containing hazardous materials was discovered in masonry joints of certain areas of the façade. CCJV tested, removed, and disposed of the hazardous materials in compliance with federal standards. This unforeseen condition disrupted the planned work sequence and required the scaffolding used to access the work to remain in place much longer than originally planned, which ultimately delayed the site restoration.

Notice of Change: March 28, 2018

Notice to Proceed: May 29, 2018

Final Directive: June 19, 2018

Work Completed: August 30, 2018



Acquisition and Material Management Division forth Horse Office Building Rossu 312 203 Washington, 38, 20515 202.220-2550

WHAT HE WA

May 29, 2018

Clark/Christman A Joint Venture (CCJV) 7500 Old Georgetown Road Bethesda MD 20814 ATTN: Jim Johnston, Project Executive

Subject: Not to Exceed (NTE) - Contract No. AOC13C2002, Cannon House Office Building Renewal, AOC PCO 1352 - PCB Caulk Removal

Mr. Johnston,

This letter serves as notice for CCJV to proceed with work pertaining to PCB Caulk Removal at the NJ Avenue Façade, as per CCJV proposal 810429 dated May 23, 2018 for a total of \$100,000. Per discussions held on May 29, 2018, CCJV is to review proposal with Retro Environmental, Inc. to ensure all inclusions and exclusions have been fully addressed. Also, please provide an expert report from an Industrial Hygienist on the handling and disposing of exterior façade PCB caulk based on the samples that were collected from the field. CCJV is to also address warranty issue of masonry joints after removal of PCB Caulk with Lorton and provide response in revised proposal.

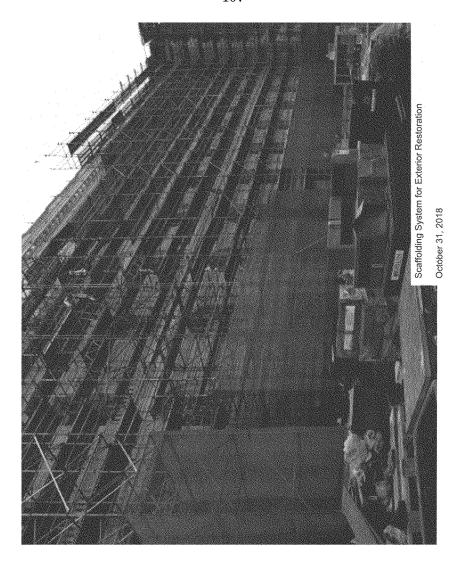
Pursuant to the Contract Clause 52.243-4, Construction Change Clause and the provisions for a "Request for Equitable Adjustment", the Government requests this work to proceed per the guidance of the Contracting Officer Technical Representative with a not to exceed amount of \$100,000 against Owner Allowance #92. Under no circumstances shall the contractor commit to or expend costs to the Government that will exceed \$100,000 against Owner Allowance #92 without prior authorization from the CO. If at any time during the Contractor's performance of this changed work the Contractor anticipates the cost to the Government may exceed the \$100,000 amount approved, the Contractor shall immediately provide written notice to the CO.

Please provide a finalized proposal for this work for review and approval. This NTE will be superseded by a final directive for this work once proposal is submitted, negotiated and settled. Please provide the proposal as soon as possible to finalize pricing for this work.

Sincerely,
Fateastia Alghussain
Contracting Officer

ENCL CCJV PCO 810429

CC: Bruce Pitts, COTR, Susan Wong, Desmond Michael



## **EXHIBIT 12**

Cannon House Office Building Renovation Lessons Learned Comparison Temporary Roof Enclosure (TRE)

	Ö	Dates							Year 1	2	
Activity	Start	Finish	Duration	Ę	Fg.	Mar	ğ	Jan Feb Mar Apr May Jun Jul A	Ę	Z	۱<
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TRE Installation	4/1/2017	11/29/2017	8.1						đ	PH1 TRE Insta	8
TRE Removal	6/18/2018	10/4/2018	3.6					Γ			
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Phase 2 - Temporary Roof Enclosure (TRE)		-									1
TRE installation	4/15/2019	9/6/2019	4.8					PH2	PH2 TRE Installation	tailatic	ę
TRE Removal	3/31/2020	6/17/2020	5.6								
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Installation of the Temporary Roof Enclosure (TRE) covers the entire 5th Floor and allows the building to remain dry as the entire existing 5th Floor is removed and rebuilt. In Phase 2, we changed our approach for how the TRE is supported and anchored. The change in approach resulted in the TRE installation completing 3 months earlier than Phase 1. Presently, the schedule is forecasting the TRE to be removed 4 months ahead of when it was removed on Phase 1. This improved performance will allow the follow-on work for demolition of the existing 5th floor, installation of the new structural steel, and interior finishes to begin ahead of when these similar activities began on Phase 1, which ultimately provides more certainty as to when the 5th Floor Member Suites will be ready to occupy.

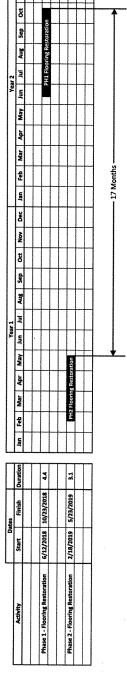
Cannon House Office Building Renovation Lessons Learned Comparison 5th Floor & Roof Structural Steel Installation

	Jan Feb Mai					
	Duration		2.0		4.4	
Dates	Finish		3/8/2018		8/13/2019 12/24/2019	
Da	Start		10/9/2017		8/13/2019	,
	Activity		Phase 1 - Steel Installation		Phase 2 - Steel Installation	

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fabrication and installation drawings to coordinate with the exact locations of the 4th Floor steel. This resulted in the Phase 1 structural steel installation beginning 1.5 months Erection of the new structural steel for the 5th floor is presently forecasted to complete 3 months ahead of when the structural steel was completed on Phase 1. This is due to the 5th Floor. In Phase 1, we verified the exact locations of the structural beams and columns supporting the 5th Floor after the 5th Floor was removed. The exact location of structure. This revised approach enabled us to start the structural steel immediately following the demolition activities, which is 2 months ahead of when this activity started the revised approach to the TRE installation, as well as our revised approach for when we verified the exact location of the 4th Floor existing structural steel, which supports the structural steel, which was installed in 1908, was in slightly different location than what appeared on the contract drawings. We then had to correct our structural steel after the demolition of the existing structure occurred. For Phase 2 we verified the exact location of the 4th Floor structural steel prior to the demolition of the existing on Phase 1.

Cannon House Office Building Renovation Lessons Learned Comparison Flooring Restoration



occurred in the last 12-months prior to occupancy. As such, there was considerably more activity and workers in the corridor spaces than planned leading up to the opening of completion of the Phase. When we established the Phase 1 plan, we could not anticipate the volume and timing for when Changes would occur. Most of the Phase 1 Changes inefficient process. In Phase 2 we have completed the floor restoration before the demolition activities and are still able to achieve follow-on schedule milestones earlier than what was scheduled in Phase 1. We are protecting the floors throughout the remaining work duration. This revised approach has proven to be more efficient than what we The Cannon Renewal Program includes restoring the existing stone floors within the corridors on Floors 1 through 4. For Phase 1 we planned for this work to occur near the the 116th Congress. This required us to perform the floor restoration at night over a 4-month period. As part of the floor restoration installation we had to remove floor protection every night to allow for the floor restoration to occur, then replace floor protection before the early morning work shift. This was a very time consuming and experienced in Phase 1. The CHAIRPERSON. Thank you very much for that testimony and to all of you for your testimony and your work. I would turn now to the Ranking Member of the Committee for questions that he may have for the witnesses.

Mr. DAVIS of Illinois. Thank you, Madam Chairperson, and thank

you all for your testimony.

Mr. Abt.

Mr. Abt. Yes, sir.

Mr. DAVIS of Illinois. According to the AOC IG's first report from last year on Cannon Renewal, the AOC blamed overages on Clark for deviations in scheduling, changing work methods, late submission of mockup completions, and incomplete shop drawings. I would like to give you an opportunity to respond to that. What are your

thoughts?

Mr. ABT. Sure, thank you. The cost overruns that have been incurred as of today are really driven by, as you saw in my testimony, unforeseen conditions in this 110-year-old building. One example of that are the openings in the basement walls which could not be discovered until you demolished an existing slab. And once those openings were discovered, it was discovered that they were not properly supported when they were built 110 years ago, nor were they of the appropriate size to support the new mechanical systems in the basement. So areas like that, unfortunately, were unknown to the entire project team until they were discovered during the project.

Mr. DAVIS of Illinois. Okay. Mr. Carroll, what do you think?

Mr. CARROLL. The changes that we experienced, as Mr. Abt pointed out, a lot of the project was—and we said this going into it—unknown. And I said in my opening statement that unfortunately, in an occupied building that is a highly complex historical structure, occupied, we were unable to do any kind of investigative demolition. And what this means is that many of the conditions behind the walls were unknown until we were actually able to open it up.

I would also say that in addition to unforeseen circumstances, there were also areas where, between 2009's original project requirements identification and the 2012 design, there were technological advances and security enhancements that also needed to be added to the project's scope as we got into construction, and that also presented some areas where we needed to make changes.

Mr. DAVIS of Illinois. Okay. Well, Mr. Carroll, thank you both for your responses. In February 2016, Mr. Carroll, the AOC IG released a report saying that the AOC had completed the second Cannon Renewal Project's integrated cost schedule risk assessment with the GAO's guidelines in 2015. The result showed that the overall project, including phases 1 through 4, was likely to finish on time and within budget. Will you please elaborate on why, if the AOC was complying with those best practices, the project went over budget and has changed so much in scope?

Mr. CARROLL. So I think at the time that that second cost analysis was done, there were a couple of contributing factors. One, again, the unknown conditions that were experienced in phase 1, keeping in mind that phase 0 was an infrastructure phase of the project, operating mostly in unoccupied spaces of the building. And

phase 1 represented the first phase where we began to get into the occupied spaces of the building.

At the time that that cost-risk analysis was done, I believe—and GAO can confirm—that we did validate that we had an 80 percent confidence level that it would fall within the projected budget.

But again, as I have stated, so many of the unknowns, until we actually started to get into phase 1, were still unknown at that time. And I think I would also agree with GAO's assessment that perhaps we were maybe a little overly optimistic on our ability to execute some of the mitigation strategies that had taken—that

were identified during that risk assessment.

Mr. DAVIS of Illinois. Mr. Failla, in February 2016, your predecessor reported that the AOC was complying with the guidelines for best practices for cost estimating and project scheduling. Since then, we have seen a lot of the overages as discussed. And I am happy to get your opinion, really quick, on how Clark and how the AOC are responding to some of the issues in regard to change orders. And really, my concern is—and I am assuming this would be a concern for you as the IG as this project moves forward, is a complete explanation of why the change orders exist. Simply saying various unforeseen and owner-requested changes for \$5.2 million is something that is going to beget more questions.

So, how can the IG work with Clark and with the AOC and with us to ensure that we have more specificity, more specific issues ad-

dressed, when it comes to such large expenditures?

Mr. FAILLA. Thank you for your question, Congressman. I believe that we are currently doing now, if you look at it, Cannon, having Cotton & Company looking at modifications, for example, in phases 0 and phase 1 will give us an idea of how those modifications were approved, if they were approved correctly, and if the modifications that took place were within guidelines and should have been made. Going forward, I believe that the AOC has put in a process now

that will take a better look at modifications, have cut off timelines on when those modifications can be presented, and that will also bring down the cost and also help alleviate many of the modifications. That change process was something that, upon my arrival here, and noticing, I brought to the Architect's attention, and it has now taken a little bit of time to implement, but I think it is going forward and is the correct way to do business.

Mr. DAVIS of Illinois. Thank you. I yield back. The CHAIRPERSON. The gentleman yields back. Congressmember

Davis is recognized for her five minutes.

Mrs. DAVIS of California. Thank you all for being here. We appreciate that. We know how critically important this is. You were talking a lot about cost overruns, and within our oversight responsibility, I just wonder about the assumptions that you are dealing with as you think and work with these overruns. How are they being paid for? Are they being diverted from other funds? I think this is an important issue for us to try and understand.

Mr. CARROLL. So, let me take that, Ma'am. Congress has been very supportive and generous in appropriating dollars for the construction or renovation of the entire Cannon project. And thus far, the appropriations that have been used for the project have been earmarked for various phases. And thus far, what we have done is use those funds and all those funds that were appropriated for the Cannon project have been directed at the Cannon project through phase 1.

So, when we talk about these additional costs due to changes, they were somewhat foreseen in the budget in that there was a portion of the budget that was earmarked for contingency. And so thus far, we have not had to adjust the request, and Congress has appropriated the dollars needed to complete up to phase 1 and, in fact, appropriated dollars for us to start, which has already been

mentioned here today, phase 2.

I think going forward, as I mentioned in my opening statement, our analysis of the current working estimates, along with the integrated cost schedule risk analysis will allow us to fold into that analysis the now—previously unknown, now known conditions that need to be changed for future phases and update our assessments of the current risks to the project. And that will allow us to arrive at a new budgetary figure that we can, of course, then share with

the Congress for your support.

Mrs. DAVIS of California. I know, Madam Chairperson, because it seems to me that as you are talking, that there still has been a significant diversion of funds from other projects that, perhaps, were not part of the contingency, and I think that is just something for us to track and be careful about, because the alleged budget, I think for all of us, is low. I mean, we have looked at a number of issues that really do affect members and their districts, and I just want to be sure that there is an understanding of that and that it is very transparent, which, I think, there is still some confusion about that. I certainly can understand, we can all understand, that it is usually less costly to construct a house than to remodel it entirely, and there are often surprises. You know, that is clear.

But on the other hand, it feels as if, as we go forward, trying to find a better way to assess that, within a time frame is important, and I know that-I think, Mr. Dorn, you spoke to this, and Mr. Abt, if you want to speak to it as well, because the basic assumption is that the money is going to be there no matter what you find, and that is kind of a black hole that we don't want to deal with.

Anybody else want to comment on this?

Mr. Abt. Sure, I would be glad to comment. You know, as I stated in my testimony, we have now completed the most challenging phase of the Cannon Renewal Project, and we are hopeful that regarding most of the deviations that the 110-year-old building has, we are much smarter about those today because as was explained in some of the testimony, you know, the destructive testing prior to the start of the project just was not an option for the project. And so now, having completed the first phase, I think the knowledge of the whole team of what the building consists of, as it was constructed, as I say, 110 years ago, is now known. And so now, those details can be put into the future documents, so that then as the job is then finalized for the future phases, it will contain the information that we now have learned from the first phase.

Mrs. DAVIS of California. Do you feel that you are in a position to scale back on anything? I know you mentioned that in order to do that you run into other problems when you start trying to

descope it or—are you at that point?

Mr. ABT. Well, it is hard for me to comment because it is really based on the mission, but as I understand from the Inspector General's testimony that it has looked at areas that can be scaled back, and with the desire to make this a building that is going to last for another 100 years, that there is probably not a lot of opportunity to scale back the program that the building is based on.

Mrs. Davis of California. Thank you. Thank you, Madam Chairperson.

The CHAIRPERSON. The gentleman from Georgia is recognized. Mr. LOUDERMILK. Thank you, Madam Chairperson. Thank you all for being here. Quite a project. I grew up in a construction family. I still have family members involved in commercial construction, especially in government contracting. That is a unique niche market, right? It is—especially when it deals with government agencies or the Corps or someone, there are unique challenges there. And I have never been on a construction project where there weren't unforeseen conditions, whether it is new construction, because of foundational issues, design issues, or scope changes, change orders are just a way of life in any construction project. And I can imagine the scope of what you are dealing with, of unknown, undocumented changes to buildings, et cetera. So I am sympathetic to these changes.

Mr. Dorn, other projects you have—based on other projects you have reviewed, how does this project compare, especially as it pertains to the challenges that you have seen with other projects, and are they less likely to occur in the future phases of this project, as far as the challenges we faced and how we have attempted to over-

come those challenges?

Mr. DORN. Right. So I would say that, as Mr. Abt said, you have uncovered a whole lot of the unforeseen conditions in this first phase. So you are probably going to see some of the same things. But if you are able to get these design bulletins and things incorporated into the future phases and don't need to pay for them as later change orders out of schedule, affecting the schedule, then I think you can reduce some of the costs going forward. So that is that is about that.

Renovation projects are usually messy, as you mentioned. It is not unusual to have 15 to 20 percent change orders in your cost increases. But the project already had some contingency built in. And I would just caution that as we do the re-funding of the project that we adequately fund that contingency. If we don't use it, give it back. But we don't want to keep coming back to the well, right? That is not very good.

Mr. LOUDERMILK. Are the efficiency savings from what we learned, especially being over the most complex portion of the renewal, you mentioned efficiencies, lessons learned, there will be some cost savings. Are those enough to mitigate increased cost of

the change orders?

Mr. Dorn. No. No, I think it is—what we have seen—and Mr. Abt had some great examples of lessons learned being incorporated in his statement-I think there is no way that they can overcome that, but it can reduce future cost increases.

Mr. LOUDERMILK. Do you anticipate that the scope of the project will need to be tailored in the future?

Mr. DORN. If sufficient funds aren't available, you are going to have to find some way to reduce the scope. I would hate to be in phase 4 if that happened.

Mr. LOUDERMILK. Yeah, I appreciate that.

Mr. Carroll, on that, if Congress should not provide additional funding that is needed, what would change about the scope of the

project?

Mr. CARROLL. So that would make it very challenging for us, to be perfectly frank. I think the team has done just a superior job early in the development of the design to use value engineering techniques to provide the best value, and to engineer any improvements in both process and constructability.

So that is already done. And what has already been said, both by GAO and our partners and the inspector general, is, I think we are really at the point at which the descoping of anything else

would probably start to impact the overall project.

But I will say that if we get to that point, then we would have to address it. And the Architect of the Capitol would certainly take the approach of, we are here to ensure that the facility, the building, meets the needs of Congress, meets the needs and mission of the Members and constituent services. So any scope changes or descoping of the project, should it have to occur, would be applied through that filter. So that at least the end product, if we ever got to that phase that you potentially suggest, that at least in the end, that Members and Member offices would be maximized in that effort.

Mr. LOUDERMILK. All right, thank you.

Mr. Abt, quickly, I have never worked on a project that was as long in duration as this, 10 years. Even on some of the smaller projects, the concern was the volatility of cost of products and supplies. How does that weigh in to you guys going forward, especially over such a long period of time?

Mr. ABT. Sure, thank you. And that is a great question. And when the overall budgeting was put together, it was discussed with the Architect of the Capitol, and essentially, we carried a contingency, an escalation contingency in the numbers. Obviously, nobody really has a crystal ball on what materials are going to do 10 years out, so we agreed to a percentage that was then carried within the budget to cover anticipated escalation.

Mr. LOUDERMILK. Okay. Thank you. I yield back. The CHAIRPERSON. The gentleman yields back.

The gentleman from Maryland is recognized for five minutes.

Mr. RASKIN. Thank you very much, Madam Chairperson. Thank you all for your testimony.

Mr. Abt, thank you for your detailed explanation of what has been going on, and the work of Clark Construction, which, of

course, has a storied history in our community.

You explained a number of the causes for different changes, the discovery of hazardous material, some of the changes and requests from Congress for different kinds of restaurant services and stuff like that. What do you think is the single greatest challenge you have faced so far, and how did you, or are you overcoming it?

Mr. ABT. Well, the greatest challenge so far is really a lot of the items you just mentioned, is during phase 1, it was really the tim-

ing of those changes. And if we were aware of those changes at the very beginning of the phase, we could incorporate them into the plan and the process for the job. And the most challenging aspect is when we get those changes midstream or late into the program, and we have to try to incorporate those into the work. But that is why I am very excited about the future phases—phases 2, 3, and 4—to where we are incorporating a lot of those lessons learned and knowledge that we have gained from phase 1. And in my testimony, I noted three lessons learned where we have been able to really move up some of the work, based on knowledge of having completed that phase 1.

completed that phase 1.

Mr. Raskin. Is the renovation now proceeding on schedule, and

will phase 2 be done in time for the 117th Congress?

Mr. Abt. Yes.

Mr. RASKIN. All right. This is good to know. And are you on site, or how frequently are you on site?

Mr. ABT. I am not on site, sir. But typically, I am on site about

every month or month and a half.

Mr. RASKIN. Who is the direct manager for Clark on the site?

Mr. ABT. We have a large staff of about 40 people. But a gentleman with me today is Joe Hogan, who is our division president,

who is involved on a weekly basis on the project.

Mr. RASKIN. Okay. Let me turn to Mr. Failla—I hope I am pronouncing your name correctly—in your testimony, you mentioned needing to suspend the 2018 audit of the project because of staffing problems that you were having in the audit division. Do you feel that you now have the resources necessary to oversee the Cannon Renewal Project?

Mr. FAILLA. Thank you for the question, Congressman. Yes, I do. We are currently using Cotton & Company, who is an independent construction audit firm that will do these construction audits, and we are going to do two a year on Cannon until Cannon is finished. And that is going to help alleviate some of the strain that was put on my staff that did not have the expertise or the numbers to do the oversight.

Mr. RASKIN. Gotcha. Of the contract modifications that we have seen, what portion have been necessary and unavoidable, and what portion could have been avoidable and perhaps could have been an-

ticipated?

Mr. Failla. So what Cotton is looking at currently is going to be just that. They are looking at the modifications for phase 0 and phase 1. I, at this time, could not give you an honest answer on what was proper and improper to do for modifications. I just know that there is a lot of them. About 54 percent were client-driven modifications of the cost that was driven up by those. I think the process, again, that the AOC is putting in place will help tamp that down, and I am hopeful that Cotton & Company will recognize and provide recommendations that could offset those problems in the future

Mr. RASKIN. Okay. Mr. Carroll, let me turn to you. Serving on the House Administration Committee must be a little bit like what your job is, because Members will come to us with particular kinds of gripes and complaints that they have. And one that I hear commonly is that the offices are too hot or they are too cold, they can't

control the temperature. What is the cause of this? And are we moving in the direction where we might hear a little bit less grip-

ing about that?

Mr. Carroll. So let me first start by saying that Members of the Committee that hear these complaints just pains me. You—we should be on top of these before they get to your level, and so let me just start by saying that. I think, with regards to some of the issues that we hear about, in particular, from phase 1, they break down into kind of three buckets, one of which is this HVAC, or too-hot, too-cold situation. So our team has been working very hard, and we, too, have heard those complaints, and they have worked very hard to try to correct the situation. I believe that the reason for it, in the first phase was, again, because of the late nature of many of these changes, the systems were not ready for testing and evaluation when the Members started to move in—

Mr. RASKIN. And forgive me for interrupting, but my time is about to be up. Can you just add a note about the elevators too,

because that is the other thing.

Mr. CARROLL. Absolutely. And we are aware of that, sir, and I think the team, again, has worked with this and we are incorporating those lessons learned to prevent that happening in future phases.

Mr. RASKIN. Okay. So in other words, we are making progress in terms of the slowness of the new elevators?

Mr. CARROLL. The new, yes. The new elevators going in will be delivered as scheduled. And it is my understanding that all the items associated with the existing elevator situation have been resolved. But we can check into that, sir, and I will get back to you.

Mr. RASKIN. Okay. If you would follow up, that would be great.

Mr. Carroll. Yes.

Mr. RASKIN. Thank you very much. I yield back, Madam Chairperson.

The CHAIRPERSON. The gentleman from Maryland yields back. The gentleman from California is recognized for five minutes.

Mr. AGUILAR. Thank you, Madam Chairpreson.

Mr. Dorn, you had talked a little bit about the change orders and the contingency. Can you talk about some other projects? What typically should a contingency be for a project of this scope, of this age?

Mr. DORN. As I said before, it is not unusual for a renovation project to start off with 15 to 20 percent contingency. One that is this difficult, I would have probably tended towards the upper end of that. And that is probably the best advice I can give you right now.

Mr. AGUILAR. Mr. Carroll, from a position of lessons learned, can you talk a little bit about contingency and what we should look to-

ward in the future?

Mr. CARROLL. So, obviously contingency is programmed and budgeted into the project to address unforeseen conditions and constructability issues and scope changes, and what I would say is, setting the proper amount gives us that confidence level, and that is using GAO's best practice of the cost-risk assessment in order to arrive at that.

Also, because of the importance of delivering Member suites in each phase by at least December of the new cycle year, we also do the integrated cost schedule risk analysis. We look at risks as they impact the cost, and we look at risk as they impact the schedule. The mitigation strategies that that report suggests, and then are ultimately approved is what then ultimately sets the contingency.

So I would, as I said in my opening statement, I would really like to make sure that the team has full visibility and analysis of these two reports—the working estimate analysis and the risk analysis—

before we come back with a revised budgetary figure.

Mr. AGUILAR. Sure. I guess what I am trying to also ask is less specific to this project and more specific to improvements on this campus. What should we be looking at in the future? I understand you want all of the data, all of the information before we—and I know the back-and-forth between the contingency, you don't want it too high, because that signals that there is a lot of unknowns or that maybe the contractor has a little more wiggle room than we may like, but what I am trying to get at is, the contingency that was set was clearly inadequate, based on the age of the building, given what we know now and the work that was done on phase 0.

So what I am asking you to give the Committee and to give me, is, can you walk me through what we are going to learn from setting new projects outside of Cannon and what that contingency might be, or things, lessons, that the Committee should keep in mind, as we sharpen our pencils and look to those projects in the

future.

Mr. CARROLL. Sure. And it is important to also note that every project on this campus is slightly different. I mean, you can well imagine the different spaces, the different aspects of historical nature, occupied versus unoccupied spaces. I can assure you that as a result of a previous GAO audit that looked at our project cost estimating, we have adopted the risk analysis as part of the general practice.

So when we offer our annual budget request, which includes projects not only here in the House office buildings but across campus, those projects have all gone through a rigorous cost-estimating process. For projects over \$10 million, they go through the risk analysis, which helps us better define and refine the contingency amounts. And so, it involves the—those requests have the construction management and contingency all as part of the request.

Mr. AGUILAR. I appreciate it.

Mr. Carroll, also, you mentioned in response to Mr. Raskin that the concerns you have received are in three buckets. He had mentioned HVAC, and I assume the other one was elevators.

What is the third bucket?

Mr. CARROLL. So I actually—I had heard about elevators, but I put that into the general repairs bucket. But the three were—we had heard about HVAC. But the new lighting system, and what I call general repairs, which often, many of those were contractor warranty and punch list items that we are working to conclude.

Mr. AGUILAR. Okay. Understood.

Members have also received some conflicting information on—I am going to put this in the general bucket that you described, on a wall that separates the chief of staff from the reception area.

Can you talk a little bit about what that policy might be? Are folks allowed to hang things? Folks routinely want to hang things showing and displaying their districts and the communities in which they come from. Are there restrictions on which walls can have things hung in the newly renovated suites?

Mr. CARROLL. The design consideration for that particular division wall is essentially a solid wood wall. And so, yes, we would

not want folks to be hanging things on that wall.

However, sir, I have heard that complaint, and we are looking into that to see if there is methods that would accommodate the request, or potentially even design changes in the future that would allow that to happen. So I am aware of it, and our team is looking into it.

Mr. AGUILAR. I appreciate it. Thank you.

Thank you, Madam Chairperson.

The CHAIRPERSON. Thank you.

I am looking forward to the completion of the audit. I think we will know more when that is done. But there are concerns that, according to the report we received so far, that over half of the cost is because of scope changes and that is really not something that you hope to see in a project.

Now, it looks like a large portion of those in terms of cost were security-related, and we certainly don't want to—not only for the well-being of the people who have offices there, but the public,

don't want to have an insecure facility.

The real issue, I think, is to get control of what we are going to have, and then budget for it and to prevent change orders, because there is a premium cost with change orders. So I am wondering whether we feel that the management changes that we have made will incorporate the known changes so that we can eliminate these change orders that are so costly.

Mr. Carroll.

Mr. CARROLL. So I, too, welcome the audit. And this particular one that Chris mentioned earlier is going to be focused on the changes. And hopefully also, as with all our audits and working with our partners, we will receive some recommendations that will help us going forward.

But to your point, ma'am, the lessons learned from phase one, the change orders were categorized as three major things. Unforeseen site conditions. And these types of change orders are some-

what unavoidable. Again, I mentioned—

The Chairperson. Well, if I could follow up on this.

Mr. CARROLL. Yes, ma'am.

The CHAIRPERSON. There is a press report today—and I am not—you know, it may or may not be correct—but that some of the unforeseen conditions should have been foreseen. There is a report that an outside expert and former EPA official is quoted as saying specifically it shouldn't have come as a surprise to anyone that there would be PCB in the caulk.

You know, this is an old building. There are things that—I mean, there are no plans—there are just things you can't anticipate that, you know, things might be missing. But an old building has some

known unknowns.

Are you confident that we built in those known unknowns into our plan so that we don't have change orders to deal with them?

Mr. Carroll. So that is what I am actually excited about, is that the phase 1 allowed us the opportunity to see where a lot of these known unknowns—we knew about it, we just didn't know the amounts or the locations in many places, and we can reasonably infer that some of those patterns will replicate in the future phases. And we have informed the contractor in the initial base bid of phase 2 and in—some bulletins that have been issued have incorporated that earlier. And Mr. Abt already suggested and said earlier this morning that getting those change orders early is key.

The other thing is the user—what we call scope changes, or user requested changes, as Mr. Abt has pointed out. And these are the things that you have already mentioned, the security changes or enhancements that are new or different than when the project was first conceived and budgeted in 2009 and designed in 2012.

Again, I am pleased that these changes have now been identified and rolled over or incorporated into future phases which will help to contain—although they will cost more to the project, at least we will contain the cost of the premium and acceleration dollars that

we did have to pay on phase one.

The CHAIRPERSON. Well, I just want to make sure that what we know has to be changed that is built into the base budget. The changes that have been made—you know, this is the first hearing we have had in a long time. And some of the changes were unavoidable. I mean, the life safety issues, unavoidable. Some of them might have been discretionary. We might make a choice. But at this point, those changes have already been made and can't be undone. That bell cannot be unrung. We just want to make sure that we are sitting on this in a very aggressive way to keep the costs down going forward.

And I have been involved in—when I was in local government, in projects that involved old things and, it is expensive. You get some surprises sometimes, so that is really not an excuse to have 54 percent of the cost overruns relating to change orders that were

requested by the owner. So that is a concern that I have.

Mr. Davis has an additional question that he would like to ask, so I would yield to him at this point.

Mr. DAVIS of Illinois. Thank you, Madam Chairperson.

Mr. Carroll, I didn't get a chance to ask you a couple other follow-up questions.

You mentioned that there has been some testimony about the reduction in scope of the project. You know, the GAO report mentions the window project being shifted over to a larger window project

versus being part of the original Cannon renewal estimates.

So with that reduction in scope, do you think it is going to have—are any of those reductions, in your opinion, going to have an impact on building occupants, or will they all be kind of just un-

known to the members who operate out of Cannon?

Mr. CARROLL. That is a great question. And as I said previously, I think it is important to realize that we have designed a project to renovate the Cannon House Office Building that meets the needs of Congress, meets the needs of Members and constituent services and that is paramount.

And, so, any scope additions or reductions always go through that filter. So our goal is to make sure that, at the end of the day, when the Members are occupying the building, that their needs to conduct their mission, your mission, is met. And so, we do focus our scope changes on the areas that, when necessary, on the areas that will have least impact.

When there is an impact, and Chris has already mentioned that we have instituted a new change management process, and when there is an impact to Members, we will be bringing changes of that sort when there is a significant impact to the executive working group for review and decision.

Mr. Davis of Illinois. Well, thank you.

As you can tell from some of the questions on the Committee today, relaying that information to our teams, both the Majority and Minority, could be helpful in us addressing some situations

that may be brought to us as Members.

Just like any other construction project, I built a house years ago and had a punch list after that was completed And you hope and pray the contractor doesn't move on to bigger, brighter, newer projects before those last few things are done. With some of the completed phases, I know there has been a punch list that has been put together in conjunction with Clark and with the AOC.

What is the time line for completing that punch list that exists

on the previous phases that are complete?

Mr. CARROLL. So it is my understanding, Congressman, that we are down to approximately 200 items, with under 10 of those punch list items being associated with member offices, I have been told and I know our partners over at CCJV are working very hard- I have been told that a majority, well over 95 percent, will be completed by the end of this month with the remaining items.

Mr. Davis of Illinois. Who is completing them? Are you com-

pleting them or CCJV?

Mr. CARROLL. No. CCJV is responsible for the punch list and warranty items.

Mr. DAVIS of Illinois. Nothing the AOC is doing with that punch list? It is the contractor?

Mr. CARROLL. No. If it has been declared a punch list items, then it is the contractor's responsibility to take care of it.

Mr. DAVIS of Illinois. All right. How are they coming along, Mr. Abt?

Mr. Abt. As Mr. Carroll mentioned, there is about approximately 150 to 200 punch list items remaining. And we are working very

diligently to complete them.

The most challenging aspect is really access to them. It is now in an occupied building, and we are very respectful of the work that is going on within the building, not to disrupt that. And so right now, we are working with the AOC to come up with the best way to access those items so that we can do them most expeditiously.

Mr. DAVIS of Illinois. Okay. Well, thank you all for being here

That concludes my questions. I yield back.

The CHAIRPERSON. The gentleman yields back.

I will just close by expressing the hope that some of the complaints that we have received in terms of HVAC systems not working, emanating loud white noise, lights that go off intermittently and don't go back on that are supposed to be motion-activated, the elevators that don't work, that seems to be out of sync with the algorithms they don't call, that those are on the punch list to get fixed.

I would like to know—I am now in my 8th month as Chairperson of this Committee. We haven't had review of this project in the eight years prior to this hearing. I want to keep on top of what is

happening.

So I look forward to this audit and expect that we will review that audit with the appropriate personnel, either in a hearing or workshop or in an informal way to keep on top of this. We don't want any additional unforeseen costs involved with this project.

So without objection, we will adjourn this meeting, recognizing that we have five legislative days to submit additional questions.

We thank you all for your participation.

[Whereupon, at 11:17 a.m., the Committee was adjourned.]

#### HEARING

# COMMITTEE ON HOUSE ADMINISTRATION "OVERSIGHT OF THE RENOVATIONS OF THE CANNON HOUSE OFFICE BUILDING" SEPTEMBER 10, 2019 MALONIE OVERSTONE FOR THE PROCESS.

#### MAJORITY QUESTIONS FOR THE RECORD THOMAS J. CARROLL III ACTING ARCHITECT OF THE CAPITOL

- 1. How frequently is the projected overall cost of the Cannon rehabilitation project reevaluated?
  - a. How frequently are cost estimates recalculated for future phases?
  - b. When were cost estimates last recalculated for future phases?

It is typical for the Architect of the Capitol (AOC) to prepare projected overall costs in association with the Integrated Cost Schedule Risk Analysis (ICSRA) that is performed during each phase of the project. The AOC has completed three ICSRAs for the Cannon Renewal in October 2014, February 2016 and February 2018. The risk assessment currently in process, which began in early August 2019, will be the fourth assessment. All of the assessments have been led by expert consultants.

The AOC has been doing qualitative risk assessments for many years. Qualitative risk assessments typically entail asking the AOC project team staff and stakeholders, including jurisdiction and Safety, Fire and Environmental Programs staff, and relevant U.S. Capitol Police staff to identify risks they see as potentially affecting accomplishing project objectives, such as cost, schedule, quality, safety, and security and their probability of occurrence and likely impacts on these objectives.

In 2014, following a Government Accountability Office review of the AOC's cost estimating program, the AOC supplemented its cost estimating process with ICSRA for high dollar value construction projects. These integrated assessments evaluate the risks and uncertainty associated with both the project's estimated cost and expected schedule duration.

- 2. Is the Architect of the Capitol ("AOC") utilizing its own resources and personnel to supplement contractor work in any way?
  - a. If yes, has this had an impact upon the AOC's ability to allocate resources to other projects?
  - b. If yes, is this standard industry practice?

The AOC is very careful to ensure that we remain in compliance with appropriations law. For the Cannon Renewal, project work is funded by the project. Any activity that falls under the AOC's regular operations is funded by the AOC.

Due to the limited number of qualified plaster workers in the workforce, and as time became limited for completion of Phase 1 of the project, the AOC needed to supplement the contract workforce to ensure the project remained on schedule. The AOC ensures that any instances of resource sharing across accounts remains in compliance with applicable fiscal law and under its authority in 2 U.S.C. § 1832. As such, the AOC obtains an appropriate credit for this completed work from the contractor. The Phase 1 plaster work did not impact the AOC's ability to allocate resources to other projects.

- 3. Are invoices received in a timely manner from the contractor?
  - a. If no, has this impacted project cost?
  - b. If no, has this impacted project timeline?

Invoices from the contractor have been received in a timely manner.

4. What methodology does the AOC use to evaluate contractor performance?

The AOC evaluates contractor performance using the methodology set forth in the Contractor Performance Assessment Reporting System (CPARS) as described in Federal Acquisition Regulations 42.15. The methodology includes seven criteria with metrics used to rate the contractor's performance to eliminate subjectivity from the process. The seven criteria are: safety, cost control, schedule, quality, small business contracting, regulatory compliance and customer satisfaction.

5. What factors are considered when deciding whether to request that the contractor make design changes?

The basis for changes on the Cannon Renewal falls into three main categories: unforeseen conditions, design and constructability issues, and scope changes. The two primary factors that are analyzed when deciding whether to execute a change are impacts to cost and schedule. The AOC has adopted a rigorous change management process to assess requested changes. The change order process is vetted through the project team for cost and schedule impact. Recommendations are briefed to AOC leadership at monthly Change Management Board (CMB) meetings for final direction on scope, funding and contract execution strategies. The CMB evaluates the need to raise issues to the House Executive Working Group for either awareness or decision, particularly if scope would significantly affect cost and/or schedule.

- 6. What is your procedure for addressing issues or concerns raised by occupants of newly renovated office suites?
  - a. How does the AOC capture feedback from Members of Congress and staff in newly renovated office suites?
  - b. How is this information used?
  - c. What are some specific examples of the AOC incorporating that feedback into plans for future phases of the Cannon rehabilitation project?

Because Phase 1 was the first of the four building wing renovations on the Cannon Renewal, there were a significant number of lessons learned that are being incorporated into subsequent building phase renovations. Interviews with stakeholders and members coupled with changes in the design and construction methods from Phase 1 are being incorporated in these future phases. Additionally, a large part of understanding the operations of the newly constructed wing includes ongoing communication with and feedback from impacted members and staff. The AOC conducts door-to-door visits and monitors incoming work order requests. Member offices also reach out directly to the Cannon Renewal's communications manager, which allows the project to respond immediately and provide a timely resolution.

Thus far, input from offices generally falls into three categories: general repairs, temperature adjustments and light fixture modifications. General repairs are those typically associated with punch list and warranty work on construction projects. Feedback related to temperature adjustments and light fixture modifications have shown that the Cannon team must improve our pre-move-in education for member offices to ensure they know how to use the new systems. In August 2019, AOC staff visited all of the Phase 1 offices to offer an instructional tutorial on the thermostat controls. On request, we have disabled new light fixture motion detectors in these offices. We will continue to work with these offices and plan to be better prepared for the new offices that will be moving in following the completion of future phases.

- 7. When was the Phase 1 HVAC system commissioned?
  - a. Was the Phase 1 HVAC commissioning completed on schedule?
  - b. Do you anticipate that HVAC commissioning for Phase 2 being complete prior to the start of the 117<sup>th</sup> Congress in January 2021?
  - Please explain how the HVAC commissioning process impacts the ability to control temperatures in office suites.

Testing and balancing, also known as commissioning, of the heating and cooling systems ensures they meet baseline functionality requirements (i.e., heating/cooling capabilities and humidity levels). The system is then tied into the campus-wide Building Automated System Network (BASnet) and turned over to AOC operations. Testing and balancing work usually occurs after construction is substantially complete and prior to occupancy, although it is not a required precondition of occupancy.

Phase 1 HVAC testing was scheduled to occur in the fall of 2018. Delays from a significant amount of contract modifications caused testing to take place after member office move-ins occurred in December 2018. To minimize the disruption to occupied offices, testing was relegated to a limited work schedule of nights and weekends, which extended the testing period through the 2019 August recess. Phase 2 HVAC testing is scheduled to be complete by the congressional move cycle.

8. How many Phase 1 punch list items remain outstanding?

As of October 16, 2019, there are 117 individual punch list items remaining to be closed out in Phase 1.

- 9. What steps are being taken by the AOC to ensure that there is sufficient funding available to complete all phases of the Cannon restoration project?
  - a. Do you anticipate requesting increased appropriations in order to finish the restoration project, and if so, when do you expect to request these additional dollars?

The project will require additional future funding. A detailed analysis of the project's working estimate is ongoing. Furthermore, the Integrated Cost Schedule Risk Analysis' final report is expected later in the fall. The project team will use the final results of these two reports to recommend a revised program strategy to the Executive Working Group. Until the risk analysis is complete and the final report issued, the AOC will refrain from making any assumptions on future funding needs.

10. In previous projects overseen by the AOC has it been standard practice to use funds provided for future phases to address increased costs above estimates for previous phases?

In general, the AOC seeks full funding for capital projects. When full funding is not attainable, the AOC requests full funding of capital project phases or segments that, when completed, ensures the government benefits from a fully useable construction effort even if no further phases or segments of the project are funded.

When it's determined to be in the best interest of the government, the AOC occasionally uses funds from future construction phases to address increases above the estimated cost. It is standard AOC practice to work with its oversight committees to provide notification of these instances.

#### MINORITY QUESTIONS FOR THE RECORD

1. Would you please provide a detailed list of remaining Phase 1 punch list items that Clark is responsible for completing?

The punch list is attached.

2. Will you please provide a detailed list of any change orders over \$100,000: what were they for and who specifically requested them?

The change order list is attached.

3. You mentioned in your testimony before the committee that the AOC has adopted a new change order management system. Would you please describe how this new system will work and how it will be more transparent and accountable? Additionally, will you please explain why this new system is necessary when a February 2016 AOC IG report stated that the AOC was following best practices for managing change orders. What pitfalls have highlighted the need for this new system?

The AOC has adopted a rigorous change management process for the Cannon Renewal due to the amount of requested changes and the fact that many of the Phase 1 requests were provided well into the project's construction. The new process will help avoid delays and premium costs associated with change orders in future phases. We have identified, scheduled and priced any required changes much earlier in Phase 2 than occurred in Phase 1. We have also formalized the process by which changes are requested and reviewed. The change order process is vetted through the project team for cost and schedule impact. Recommendations are briefed to AOC leadership at monthly Change Management Board (CMB) meetings for final direction on scope, funding and contract execution strategies. The CMB evaluates the need to raise issues to the House Executive Working Group for either awareness or decision, particularly if scope would significantly affect cost and/or schedule.

4. Was it the plan all along to not have the HVAC system fully commissioned when Members were moved back into Phase 1 offices? If so, do you anticipate the same timeline for commissioning the HVAC system in the out-phases?

Testing and balancing of the heating and cooling systems, or commissioning, ensures they meet baseline functionality requirements (i.e., heating/cooling capabilities and humidity levels). The system is then tied into the campus-wide BASnet system and turned over to AOC operations. Testing and balancing work usually occurs after construction is substantially complete and prior to occupancy, although it is not a required precondition of occupancy.

Phase 1 HVAC testing was scheduled to occur in the fall of 2018. Delays from a significant amount of contract modifications caused testing to occur after member office moves in December 2018. To minimize the disruption to occupied offices, testing was relegated to a limited work schedule of nights and weekends, which extended the testing period through the 2019 August recess. Phase 2 HVAC testing is scheduled to be complete by the congressional move cycle.

5. This project has been ongoing for quite some time—initial planning occurred at least 10 years ago. How does the current scope compare to what was initially planned? Have you cut scope for budget reasons? Will you need a future project to do what you are not able to do on the current project?

Studies for developing this project began in 2009. During the early planning phase of the project, we accepted that it would be extremely complex and involve stringent schedule, logistical and budgetary parameters that are inconsistent with many industry standards and best practices. The 2012 project design was subsequently developed within the established budgetary parameters while building in as much flexibility as possible to address likely unforeseen conditions, such as hazardous materials that are found in older facilities across campus and expected future design alterations that commonly occur as a part of all renovation projects. There were multiple rounds of 'value-engineering' performed in order to eliminate redundant or unnecessary scope as the design was being finalized in order to prepare contract documents that were believed to be within the budgetary limits from the 2009 study. Staying within the confines of this 2009 budget number has been a great challenge during the past two years. However, we believe that we have now uncovered the majority of those construction and design challenges, and we are better prepared to mitigate similar issues in the future. As the project progresses, and we continue to address any identified issues and incorporate lessons learned, we will continue to refine and update the project's cost estimate while investigating ways to control costs. Any potential future changes to the project scope will involve stakeholders. The scope from the 2012 design as well as solutions to the challenges discovered in Phase 1 are currently included in the project design. If additional scope or scope changes are required, they would likely have an impact to the cost and schedule of the project, and may need to be deferred as a separate project in the future.

6. What would you do differently the next time you need to execute a project of similar scope and cost?

In December of 2018, we contracted with an independent organization to assemble a blue-ribbon panel of construction and financial industry experts to assess potential renewal strategies for the Longworth and Rayburn House Office Buildings. The focus of this study will be to identify alternative renewal strategies and their related cost and schedule impacts. We will investigate alternative financing options including public-private-partnerships, leasing options with developers, in addition to the traditional direct appropriations. The results of this study will provide actionable recommendations to the agency for future funding request consideration.

In addition to the blue-ribbon panel study underway, the AOC is conducting a third-party facility condition assessment of the Rayburn House Office Building. This study will identify the building's deficiencies and outline strategies to correct them with appropriate timeframes for action.



Office of Inspector General 499 South Capitol Street, SW, Suite 518 Washington, DC 20515 202,593,1948

www.aoc.gov

Date: October 16, 2019

The Honorable Zoe Lofgren, Chairperson The Honorable Rodney Davis, Ranking Member Committee on House Administration U.S. House of Representatives Washington, DC 20515

Subject: Architect of the Capitol (AOC) Office of Inspector General (OIG) Response to Questions for the Record for the Committee on House Administration hearing titled "Oversight of the Renovations of the Cannon House Office Building."

Dear Madame Chairperson and Representative Davis:

Thank you for the opportunity to address the Questions for the Record (QFRs) following the Committee on House Affairs hearing titled "Oversight of the Renovations of the Cannon House Office Building" held on September 10, 2019.

The AOC OIG received your letter dated September 25, 2019, which included nine QFRs and attached below are our written responses.

Further, the AOC OIG received your second letter, also dated September 25, 2019, with an additional five questions. Our responses to these questions are also attached below following our QFR response.

It is important to note that AOC management is responsible for the information presented in these responses unless the question specifically addresses the OIG's opinion on a certain topic.

Please do not hesitate to call me at 202.593.0260 if you have any questions or if I might be of further service.

Sincerely,

Christopher P. Failla, CIG Inspector General



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- 1. In your written testimony you noted that the Architect of the Capitol ("AOC") utilized personnel from other jurisdictions to support contract work. On what specific tasks has the AOC utilized personnel from other jurisdictions to support contract work?
  - a. Has this impacted the AOC's ability to allocate resources to other projects?

OIG Response: According to AOC Planning & Project Management executives, the project team sought this help from jurisdictions to help address schedule issues and not necessarily to offset project costs. For a short time, the House Office Buildings, Senate Office Buildings, and Library Buildings & Grounds jurisdictions provided trade workers to the Cannon House Office Building Renewal (CHOBr) project to help complete plaster work to maintain the project's schedule. The project team sought a credit for the cost of this work from Clark Christman Joint Venture (CCJV), the contractor, and was able to have all financial issues associated with this work addressed by the closeout of Phase 1. The OIG is unaware of other instances where personnel from other jurisdictions provided support to the CHOBr project.

b. Is this standard industry practice?

<u>OIG Response</u>: Due to a labor market shortage of skilled plasterers, CCJV was unable to obtain a sufficient number of plasterers to complete work and remain on schedule. To address this issue, the project team asked jurisdictions with plasterers if they could provide short-term help.

2. What roadblocks, if any, exist to your ability to obtain information necessary to conduct oversight of the Cannon rehabilitation project?

OIG Response: We reported in our OIG Statement of Management Opportunities and Performance Challenges 2016 under Data Quality Monitoring, that OIG requests for documentation have routinely taken the AOC a significant amount of time to gather and provide, thus highlighting concerns with efficiency and accountability. Further, the OIG has included this issue in the Management Opportunities and Performance Challenges 2019 under a consolidated category of overall agency auditability. The OIG has also briefed this issue to various Congressional committees during our scheduled monthly meetings. In addition, if provided, the information was incomplete which raised concerns regarding data reliability and auditability. The AOC's procedures for documentation do not promote a standardized process; therefore, documentation maintained varies amongst staff and from jurisdiction to jurisdiction.



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While there have been difficulties in the past with obtaining documentation for this project, the AOC has shown significant improvements in providing sufficient support documentation for the latest Semiannual Status Update on Cannon House Office Building Renewal Project, period which ended June 30, 2019.

3. Which agencies or stakeholders requested the most significant contract modifications during Phase 1?

OIG Response: The AOC is negotiating the contractor request for equitable adjustments from the contractor. Because this negotiation is ongoing, it will be covered and answered as a part of the announced project modifications audit.

4. How many Phase 1 punch list items remain outstanding?

OIG Response: As of October 4, 2019, the contractor had 140 outstanding punch list items remaining for Phase 1.1

5. Do you anticipate any known delays in the delivery of Phase 2 of the Cannon rehabilitation project?

OIG Response: The project team has been coordinating the Phase 2 design and construction schedules for plan and specification revisions to incorporate the remaining lessons-learned and stakeholder changes that were introduced to the project at the end of Phase 1. Measures to mitigate the schedule impact of these plan revisions are underway and the team expects to fully quantify these impacts and undertake the necessary schedule recovery during the fall and winter of 2019.

6. What do you see as the most significant risks to the Cannon rehabilitation project?

OIG Response: We reported in our OIG Statement of Management Opportunities and Performance Challenges 2018 that the management of large construction projects poses challenges and risks to the AOC that are not typical to other agencies. While adequate planning and design limit the extent of these challenges, unforeseen circumstances increase the risks. Our Semiannual Status Update on Cannon House Office Building Renewal Project for the period ending June 30, 2019, further specified that the Phase 1 budget of approximately \$180 million is now estimated at \$194 million due to unforeseen conditions, design issues, and increased scope. Some cost changes experienced in Phase 1 will be carried over to future phases and are expected to increase the total project budget

<sup>&</sup>lt;sup>1</sup> RF101-0004 Cannon Renewal Phase 1 Punch list 10.4.19.



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by 10 to 15 percent. The CHOBr project's original budget estimate of \$752.7 million is currently estimated at \$831.9 million, an increase of approximately \$79.2 million or 10.5 percent.

The AOC also identified Phase 2 Top Risks in the Cannon Renewal Project Semiannual Report to the Inspector General, January 1, 2019 – June 30, 2019, as the following:

- Lack of sufficient construction resources to incorporate bulletin work that may result in adverse schedule impact.
- Lack of staffing affecting AOC's ability to provide timely reviews of CCJV's submittals, work plans and request for information.
- Improper management of stakeholder changes causing delays and overages.
- Failure to properly incorporate bulletins into the contract documents may adversely impact project cost and schedule.
- Multiple AOC submittal reviews delaying the project.
- 7. Are there any opportunities for cost-cutting measures for current and future phases on the Cannon rehabilitation project?

OIG Response: My staff and I have reviewed a draft CHOBr project budget estimate with CHOBr project managers line item by line item and have found little or no room for de-scoping the project further without affecting schedule, security, or staffing. Now that the project has reached the mid-point of the overall renewal, the project team has identified several areas to control costs and are implementing changes for the completion of the project. These include:

- A new change management and stakeholder coordination process, including a cut-off date for change requests to enable better control of project modifications and related premium costs.
- Incorporating known changes from Phase 1 into the base contract to avoid paying change order premiums.
- A schedule management process that quickly identifies impacts of changes to the project schedule and to better control acceleration costs.
- A better protocol for contractors to provide cost, schedule and feasibility feedback for proposed changes.
- Expedited the evaluation and selective demolition in the basement and fifth floor to identify potential unforeseen site conditions early to lessen the impact on cost and schedule.
- 8. What are the estimated delivery dates of the audits being performed by Cotton & Company?
  - a. How long does a typical audit take?



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OIG Response: An average audit will take approximately nine months. The OIG is now partnered with Cotton & Company, LLP, to conduct two construction audits for the CHOBr project beginning this year. We announced the first of these two audits on August 13, 2019, concerning CHOBr project modifications, and we expect to have a final report published in April 2020. Our second audit will be a Cotton & Company LLP, audit of CHOBr project invoices. We announced this audit on September 5, 2019, with the final report expected in May 2020.

b. Will there be information from the audits available prior to the delivery date?

OIG Response: We are happy to provide audit status updates throughout the course of the audit. Prior to November 2018, the OIG met monthly on a reoccurring basis with the Committee on House Administration but since that time, the meetings have become less routine. We would like to encourage the continuation of this healthy engagement for oversight of AOC programs and operations

9. Are you properly staffed to provide oversight of both the Cannon rehabilitation project and other AOC construction?

OIG Response: In the summer of 2018, due to staffing issues in the Audit Division, I had to suspend an audit on the CHOBr project and find another way to provide oversight of this \$752.7 million dollar construction project. At that time, my audit team was not prepared to conduct oversight into the specific nature and complexity required by this project.

Since that time, and with the help of many Congressional oversight committees, including the Committee on House Administration, our audit staff has grown from two to five auditors. Additionally, we recently completed a yearlong search for an independent contractor to assist us in conducting construction audits. I am happy to report that we are now partnered with Cotton & Company, LLP, to conduct two construction audits for the CHOBr project beginning this year. Our goal with this newly formed relationship is to conduct two construction audits per year under this contract until the CHOBr project is completed. Other audit areas under consideration are the CHOBr project labor costs and product substitution. These audits will account for 50 percent of the OIG's audits for the year. For the time being, the OIG is adequately staffed for the work asked of us; however, as AOC programs and operations become more complex and specialized, we will need to add additional capabilities and capacity. We will also consider committee concerns or any other guidance the committee requests us to review.



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Below are the OIG responses to your second letter regarding CHOBr project oversight. From your letter, dated September 25, 2019, we recognize an additional five questions as identified below.

- The first Cannon Renewal Project Semiannual Report to the Inspector General from 2018
  reported several significant overages due to modifications. Eight of these were over
  \$300,000, two were over \$1,000,000, and one was over \$5,000,000. We would like to see a
  comprehensive breakdown of these overages; who the requests came from; the process for
  correctly approving these overages; and the reasons and decisions for why these were
  approved.
  - OIG Response: On October 2, 2019, the OIG requested the information from the AOC to answer this inquiry. AOC management has provided the Project Management Plan discussing the Change Management Plan (CMP) (see Enclosure 1). The purpose of the CMP is to document the process for identifying, evaluating, and instituting changes specific to the CHOBr project. Unfortunately, AOC management is unable to provide specific details for the eleven modifications request at this time. The AOC notified us that this request would take additional time to prepare and expects to provide the information by no later than October 28, 2019. We will, in turn, analyze and provide this data to the committee as soon as it is made available. This issue is another example of delayed response to requests for information from the AOC as discussed in our QFR question two response.
- We would also like to see the data used to create the "Cannon Renewal Project" flyer produced by the AOC that asserts that 41.5% of the overages during Phase 1 are due to the Executive Working Group.
  - OIG Response: On October 2, 2019, the OIG requested the information from the AOC to answer this inquiry. At the time of this letter, the AOC was unable to provide the OIG with the information requested to respond to this inquiry. We expect to receive the information from the AOC no later than October 18, 2019. We will, in turn, analyze and provide this data to the committee as soon as it is made available.
- Going forward, we would like to see increased oversight and expect regular feedback from your office on how the largest project the AOC has undertaken is progressing.
  - <u>OIG Response</u>: We are happy to provide audit status updates throughout the course of the audits. We encourage the continuation of healthy engagement for oversight of AOC programs and operations. Prior to November 2018, the OIG met monthly on a reoccurring basis with the Committee on House Administration but since that time, the



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meetings have become less routine. The OIG plans to continue monthly dialogue with the House and Senate Committees on Appropriations, which directed the AOC conduct quarterly (now semiannual) updates on the CHOBr project. The Committees on Appropriations has granted permission to share this report with the Committee on House Administration. We will continue to provide oversight and feedback using the Cannon Semiannual Reports produced each March and September until the project is completed. We also have begun two contracted construction audits on the CHOBr project to include an audit on project modifications with a final report expected by April 2020, and an audit on project invoices with a final report expected by May 2020.

 AOC's new Change Management Process - Please inform us on how you believe this new system will be an improvement in accountability and transparency.

OIG Response: According to the AOC, the new change management and stakeholder coordination process includes a cut-off date for change requests and additional levels of review and approvals intended to enable better control of project modifications and related premium costs.<sup>2</sup> The AOC also plans to evaluate user-requested changes during Phases 2-4 to ensure that the impact on cost and schedule are fully considered before deciding to implement the change.<sup>3</sup> The OIG recognizes the new change management process and in discussions with PPM has suggested:

- i) including an impartial 3<sup>rd</sup> party (i.e., Committee on House Administration) to the Change Order Board,
- ii) completing a cost benefit analysis if modifications are over a specified threshold,
- iii) communicating and documenting change consequences on budget and schedule, and iv) authorizing only requirements-based changes initially as they may relate to safety and
- security, to further improve accountability and transparency.
- Provide details on how Clark is fulfilling their contractual obligations, specifically their late submissions and delayed schedules. It is imperative we know if any of these issues violate the procurement rules of the AOC or contractual obligations specific to this project.

OIG Response: The OIG is reviewing the addition of a contract requirements audit added to the AOC OIG Annual Audit Plan that could consider these factors. The audit would commence in the summer of 2020 with an objective to determine whether the contractor is fulfilling their contractual obligations.

<sup>&</sup>lt;sup>2</sup> Cannon Renewal Project Semiannual Report to the Inspector General, Jan 1, 2019-Jun 30, 2019, pg. 7.

<sup>&</sup>lt;sup>3</sup> CHOBr Semiannual OIG Report for JUL-DEC 18 - Final, pg. 8.

#### HEARING

COMMITTEE ON HOUSE ADMINISTRATION
"OVERSIGHT OF THE RENOVATIONS OF THE CANNON HOUSE OFFICE BUILDING"
SEPTEMBER 10, 2019

MAJORITY QUESTIONS FOR THE RECORD

FOR

BRIAN A. ABT

CHIEF EXECUTIVE OFFICER, MID-ATLANTIC REGION, CLARK CONSTRUCTION, LLC

 One unique aspect of this project is that while it is ongoing, most of the building remains open to Members and committees and their constituents. Please explain how this impacts the timing and cost of the project.

In developing the original program and plan for the phased renovation of the Cannon House Office Building (Cannon), the Architect of the Capitol (AOC) planned for a five-phase project aligned with the two-year Congressional cycles. Renovation of an occupied building is always challenging, especially in an historic structure that also represents a high-profile and sensitive environment where Members of Congress are conducting the people's business. As stated in my testimony, beyond the considerable construction challenges related to the Cannon renovation, CCJV's first priority has been – and is – the health, safety, and welfare of all of the Cannon occupants, as well as that of the craftworkers and our employees. In addition, our goal is to minimize disruption to the Members and their staffs.

A phased, occupied renovation will typically take longer and be more costly than a single-phase, unoccupied renovation. In this instance and understandably, the decision was made by the AOC for the project to be a phased, occupied renovation in order to best support and least inconvenience those working in the building.

Even when planned from the beginning, the decision to conduct a phased and occupied renovation impacts both the cost and the timing due to a number of restrictions put in place to safeguard the occupants of the Cannon Building and to reduce disruption to the ongoing operation of the building. These include work hour and noise restrictions, both of which reduce disruption to those occupying the building and those in the surrounding community. Thus, much of the construction work occurs at night, on weekends, and during Congressional recess periods. In addition, working in an occupied Cannon Building requires that all workers are subject to security screening, badging, and access control. All materials brought into the building must be inspected. Finally, all construction work plans must be carefully developed, reviewed, and approved by

AOC to ensure occupant and worker health, safety, and security. All of these processes help ensure that construction activities do not create risks for the building tenants or the workers.

### 2. Did Clark Christman Joint Venture ("CCJV") change its management team after Phase 1 of the project?

#### a. If yes, what was the reason for this change?

CCJV's executive-level leadership remained the same from Phase 1 to Phase 2. Approximately half of the CCJV project team transitioned from Phase 1 to Phase 2 to ensure the proper transfer of knowledge and lessons learned, and the balance of the team continued to close out Phase 1.

Since the beginning of the project, CCJV has sought to balance continuity of both leadership and project knowledge with the need to have different team members focus on specific phases or scopes of work. We always anticipated that staff additions and changes would be expected over the course of this 12-year project. CCJV has made it a practice to bring new project managers, superintendents and other staff onto the team six to 12 months before the completion of one phase to help plan and begin work on the next phase.

As the Cannon Renewal team completed Phase 0 and began planning for Phase 1, CCJV introduced an additional set of project managers, superintendents and other staff to focus on planning and beginning work on Phase 1. Similarly, as we moved toward the completion of Phase 1 and began planning Phase 2, the CCJV team added to its team an additional Project Manager, Superintendent, and other new staff members to focus specifically on planning Phase 2. This allowed the team already in place to focus on the completion and closeout of Phase 1.

#### 3. Please explain CCJV's billing procedure for this project.

CCJV's monthly billing for this project is performed in accordance with the Contract, following the timeline listed below:

10th day of the month	CCJV submits draft monthly billing and schedule update to AOC
13th day of the month	AOC audits and provides comments on the draft billing
15th day of the month	AOC & CCJV meet to resolve draft comments
20th day of the month	CCJV submits final billing and final monthly schedule update
30th day of the month	AOC approves the monthly billing
15th day of next month	Payment made to CCJV from AOC

#### a. Have invoices been sent out on time?

Yes, invoices have generally followed the above timeline, with some adjustments for weekends and holidays.

#### b. If yes, do these delays result in increased costs?

No, there have been no increased costs due to the billing procedure on the project.

4. Please describe the process by which you are informed by the Architect of the Capitol ("AOC") of complaints by occupants of newly renovated office suites.

The staff of the AOC is responsible for all direct communications with the occupants of the building, including receiving and addressing Member or staff complaints. Once the AOC receives tenant or occupant complaints, it determines if the issue(s) are operational matters related to building use or tenant comfort, such as issues related to temperature in the offices (i.e., too hot or too cold), use of lighting controls, office décor, or similar matters. Any issues the AOC deems to be construction-related matters, such as warranty items, are placed on a warranty log and distributed to CCJV for resolution. CCJV staff interacts daily with AOC staff for real-time progress updates on these issues.

a. Are complaints by occupants of newly renovated office suites addressed by the AOC or CCJV?

Any complaints related to operational matters or tenant comfort are usually handled by the AOC since they are typically not construction-related. Any complaints related to the construction or to warranty items are performed by CCJV and its trade contractors and the progress of the work is communicated to AOC staff. Additionally, CCJV coordinates with the AOC to gain access to the suites.

#### MINORITY QUESTIONS FOR THE RECORD

1. Would you please provide a detailed list of remaining Phase 1 punch list items that Clark is responsible for completing?

Please see the attached punch list dated 10/15/19 (Exhibit 1). We have also included a list of warranty items identified by the AOC following occupancy of Phase 1.

2. Will you please provide a detailed list of any change orders over \$100,000: what were they for and who specifically requested them?

Please see the attached Approved Change Order log dated 10/15/19 (Exhibit 2).

3. How does this project compare to others that you've completed? What are the particularly challenging aspects of this project, and can anything be done to address them?

Members of the CCJV team have completed a number of large, complex, occupied renovation projects, and the Cannon Renewal is similar in many respects, while it is unique in others. The Cannon Renewal has presented several particular challenges as noted in my testimony. First, the 110-year-old historic nature of the Cannon Building and the inability to do any destructive investigation or testing in the building prior to construction resulted in a number of unforeseen conditions revealed during Phase 1. Also, as I testified, we believe we now have a much more complete understanding of the building conditions and have actively incorporated the lessons learned from Phase 1 into our plans and schedule for Phases 2-4. There may still be additional unforeseen conditions that we discover as we progress through the later phases; however, given what we have learned and the way in which remedial measures have been implemented, we believe we are far better positioned to address any remaining unforeseen conditions that are discovered.

Second, as described in my testimony, the volume and late timing of the changes on Phase 1 caused this phase to be more challenging, especially given the firm, fixed occupancy date mandated by Congressional cycles. As I commented, our experience in overcoming the significant challenges in Phase 1 will translate into our ability to do Phases 2-4 more smoothly, efficiently, and predictably.

4. You are about half-way through the renovation at this point. Is the project progressing as you expected? What have you learned to this point that will help you the rest of the way?

As noted in my testimony, Phase 0 was completed on schedule and within budget. Phase 1, despite an influx of owner-requested changes and the unforeseen building conditions, was completed in time for Members of the 116<sup>th</sup> Congress to move in on time, consistent with the Congressional move cycle. As the Phase 1 work progressed, significant unforeseen conditions in the 110-year-old Cannon Building were revealed. Those conditions necessitated various design changes or remedial measures. These had to be developed principally by the design team, approved by the AOC, and then provided to CCJV to be implemented by CCJV.

We now have a far better understanding of the building conditions we will encounter in Phases 2-4 and have incorporated significant lessons learned from Phase 1 into the work plan, schedule, and budget for Phases 2-4. My written testimony provides several examples of how these lessons learned have improved productivity and effectiveness.

5. Now that it looks like the Architect of the Capitol will need more funding for the project, is there anything you would recommend doing to control the project's costs and minimize the extent of the increase?

As discussed during my testimony, there were significant owner-requested changes as well as unforeseen building conditions on Phase 1. As noted above, significant owner- and user-requested changes on Phase 1 contributed in part to the need for additional funding for the project, especially given that many of the changes made on Phase 1 will need to be carried through to the future phases.

To control the project's cost and minimize the extent of any increase, CCJV recommends eliminating any future owner- or user-requested changes that are discretionary. Further, we recommend that the owner/user and design stakeholders put a premium on identifying necessary changes as early as possible to reduce costs created by late changes that are disruptive and that often require accelerated work, which itself adds cost. Based on lessons learned in Phase 1, we endorse the plan instituted by the AOC to more rigorously oversee the Change Management approval process to limit the volume of changes and to bring forward those changes that are necessary as early as possible.

# **EXHIBIT 1**

10/16/2019

Page 1 of 2

Cannon Phase 1 Punch List 10/15/19

Report	•	-	Floor	Describes	
Punchiist	108		-	the throughout door was the up properly have a large phaseins has one discuss card in this purpose as one diseased. The seed destroy the story is seal the door. Need CLCAY to manight it as door set it clease spready as enough the door. One of the seed fear of the seed	Work is forecast to be complete by 12/8/19, panding material delivery and scores.
Punchiist	19481	288	2	FPE #388 - Inadequate steel beam SFRM Coverage in main room neer north closel and entrance overhead, and also in the sest and north closets.	Work is forecast to be complete by 12/2/19, pending access.
Punchilist	620	210A	2	the dools and unseed medical removable. Used a facility of the dools are seen to the dools become the or come plates installed). We age and a recent plates are seen as recent application it completely. We age at section and the dools are seen as the dools are seen to the dools are seen as the dools are seen	Work is forward to be complete by 10/25119, peroling access.
Punchilst	679	C2TW1	2	2nd Boor Telecom Room Mezzanine, and Vestibule issues: Sprinkler heads have the crange quants on	Work is forecast to be complete by 10/25/19, pending access.
Punchlist	9490	386	3	thup required on overhead beam in north closes	Work to forecast to be complete by 12/2/19, pending access.
Punchilist	19615	390	60	Install weather ethypting	Work is forecast to be complete by 10/25/19, pending access.
Punchilist	19607	3rd Floor Ternace Balconies	3	, cleaning of debris, cleaning of debris bohind columns, replacement of drain cap	Work is forecast to be complete by 11/15/19.
Punchist	888	C3TNW1	8		Work is forecast to be complete by 10/25/19.
Punchilist	825	308A	6	Electrical and HVAC ploing insulation contract work that has not been completed in the buildhead. It appears this work is associated with the 1748 process. Please complete this work as soon as possible.	Work is forecast to be complete by 11/18/19, pending access.
Punchilist	19812	C3TW1	3		Work is forecast to be complete by 10/25/19, pending access.
Punchlist	689	CATNW1	,		Work is forecast to be complete by 10/25/19.
Punchiist	418	107	4	Conference room 401 above ceiting at access coons: North access Cyber 172/2   box, form all thread hanger rode within 1*, thin access panel acress protruding through. Sooth Access Cyber 172/2   box.	Work is forecast to be complete by 10/25/19 pending access.
Punchlist	1059	Typical	u)	fixtures installed in the Pheae 1, fifth floor, member 11 fixtures installed temporarity in Pheae 1 would be	Work is forecast to be complete by 11/19/19, pending material delivery and mock-up approvel.
Punchlist	1013	Typicat	₹		Vient is forecast to be complete by 116/16, pending access.
Punchlist	810	Typical	8	by to main comdon) have spills/cracks on the strike	Work is forecast to be complete by 10/25/19.
Punchilist	411	B85C B4	Besement	Bensent conn 1950, Chardonia Biss have be seisfald without page of requirement page (or page). Better the page of	Work is forecast to be complete by 1025/19, pending access.
Punchilist	1007	CBMWZA BY	Besement	in the chase beher April 19 in CabaWZA then are served issues: 2. The CabaWa complete a chock complete a complete and a characteristic and a characteristic and a complete and a complete and a complete and a characteristic and a complete and a complete and a characteristic and a cha	Mont is forecast to be complete by 1023/19, pending access.
Punchilist	19808	Moet	asement	Basement Operatings need to be filted	Work is forecast to be complete by 11/8/19, pending access.
Punchlist	765	5th Floor Exterior	Exterior		Work is forecast to be complete by 11/17/19, pending access.
Punchilist	780	5th Floor Exterior	Exterior	and the metal panets. The face pistes of the wall hydrants should be against ether the installation of flashing are installed.	Work is forecast to be complete by 11/17/19, pending access.
Punchiist	19690	rior			Work is forecast to be complete by 11/15/19, pending access.
Punchise	18952	1		approved shop drawings, typ.	Work is forecast to be complete by 12/2/19.
- Chicago	18373	Guider	Serior		Work is torecast to be complete by 11/15/19, pending material delivery.
Punchilet	2000	MOBI		SW end of model. Cutherfully has a cuth and pill - Contract documents do not show this pil but a continuous stab	Wark is forecast to be complete by 11/8/19, pending access.
Punchilist	30001	-	Exterior	Periototical and hales are not filled.	Work is known to be complete by 1/2019, percent a consess.  Work is known to be complete by 1/2019, percent
Punchilist	exterior	NJ elevation	Exterior	N. Most No D6# on A100-1 states Restore exating metal grains; remove all peint and concaton to bare metal. Prime and repaint. Restlach any loose support analysis at side walls. Prime and repaint support analysis.	Work is forecast to be complete by 11/8/19, pending access.
Punchilist	19632				Work is forecast to be complete by 11/8/19, pending access.
Punchilist	19629		Exterior		Work is forecast to be complete by 11(8/19, pending excess.
Punchist	19834	Service Chese	Exterior	Exterior Meat, southermost arch, bitck, repointing failed joints	Work is forecast to be complete by 11/8/19, pending access.
Punchiet	30000	-	Catalor		Work is forecast to be complete by 11/8/19, pending access.
Punchist	19631	T	Exterior		work a lovecast to be complete by 11/2/3/ by penaling access.  What is forecast to be complete by 11/2/3/ payding access.
Punchiist	18974		Exterior		work is to example to be complete by 11/11/19, pending insternal delivery.  Work is forecast to be complete by 11/15/19, pending material delivery.

Cannon Phase 1 Punch List 10/15/19

Report			Floor		
Punchilst	19209	Street Side Gutter	Exterior	Exterior Trouch up paint on architectural frame verticate	Work is forecast to be complete by 11/15/19, pending material delivery.
Punchilist	19665	Street Side Gutter	Exterior	ored touch up paint (multiple locations).	Work is lorecast to be complete by 11/15/19, pending material delivery.
Punchilist	19684	Street Side Guttter	Exterior	at aide of the southwest bump out. Cannot see in a	Work is forecast to be complete by 11/15/19, pending material delivery.
Punchilist	19653	Street Side Guttler - SW Bump out	Exterior	Street Side Guttler - SW Bump out Exterior Metal pearler are acraitched and chipped exposing the metal underneath; Sh Floor / SW Bump Out / South Side	Work a forecast to be complete by 11/15/19, pending material defensy.
Punchlist	19678	SW Armany	Exterior		Work is forecast to be complete by 10/25/19, pending access.
Punchilist	19693	SW Areaway	Exterior	Exterior Resing paint on metal siding.	Work is forecast to be complete by 10/25/19, pending access.
Punchilist	19311	Roof	Roof	Copper flashing north of street side guitter is too wide, per SMACNA	Work is forecast to be complete by 11/6/19.
Punchilist	883	Roof	Roof	Field report Item 9, Drain body for RD-0 at transition from existing roof to street-side guilter near column-fine WBA not transition also not complete.	Work is forecast to be complete by 11/8/19,
Punchilist	838	Roof	Roof	Fleid report from 3.a At Copper Rooffeg, the flux was not fully neutratized intend following soldering, leaving many locations of add-induced patins formation and white deposits on the rooffergi fleathing surfaces. (Photos 24-28)	Work is forecast to be complete by 11/8/19.
Punchilist	862	Roof	Roof	Field report fram 8, New Roof Draft body near column-line intersection NA,WD per SKA 132-1/RFI 0785-R1 not installed.	Work is forecast to be complete by 11/8/19.
Punchilist	30011	Roof	Roof	Repair and waterproof damaged elevator machine room	Work is forecast to be complete by 10/25/19, pending access.
Punchilist	758	Roof	Reof	The elevator 8 perthouse was modified to receive temporary support structure for the temporary roof. There was damage to the existing exclusion exclusion.	Work is forecast to be complete by 10/25/19, pending access.

10/18/2019

Cannon Phase 1 Warranty List 10/15/19

Report	•		Floor	Description	CCAV Notes
Warminty	\$	186	-	Cannot control light by switch or occupancy sensor	Work is forecast to be complete by 10/25/19, pending material delivery and access.
Warrenty	1401, 624	CILWI	-	Dow Wir J. Assembly, door archoring failing, door nabhing gravile flooring and frame. Must be lagged dosed. Comedian required for ISCP look dows. Wit-11 New Job don (CH15) swings frig the stone well. Adjust back check position to prevent door from impeding the well. Repair demoged paint on door.	Work is forecast to be complete by 10/25/19.
Warranty	1386, 1389, 1384, 1387	C1ST2	-	Door WH-07 Assembly: descripcible threshold; fix all door scratices, remove paint splater, fill in holes from hardware installs; sesteting should be written door farms and at the end of doors at leach side, install missing gaskeding. Assembly: wood side stop invests to go all the way, stops show, the side.	Work is forecast to be complete by 12/19/19, pending access.
Werranty	909	C1VW3	-	The telecom closel doors are short	Work is forecast to be complete by 12/6/19, pending material delivery and access.
Warrenty	1380, 1382, 1389, 1400, 1391, 1393, 1394, 1397, 1385, 1398	SW Entry	-	Door VH-14 Jeannin's, boats of not does not appope mit USCPT may be about a proper within any boats of not does not of plants and not a boats	Work is forecast to be complete by 117519, pending accesss.
Werranty	1220	208	7	Door 20% Assembly: Door has not of baleanoe undercut and needs to be replaced (identified in previous punchist). The door was also installed not of square with unbilanced gaps (varying from 30° to 15.2°). When new door is installed, ensure it is tristalled with required flamm, that with completel spacing.	Work is forecast to be complete by 12/0/19.
Warranty	1232, 1233, 1224	210	2	Door 210 Assembly: Repisco BS operator button with approved bronza button; North door pull assembly is loose, Astrogal gasked is missing patched; has manned frish and needs to be adjusted per manufactures recommended folleances. Repairinglishes as required to correct. Deficiencies.	Work is forecast to be complete by 12/0/19.
Warranty	1242, 1241	210	24	Door 210A Assemby: Install standard polished bress final higges, current ones installed are not in the contract. Hardwere set in contract is Swing start in you, at the standard of the standard contract associated intersoruture required to both others, note are currently installed. A activation before so with set and the installed or from CGAP with submit RFI on detect method of ADO installation deaths	Work is forecast to be complete by 11/18/19, pending access.
Warranty	1236, 1234, 1235, 1237	210	N	Coord 2006 Assembly French contract request in princip does conscious from the Coord 2006 Assembly French as Coord 2006 Assembly French and Coord 2006 Assembly French Assembly F	Work is forecast to be complete by 11/19/19, pending access.
Warrenty	1201, 1200, 1209	210	~	Over 710, Assembly, the Linearbook Ore Use in Substitution and the contraction of the Con	Work is forecast to be complete by 2227th, pending material delivery and access.
Wementy	612	2nd Floor	2	Front hallway doors salvaged hardware, missing back plates (library Hellway)	Work is forecast to be complete by 12/31/19, pending material delivery and access.
Warranty	\$	C2ST5	8	2nd Floorstat's slewmark bobby. 19/00 stateway don (20/20/8) as problem with the closer, it looks like a new overhead conceasied closer was used and it somethow classway to the moritaed track on the top of the door, gindling issue, beafrags are completely shot.	Work is forecast to be complete by 11/8/19.
Warranty	789	C28T6	ď	2nd floor, stat 5, south door to Phase 4: Door swings past 90 degrees.	Work is forecast to be complete by 11/8/19.
Warranty	1363, 1191, 1367, 1365, 1371, 1386, 1370, 1369, 1368	Rotunda	8	Over CERTAL Assembly does not consider and deepper and U.S.C.D. map-but are required to the first required to the consideration of the	Viorit is forecast to be complete by 122019, pending access.
Warrenty	1379, 1372, 1380, 1374, 1379, 1383, 1373, 1375, 1381, 1382, 1377	Rotunda	7	Dock WRSTA Assemble, between the control point of t	Work is forecast to be complete by 12/19/19, pending access.
Warrenty	1351, 1361, 1357, 1359, 1355, 1356, 1353, 1352, 1354, 1359, 1360	. Rotunda		Door WRS-10. Seaming, foom is not case and engage will stoll swipped deep will require with the contract of the case and case and engage will regar for required stolled own find all one cases. The case and case	Work is forecast to be complete by 12/2018, pending access.
Warranty	1362	Rotunda	2	Door NWZ-018 Assembly, doors currently installed are bamporary, install new door, frame, and hardware	Work is forecast to be complete by 12/2/19, pending access.
Wernanty	1173	Stair 5	2	2nd floor plase 4 door - overhead stop broken	Work is forecast to be complete by 11/8/19.
Werranty	1176	Stair 5	2	2nd Scor plase 1 door - door not latching or closing all the way	Work is forecast to be complete by 11/8/19.
Warranty	1253, 1252, 1254	303	8	Door 3XIA beaching: Research Faster and Repair marble plintina. CGVI demayed plintins and incorrectly installed them: Adjust door latch in accordance with RFI 1885. Dutchmen may be required to repair current installation. Modification may be required; Switch out SS door operator buttons with spenced betton.	Watk is forecast to be complete by 12/2/19.
Wamanty	1282, 1267	303		Door 303 Assembly: Astragal missing nubber; Door handles do not control latch from Inside room, creating entrapment. Repair proper operation.	Work is forecast to be complete by 10/18/19, pending material delivery and access.

Cannon Phase 1 Warranty List 10/15/19

Report	•	Ans.	Ploor	Description	
Warranty	1349, 1346, 1341, 1338	308	6	Door 308 Assembly 1 Outch up demage to ADO conet; Door has an undercoal that is out of tolerances; Switch out SS ADA button with approach docume button; Correlationships on 10ggle Switch and 3 way Rocher switch installation/fundionally to complying with RFI 1391. In Modification Redy installation in the property of the Correlation Redy installation in the Correlation Redy installation Redy installation Redy installation Redy installation Red in RFI 1391.	Work is forecast to be complete by (20819, pending access.
Warranty	1286, 1283, 1294	310		Door SN beamarity, from patient is patient finished in not the one equalent in the Construction, are detected in recipiant of contract.  Personal patients of the state of the contract of the	Work is tonecast to be complete by 11/1/19, pending material delivery and access.
Warranty	1304, 1301	310	6	Door 3109 Assembly: Door stribe is black, not boze, replace per centract; AV trench not level under door drop, cent seel till level. A manble threshold may have been required here. AQC/SBA to verify,	Work is forecast to be complete by 12'8/19.
Warranty	1326, 1323	310	m	Door Stor, Assembly, ADD earn his parest. Replace parts or reletable ACO as required so chase doos not continue to demage panel. Repail demaged panels, Black striated, and analysis with all though the Company in the Story Continue and the Installed in the Story of the Story Installed Programmer and the Installed in the Story Company and RTI 1351. Modification likely installed the conduit how, both sides of ALOC.	Completion of work is pending response to RFI (420.
Warranty	443	310	8	Stone base at north wall	Work is forecast to be complete by 12/20/19, pending material delivery and access.
Warranty	796	C3ST5	m	3.0 devo state 5 develor boby.  CHOS stateway door (CADCRS) has a problem with the closer. It hoots like a new overhand conceased closer was used and it somethow in close stateway door (CADCRS) has a problem with the closers. Before are completely closered thank on the pop of the door, ghirding its saw, beeings are completely.	Viork is forecast to be complete by 11/8/19.
Warranty		Stair 5			Work is forecast to be complete by 11/8/19.
Warranty		Stair 6	60	3rd floor lobby - storefront door is squesky, adjust to eliminate sound	Work is forecast to be complete by 11/8/19.
Warranty		Statr 5	4	4th Roor door to phase 4 not letching completely	Work is forecast to be complete by 11/8/19.
Wementy		502	5	wrong floor box cover in members office	CCJV and AOC to meet week of 10/21/19 to discuss resolution of this flam.
Warranty		5th floor elevator 5-6	9	Gless backing for the call buttons is cracked	Work is forecast to be complete by 10/28/19, pending access.
Warranty		Corridor	₹	reveal at top of stone in inconsistent (Christine Dillen tesus)	Work is forecast to be complete by 10/25/19, pending access.
Werrenty	3004	Typical	₩	ADA push buttons ana required to be Bronza per 067101	Work is forecast to be complete by 12/6/19, pending approval of submitted sample and material delivery.
Warranty	587	803	Besement	803 ceiling titler have been dropped. There has been no Approved close in inspection. See attached list of deficiencies from the inflasi expection on 11-28-18.	Work is forecast to be complete by 11/16/19, pending access.
Warrenty		Basement by tunnel to capitol	Basement	Besentent Door CBMR1 Assembly: Install new door, frame, and hardwase	Work is forecast to be complete by 18/25/19.
Warranty	210	Basement Corridor	Basement	Basement Drinking fountain extends 7 out of alcove, delait calls for 4" (ADA Requirement)	Work is forecast to be complete by 11/25/19, pending access.
Warranty	223	CBMW2A	Basement	CBMM2A, AUH-12 (pwwkxusy) AHL-1) Outside Air (DA) plenum: The sprinkler pipe passing through the OA shaft MUST be temporarity protected with heat trace and permanently relocated to outside of the OA shaft/chase.	Completion of work is pending response to RFI 1370.R1,
Werranty	899	902	Basement	lises and the be determined from the come Bod.  The first and the determined from the come Bod.  The first and the come Bod.  The page page of the badden by the value of the come bod.  The page page between the badden by the value of the come bod.  The page page between the badden by the come bod.  The page page bod to be badden by the come bod.  The page page bod to be badden by the complete by the page bod.  The page bod to be badden by the bad	Work is forecast to be complete by 11/77/19, pending access.
Wernanty		SW Areaway	Exterior		Work is forecast to be complete by 11/6/19.
Warranty		SW Areaway	Exterior	Exterior Waterproofing not covered ensured louveirs and at doorwely.	Work is forecast to be complete by 12/2/19, pending material delivery.
Werranty	19680	SW Areaway	Exterior	Visible waterproofing above door at louver.	Work is forecast to be complete by 12/2/19, pending material delivery.
Warranty	19362	SW вгеемву	Exterior	Top Start does ont meet code. Whitesproceding needs to be covered. Yet proporting needs to be covered. Yet provide adult that advent but always.	Work is forecast to be complete by 11/19/18, pending access.
Werrenty		SW Areaway	1. 1	Door to CY gutter wobbles when open.	Work is forecast to be complete by 10/31/19, pending access.
Warranty	3003	Roof	Roof	Repair and waterproof damaged slevator machine room	Work is forecast to be complete by 10/25/19, pending access.

## **EXHIBIT 2**



Cannon House Office Building Renewal
Owner Change Order Log - Approved Changes Funded Outside the GMP Greater Than \$100,000

CCJV PCO	Description	Awarded Value	Type/Requested By
810135	Bulletin 16 Penetration Details for Overhead Services	\$2,519,969	Unforeseer
810107	Card Readers at Suite Entries & Other Locations	\$2,411,707	AOC
810366	Bulletin PH1-041 Food Servery	\$1,013,574	AOC
810136	Bulletin 25 Budget Hearing Room 210 Dais Rotation - New	\$847,330	Contract Alternate
810720	Lead Based Paint Testing and Abatement Beyond Contract Allowance	\$840,000	Contract Allowance
8100201	Replace Fire doors Stairs 5,6,7	\$663,673	Contract Alternate
810471	DC Fire Department Added Antenna System	\$627,570	AOC
810004	Bulletin 13 Demo Budget Hearing Room 210 Dais Rotation	\$530,804	Contract Alternate
810082	Bulletin 17 Shift SW HALSA Barrier from Ph4 to Ph1	\$464,495	AOC
810077	Scaffolding Rental Contract Allowance	\$420,477	Contract Allowance
810117	Bulletin 23 NW Basement Screening Area, DAS Connection in Suites & Misc Changes	\$393,357	AOC
810047	Bulletin 3 Strip & Repoint Basement Brick Walls	\$391,266	Contract Alternate
810532	Additional Bonds, Insurance, OH & Fee	\$365,743	AOO
810103	Bulletin 19 SW Lobby Ballistic Upgrades & Fire Rated Entrances	\$341,052	Contract Alternate
810007	100% Regrout Public Corridor Stone Flooring	\$331,264	Contract Alternate
810521	Additional Exterior Stone Restoration	\$320,000	AOG
810723	Water Intrusion Prevention Program 24/7 Monitoring	\$310,000	AO
810429	Exterior PCB Caulk Abatement	\$300,076	Unforesee
810217	Unforeseen Structural Slab Penetration Infills	\$286,163	Unforesee
810019	SW Lobby Ballistic Upgrades	\$286,656	Contract Alternat
810212	Bulletin 37 Room 590 Tenant Improvements & NW Corridor	\$260,532	Contract Alternat
810018	Door Frame Trim Paint Strip	\$257,790	Contract Alternat
810253	Bulletin 40 Caucus Room Vestibule	\$240,839	AO
810008	Exterior Columns Pilasters Stone Replacement	\$229,504	Contract Alternat
810618	Air Handling Unit Reprogramming	\$205,342	AO
810223	Builetin 29 Library Millwork, Clerestory Wall, NW Tunnel & Fire Alarm Changes	\$187,777	AO
810558	Balustrade Repair Revision	\$181,821	AO
810632	Elevator Alarm System Lobby Panel Connection	\$171,913	AOG
810297	Corridor Floor Restoration 4FI - 1FI	\$160,462	AOG
810431	ASI-PH1-006 TV Outlet Mounting Heights	\$157,464	AO
810363	5th Floor Metal Ceilings	\$149,700	Contract Allowanc
810425	ASI-013 Clock Rough-In in Member Suite CoS Office	\$143,309	AO
810594	Modifications to Contract Security Infrastructure	\$131,531	AO
810611	NW Terrace Waterproofing	\$130,178	AOI
810005	Enhanced Cleaning of Exterior Stone	\$121,560	Contract Alternat
810006	Bulletin 6 Building Signage	\$120,792	Contract Alternat
810380	DC Fire Department Added Antenna System	\$112,680	AQ
810140	Remove Steel Plate and Install Concrete Infill, Multiple Locations Throughout	\$106,710	AO
810023	Changes to Molding for CoS Partition	\$104,163	AOG
810358	RFI-0545 AHU-7 Duct Conflict	\$102,340	AQC

### Questions for the Record from Chairperson Lofgren to Terrell Dorn

- 1. In your written testimony you noted that the Architect of the Capitol (AOC) encountered several issues during the Phase 1 renovation that have prevented it from settling the costs for that phase, and that this would affect the cost of the project's later phases. What issues have prevented the AOC from settling Phase 1 costs?
  - a. Are Phase 1 cost settlements proceeding at a reasonable pace?

The time required to negotiate a settlement on open requests for reimbursement from the construction contractor have prevented AOC from settling Phase 1 costs. Termed "requests for equitable adjustment" these are costs for which the contractor is seeking to be reimbursed, subject to negotiation with the AOC, as a result of addressing additional work the AOC requested or ameliorating unforeseen conditions. On major construction projects such as the Cannon Building renovation, payment for work tends to lag behind actual performance of the work, and it is not unusual for costs to be settled after construction work is completed. The AOC told us that it expects to settle costs for this phase by November 30, 2019, which we believe is generally reasonable given the scope, scale, and complexity of the project.

- 2. The Cannon Building is more than a century old. In your professional opinion, should the Architect of the Capitol and/or the contractor have foreseen the presence of polychlorinated biphenyls ("PCBs") in the Cannon Building's caulking?
  - a. Are there other instances where the AOC or the contractor should have reasonably foreseen issues that have added to the increase in the project's cost and been made part of the original cost estimate?

Prior to construction, the AOC determined the hazardous materials that likely existed throughout the building and included a list of these in the contract specifications. However, because of the impracticality of determining the precise quantities of hazardous materials, the AOC did not make hazardous material abatement a requirement under the base contract. Rather, the AOC's approach has been to initiate contract changes for hazardous material abatement during

construction—after the contractor determines the extent of the clean-up—and use funding allocated for contingencies to cover these costs.

Considering the age of the building, it is reasonable to expect that a contractor will encounter unforeseen conditions that may require contract changes, and the AOC allocated funding for such contingencies. However, some critical changes were greater than expected and added to project costs.

### 3. What do you see as the most significant risks to the Cannon rehabilitation project?

A significant risk is a tendency to be overly-optimistic in assessing risks to the project and estimating the scope and cost of mitigation actions. As noted in my testimony, the AOC completed an integrated cost-schedule risk analysis in January 2018 that concluded there was a high probability that actual costs would be less than the project's \$753 million estimate. As we now know, estimations about the time and funding required to mitigate the risks identified through the analysis were overly-optimistic as the AOC reported in June 2019 that it expects project costs to exceed \$753 million.

The AOC is currently updating its integrated cost-schedule risk analysis and expects to complete this effort in December 2019. If done correctly, this study will provide a meaningful source of information to identify project risks and their effect on the project. Going forward, it will be important for the AOC and project stakeholders to avoid the bias toward optimism that could again lead to an incomplete assessment of risks and inaccurate estimate of the costs to complete the project.



Office of Inspector General 499 South Capitol Street, SW, Suite 518 Washington, DC 20515 202.593.1948

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November 1, 2019

The Honorable Zoe Lofgren, Chairperson The Honorable Rodney Davis, Ranking Member Committee on House Administration U.S. House of Representatives Washington, DC 20515

Subject: Architect of the Capitol (AOC) Office of Inspector General (OIG) Follow-up to our October 16, 2019, Response to Committee on House Administration Letter Regarding Cannon House Office Building Renewal (CHOBr) Project Oversight Dated September 25, 2019.

HOUSE BINTIN NIGW 05719 PM 0404

Dear Madam Chairperson and Representative Davis:

In response to your September 25, 2019, letter addressing nine Questions for the Record following the Committee on House Administration hearing titled "Oversight of the Renovations of the Cannon House Office Building" held on September 10, 2019, along with five additional questions on CHOBr project oversight, I provided the committee with a response in which I stated that the AOC was unable to provide information for two questions until late October, listed as questions one and two, respectively. For question one regarding significant overages due to modifications, the AOC provided us with a partial response on the due date to include eight of the 11 modifications. The AOC expects to deliver a response on the remaining three modifications during the week of November 11, 2019. For question two regarding the AOC-produced flyer asserting 41.5 percent of the overages during Phase 1 were due to the Executive Working Group, the AOC provided us with a full response on time.

In order not to further delay a response, I am providing the information received to date. I will provide AOC's response on the additional three modifications when I receive them.

Please do not hesitate to call me at 202.593.0260 if you have any questions or if I might be of further service.

Sincerely,

Christopher P. Failla, CIG Inspector General

Enclosure



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Below are the additional OIG responses to your second letter regarding CHOBr project oversight from your letter, dated September 25, 2019.

1. The first Cannon Renewal Project Semiannual Report to the Inspector General from 2018 reported several significant overages due to modifications. Eight of these were over \$300,000, two were over \$1,000,000, and one was over \$5,000,000. We would like to see a comprehensive breakdown of these overages; who the requests came from; the process for correctly approving these overages; and the reasons and decisions for why these were approved.

OIG Response: The AOC notified the OIG they would provide the requested information no later than October 28, 2019. On October 28<sup>th</sup> we received a partial response with eight of the 11 contract modifications in our request. The AOC will provide information on the remaining three contract modifications during the week of November 11, 2019. See Attachment A for the details of the eight modifications provided by AOC.

We would also like to see the data used to create the "Cannon Renewal Project" flyer produced by the AOC that asserts that 41.5% of the overages during Phase 1 are due to the Executive Working Group (EWG).

OIG Response: In July 2019, the EWG received illustrative information based on initial cost estimates to summarize some of the reasons for changes to the CHOBr project's scope. The AOC identified three categories of changes to the project's scope: (1) changes due to design/constructability issues, (2) unforeseen site conditions, and (3) stakeholder-requested changes. Initial estimates used for the illustrative information were based partly on estimated costs. The data shown below are based on actual costs. This accounts for the slight differences in the percentages shown below.

Scope changes requested by stakeholders totaled approximately \$9 million, or 53 percent of all modifications. Of this \$9 million, the EWG endorsed seven modifications costing approximately \$3.8 million, or about 42 percent of all stakeholder requested changes.



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### **EWG Approved Changes:**

Description	Fir	nal Amount
Exterior stone cleaning and restoration	\$	349,779
Door frame/wood trim paint removal	\$	257,290
Strip & repoint basement brick walls	\$	296,266
Entrance ballistic upgrades and Enhanced stairwell glass	\$	1,344,043
Corridor stone floor regrouting	\$	331,264
Food Servery	\$	1,020,949
Alternates Design Costs	\$	206,447
	\$	3,806,038

Project	
Renewal	
Cannon	

Contract No.	# pow	Contractor	Mod Amount	unt PCO#	# PCO Description	PCO Amount	Difference (MOD vs PCO's)	Requestor	Approval Process	Change Type (Owner Requested/Unforeseen/Stateholden)
AOC10C0090-T3	38	SBA	\$ 645,376	376	Additional Phase 1 CA Services	\$ 645,375		Project	Change Management Board	Owner Change - Additional CA Services incurred due to extended coordination effort of construction past substantial completion date of August 31, 2018.
AOC13C2002	98	ocav	\$ 679,061	1012	Card Reader Rough-in	\$ 679,061	v	USCP/House	Change Management Board	Stakaholder change - Expanded capability to access offices through a key yestern comparible with Saffa begas and US Capability but access control system by providing contuit mappin at Member salte dozsa. The control system by providing contuit mappin at Member salte dozsa. The hope has a control of the control of th
AOC13C2002	¥	CCJV	3 - 450,000	8					Change Management Board	
				1119	Bulletin 23 Garage Bsmt NW Screening Station	\$ 407,752		USCP		Stakeholder change - Screening station change associated with USCP garage lockdown initiative. Added conduit, power rough-ins to support new screening equipment.
				1211	6th floor Telecom rooms	\$ 57,376		Project		Mandalory change due to Contract Documents not showing telecom and security raceways required from overhead cable tray in 5th floor similar to that on floors 1-4. Change was to address this design issue.
Total	6		\$ 450,000	000		\$ 465,128	, (ec/3// \$			
AOC13C2002	43	ccav	50 SC+ 3	3					Change Management Board	
				1267	Unforeseen structural slab penetration infilis	\$ 262,593		Project		Mandatory change due unforessen site conditions. After demo of topping slab it was discovered that penetrations existed that were infilted at topping slab and not structural slab. PCO directed infilts of structural slabs to repair this condutor.
				1225	Removal of portions of existing ceiling in 1ft SW suites	\$ 55.374		Project		Mandatory change due to unforeseen site condition where removal of entire celling was needed to allow room for overhead ductwork and electrical conduits.
				1192/12	Floors 1-4 corridors 1192/1289 additionar plaster demo for new MEP services	\$ 69,124		Project		Mandatory change due to unforesen site condition where south end of corridor at floors 1-4 had existing plaster wall overbuild which interfered with MEP installation. PCD is for additional plaster removal at these areas.
				1267	Additional wall demo for plumbing lines in mbr suites	\$ 8,800		Project		Mandatory change due to unforeseen site condition installation of new chili water lines was in conflict with existing vent lines. PCO is to perform additional wall demo to facilitate installation of new MEP services.
				1264	Patuxent Engineering current issues	\$ 5,700		Project		Various design services for additional shoring at ADA entrance, security trailer support and exterior wall mockup
Total	Tip.		\$ 425,000	000		\$ 401,591	\$ 21.00			
s AOC13C2002	#	ccav	\$ 340,853	853 1183	Additional Window Sash Repairs	\$ 340,853	. \$	Project	Change Management Board	Mandatory change due to unforeseen conditions. After paint stripping was completed on the windows, significant damage was revealed beyond what was in the Contract Documents.
6 AOC13C2002	\$	Ar30	\$ 341,052	052 1079	At 24 and 27 Design Completion	\$ 341,052		Project	Change Management Board	Both the bid atternates were awarded to CCJV as allowances pending a finalized design. Bulletin 19 finalized the design for both these atternates and was awarded under this MOD.

Change Type (Owner Requested/Unfor

AOC13C2002 47 CCJV	<b>1</b>	CCJV \$ 464,495	•	464,495	1026	1026 Shift SW HALSA Barrier from Phase 4 to Phase 1	\$ 464,495	(A)	Project	Change Management Board	Owner Requested Change due to need to complete the Phase 1 HALSA Zone at the conclusion of Phase 1 in iteu of Phase 4 as committed by AOC Inche of Compliance (now OCWR). Design changes made in Bulletin 17.
Contract No.	Mod #	Contractor	Mod	Amount PC	# 03	Med # Contractor Med Amount PCO# PCO Description	PCO Amount	(MOD vs PCG's) Requestor	Requestor		Approval Change Type (Owner Requested/Unforeseen/Stakeholder)
AOC13C2802	9	OCA	_								Still Awaiting Information (Expected November 11, 2819)
AOC13C2002	<b>5</b>	CCJV \$ 4,046,129	w 4	,046,129		Modification exercised portion of Phase 2 Construction Option for early start of Phase 2 construction,	\$ 4,046,129	,	Project	Change Management Board	Partial award of Phase 2 construction.

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• Notes:

1. Items in GREEN are still outstanding from AOC, expected November 11, 2019.

2. (1) - FOC amounts reflect values as presented to the Change Management Board at which time pricing may have been at ROM level, not fully negotiated or priced. Final awarded amounts are shown on the PCO log. Therefore values under PCO amount may not total to MOD value.

3. (1) - Some PCOs listed under each MOD may not be listed in the PCO log, because the PCOs were exposures at the time of approval by CMB, but were voided after further discussions with the Contractor.