

**UNIVERSITY OF CALIFORNIA, SAN FRANCISCO  
AUDIT AND ADVISORY SERVICES**

**UCSF  
Mission Bay East Campus Building  
Block 33 Project Construction Cost Assessment**

**Project #18-037**

**November 2018**



University of California  
San Francisco

**Audit & Advisory Services**

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November 21, 2018

**Brian Newman**

Senior Associate Vice Chancellor, Real Estate  
Vice President, Real Estate, UCSF Health

**SUBJECT: Block 33 Project, Construction Cost Assessment**

Audit and Advisory Services (“A&AS”) conducted an interim construction cost assessment to review the invoiced construction costs associated with the Mission Bay East Campus Building Block 33 project in San Francisco.

Our services were performed in accordance with the applicable International Standards for the Professional Practice of Internal Auditing as prescribed by the Institute of Internal Auditors (the “IIA Standards”).

The preliminary draft report was provided to department management in August 2018. Management provided us with their final comments and responses to our observations in November 2018. The observations and corrective actions have been discussed and agreed upon with department management and it is management’s responsibility to implement the corrective actions stated in the report. In accordance with the University of California audit policy, A&AS will periodically follow up to confirm that the agreed upon management corrective actions are completed within the dates specified in the final report.

This report is intended solely for the information and internal use of UCSF management and the Ethics, Compliance and Audit Board, and is not intended to be and should not be used by any other person or entity.

Sincerely,

Irene McGlynn  
Chief Audit Officer



## EXECUTIVE SUMMARY

### I. BACKGROUND

As a planned audit for Fiscal Year 2018, Audit and Advisory Services (AAS) teamed with Deloitte Advisory<sup>1</sup> (“Advisor” or “we” or “our”) to conduct an interim construction cost assessment<sup>2</sup> to review the invoiced construction costs associated with the Mission Bay East Campus Building Block 33 project (“Block 33” or “Project”) in San Francisco, California.

On September 22, 2016, the University of California, San Francisco (“UCSF”) entered into a design-build agreement (“Agreement” or “Contract”) with Webcor Builders (“Webcor”) as the general contractor (“Contractor”) to design and construct the project. The Project’s scope comprises the design and ground up construction of a 12-story, 347,500 gross square foot academic and administrative building paired with a five-story center for vision neuroscience, along with site utilities and onsite improvements including a parking lot.<sup>3</sup> The scheduled temporary certificate of occupancy (“TCO”) or construction completion date is October 1, 2019.<sup>4</sup> Under the initial terms of the Contract, the value of the Contract was based on the cost of the work plus Contractor’s fee with a maximum acceptance cost of \$152,000,000. As of March 31, 2018, Project funds were not fully released by UCSF and Webcor’s total committed amount was \$67,420,746, out of which \$33,292,877 (or 49%) was incurred.<sup>5</sup>

In order to select a general contractor for the Project, UCSF issued a cost reimbursable design-build request for proposal (“RFP”) to its prequalified list of contractors including Webcor,<sup>6</sup> during the proposal phase of the process, there were multiple contract and design review meetings with all three proposers where the terms of the contract were reviewed. During the bidding process, however, UCSF erroneously cited in its bid form that it was seeking lump sum bids for their fee and general conditions. The form also required that each firm check a box on the form that certified that they could design and deliver the project at or below the \$152M maximum allowable cost (MAC).

Webcor, in return, submitted a lump sum bid.<sup>7</sup> Subsequently, UCSF selected Webcor as the successful bidder, but presented it with a cost-plus contract instead. While both UCSF and Webcor executed the cost-plus contract, Webcor stressed that, despite the contract stipulating the compensation model as cost reimbursable, it believed that the contract would still be lump sum. UCSF, on the other hand, believed the agreement was cost-plus per the contract terms. UCSF expressed that its intentions were always to solicit and award a contractor for the Project using a cost-plus mechanism and at no time during the selection process did the University state that the project was a lump sum project. This misunderstanding and miscommunication between the two parties resulted in a dispute two months after the contract award when Webcor submitted the initial pay application that did not meet the contract requirement. Ultimately, the contract compensation model was converted to a lump sum design-build contract by the University.

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<sup>1</sup> As used in this document, “Deloitte” means Deloitte & Touche LLP, a subsidiary of Deloitte LLP. Please see [www.deloitte.com/us/about](http://www.deloitte.com/us/about) for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

<sup>2</sup> This report is intended solely for the information and internal use of UCSF and is not intended to be and should not be used by any other person or entity. No other person or entity is entitled to rely, in any manner, or for any purpose, on this report.

<sup>3</sup> Webcor’s summary progress report for February 2018

<sup>4</sup> Webcor’s master schedule report, dated March 31, 2018

<sup>5</sup> Webcor’s payment application #15 for March 2018

<sup>6</sup> Design-build RFP dated June 2016

<sup>7</sup> Price proposal for design-build services, Webcor and SmithGroup JJR, dated September 2, 2016

## II. AUDIT PURPOSE AND SCOPE

The purpose of this review was to assess contractual compliance of costs incurred on the Project and identify opportunities for cost recovery.

The relatively large cost of the project made it a good candidate for a cost compliance assessment.

The scope of the review covered transactions and activities until March 31, 2018.

The assessment included a review of the Contractor's cost of performed work to identify potential cost recovery opportunities for the Project, as well as a review of the Contractor's subcontractor procurement process. For more detailed steps, please refer to Appendix A.

After an initial review of the provided Project documents and interviews with Webcor and UCSF personnel, we learned that the Contract was effectively administered as a lump sum agreement. Webcor claimed that its billings, including the general conditions and general requirements ("GCs/GRs"), had been based on the percent complete of the work and not necessarily connected to the actual costs incurred. As a result, UCSF does not have transparency into how the costs are actually incurred by Webcor, nor does Webcor provide supporting documentation, such as invoices and time sheets, to substantiate its GC/GR costs. We note that this is in contrast with the Contract terms<sup>8</sup> that require the Contractor to provide substantiating records and documentation, including time cards and invoices in support of its allowable costs incurred.<sup>9</sup> In addition, we note that the Project subcontracts, including Webcor's self-performed structural concrete scope, were executed on a lump sum basis. As a result, our ability to assess the Project costs for non-compliance and recovery was significantly diminished and we were confined in our cost compliance analysis to a review of the owner change orders only. With the exception of the following high-level analytical tasks, we could not undertake a detailed cost assessment on Webcor's payment applications.

- Performed math checks on the schedule of values for the 15 payment applications submitted as of our testing date, to check the tie out of carryover amounts from payment application to payment application.
- Reconciled a judgmental sample of schedule of value line items from four judgmentally selected Webcor payment applications, representing \$6,608,308 (20%) of the \$33,292,877 total costs incurred, against the underlying subcontractor payment applications to check whether amounts billed by Webcor to UCSF matched the amounts billed by its subcontractors.
- Performed an analysis of total GC/GR billings to date against the project percent complete (see Observations and Management Corrective Actions section, "GC/GR billing percent complete" for more details).
- Performed an assessment of retention withheld on total costs incurred to date (see Observations and Management Corrective Actions section, "Retention" for more details).

Regarding the owner change orders, only three non-administrative change orders were executed as of the date of our testing on the Project, and two of these change orders were for design and engineering (non-construction) services only.<sup>10</sup> Only one change order was for construction work.<sup>11</sup> Out of the three, we sampled the two largest change orders in value (#4 and #9), as shown below, collectively representing 92% of total change order costs, to assess contract compliance. We also checked the application of overhead, profit, and insurance for the third change order (#10).

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<sup>8</sup> Webcor Contract, 8.2 Allowable Costs, subsection 8.2.2

<sup>9</sup> Webcor and UCSF personnel stated that after our analysis cutoff date, they executed an amendment to the Contract that, among other changes, formally converted the project compensation model into a lump sum arrangement

<sup>10</sup> Owner change orders #4 and #10 for \$574,400 and \$233,034, respectively

<sup>11</sup> Owner change order #9 for \$1,969,982

**Table 1: Non-Administrative Owner Change Orders**

<b>Owner Change Order (OCO) No.</b>	<b>OCO Amount (\$)</b>	<b>OCO Amount (%)</b>
4	574,400	21%
9	1,969,982	71%
10	233,034	8%
<b>Total Non-Administrative OCOs</b>	<b>2,777,416</b>	<b>100%</b>

Work performed was limited to the specific activities and procedures described above. As such, this report is not intended to, nor can it be relied upon to provide an assessment of compliance beyond those areas specifically reviewed. Fieldwork was completed in May 2018.

**III. SUMMARY**

The results of the internal audit identified opportunities for UCSF to enhance the current design of internal controls relating to the construction costs. The areas of potential improvement in the design of internal controls are summarized below and discussed more thoroughly in the “Observations and Management Corrective Actions (“MCA”)” section that follows.

Based upon the observations as discussed below, we estimate that the potential recoverable amount from Webcor is as follows:

**Table 2: Summary of Cost Recovery Findings**

<b>Findings</b>	<b>Recoverable Amount (\$)</b>
Owner Change Order 4	1,568.27
Owner Change Order 9	2,852.90
Owner Change Order 10	216.98
<b>Total</b>	<b>4,638.15</b>

**IV. OBSERVATIONS AND MANAGEMENT CORRECTIVE ACTIONS (“MCA”)**

<b>No.</b>	<b>Observation</b>	<b>Risk/Effect</b>	<b>Recommendation</b>	<b>MCA</b>
1	<p><b><u>Cost Recovery</u></b></p> <p>Owner Change Order #4 - Total Findings \$1,568.27</p> <ul style="list-style-type: none"> <li>SmithGroupJJR (Project architect) used incorrect billings rates resulting in \$2,135.00 of recoverable cost. SmithGroupJJR noted on its back up documentation that it has used amended rates “based on allowable annual increases” for some of its staff; however, no official rate increases were contractually established.</li> <li>Webcor used incorrect billing rates for its management and preconstruction staff resulting in \$1,299.52 of overbillings.</li> <li>Webcor under billed its allowable 5% overhead and profit by (\$1,866.25).</li> </ul> <p>Owner Change Order #9 - Total Findings \$2,852.90</p> <ul style="list-style-type: none"> <li>Teichert (excavation subcontractor) under billed its allowable overhead and profit of 15% in one of the constituent change order components by (\$462.00).</li> <li>Webcor applied 2% insurance fee on the base cost and profit, whereas, the insurance should be applied to the base cost only according to contractual documents.<sup>12</sup> This resulted in \$1,838.98 of overbillings.</li> <li>Math errors in the change order breakdown resulted in (\$107.79) of under billings.</li> <li>We also performed a cost reasonableness assessment for a judgmental sample of billed</li> </ul>	<p>UCSF is overpaying its general contractor.</p>	<p>Capital Program, Real Estate should verify the accuracy of rates/unit prices used in change orders against established rates by performing spot checks prior to approving those change orders. In cases where unit prices are not previously established, we recommend UCSF perform an analysis of a sample of unit prices used in change orders for cost reasonableness, prior to approving those change orders.</p>	<ol style="list-style-type: none"> <li>Assure that all rates are included as part of all bids for prime contractors, sub-consultants and sub-contractors and allowable costs are clearly defined in the contract and bidding documents.</li> <li>Procedures will be developed for review of approved rates against both change order submittals and invoices consistent with our contract terms and industry best practice</li> </ol> <p><b>Responsible party:</b> AVC Capital Program Delivery</p> <p><b>Target completion date:</b> March 31, 2019</p>

<sup>12</sup> Project Management Tab 4, Change Order Request Form/Cost Proposal Form template, Cost Proposal Summary, Allowance 11. Insurance & Bonds: 2% of Actual Costs

<b>No.</b>	<b>Observation</b>	<b>Risk/Effect</b>	<b>Recommendation</b>	<b>MCA</b>
	<p>material and equipment by sourcing commercially available online retail rates for material and California Department of Transportation (Caltrans) equipment rental rates manual for equipment. The pricing we found for comparable material and equipment items was, in the aggregate \$791.85 less than Teichert's pricing:</p> <ul style="list-style-type: none"> <li>➤ Material: Our research yielded a total of \$1,511.75 for comparable items as the ones used by Teichert, which is \$36.99 (2.5%) higher than Teichert's pricing of \$1,474.76.</li> <li>➤ Equipment: We found comparable equipment's for a total rental fee of \$10,363.16, which is \$828.84 (7.4%) less than Teichert's pricing of \$11,192.00</li> </ul> <p>Owner Change Order #10 - Total Findings \$216.98</p> <ul style="list-style-type: none"> <li>• Webcor's misapplication of insurance fee resulted in \$216.98 of overbillings.</li> </ul> <p>According to CP Management, detailed rate sheets for all contractor, sub consultants and subcontractors are typically provided prior to contract award and are normally part of the bidding process. This was incomplete on the block 33 project and was compounded due to the dispute with Webcor over the form of contract. Additionally, a formal process for verification of rates in change orders and invoices is currently missing from departmental standards.</p>			
2	<p><b><u>Procurement</u></b></p> <p>The project compensation model, as initially established by UCSF in its request for proposal, used by Webcor in its bid, and being employed to manage the Project (lump sum), does not align with the</p>	<p>By not enforcing elements of the cost-plus requirements of the contract, UCSF missed the opportunity to</p>	<p>We recommend management:</p> <ul style="list-style-type: none"> <li>• On future projects, clearly define project compensation definitions and then enforce</li> </ul>	<p><i>The contractual dispute with Webcor whereby they refused to provide financial backup in compliance with the executed contract and maintained that all of their</i></p>

No.	Observation	Risk/Effect	Recommendation	MCA
	<p>compensation strategy stipulated in Webcor’s Contract (cost-plus). The shift in approach was not documented as of our testing date, exposing UCSF to strategic and legal risk and potential claims of contract abandonment if a dispute arises.</p>	<p>exercise its contractual rights to participate in Webcor’s subcontractor buyout, which could be a potential avenue to control project costs. The Contract required Webcor to collaborate with UCSF regarding the evaluation of bidder prequalification and bid analysis to determine the most responsive, responsible bidder that provided the best value.<sup>13</sup></p>	<p>requirements accordingly. If a shift from a cost-plus to lump sum approach occurs on a project, we recommend the transitions be memorialized in a change order to the original contract.</p> <ul style="list-style-type: none"> <li>• Fully engage in subcontractor buyout as allowable by its contracts on future projects.</li> </ul>	<p><i>subcontractors were lump sum prevented the University from receiving and reviewing detailed cost proposals. This will be prevented on future projects in two ways.</i></p> <ol style="list-style-type: none"> <li>1. A formal project kickoff sessions will be implemented at the project onset and prior to beginning any work by the successful bidder where all stakeholders are engaged in a thorough review of the contractual requirements of the project including all specified deliverables.</li> <li>2. Implement strict gate management of major projects requiring evidence that all deliverables have been met at the appropriate phase gate to authorize the team to progress into the next phase of the project.</li> </ol> <p><b>Responsible party:</b> AVC Capital Program Delivery</p>

<sup>13</sup> Webcor Contract, 6. Design Builder’s Obligations, 6.4 Design Development Phase, 6.4.1 Bidding Process

No.	Observation	Risk/Effect	Recommendation	MCA
				<p><b>Target completion date:</b> Already implemented informally on all major projects including ZSFG. Will be formalized in a department SOP by March 31, 2019.</p>
3	<p><b><u>Change order backup</u></b> <b>Owner Change Order #4</b></p> <ul style="list-style-type: none"> <li>Change order #4 covered additional costs for design, engineering, and project management services performed by Webcor and five of its subcontractors/sub-consultants. However, Webcor did not require its vendors to provide standard backup documentation such as time sheets to support their costs incurred, nor did UCSF ask for such documentation. As a result, these documents were not available for review.</li> </ul> <p><b>Owner Change Order #9</b></p> <ul style="list-style-type: none"> <li>This change order comprised the off haul and disposal of contaminated soil by Teichert. Uniform hazardous waste manifest forms documenting the actual disposal of contaminated soil, as required by Environmental Protection Agency, were missing and not provided for 26% of tested quantity of removed contaminated soil.</li> <li>Invoices and time and material tickets for a total of \$35,724 (79%) of the \$45,479 tested material, equipment, and labor costs were not provided.</li> </ul>	<p>While these findings do not directly indicate the presence of unjustified or inflated charges for the above change orders, they do prevent us from concluding definitively the accuracy or legitimacy of the charges made.</p>	<p>We recommend management:</p> <ul style="list-style-type: none"> <li>Require and review supporting cost information before approving change orders</li> <li>Require copies of permits, bonds, and documents required for regulatory approvals prior to paying change orders that involve such statutory and liability requirements.</li> <li>Require substantiation for costs incurred before payment, particularly when work is performed on a time and material basis.</li> </ul>	<p><i>Both change orders appear to meet the contractually requirements for owner change orders and payments.</i></p> <p><b>Action:</b> We shall evaluate our process to understand what should have been different than what was done so that we can make any improvements to our process or contract terms.</p> <p><b>Responsible party:</b> AVC Capital Program Delivery</p> <p><b>Target completion date:</b> March 31, 2019</p>
4	<p><b><u>Teichert's Labor Rates</u></b></p> <p>We assessed, on a judgmental basis, a selection of Teichert's labor classes in Owner Change Order #9</p>	<p>Subcontractor labor rate build-ups may include costs that do not comply with</p>	<p>We recommend management:</p> <ul style="list-style-type: none"> <li>Review the buildup of subcontractor labor rates</li> </ul>	<p>1. Assure that all rates are included as part of all bids for prime contractors, sub-</p>

No.	Observation	Risk/Effect	Recommendation	MCA
	<p>for compliance with the minimum prevailing wage requirements per California Department of Industrial Relations (“DIR”) prevailing wage determinations. Teichert complies with DIR requirements by meeting the minimum as its rates were on average 35% higher than established prevailing wages. We requested, but did not receive the buildup and support for Teichert’s labor rates. Current market conditions allow construction workers to command higher wages, particularly in San Francisco, so Teichert charging a premium relative to DIR prevailing wages is not surprising.</p> <p>According to CP management detailed rate sheets for all contractor, sub consultants and subcontractors are typically provided prior to contract award and are normally part of the bidding process. This was incomplete on the block 33 project and was compounded due to the dispute with Webcor over the form of contract. Additionally, a formal process for verification of rates in change orders and invoices is missing from departmental standards</p>	<p>contractual definitions of the cost of the work or conform to statutory requirements leading to overpayment by UCSF.</p>	<p>for change orders for the duration of the Project, particularly for work performed on a time and material basis.</p>	<p>consultants and sub-contractors and allowable costs are clearly defined in the contract and bidding documents.</p> <p>2. Establish SOP for review of approved rates against both change order submittals and invoices consistent with our contract terms and industry best practice.</p> <p><b>Responsible party:</b> AVC Capital Program Delivery</p> <p><b>Target completion date:</b> March 31, 2019</p>
<p>5</p>	<p><b><u>GC/GR billing percent complete</u></b></p> <ul style="list-style-type: none"> <li>According to Webcor’s payment application #15 for March 2018, the Project’s billing percent complete (with exception of GC/GR costs) was 48% (\$28,670,184 incurred out of the total \$61,961,207 committed). At the same point, GC/GRs were 85% billed (\$4,622,693 incurred out of the total \$5,459,539 committed).</li> <li>This is inconsistent with Webcor’s statement that it bills for GC/GR costs on a straight-line basis and in direct correlation with the actual work complete. If the GC/GR billings had occurred solely based on the percent complete of the work, they would be</li> </ul>	<p>Webcor may have front loaded its GC/GR billings and UCSF may have paid Webcor more than it has earned for the work to date.</p>	<p>We recommend management:</p> <ul style="list-style-type: none"> <li>Monitor GC/GR spend against the scheduled GC/GR value and compare that percentage against the overall percent complete. Where there are variances, we recommend UCSF seek explanation.</li> </ul>	<p>1. As an interim short term action a written SOP will be put in place that will provide guidelines and parameters when variances exceed appropriate limits and need to be escalated to the appropriate control point.</p> <p><b>Responsible party:</b> AVC Capital Program Delivery</p>

<b>No.</b>	<b>Observation</b>	<b>Risk/Effect</b>	<b>Recommendation</b>	<b>MCA</b>
	<p>\$2,096,500 less than the billing amount in payment application #15.</p> <ul style="list-style-type: none"> <li>• Webcor in response to our question stated that one of the contributing factors to this variance includes the work performed by subcontractors that did not have all the required paperwork in place at the time of work, which prevented Webcor from billing UCSF for the completed construction work on time. In such cases, Webcor continued to bill UCSF for its GC/GR costs. Webcor noted that since the execution of the GMP amendment with UCSF, which occurred after our analysis cutoff date, this issue has been rectified and GC/GR billings are currently in line with the percentage of work complete.</li> <li>• While Webcor’s rationale for this finding may address some of the \$2,096,500 difference, it does not seem to fully justify the extent of the variance.</li> </ul> <p>CP management acknowledged that there is currently no written process for review of these invoicing parameters or established triggers to alert and elevate such discrepancies to the appropriate control point.</p>			<p><b>Target completion date:</b> March 31, 2019</p> <p>b) As a long term solution, templates in the Unifier system will be developed and deployed to automatically track invoices and assure that they track to expected parameters and automatically alert UCSF project control points to unexplained variances that require specific approval.</p> <p><b>Responsible party:</b> AVC Capital Program Delivery</p> <p><b>Target completion date:</b> June 30, 2019</p>

**V. OPPORTUNITIES FOR IMPROVEMENTS**

<b>No.</b>	<b><u>Observation</u></b>	<b><u>Risk/Effect</u></b>	<b><u>Recommendation</u></b>
1	<p><b><u>Pay application</u></b></p> <p>We noted a \$200,000 discrepancy in the costs incurred amount between Webcor’s schedule of values (“SOV”) in its payment application #15 and Webcor’s internal cost report under SmithGroupJJR. The SOV showed \$5,764,627 costs incurred while the internal report figure was \$5,964,627. Webcor agreed that the difference is an error and stated that it needs to amend the SOV so that it matches its internal cost report.</p>	<p>While this does not appear to be a major risk, inconsistencies between the recorded amounts in general contractor’s internal cost tracking and its billings may lead to erroneous billings in the future.</p>	<p>We recommend management:</p> <ul style="list-style-type: none"> <li>• Follow up to see that updates occur.</li> </ul>
2	<p><b><u>Retention</u></b></p> <p>UCSF is contractually entitled to withhold 5% retention from each payment request by Webcor. UCSF, however, has withheld the retention on Webcor’s construction-related work only, and has not withheld retention for design and engineering related billings. Upon enquiry, UCSF stated that it made a discretionary decision at the request of the Project architect to release the retention on non-construction related scopes.</p>	<p>Not formally memorializing the changes in contractual requirements may undermine UCSF’s leverage to enforce its contractual rights in the future, which may lead to disputes.</p>	<p>We recommend management:</p> <ul style="list-style-type: none"> <li>• Formally memorialize any such business decisions that cause deviations from the contract language in a contractual amendment.</li> </ul>

## **APPENDIX A**

We requested and received the Project documentation from UCSF and Webcor, including Webcor's Contract and amendments, change orders, Contractor and subcontractor payment applications, subcontractor agreements, subcontractor procurement documentation, and other supporting information pertaining to the Project. In addition, we conducted interviews with the following Project personnel to gain a clearer understanding of how the Project was administered and how the costs were incurred:

- Patrick McGee, senior project manager for UCSF
- Eric Hatlen, project manager from Jacobs for UCSF
- Ted Williams, senior project manager from Webcor for the Project
- Brent Williams, project manager from Webcor for the Project

We reviewed and analyzed the relevant and provided Project documents using our construction compliance and cost audit methodologies, in order to identify potential non-compliant costs and overcharges, to present the associated findings described earlier in this report to UCSF. The following procedures were part of our scope:

- Reviewed associated contracts and amendments to understand the contractual framework for how costs are to be incurred, recorded, monitored, and reported.
- On a sample basis, assessed bid documentation for its effectiveness in supporting subcontractor selections.
- Obtained and assessed the general contractor's cost report for costs recorded to date for the project.
- Obtained and reviewed general contractor's payment applications to date, with specific attention to the following:
  - Reconciliation of the latest payment application with the general contractor's cost report.
  - Conformance of costs related to general conditions and general requirements with contractual definitions of the cost of the work including with allowable rates established in the contract with the general contractor.
  - Justification and supporting documentation for a sample of invoiced costs for compliance with some allowable cost categories included in Section 8.4-Allowable Costs of the contract with the general contractor.
  - Reconciliation of line item amounts in the general contractor's payment application with subcontractor payment applications.
  - Conformance of time and material subcontracts, including self-perform agreements, with agreed-upon labor, material, and equipment rates.
  - Reasonableness of a judgmental sample of material and equipment rates for the general contractor and three major subcontractors working under guaranteed maximum price or other "open book" arrangements.
  - Conformance of labor rates with statutory and union requirements for the general contractor's self-performed work and three major subcontractors.
  - Contractual application of overhead, fees, taxes, bonds, and insurance costs.
- Assessed whether change orders, selected on a judgmental sample basis, were supported with appropriate documentation and conducted the following analyses:
  - Tested whether unit rates, overhead, and fees applied comply with contract terms.
  - Assessed whether a review of the change orders merit was performed by the project team to determine whether the change order work was actually beyond the scope of the base contract.