

#### City of Fort Lauderdale • Procurement Services Division 100 N. Andrews Avenue, 619 • Fort Lauderdale, Florida 33301 954-828-5933 Fax 954-828-5576 www.fortlauderdale.gov/purchasing

#### **BEST AND FINAL OFFER**

Proposer Name: \_\_Baker Tilly Virchow Krause, LLP

Proposer agrees to supply the services at the prices bid below in accordance with the terms, conditions and specifications contained in this RFQ.

#### **Proposal – Cost Information**

<b>Construction Contract Audit Services</b>	Firm, Fixed Project Cost	
Las Olas Blvd Corridor     Improvement Project- Garage	\$75,000	
Las Olas Blvd Corridor     Improvement Project – Open     space	\$100,000	
Aquatics Center Improvements     Project	\$60,000	

**Total Project Cost** 

\$235,000

<b>^</b>
m, D. Ollian
or
֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜

(Baker Tilly Virchow Krause, LLP) RFP 571-11919, Construction Contract Audit Services Best and Final Offer

#### **SECTION VI - COST PROPOSAL PAGE**

Proposer agrees to supply the services at the prices bid below in accordance with the terms, conditions and specifications contained in this RFQ.

#### **Proposal – Cost Information**

Construction Contract Audit Services	Firm, Fixed Project Cost
Las Olas Blvd Corridor Improvement	
Project- Garage	\$78,350
Las Olas Blvd Corridor Improvement	
Project – Open space	\$104,485
Aquatics Center Improvements Project	\$67,165

Total Project Cost \$250,000

NOTE: Pricing should be included in this RFQ, but it MUST be submitted in a separate SEALED PACKET/ENVELOPE. The Proposer shall label both packets/envelopes according to the requirements in Section IV of this RFQ. Sealed Pricing will be opened upon selection of short list of proposers. Should the pricing be included in the same packet as the proposal, and not be kept separate, the proposal may be deemed non-responsive. Do NOT include pricing on the Flash Drive Copies.

Submitted by:	10000
Tony (Anthony) Ollmann	Anthy Ollman
Name (printed)	Signature
April 7, 2017	Firm Director Construction Risk Management
Date	Title



## Value-added construction audit services from industry specialists with national reach

# City of Fort Lauderdale – Procurement Services Division

## April 10, 2017

Solicitation Number: RFP No. 571-11919 - Construction Contract Audit Services

Name: Baker Tilly Virchow Krause, LLP

Address: Ten Terrace Court

Madison, Wisconsin 53718

Primary Contact: Tony Ollmann, Firm Director – Construction Risk Management

608 240 2618

tony.ollmann@bakertilly.com



Navigate complexity.

April 10, 2017

Ms. AnnDebra Diaz, CPPB Senior Procurement Specialist II The City of Fort Lauderdale Procurement Services Division 100 North Andrews Avenue, #619 Fort Lauderdale, Florida 33301 Baker Tilly Virchow Krause, LLP Ten Terrace Ct, PO Box 7398 Madison, WI 53707-7398 tel 608 249 6622 fax 608 249 8532 bakertilly.com

Dear Ms. Diaz:

Thank you for the opportunity to respond to the City of Fort Lauderdale (City)'s request for a qualified, experienced and licensed public sector construction contract auditing firm for the City Auditor's Office (CAO). We recognize the work performed by the selected firm must conform to the terms and conditions contained in the Request for Qualifications (RFQ) issued by the City. Based on the information contained in the RFQ and our experience performing construction audit services for other public sector entities, we are confident Baker Tilly Virchow Krause, LLP (Baker Tilly) is uniquely qualified to provide an experienced construction audit team to perform the work requested by the City.

The CAO is seeking construction auditing services for three projects that are part of the Fort Lauderdale Beach Community Master Plan and Beach Community Redevelopment Plan (CRA) totaling approximately \$60 million combined. They include the Las Olas Boulevard Corridor Improvement Project, valued at \$21 million, the Las Olas Boulevard Corridor Improvement Project, valued at \$28 million, and Aquatics Center Improvements valued at \$18 million. Baker Tilly's nationally recognized construction audit group adds value to projects of all sizes, but our public sector projects typically vary in construction costs totaling anywhere from \$25 million to \$100 million.

Your Baker Tilly team recognizes the CAO has unique organizational needs and concerns as a state and local government that must be accountable to the citizens of Fort Lauderdale. If left unmonitored by a third party, the City's upcoming projects could result in increased exposure and unplanned construction risk. Baker Tilly's construction risk management specialists are skilled in providing an onsite audit presence throughout the construction process to ensure that contract terms are fulfilled, that the City receives exactly what it is paying for and that cost overruns are mitigated and potential fraud is immediately identified and remediated.

The CAO is a chartered office of the City with the authority to conduct financial, compliance, economy, efficiency and performance audits for the City and City officials. The CAO is also the audit contract manager for the three engagements outlined in the RFQ and will approve all pay applications, change orders and other related issues for the construction contracts. Your Baker Tilly team understands the importance of performing an independent review of the construction costs and compliance testing of these capital projects, in addition to all other audits requested by the City or CAO. Collaboration is an important standard at Baker Tilly that sets us apart from other firms. We will work hard to establish a mutually beneficial relationship with the CAO throughout your project's entirety.

As a Baker Tilly client, you will also receive access to our complimentary construction contract controls and construction audit webinar series, providing technical education to your team on current industry standards, trends and best practices that can assist you both now and in the future.

Notwithstanding any provision to the contrary in the RFQ materials, this proposal is expressly contingent upon the parties negotiating mutually acceptable terms and conditions prior to executing a final contract.

The City and CAO will be an important client of our firm, and we look forward to building a successful relationship as your Valued Business Advisor. Tony Ollmann has the authority to contractually bind Baker Tilly to the City's requested service through our firm's limited liability partnership.

As always, we welcome any questions or feedback that you have while making your decision. Thank you in advance for your time and consideration.

Sincerely,

BAKER TILLY VIRCHOW KRAUSE, LLP

Tony Ollmann, CPA, CCA

Firm Director – Construction Risk Management 608 240 2618 | 800 362 7301 x42618 tony.ollmann@bakertilly.com

This proposal is printed on 100 percent tree-free paper made with sugarcane and bamboo fibers.

Electronic copies of the proposal have been submitted on recycled Flash Drives.

4.2.2 EXECUTIVE SUMMARY	1
4.2.3 QUALIFICATIONS AND EXPERIENCE	6
4.2.4 APPROACH TO SCOPE OF WORK	10
4.2.5 REFERENCES	19
4.2.6 MINORITY/WOMEN (M/WBE) PARTICIPATION	22
4.2.7 SUBCONTRACTORS	24
4.2.8 REQUIRED FORMS	25
APPENDIX: SAMPLE REPORTS	31

## Key differentiators of Baker Tilly that add value to your construction audit

The City's upcoming construction projects are complex and carry the risk of budget overruns, scope creep, scheduling issues and contract compliance exceptions that need to be controlled from early on. In addition, there are a number of other anticipated compliance risks such as procurement, bid and award procedure compliance; construction job creation reporting and workforce diversity compliance; cost management; contract administration; reimbursable cost compliance; compliance with contractual terms; specific trade and craft pricing compliance and project funding compliance reporting. For each of these areas, Baker Tilly's proven approach to compliance procedures and audit testing can help reduce the risk of construction litigation through continuous project monitoring, better project controls and better communication. Key factors that differentiate Baker Tilly and will add value to the City and CAO include:

- Nearly 20 years of construction audit and construction controls experience including projects for public sector entities, higher education institutions, governmental agencies, commercial office buildings, healthcare systems, medical research facilities, resorts, waterparks, sports complexes and public power utilities
- > **A hands-on audit philosophy** that requires our construction risk management specialists to spend a significant amount of time onsite, ensuring first-hand knowledge of all construction activities, interpretation of the construction environment and effective data collection
- > Proven track record of conducting public sector construction risk engagements, including projects for the Illinois Department of Transportation, University of Wisconsin Hospitals and Clinics, Ohio University System, Chicago O'Hare Airport, Rochester School District, Philadelphia School District, Colorado Springs Utility, Sacramento Municipal Utility District, New York School District and U.S. Department of Transportation
- > **Team expertise with high-profile, complex projects**. Your Baker Tilly team is deeply specialized in working with high-profile, complex projects. We understand the nuances and cultural complexities of working under the oversight of both project stakeholders and the general public. For example, two recent projects we completed were for Target Field (home of the Minnesota Twins) and Freeport LNG (a liquefied natural gas facility).
- > Nationally recognized construction audit, project controls and administration experience. As our firm's largest practice, construction and real estate generates more than \$80 million in annual revenue for Baker Tilly. As a stand-alone practice, this team would place among the 50 largest U.S. accounting firms. Tony Ollmann, firm director on your engagement team, leads Baker Tilly's construction risk management services with more than 25 years of experience. Tony combines a compliance focus with operational experience, leveraging his knowledge gained as a project controls and systems director for a national engineer, procure and construct firm.
- > Broad resources of a top 15 accounting and advisory firm with collaborative client service, blending deep industry insight with sound business advice to provide consulting, risk advisory, assurance and tax services for leading enterprises. We deliver practical, customized solutions to each state and local government client while keeping the unique culture and unique risks of your industry and project in mind along the way.
- Communication, communication, communication. Construction audit clients tell us that Baker Tilly excels at our commitment to providing complete and detailed information of progress at every step of the engagement. Baker Tilly delivers on this promise by issuing a monthly project status update report which outlines the current activities, results of testing and next steps. In addition, your Baker Tilly team members will participate in the monthly Owner, Architect, Contractor (OAC) meeting to better understand the project issues, controls and outstanding items that might impact desired outcomes. This ultimately improves the open line of communication between the City, CAO and Baker Tilly differentiating us from other construction auditing firms.
- > **Continuous project monitoring.** Baker Tilly frequently provides continuous project monitoring services. From performing monthly pay application reviews to assisting owners with monitoring project schedules, we bring prior contractor experience and added expertise in continuous project monitoring when compared to the competition.
- Keen attention to detail. Your Baker Tilly construction audit team prides itself on being detail-oriented so we can ensure that City's construction projects are implemented in compliance with governing body rules and regulations. For example, we will perform an interim project audit to determine that the project has adequate functioning project controls. Throughout your engagement, we will review construction deliverables, change orders and lien waivers as well as inspections, approvals and permits to reveal possible unauthorized re-work charges, general conditions inflation, overpriced change orders, lost incentives and credits, failure to deliver contracted scope and charges for non-allowable costs as well as to look for possible fraud and schedule non-compliance.

## Top 15 firm with expanding national presence

**Baker Tilly office locations** 

Baker Tilly is one of the oldest, largest and fastest growing accounting firms in the United States. We **originated in 1931** with one central objective: *use industry expertise to help our clients improve their operations.* Today, Baker Tilly is one of the 15 largest nationally recognized, full-service CPA and advisory firms with a powerful reputation for delivering candor, insight and results to public sector entities like the City.

Headquartered in Chicago, Baker Tilly is also an independent member of Baker Tilly International, a worldwide network of independent accounting and business advisory firms in 141 countries with 29,000 professionals. Other key facts include:

- > Named a Vault Accounting 50 "Best Place to Work" for the past seven years
- > Recipient of "Salute to Diversity Award" by Corp! Magazine
- > Recipient of "Jefferson Award" for corporate philanthropy
- Nationally certified as a Great Place to Work®
- > Elected a "LearningElite Organization" by Chief Learning Officer
- > Baker Tilly International was recently awarded the prestigious "Network of the Year Award" by *The International Accounting Bulletin (IAB)*

#### Your single point of contact and primary office

Name/title: Tony Ollmann, Firm Director – Construction Risk Management

Email: tony.ollmann@bakertilly.com

**Phone:** 608 240 2618 800 362 7301 x42618

Office: Madison, Wisconsin (headquarters of our construction industry practice)

#### Introduction to your construction audit team

The composition of your project team is a critical component in our ability to deliver an efficient, effective audit. Baker Tilly offers the City an integrated team of construction audit specialists who will serve you onsite and mobilize nearly 100 years of combined experience performing similar projects. Your construction audit team has knowledge and experience spanning the entire construction project life cycle. They are supported by Baker Tilly's construction, real estate and risk groups who bring architectural, engineering and other subject matter expertise that can provide technical and construction financial experience to your engagement.

Unlike many other advisory firms, Baker Tilly builds our delivery model around industry expertise before service line. Our construction and real estate industry group includes nearly 300 professionals (including more than 40 partners) dedicated entirely to serving the construction and real estate industries. This experience and bench depth translates into value for the City in several ways, including:

- > Our professionals consult to the construction and real estate industries on project controls systems, tax matters, real estate development funding and project performance analysis.
- > Our auditors perform not only construction audits, but are experienced contractor financial statement auditors, so they understand the inner workings of contractor financial and project management.

## Key firm personnel assigned to the City's project

Baker Tilly recognizes the complexity of working with the City and is including construction audit leaders and staff to perform this engagement. Our industry and service-specific approach will ensure that the City is working with a team that is truly dedicated to construction audits for the public sector, translating into better service and greater value.

Through association involvement, your specialists keep abreast of the new developments and trends that may impact your industry and will regularly provide newsletters, trainings and industry alerts with updates and answers to your financial and governmental questions. In addition, team members are active participants in ongoing continuing education to obtain certifications and are frequently asked to speak about and author articles on industry trends.

To best serve you, we will put our technical and industry specialists at the disposal of the people who know your organization best: you and your employees. Through our industry expertise, we will focus considerable time and energy on your risk areas, while paying additional attention to the items of most concern to you. We employ a business integration approach that incorporates strategy, organization, processes, performance measures, incentives, people and technology. In other words, we listen to your concerns and will follow the audit objectives established by the CAO and City for the audit.

To provide high-quality service, we strive to assign staff based on skill set rather than location. We weigh a variety of factors in composing project teams such as experience levels, previous assignments and subject matter expertise. This will ensure the City that your team members bring relevant industry knowledge as well as best practices and practical solutions to share with you. We have identified Tony Ollmann, our **Construction Auditing Firm Director**, as your single point of contact. Tony will lead this engagement out of our Madison, Wisconsin office, bringing 25 years of construction audit and corporate construction industry experience. Other members of your team have various work experiences similar in size and scope to this engagement. For example, Jim Miller, senior manager, will lead your field work as a senior project manager. He has more than 30 years of construction experience – including 21 years of varied experience with general contractors, 10 years with a construction consulting firm and two years with Baker Tilly.

#### Organizational chart

## Individual team member resumes and office locations

Tony Ollmann, CPA, CCA   Engagement and Relationship Lead			
Biography	Tony is the firm director of Baker Tilly's construction risk management practice. He has more than 25 years of experience (including 20 at Baker Tilly) in the construction industry providing risk management, project controls, and operations consulting services to owners, operators and contractors. His project experience spans from large complex construction audits to single thread financial controls and process improvement consulting. Additionally, Tony provides litigation support services to owners and contractors. He is a regular contributor to <i>Construction Accounting</i> and <i>Taxation</i> , as well as a requested speaker to numerous construction, trade, audit and industry associations across the United States.		
Education	University of Wisconsin–Milwaukee B.B.A in Accounting	Licenses and certifications	Certified Professional Accountant (CPA) Certified Construction Auditor (CCA)
Role on projec	Tony will be responsible for overall client management and the City's project satisfaction, managing engagement scope, quality assurance reviews and quality control services. Tony is based in Madison, Wisconsin.		

Jim Miller, CF	PA, CCA   Senior Manager		
Biography	Jim has more than 30 years of construction experience both in construction company operations management and construction consulting – nationally and internationally. He provides services that encompass risk advisory, construction auditing and dispute resolution. Jim has assisted clients in strategic project planning, cost and project profit analysis, delay and disruption analysis, insurance claim support services, contract review, financial statement preparation, process development and improvement, as well as procedures to provide financial and operational solutions.		
Education	University of North Carolina – Charlotte B.S. in Accounting	Licenses and certifications	Certified Professional Accountant (CPA) Certified Construction Auditor (CCA)
Role on proje	<b>ole on project</b> Jim will be a quality assurance and senior project manager. His responsibilities will include project risk analysis, audit program development, resource management, technical review, compliance with quality standards and continuous communication with the City. Jim is based in Charlotte, North Carolina.		

Robert Zellmer, CCA   Project Manager			
Biography	Robert has been with Baker Tilly for five years and specializes in construction project audits. He also works with contractors and real estate owners assisting in financial statement audits.		
Education	Edgewood College (Madison, Wisconsin) M.S. in Accountancy University of Wisconsin–Eau Claire B.B.A in Marketing	Licenses and certifications	Certified Construction Auditors (CCA) Certified Public Accountant (CPA)
Role on project Robert will be a project manager and his responsibilities will include project risk analysis, audit program development, resource management and continuous client communication. He is based in Madison, Wisconsin.			



"Baker Tilly is an experienced, high-quality team who provides best-in-class service and consultation."

Mark MacDonald, CPA   Project Manager			
Biography	Mark MacDonald has more than 30 years of business and consulting experience, including one year with Baker Tilly. His progression from an auditor specializing in construction to controller and chief financial officer of commercial contractors provides him with a unique understanding of risk management, job costing, internal controls and management information systems related to construction accounting. Mark has employed his construction knowledge for more than 10 years to help owners from a variety of industries (including the public sector) manage, monitor and control construction costs for major projects in all phases of the construction process. He has managed construction audits ranging in size from \$800,000 to \$400 million.		
Education	University of Wisconsin – Milwaukee B.B.A. in Accounting and Management Information Systems  Licenses and certified Public Accountant (CPA)		
Role on project	Mark will be a project manager and his responsibilities will include project risk analysis, audit program development, resource management and continuous client communication. He is based in Milwaukee, Wisconsin.		

Nick Rhode   Project Staff		
Biography	Nick Rhode, staff consultant with Baker Tilly, has been with the firm's construction and real estate team since 2015. He specializes in providing contract consulting services to our construction clients. Before working at Baker Tilly, Nick was a financial analyst with a national housing development company where he specialized in downtown revitalization, the preservation of affordable housing, workforce housing and the adaptive reuse of significant historic buildings.	
Education	University of Wisconsin – La Crosse  B.B.A. in Accounting and Finance  Licenses and certifications	
Role on proje	Nick will be a project staff consultant and his responsibilities will include performing audit tests, site visits and performing the monthly pay application monitoring. He is based in Madison, Wisconsin.	

More information on our Florida-based M/WBE partner, Coordinated Construction Project Control Services, LLC (CCPCS) and Jacqueline Doyle, P.E., PMP, CCM, PSP, LEED AP, AVS is available on page 22.



"We have used Baker Tilly on multiple projects; most recently, a construction audit that included a review of two residential buildings and one underground parking structure. All members of the Baker Tilly team were engaged, available, knowledgeable and professional. They provided comprehensive insight and timely results while demonstrating extensive technical knowledge and superb interpersonal skills. Without a doubt, Baker Tilly is a go-to resource for all audit and resource needs."

Recent survey excerpt from a construction audit client

## Nationally recognized construction and real estate practice

As Baker Tilly's largest practice, construction and real estate generates more than \$80 million in revenue. In fact, this team would place among the 50 largest accounting firms in the United States as a stand-alone practice. Of the nearly **300 team members**, more than **40 are partners**. **Nearly 4,000 construction and real estate clients** from multiple industry sectors trust Baker Tilly to support their organizational needs, including construction audit.

Our certified public accountants, consultants and industry specialists provide comprehensive accounting, advisory, consulting and tax services to clients across North America.

#### Construction audit experience

Baker Tilly has delivered construction audit services since 2001. Our construction audit clients include: governmental agencies, higher educational agencies, transportation agencies, Fortune 1000 corporations, energy companies, public-private partnerships, private owner hospitals and healthcare networks – to name a few. Our projects encompass water park projects, transportation projects, research and development centers and sports facilities. Our broad experience translates into value for the City in several ways:

- > The City will be served by construction audit professionals with experience working on public sector, higher education, transportation and industrial projects.
- Our auditors perform not only construction audits, but are also experienced contractor financial statement auditors and former construction contractor management.
- > Your Baker Tilly team understands the inner workings of contractor financial and project management.
- > Our professionals frequently work with internal audit and facilities development; we know how to bridge the needs of both departments and mitigate conflict during the project life cycle.
- We have worked in numerous co-sourcing engagements where the staff of the internal audit department played a critical role on the construction audit team.

The following is a firm profile of Baker Tilly indicating all of the required information in the RFQ.

Length of time performing construction auditing/ accounting services	Baker Tilly has been performing accounting services for 85 years and construction auditing services for 16 years.		
Name and type of firm	Baker Tilly Virchow Krause, LLP I Limited Liability Partnership		
Contact information	Ten Terrace Ct, PO Box 7398   Madison, WI 53707-7398 tel 608 249 6622   fax 608 249 8532   bakertilly.com		
Firm history	Baker Tilly Virchow Krause, LLP is a full-service accounting and advisory firm. The firm originated in 1931 as "Edward A. Virchow, CPA" and operated under that name until 1953 when a partnership was formed, creating "Virchow, Krause & Company." Mergers occurred over the years. In 2009, the firm registered as "Baker Tilly Virchow Krause, LLP," with headquarters in Chicago when we became the exclusive branded member firm in the U.S. of Baker Tilly International.		
Firm size (professionals by discipline), current and one year ago	Administrative Support Workers Executive/Senior-Level Officials and Managers First/Mid-Level Officials and Managers Professionals Total	335 295 931 1,214 2,775	

#### In the past few years, we have provided construction risk management and audit Areas of specialty/ concentration services for more than \$15 billion worth of construction projects for owners, contractors and developers. The Baker Tilly team is currently engaged on more than \$2 billion of active construction, but has the ability to respond to the needs of our clients typically within 24 hours after contact. We are experienced auditing national, local and international contractors. Our construction project accounting and audit team understands how contractors work, providing a significant advantage for owners. As such, we are able to add value to construction projects throughout the construction life cycle. Firm age 85 years Biography Please see team member resumes starting on page 4. License to practice in As a nationally recognized firm, Baker Tilly is licensed or otherwise able to practice Florida public accounting in most states, including Florida. State licensing for Florida is documented and included in the Required Forms section of this proposal. Public sector construction Chicago O'Hare International Airport audit project examples Illinois Department of Transportation University of Wisconsin Hospitals and Clinics Ohio University System Rochester School District New York School District Philadelphia School District Colorado Springs Utility Sacramento Municipal Utility District **US** Department of Transportation **Charleston Airport Authority** Ohio Department of Transportation Elgin Housing Authority City of Houston Construction costs for these engagements range from \$25 million to \$100 million. If the City would like more information on any of these projects, we are happy to provide additional information upon request.



"Baker Tilly is responsive, interactive and produces the results they say they will. We are very pleased with the services they provide and consider **Baker Tilly a leader among accounting and advisory firms**."

Recent survey excerpt from a construction and real estate client

## **Public sector expertise**

Baker Tilly is one of the few CPA firms with a state and local government group dedicated entirely to serving clients like the City of Fort Lauderdale.

Our devotion to government organizations is manifested in our public sector practice group with a commitment spanning more than 50 years and a team of more than 220 professionals — including 18 partners — dedicated entirely to serving state and local governmental clients across the United Sates.

We understand the issues governments face, providing hundreds of thousands of client service hours annually to this industry. Our extensive experience provides us with the specialized knowledge and insight to find effective solutions.

Baker Tilly's public sector practice group services 14 niches including state and local government, K-12 education, higher

education, not-for-profits and more. We provide consulting projects of all sizes for city, state, county, village, township, school and special district governments across the United States. Engagements encompass management and operations consultation, solutions and resources.

We currently serve more than 1,000 public sector entities nationwide, but a sample of the public sector and municipal clients that Baker Tilly works with includes:

- > City of Horseshoe Bend (AR)
- Second Second
- > City of Indianola (IA)
- > City of Rock Valley (IA)
- City of Norwalk (IA)
- > City of Urbana (IL)
- Metropolitan Water Reclamation District of Greater Chicago (IL)
- > City of Bloomington (IL)
- > City of Waukegan (IL)
- > Town of Long Beach (IN)
- > City of Escanaba (IN)
- > City of Clewiston (FL)
- > Florida Municipal Power Agency (FL)
- > Florida Office of Insurance

> Gainesville Regional Utilities (FL)

Municipalities

Not-for-profit

Counties

K-12

Consulting

Higher

education

**Public sector** 

specialization

Single audits

Utilities and transit

- Orlando Utilities Commission (FL)
- > City of Lansing (MI)
- > City of Marquette (MI)
- > City of Lee's Summit (MO)
- > City of Fargo (ND)
- Long Island Power Authority (NY)
- City of St Paul (MN)
- > City of Minneapolis (MN)
- > City of Hubbard (OH)
- Oklahoma Municipal Power Authority (OK)
- Charleston, South Carolina Airport (SC)
- > City Public Service of San Antonio (TX)
- > Seattle City Light (WA)
- > City of Waukesha (WI)

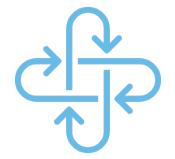


"The support and professionalism we receive from the Baker Tilly team is fantastic. The team is reliable, responsive and very easy to work with. **They bring objectivity to our audit, while feeling like an extension of our team.**"

Recent survey excerpt from a public sector client

## Baker Tilly's commitment to sustainability

At Baker Tilly, we share the City of Fort Lauderdale's belief in sustainability and recognize that sustainability is good for the planet, good for our clients and good for the bottom line. Through green policies within our offices and an investment in technology, we seek to promote an environmentally conscious culture across our firm. Here are a few ways that Baker Tilly demonstrates this commitment.



**Waste minimization.** Broad availability of technology has made it possible for us to conduct virtually paperless, and, when appropriate, remote engagements. These streamlined, technology-enabled methods can lead to a more time and cost-efficient

approach for our clients. Baker Tilly offices also promote waste minimization by encouraging recycling and providing recycling bins for each desk and in common use areas. We reduce the use of paper by sharing newsletters, memos and other internal and external communications via email and intranet/internet posts. We use paperless fax machines and when printing is needed, copiers default to double-sided printing, thereby minimizing the overall use of paper.

Water efficiency. Baker Tilly offices provide water coolers using filtered tap water instead of bottled water and offer employees and visitors reusable glassware. Additionally, faucets and restrooms are furnished with low-flow equipment and sensors to reduce overall water usage.

**Energy efficiency.** Baker Tilly is continuously moving towards a more energy efficient way of conducting business. To reduce our carbon footprint, we are installing lighting retrofits, photo sensor switches and Energy Star rated appliances and equipment wherever possible.

**Green initiatives.** Baker Tilly looks for ways to drive sustainability and reduce our carbon footprint within each of our offices, from large projects to smaller scale initiatives. For example, when we upgraded our Madison, Wisconsin data center, we assessed room layout and airflow dynamics with the dual goal of reducing the total cooling capacity required and increasing efficiency. As part of the project, we installed locally-built "heat recovery chillers" to distribute the heat generated in the data center throughout the building, rather than into the atmosphere.

**Staff.** Baker Tilly staff is encouraged to adopt a sustainable lifestyle. We support sustainable practices by offering public transit benefits, telecommuting options and bicycle accommodations. We are committed to encouraging green habits throughout the firm.

Renewable energy projects. Baker Tilly professionals who focus on tax and regulatory issues in the renewable energy sector provide clients with informed recommendations on project development and finance. They leverage their deep industry knowledge to provide strategic advice on investments in wind, solar, biomass, geothermal and other sustainable technologies.

## Baker Tilly's construction contract audit methodology

The following is a narrative of our general audit approach to perform procedures and testing that achieve the City's audit objectives, continuous project monitoring and approach outlined in the RFQ. This audit approach is applied to the pre-construction, interim/monitoring and close-out phases and comprises engagement planning, audit scope tasks and audit testing, which collectively form our proposed Scope of Work – regardless of the timing of the specific audit requested by the City.

We believe, practice and develop each of our methodologies to help mitigate construction project risk. Construction risk comes from many sources including financial, safety, schedule, end-user satisfaction and institution reputation. Risk-mitigating audit programs and preventive internal controls can dramatically improve the construction experience and outcome. Baker Tilly also performs fraud investigations, fraud risk assessments, contract reviews and litigation support on construction projects and processes. Our public sector clients appreciate the long-term view we take to supporting their audit and advisory service teams.

Baker Tilly prefers to be engaged in the pre-construction, interim/monitoring construction and/or post-construction stages. Our involvement throughout each stage of the construction lifecycle dictates our role and ability to influence construction contract provisions and performance measures. We have found that our team can provide the most impact when we get involved early on in the process. Engaging Baker Tilly prior to the execution of the contract allows us to assist in identifying unfavorable contract terms and recommending changes. Baker Tilly works with clients in all aspects of contract analytics and implementing effective project controls and reviewing construction contracts for owners. By engaging us early on, we can provide clients with the most efficient and effective recommendations that directly impact the final cost of the construction project.

As such, our construction auditing focus is significantly different for each of the three audit phases: pre-construction, interim/monitoring and closeout. During each of these phases, there are unique auditing procedures specifically pertaining to that phase. Our final audit approach is also based upon the requirements of the RFQ and Addendum #1 requiring the selected firm to provide continuous project monitoring by its presence on the project site regularly, attend all contractor and city construction meetings, inspections and all other construction events and to review the "pencil copy" monthly pay estimates and supporting source documents at the contractors' offices for all pay estimates.

Our construction audit methodology is specifically tailored to fit the unique contractual needs of the City as our client. Baker Tilly reviews the project delivery method, the experience of the project personnel, the required project financial and operational reporting requirements, reasonableness of the project schedule and the adequacies of the project budgets. More specifically, we design tests to determine that project budgets are aligned with stakeholder/public expectations and ensure they are reasonable to complete the project. Our risk analysis methodology takes these factors into account laying out an inventory of risks and a roadmap mitigating those risks as well as the project audit program.

Baker Tilly's approach and methodology are grounded in the Construction Audit and Cost Control Institute (CACCI) Professional Practices Framework. The CACCI is recognized as the leading developmental and technical resource for construction auditing. The CACCI is associated with the Institute of Internal Auditors as its primary construction audit and construction fraud training resource. Baker Tilly follows a methodology based on the CACCI Institute delivery framework to identify risks to the organization, assess the level of risk to the organization, evaluate management's responses to mitigate the risks and determine whether progress is monitored and efforts result in improvements to the organization.

#### **Timeline**

We are ready to begin work upon authorization from the City. We will begin the engagement with a kickoff meeting that allows us to co-develop an agreed upon timeline with you. Baker Tilly proposes the following timeline for the work proposed into the following phases: engagement planning, pre-construction, interim/monitoring and closeout.

## Engagement approach and methodology for the City and CAO

#### A. Engagement Planning

During this task we will confirm your project expectations, determine risk tolerances and establish preferred methods of communication. Baker Tilly will compile formal Document Request Lists that will include information requests specific to contract documents, reports and other supporting documents necessary to complete the construction audit services. We will review the Document Request Lists with the City and CAO, as appropriate to discuss the requested information, establish dates of support submission, identify appropriate contacts, and answer questions. Typically, our audit process stresses the importance of evaluating existing internal controls, especially under the risk assessment standards. We perform a thorough evaluation of the effectiveness of your internal controls to perform risk assessments and design a risk-based audit program for the construction project.

During preliminary work, we will document our understanding of your internal controls and evaluate internal controls over the significant accounting and reporting systems, project management systems and contract administration systems of the City. These evaluations help us to determine how much reliance we can place upon the systems for audit purposes and the amount of systems testing and account verification work that may be required.

Construction audit value is maximized when it is part of an overall construction risk mitigation program. Our execution philosophy is anchored in transparency and continuous communication with all parties; the City, CAO and the contractors and subcontractors (construction management team). We ensure transparency by integrating these actions into our delivery methodology:

- > Developing a project risk register with the construction management team and soliciting their feedback prior to writing the audit program
- Facilitating an onsite project kickoff meeting with the construction team to discuss the engagement timeline, scope, audit program and documents required to support the audit. This forum also gives the contractors an opportunity to ask questions about the audit process
- > Coordinating with (rather than dictating to) the contractors' interview schedules and document requests, thereby minimizing any construction interference caused by the construction audit
- Providing the owner with a monthly project status update report
- Verifying findings with the contractors prior to final reporting. For example, we use a draft findings schedule to share our initial findings with the Owner and the contractors. This communication method enables the contractors to discuss the findings with us, clarify any misunderstandings and propose a mitigating solution. We utilize this approach with contractors to overcome negative perceptions about the audit and this approach reinforces that the purpose of the audit is to mitigate construction risk.

#### **B.** Pre-construction phase

In the pre-construction phase, Baker Tilly will perform a risk review of the proposed contract terms and conditions to identify the key contract risk areas for the project. Baker Tilly will identify contract strengths, weaknesses and financial risks of the proposed contract language. Our analysis will include recommendations to define allowable and non-allowable costs, fee computations, cost limits, use of allowance and contingency funds and general conditions definition and computation. This step assumes the use of a Guaranteed Maximum Price (GMP) contract with specific cost reimbursable language.

As part of our review and work with our in-house legal counsel, we would propose modifications to the construction contract language, changes to "fixed billing rates" and other recommendations to make the proposed construction contract fair and equitable. The purpose of the review is to make the proposed Contractor terms more transparent to the City so you can decide how they want to treat each specific area of the contract with a complete understanding of the potential impact.

Examples of Baker Tilly contract language recommendations on previous pre-construction audits include insurance terms, conditions and allowances, allowable pass-through expenses, labor and overhead burdens, labor billing rates, change order pricing, self-performed work and contractor controlled contingency including:

- > **Program control interviews:** Baker Tilly will conduct interviews with City personnel including program managers, engineers, project accountants, procurement personnel and support staff. The goal of these meetings is to gain an understanding of the department, program and project objectives, monitoring activities specific to scope, schedule and cost, financial controls, accounting systems and overall internal control policy and procedures. In addition, we discuss practices and departmental, program and/or project risks.
- Construction audit program development. Baker Tilly will develop an audit program with detailed procedures to test and analyze the construction project contract controls and identify control weaknesses, contract compliance, and potential cost recovery opportunities. This work program will be developed for each targeted or major risk area and specific City internal controls.
- Review the pre-award bidding process. Baker Tilly will perform a review of the pre-award bidding process to ensure the Owner is getting the best possible price for the project and all scope items were properly vetted and included within the price submitted.
- Review the development of the schedule of values. Baker Tilly will provide a review of the pre-billing allocation of the contract values throughout the project schedule of values. Our review will look for unusually large amounts of funds allocated to line item activities that get billed out early in the pay application process. This continuous monitoring activity will ensure the contractor does not bill the project upfront, which creates an improper cash flow benefiting the contractor.

#### C. Interim/monitoring phase

During this phase of a project, our attention turns toward compliance with the internal controls set up during the preconstruction phase and the monthly monitoring activities required by this RFQ. Our testing of the controls ensures these controls are operating as designed and producing the desired results. We also will perform a variety of monthly project monitoring activities such as review of the monthly "pencil copy" pay application process, review of the schedule and any proposed changes to the contract completion, change order control system and change order management and job cost reporting system to ensure compliance with the written policies and procedures of the City.

Every project requires continuous monitoring for success. We realize that all projects differ, so we craft our solutions to each situation. We leverage our experience and the widely accepted principles from the Project Management Institute (PMI) and its Project Management Body of Knowledge (PMBOK) to conduct monitoring/assurance reviews.

Our experience has shown that it is common for projects to encounter issues that span scope definition, solution selection, project approach and management, technical design, unrealistic expectations and ineffective issue management. Our rigorous approach to project management guards against these potential pitfalls through the following essential disciplines: project planning, risk identification and management, milestone tracking, budget management, monthly project status reporting, communications, change management and scope management.

Examples of interim/monitoring internal control testing include contract bid and award, change order management, cost development and management, schedule management and contractor billing practices.

#### Interim compliance testing

This element of our methodology turns toward compliance with the internal controls set up to manage project and program risk identified during our pre-construction phase. Our testing of internal controls ensures that the controls are operating as designed and producing the desired results. Basically, we obtain an understanding of the project controls implemented by the City and the contractors. The controls review with the transaction testing will be used to identify potential control weaknesses, gaps or strengths in the project controls environment. We will concentrate on:

- Contract bid and award process. Owner contract and subcontract files will be reviewed for proper application of procedures, documentation and approvals. Processes will be examined to determine the application of standard institutional bidding procedures, presence of competitive bidding, vendor prequalification, requirements for sole source selections and adherence to approval policies and thresholds. Bid package development activities will be reviewed to ascertain parties/personnel actively involved in the Request for Proposal (RFP) creation process, internal scoping requirements and percentage of plan completion at the time RFPs are advertised. Controls will be assessed specific to the bid prequalification and advertising process, evaluation of bid completeness and alternates, and the contract award process. The review will include work plans of successful and unsuccessful bidders and bid recaps.
- Control assessment and testing: We use a risk-based approach to assess City program controls design and implementation. Our analysis will include a review of documented policies and procedures to identify internal control strengths, weaknesses and gaps. We will verify that the written internal control policies and procedures include a system of approvals and appropriate segregation of duties and are compliant with applicable regulations, laws and/or statutes.
- Contract and change management. Procurement and contract administration controls will be reviewed for consistency and practice adherence to policies and procedures. Areas of focus will include verification of supplier compliance, standardization of contracts, legal review and contract reporting procedures. Analysis will be performed to assess organizational evaluation, communication and management of economic development initiatives and third party compliance including minority, women and disadvantaged business enterprise (M/W/DBE), loan covenants and local preference. Change order management will also be evaluated including processes to review, track and approve contract change orders. Analysis will include practices to identify scope duplication and cause of the change, reconcile supporting cost documents and mathematical accuracy and ensure contract rates and markups are contractually compliant.
- Cost development and management. Cost management and control activities will be reviewed to determine the level of control and monitoring of cost throughout the project lifecycle. The assessment will include controls specific to budget development, budget to actual cost reporting, identification of budget variances, communication and approval of budget overages and resources used to validate proposed costs. Additional practices to be assessed include cost escalation management, use of value engineering, review and approval of project charges and communication of project cost performance to key stakeholders.
- Schedule management. This review will include project baseline and interim schedules to assess the alignment of schedule milestones to project requirements and determine the frequency of schedule review and updates. Activities performed to monitor construction progress, enforce contractor and subcontractor schedule milestones, and project schedule reporting will be reviewed. Proposed changes to the contract completion date will be reviewed closely to ensure a contractual right for the extension of the contract completion. Additionally, management procedures for resolution of identified delays and schedule noncompliance will be examined for effective and consistent application.
- > **Scope management.** Project controls used to manage scope definition and modification through planning, design review and construction will be evaluated for clarity of the project scope and deliverables.

- > **Scope management (cont.):** Responsibilities and procedures for design review and approval will be assessed and specific emphasis will be placed on project changes impacting the scope. The review will include activities performed to confirm delivered products and services conform to specifications.
- > **Pay applications.** Baker Tilly will monitor monthly pay applications to ensure compliance with the contract billing terms and conditions of the contract and test for mathematical accuracy. We will visit the contractors' office to review the backup cost documentation and any other evidence to support amounts included in the monthly billing.
- > **Pre-GMP audit of contractor billing rates.** Baker Tilly recommends that a pre-GMP audit be performed on proposed contractor billing rates to ensure that the proposed billing rate is in line with the actual cost of the contractor to provide the service. We have found that contractors hide "hidden profit" into items such as proposed labor billing rates, labor burden rates and insurance billing rates. Our objective is to review the actual cost records prior to executing the contract to ensure there are no hidden profit centers in any of the proposed billing rates.
- Develop project cash flow model. Baker Tilly will assist the CAO with the development of a project cash flow billing model to use as a forecast of the future cash needs for the project. This forecast can also be used to measure the contractors' progress on the project against the initial forecast.
- Maintain and review of the project risk register. Baker Tilly would recommend the project maintain a project risk register that identifies all financial and non-financial risks to the project, the expected outcome and the severity of the potential exposure to the project. This document can be reviewed on a monthly basis with the contractor and presented to the CAO. The monthly update will show additions, deletions to the risk register and any changes in the expected outcome due to mitigating activities or actions taken during the past month.

Recent pre-construction and internal control system engagements have demonstrated high return on investment for our clients, for example:

- > Pre-construction contract due diligence uncovers \$900,000 in unfavorable pricing provisions
- > Pre-construction services audit identified excessive architect travel expenses
- > General conditions decomposition identified duplicate benefit hours charges valued more than \$116,000
- Self-performed construction bid analysis highlighting a 12 percent billing rate variance and returning more than \$500,000 to the owner
- > Labor rate decomposition and rate negotiation resulting in a 15 percent reduction in labor rates
- > Pre-GMP work on subcontractors insurance billing rate identified insurance policies that were included in the proposed billing rate that were not a requirement of the contract resulting in significant savings to the owner

#### D. Closeout phase

Project closure policies and procedures will be reviewed to ensure controls address contract fulfillment, retention release, billing compliance, performance of quality inspections, use of commissioning and tracking for any rework performed. Procedures to track warranties and process claims will be analyzed to ensure adequate processes exist to hold contractors and subcontractors responsible for sub-standard work. Practices to assess liquidated damages and the handling of project savings will be reviewed. The review will also include management of owner contingency funds and monitoring of contractor allowance and contingency fund usage. Transactions will also be tested for compliance with contract terms and conditions.

- > **Payment applications:** Contractor payment applications will be verified for mathematical accuracy and to ensure charges are adequately supported to meet documentation requirements. Charges such as fees, markups and other percentage-based charges will be recalculated to verify charges align with the executed contract.
- > **Labor and labor burden:** Labor charges will be vouched to an approved timesheet and supporting rate documentation such as payroll registers, canceled checks, union agreements or stipulated contract rates.
- > **Change orders:** Contractor change orders will be reviewed to assess the adequacy of supporting cost documentation and compliance with the contract. Additive or deductive change amounts will be traced to the cost support. Review will also include identification of potentially duplicate contract scope items, subcontract rework charges and charges that were not in compliance with the contract terms.
- > **Subcontracts:** Subcontract agreements and change orders will be assessed to identify any mathematical errors, scope or cost duplication and unallowable costs (such as improper markup application).
- > **Other direct and indirect costs:** Project costs, such as general conditions, general requirements, materials, equipment and other project expenses will be vouched to third-party invoices and other supporting cost documentation to identify duplicate charges or costs not reimbursable per the contract terms.
- Closeout report: Baker Tilly will prepare an audit report on the closeout audit and the results of our tests and observations regarding the compliance with internal control, compliance with the contract terms and conditions, and listing out any exceptions noted from our review and testing.

#### Statement of current workload

Our current workload and size of our firm allows Baker Tilly the ability to respond to any request for construction audit services by the City in a timely manner. When you engage Baker Tilly to perform construction auditing services for the City, you engage the Baker Tilly construction and real estate group of nearly 300 team members and more than 40 partners. This vast wealth of industry experience and talent will be available to the City to assist the City in resolving any workload issue or concern raised by the City.

Baker Tilly is committed to providing owners with a prompt response to scheduling and conducting an audit. As part of our project references provided, Baker Tilly has always provided our clients with the most responsive and timely services. If a critical situation arises, Baker Tilly would employ all means necessary to provide the City with a capable team within a 24-hour period.

Members of the Baker Tilly construction and real estate team have had past experience where they were required to be onsite within a 24 hour period. If that challenge reoccurs, Baker Tilly will perform as required by the situation.

## Baker Tilly's digital/technological capabilities

We use computer-assisted audit techniques (CAATs) to enhance our data analytics. Applying CAATs on construction contract audits enables us to improve the depth and breadth of testing, quantify the impact of control gaps and identify system and data errors that would otherwise be difficult to detect. We use the following software systems to aid in the facilitation of a successful examination:



**IDEA Data Analysis Software** – IDEA software enables us to perform comprehensive, independent testing and monitoring of transactional data. For many of our clients, we have used this tool to search for duplicate payments, fraud, misuse and circumvention of internal controls.



**Electronic Working Papers** – We retain our working papers in CaseWare, a powerful and all-encompassing audit documentation software that allows Baker Tilly to conduct a virtually paperless audit. This provides us with real-time communication, both internally at Baker Tilly and with you as the client.



**RS Means CostWorks** – We use CostWorks as our primary resource to estimate and verify construction pricing. It enables our professional staff to view regional and local pricing statistics across trade, craft and material suppliers.



**ENR Square Foot Cost Book** – We recognize the need to use multiple estimating resources, and ENR Square Foot Cost Book gives our construction audit team additional insight to local and regional construction pricing and estimating.



**Microsoft SharePoint** – SharePoint enables our clients and construction auditors to easily and confidentially share documents, post requests and document the engagement progress.

Specific to validating general conditions costs and labor rates, we utilize RSR Means CostWorks and ENR Square Foot Cost Book. Specialized general conditions items may also be validated comparing local vendor pricing, national brand pricing, and/or internet pricing as applicable. Labor rates may also be evaluated against local prevailing wage schedules and union agreements.

## Anticipated potential audit risks, issues and associated solutions for the City

The City's RFQ requested that Baker Tilly identify various potential audit problems and construction risks, as well as the firm's approach to resolving those problems. We have provided a number of potential audit problems and how Baker Tilly proposes to accomplish the work for those construction risk areas. Here are the potential auditing problems and how Baker Tilly intends to accomplish the City's corresponding audit objective:

Contractor wage rates and labor burden: This is an area of construction auditing that typically yields a great deal of audit adjustments as long as the contract does not contain any fixed labor rates or labor burden amounts. The primary objective in testing each component of cost is to review the source document that supports the transaction such as payroll registers, time tickets and benefit cost documentation. Other tests we will perform will be to review the workers compensation insurance charge to see that the applicable rate was adjusted for the insurance labor modifier. The impact of the labor modifier could significantly reduce the cost of providing workers compensation insurance. Lastly, we will review the insurance carrier's premium invoice to determine that all applicable premium discounts were also applied against the labor burden rate.

- Contract and change order amounts: Baker Tilly will review each change order for compliance with the terms of the contract to ensure compliance with the contract terms. We will also test the mathematical accuracy of the change order computation and ensure that all contractual markups have been properly applied. Contract markups tested include change order fee, insurance, bonds and overhead and profit added to the change order.
- Allowable general conditions and reimbursable expenses: Baker Tilly will follow the terms and conditions of the executed contract to determine if the Contractor is in compliance with the reimbursable cost language contained in the contract. Our audit tests will be developed around that language to make sure the Contractor is in compliance with the contract. Areas that typically yield audit issues are reimbursable travel expense reporting, where individuals charge travel expenses not related to the project. When exceptions are noted during our testing, Baker Tilly will obtain the applicable documentation to prove the exception noted, and the actual cost documentation to support our audit findings.
- > Payment applications and supporting documentation: One of Baker Tilly's standard auditing procedures is to review 100 percent of the applications for payment on the project. These applications are tested for proper cost support, lien waivers and mathematical accuracy. By performing those tests, we can identify exceptions or potential problems early on and avoid being in a cost recovery position. Providing this service early on a project also sends a clear message to the Contractor that the Owner is looking at the billings and intends to enforce the contract terms if needed. In addition, this audit step also assists the Owner in managing the project cash flow by identifying audit exceptions and providing sound reasons for a reduction in the pay application, or the holding of funds to protect the best interests of the project.
- > Payments from CM to its subcontractors: Baker Tilly will verify the use of applicable monthly lien waiver documents to make sure the contractor has paid subcontractors on a timely basis. By testing the monthly lien waivers, this allows Baker Tilly the ability to spot potential unpaid vendors and suppliers and the potential for contract claims. When potential problems are identified, Baker Tilly will request proof of payment by the Contractor and make an inquiry regarding receipt of the payment with the vendor to ensure proper payment.
- > **Subcontractor default insurance and insurance charges.** Baker Tilly understands the cost of insurance and has audited numerous construction companies around the United States. We understand how contractors like to use these insurance categories as "hidden profit centers" by charging inflated insurance rates. Baker Tilly will ensure the City that all insurance charges are charged at cost, or at the rate agreed upon in the contract.
- Contract allowances and contingencies: Baker Tilly will review all contract allowance accounting to determine that the cost charged against the allowance is an allowable cost per the terms of the contract. We will also make sure any contractual markups get properly applied and all allowances are closed out via a change order prior to the closeout of the project. The testing of the contract contingency will be dependent upon what type of contingency (Owner or Contractor controlled) language is found in the contract documents. If the contract contains an Owner approval language, we will review each transaction charged against the contingency balance for the proper approval, assuring the costs are in compliance with contract terms.



"It's been great to work with Baker Tilly Virchow Krause on our audit. **The team seems to focus their time in the proper areas that present the greatest audit risk** and spend an appropriate
amount of time on the less risky areas."

Recent survey excerpt from a Baker Tilly assurance client

## **Special assistance to the City**

As previously stated, Baker Tilly's construction and real estate group consists of numerous individuals with a wide degree of prior experience and skills to draw upon on an as needed basis to satisfy all of your needs and concerns that might be encountered during the project life cycle. If a special incident occurs, Baker Tilly will draw upon its resources to obtain the proper response and action item needed for the circumstance.

## Sample reports

Baker Tilly has included sample reports for your consideration in the Appendix section of our RFQ response beginning on page 31.

## The voice of our clients

The best way for the City to evaluate any professional services firm is to hear directly from clients. We encourage you to connect with the entities listed below to learn more about their relationship with Baker Tilly. Each will have a unique perspective that you may find valuable as you consider the unique needs of the City and CAO.

	Ohio University (Athens, OH)			
Contact person	Jeffrey Davis, Chief Audit Executive			
Contact information	West Union Street Office Center, Suite 275 1 Ohio University, Athens, OH 45701-2979 740 593 1865 I davisj5@ohio.edu			
Professional services provided	<ul> <li>General conditions price benchmarking</li> <li>Allowable and non-allowable pass through cost verification</li> <li>Change order authorization and price analysis</li> <li>Contingency usage reconciliation</li> <li>Subcontract bid and award process verification</li> <li>Application for payment roll forward</li> </ul>			
Years served	Started in 2015 and continues to present			
Estimated cost of project	Multiple projects ranging from \$10 million to \$90 million			
Actual cost of project	All projects have been delivered at or below budget			

	University of Wisconsin Hospitals and Clinics				
Contact person	Scott Houtakker, Director of Internal Audit				
Contact information	635 Science Drive, Madison, WI 53711 608 262 0088 I SHoutakker@uwhealth.org				
Professional services provided	<ul> <li>General conditions price benchmarking</li> <li>Allowable and non-allowable pass through cost verification</li> <li>Change order authorization and price analysis</li> <li>Contingency usage reconciliation</li> <li>Application for payment roll forward</li> <li>Contractor and supplier payment tracking and control</li> <li>Fee computation verification</li> <li>Change order tracking and control</li> <li>Davis Bacon compliance tracking</li> <li>Construction audit boot camp professional education</li> <li>Contractor project controls risk analysis</li> <li>Documentation tracking and compliance</li> <li>Subcontractor direct labor price and productivity benchmarking</li> </ul>				
Years served	Since 2013				
Estimated cost of project	Multiple projects ranging from \$10 million to \$200 million				
Actual cost of project	Actual costs are confidential				

	Sacramento Municipal Utility (Sacramento, CA)				
Contact person	Tammy Borkoski, Supervisor of Internal Audit				
Contact information	6201 S Street, Sacramento, CA 95852 916 732 6522 I tammy.borkoski@smud.org				
Professional services provided	<ul> <li>Allowable and non-allowable pass through cost verification</li> <li>Change order authorization and price analysis</li> <li>Contingency usage reconciliation</li> <li>Subcontract bid and award process verification</li> <li>Fee computation verification</li> </ul>				
Years served	Since 2012				
Estimated cost of project	\$68 million				
Actual cost of project	\$67,979,000				

	Illinois Department of Transportation				
Contact person	Nancy Rambo, Acting Section Chief				
Contact information	Bureau of Investigations and Compliance 2300 S. Dirksen Parkway, Springfield, IL 62467 217 785 4592 I nancy.rambo@illinois.gov				
Professional services provided	<ul> <li>Services include contract compliance auditing</li> <li>Billing compliance audits</li> <li>Overhead and labor rate audits</li> </ul>				
Years served	Since 2016				
Estimated cost of project	Annual contract value > \$1 million				
Actual cost of project	Project pricing is not applicable				

	Colorado Springs Utilities				
Contact person	Nathan Bornitz, Senior Mechanical Engineer				
Contact information	121 S Tejon St, Ste 200 PO Box 1103 Colorado Springs, CO 80947-0929 719 668 6871 I nbornitz@csu.org				
Professional services provided	<ul> <li>Contract term compliance testing</li> <li>Material management control testing</li> <li>Change order pricing review</li> <li>Overhead rate analysis</li> </ul>				
Years served	Since 2014				
Estimated cost of project	\$300 million				
Actual cost of project	Actual costs are confidential				

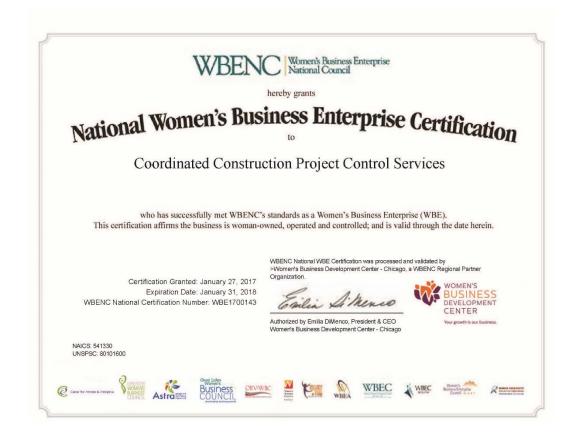
	Chicago O'Hare International Airport (Chicago, IL				
Contact person	Doug Welch, Project Manager (F.E. Moran)				
Contact information	2265 Carlson Drive, Northbrook, IL 60062 224 365 9671 I doug.welch@femoran.com				
Professional services provided	<ul> <li>Services included CPM scheduling to support the capital program</li> <li>Served by Jacqueline Doyle (CCPCS)</li> </ul>				
Years served	2015 to 2017				
Estimated cost of project	\$10 million				
Actual cost of project	\$10 million				

## Minority/Women (M/WBE) Participation

Baker Tilly is an equal opportunity employer and bases all employment decisions on an individual's unique skill set, knowledge, ability and performance. Consistent with state and federal law, Baker Tilly does not discriminate against any individual regarding any employment decision because of age, race, creed, color, handicap, disability, sex, marital status, sexual orientation, arrest record, conviction record, citizenship status, national origin, ancestry, genetic history, military service or other legally protected status. Baker Tilly's ultimate goal is to create a diverse and inclusive environment and to meet or exceed the availability percentage for women or minorities in all job groups.

#### Introduction to CCPCS

Baker Tilly is not a certified minority business enterprise, but has partnered with Coordinated Construction Project Control Services, LLC (CCPCS) for the City's project, which is a registered Florida M/WBE firm. Coordinated Construction Project Control Services, LLC (CCPCS) is a certified M/WBE firm which formed in January 2010 by Jacqueline Doyle, P.E., PMP, CCM, PSP, LEED AP, AVS. Jacqueline has more than 20 years of experience in construction and engineering consulting, including CPM scheduling, cost estimating, project management, owner representation and program management. Baker Tilly plans on engaging their services in scheduling, cost control and general construction auditing services.



## Growth and Retention of Women (GROW)

One example of the firm's commitment is our GROW initiative, established in 2007. We created GROW to enhance the development and leadership potential of Baker Tilly women by providing internal and external opportunities to network, share information, acquire skills, strengthen professional relationships and advance in their careers.

While our entry-level hiring rate is equal between genders, we focus initiatives around retaining women as their careers progress. Our commitment to GROW increases the number of women in firm leadership and management positions at Baker Tilly, increases the retention of women at all levels of the firm, creates an environment where women feel empowered, enhances our advocacy of advancing women in business, shares our knowledge gained through this initiative with clients, prospects and new hires, and creates a workforce that is reflective of the advancement of women achieved by our client base.

We are proud that the *American Society of Women Accountants/American Woman's Society of Certified Public Accountants* recognized us as "A Best Accounting Firm for Women" in 2011, 2012, 2013 and 2014. Baker Tilly also ranks in the top 15 of Vault's 2017 "Best Accounting Firms for Women."

Please see our <u>2015 GROW Annual Report</u> for more information on our commitment to women in the workplace, details on how GROW has evolved and some of the successes the program has achieved.



## Supporting Opportunity, Advancement and Retention for All (SOAR)

Diversity and inclusion is about valuing, respecting and supporting our differences to help us serve as Valued Business Advisors. Simply put, diversity is our mix; inclusion is how our unique team works well together. Diversity and inclusion is also aligned with our firm strategy to attract, develop, reward and retain the best people for our organization. To accelerate our progress, Baker Tilly's management committee established a diversity and inclusion initiative called SOAR in 2015, which is composed of representatives from geographic, business and service lines.

SOAR focuses on ensuring all team members are supported, valued and respected regardless of ethnicity, race, gender, age, physical ability, faith, sexual orientation, education, personality, skills or life experiences.

SOAR is supported by local leaders and championed by Baker Tilly's Chief Executive Officer (CEO) to drive toward a holistic diversity and inclusion strategy. For more details on SOAR, please visit <a href="http://bakertilly.com/careers/soar">http://bakertilly.com/careers/soar</a>.

Our SOAR program recently won *Corp! Magazine's* "Salute to Diversity" Award, recognizing businesses and business leaders who have displayed significant achievements in diversity within their organizations or in the community.



## **Diversity and Inclusion Steering Committee**

In 2016, Baker Tilly <u>established a national steering committee</u> designed to strengthen the firm's culture of diversity and inclusion. Alan Whitman, our CEO, chairs the new Diversity and Inclusion (D&I) steering committee, which comprises individuals from across the firm and oversees the firm's diversity and inclusion strategy, including diversity and inclusion communications, accountability measures for our substantial diversity goals and coordination of the activities of GROW and SOAR. To learn more about diversity and inclusion at Baker Tilly, please visit

http://bakertilly.com/careers/diversity-and-inclusion/.

## **Subcontractors**

Other than utilizing CCPCS as a Florida-registered M/WBE participant, Baker Tilly does not plan on subcontracting out any other work on the City's projects.

## **Required forms**

- > A) Proposal Certification See page 26
- > B) Non-Collusion Statement See page 27
- > C) Local Business Preference (LBP) NOT APPLICABLE TO BAKER TILLY
- > D) Contract Payment Method See page 28
- > E) Sample Insurance Certificate See page 29
- > F) Business License See page 30
- > G) Cost Proposal Pages SEE SEPARATE, SEALED ENVELOPE

## Sample Reports - See page 31

A) Proposal certification

#### B) Non-collusion statement

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

- 3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).
- 3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

<u>NAME</u>	<u>RELATIONSHIPS</u>

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

> This is the case for Baker Tilly.

## D) Contract payment method

#### **CONTRACT PAYMENT METHOD BY P-CARD**

#### THIS FORM MUST BY SUBMITTED WITH YOUR RESPONSE

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to payment by credit card via MasterCard or Visa. This allows you as a vendor of the City of Fort Lauderdale to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

Payments will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, firms must presently have the ability to accept credit card payment or take whatever steps necessary to implement acceptance of a credit card before the commencement of a contract.

Please indicate which credit card payment yo	u prefer:
X Master Card	
Visa Card	
Company Name: Baker Tilly Virchow Krause	e, LLP
Anthony (Tony) Ollmann Name (printed)	Antly Ollmonnon Signature
April 7, 2017 Date:	Firm Director – Construction Risk Management

## E) Sample insurance certification

ACORD®	·ED	~:-		ITV INC	LIDANG	DATE	(MM/DD/YYYY)
ACOND (	EK		ICATE OF LIABI	-III Y INS	URANC	10/01/	/2016
THIS CERTIFICATE IS ISSUED AS A CERTIFICATE DOES NOT AFFIRMA BELOW. THIS CERTIFICATE OF II REPRESENTATIVE OR PRODUCER,	TIVEL ISUR# AND T	Y OF ANCE HE C	R NEGATIVELY AMEND, EX DOES NOT CONSTITUTE A ERTIFICATE HOLDER.	TEND OR ALT CONTRACT	ER THE CO BETWEEN 1	VERAGE AFFORDED BY TH THE ISSUING INSURER(S), A	E POLICIES UTHORIZED
IMPORTANT: If the certificate holde the terms and conditions of the poli- certificate holder in lieu of such ende	y, cer	tain p	olicies may require an endor				
PRODUCER	08 77			TACT 1E:			
Aon Risk Services Northeast, Inc. 199 Water Street, 9th Floor New York, N.Y. 10038		PHC (A/C	PHONE FAX (A/C, No, Ext): (A/C E-MAIL ADDRESS:				
*				\$1900	SURER(S) AFF OF	RDING COVERAGE	NAIC #
			INSI	JRER A: Columb	ia Casualty Con	npany	
ISURED Baker Tilly Virchow Krause, L	LP		INS	JRER B:			
Ten Terrace Court				IRER C:			-
Madison, WI 53718				JRER D:			
				IRER E : IRER F :			
COVERAGES CE	RTIFI	CATE	E NUMBER:	JKEK F.		REVISION NUMBER:	
THIS IS TO CERTIFY THAT THE POLICI INDICATED. NOTWITHSTANDING ANY CERTIFICATE MAY BE ISSUED OR MA EXCLUSIONS AND CONDITIONS OF SUC	REQUI / PER H POL	REME TAIN, ICIES.	NT, TERM OR CONDITION OF A THE INSURANCE AFFORDED B LIMITS SHOWN MAY HAVE BEE	ANY CONTRACT BY THE POLICIE N REDUCED BY	OR OTHER I S DESCRIBE PAID CLAIMS	DOCUMENT WITH RESPECT TO D HEREIN IS SUBJECT TO ALL	WHICH THIS
ISR TR TYPE OF INSURANCE	ADDI INSD	SUBR W/D	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE \$ DAMAGE TO RENTED	
CLAIMS-MADEOCCUR						PREMISES (Ea occurrence) \$	
_	-				5	MED EXP (Any one person) \$	
05W 420B544T5 UNIT 4BBU50 B5B	-					PERSONAL & ADV INJURY \$	
GENLAGGREGATE LIMIT APPLIES PER: POLICY PRO- LOC						GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$	
OTHER:						* \$	
AUTOMOBILE LIABILITY	1	1				COMBINED SINGLE LIMIT (Ea accident)	
ANY AUTO						BODILY INJURY (Per person) \$	
ALL OWNED SCHEDULED AUTOS NON-OWNED						BODILY INJURY (Per accident) \$	
HIRED AUTOS NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	
I I I I I I I I I I I I I I I I I I I	-	-				\$	
- CCCON						Participant of the second second	
CDAIM 3-WA	JE						
WORKERS COMPENSATION		†					
ANY PROPRIETOR/PARTNER/EXECUTIVE							
(Mandatory in NH)	_ N⊅A					E.L. DISEASE - EA EMPLOYEE \$	
If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT \$	
A Professional Liability Insurance			ABF-188122608	01-Oct-16	01-Oct-17	Not less than US\$3,000,000 per cla annual aggregate.	im and in the
AND EMPLOYERS LIABILITY AND PROPRIETOR/PASTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandady in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N N/A		D 101, Additional Remarks Schedule, m			E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$  Not less than US\$3,000,000 per da annual aggregate.	im and
		8	T				
Baker Tilly Virchow Krause,	LLF	)				ESCRIBED POLICIES BE CANCEL	
Ten Terrace Court			ا ا	CCORDANCE W	N DATE TH	EREOF, NOTICE WILL BE DE CYPROVISIONS.	LIVERED I

Aon Rish Services Northeast, Inc. © 1988-2014 ACORD CORPORATION. All rights reserved.

Ten Terrace Court Madison, WI 53718

AUTHORIZED REPRESENTATIVE

## F) Business license verification for the State of Florida



# Sample reports

Per your RFQ request, we have included sample reports on the following pages.

# Sample Client Example Building



Let's talk about an opportunity.

Summary of Project Cost Adjustments: ......3



Opportunities for Improvement	8
Exhibit A: Cost Definitions	12
Exhibit B: Change Orders, Extra Work and Claims	14
Exhibit C: Labor Rate Template for Contractors	20
Exhibit D: Right-to-Audit	22

#### **Executive Summary**

#### Scope and Objectives

Sample Client (Owner) engaged Baker Tilly Virchow Krause, LLP to perform contract risk management services for the Example Building located in Anytown, Wisconsin which was completed in December 2008. ABC Construction (Design-Builder) is the General Contractor managing the construction work. The total cost of construction reported by the Design-Builder under the contract was \$24,878,112.

The primary objectives of the audit included:

- > Review the construction contract to determine the contract risks and terms.
- Examine applications for payment to verify compliance with contract terms and conditions.
- > Examine change orders to verify accuracy and consistency in pricing.
- > Perform construction contract financial analytics to identify contract practices inconsistent with the market trends.
- Review the processes and controls used by the Design-Builder and Owner to verify compliance with best practices, adequacy and effectiveness.
- Identify potential opportunities for improvement in the contract administrative process.

#### **Procedures Performed**

Baker Tilly Virchow Krause, LLP performed the following procedures:

- > Read the construction contract between Sample Client and ABC Construction. for the construction of the Example Building.
- > Prepare a construction contract financial risk matrix that outlines the primary financial risks of the contract and document contract strengths and weaknesses.
- > Request, review and reconcile all applications for payment and supporting documentation.
- > Request, review and reconcile all change orders and change order requests.
- Request, review and reconcile all contract costs included in ABC Construction's Account Ledger Transactions' report.
- > Request, review and reconcile subcontractor billings.
- > Perform construction contract financial analytics.
- Request, review and recomputed guaranteed maximum price (GMP) shared savings calculation.
- Compile observations and recommendations into a report for presentation and review with Sample Client.

#### **Overall Assessment**

The design-build contract executed by Sample Client and ABC Construction was very broad in scope and did not provide a clear definition of the cost of work, a definition of change order pricing and a right-to-audit clause.

Monthly cost information did not reconcile with the monthly applications for payment creating the potential opportunity for the Design-Builder to shift the GMP budget between construction phases. The failure of the Design-Builder to provide supporting documentation for subcontractor costs prohibits a thorough evaluation of this risk.

Design-build contracts are generally simplified in the fact that, when designed properly, the need for a change order for unforeseen conditions on the project is typically minimized. However, on this project there was a number of change orders that lacked the support best practices would dictate: Owner's request, itemized cost breakout and full descriptions.

Upon final reconciliation of the applications for payment we did find that the Owner underpaid the Design-Builder due to a billing error. However, we noted significant construction costs that the Owner did pay for that were not consistent with market trends. Unfortunately, the contract language limits the Owner's ability to audit these costs to uncover additional savings.

The areas of non-compliance were noted and summarized below. Recommendations for improvement are also offered for management's consideration.

#### **Summary of Project Cost Adjustments:**

1.	Contract Applications for Payment	\$	(27,000)
2.	Reconciliation of Project Expenditures – Subcontracts		36,107
3.	Reconciliation of Project Expenditures – Accruals		226,387
4.	Reconciliation of Project Expenditures – Warranty		214,348
5.	Direct Labor and Direct Labor Burden		90,000
6.	Change Order Pricing – Fees		76,287
7.	Change Order Responsibility – Contract Specs	-	12,150
	Total Project Cost Adjustments	\$	628,279

#### **Summary of Observations**

#### 1. Contract Applications for Payment

The Owner entered into a design-build cost plus contract with a guaranteed maximum price. Under the contract the Owner agreed to pay the Design-Builder for costs incurred under the contract. We found that the Owner underpaid the Design-Builder by \$27,000 as a result of a billing error.

#### Recommendation:

The Owner should verify the applications for payment are mathematically accurate and that they are reimbursing the Design-Builder for costs incurred that comply with the construction contract. If the amount invoiced cannot be recalculated or amounts billed are not in compliance with the contract, the invoice should not be processed for payment. The underpayment of total construction costs should be paid to the Design-Builder.

#### 2. Reconciliation of Project Expenditures – Subcontractor Costs

The Owner entered into a design-build cost plus contract with a guaranteed maximum price. The Design-Builder should be required to submit copies of invoices, subcontractor payment applications, payroll records and other documents to the owner with each application for payment. By requesting support for subcontractor or vendor costs, we were able to verify only a limited number of costs. Upon performing a reconciliation of project expenditures with limited documentation, we found that the Owner overpaid the Design-Builder for concrete by \$14,107 and for electrical by \$22,000. The total overpayment not supported by proper documentation is \$36,107.

#### Recommendation:

The Owner should verify they are reimbursing the Design-Builder for costs incurred that comply with the construction contract. Every invoice should be reconciled to the costs on a cost-plus project to ensure the charges are valid. The Design-Builder should have the responsibility for ensuring the invoice is correct. If the amount invoiced does not reconcile to the supporting documentation, the invoice should not be processed for payment until the Design-Builder has reconciled the costs. The overpayment of concrete and electrical should be refunded to the Owner.

#### 3. Reconciliation of Project Expenditures - Accruals

The Owner entered into a design-build cost plus contract with a guaranteed maximum price. Under the contract the Owner is required to reimburse the Design-Builder for actual costs incurred that comply with the construction contract. The Design-Builder should be required to submit copies of invoices, subcontractor payment applications, payroll records and other documents to the owner with each application for payment. Upon performing a reconciliation of project expenditures on the 'Account Ledger Transactions' report provided by ABC Construction, we found that the Design-Builder billed the Owner for accruals that were not supported by actual costs by \$301,849 incurred.

#### Recommendation:

The Owner should verify they are reimbursing the Design-Builder for costs incurred that comply with the construction contract. The Owner should verify that any accruals recorded by the Design-Builder and applied to the contract are reversed and replaced with the actual cost incurred. The accruals recorded by the Design-Builder were not substantiated as actual costs resulting in the guaranteed maximum price shared savings being understated. The understated shared savings in the amount of \$226,387 should be refunded to the Owner.

#### 4. Reconciliation of Project Expenditures – Warranty Costs

The design-build contract includes a warranty provision at Article 9. The contract states that defects due to improper material, workmanship or installation shall "be corrected by the Design-Builder and/or the responsible Subcontractor without expense to the Owner." The Design-Builder has included in the actual costs of the contract an accrual of \$285,797 for warranty costs. This warranty accrual is based on 1% of the final contract price including direct owner purchases.

#### Recommendation:

All defects during the warranty period should be corrected by the Design-Builder or subcontractors without expense to the Owner. The warranty accrual should not be included in the actual costs of the contract and the shared savings calculation should be modified. The understated shared savings in the amount of \$214,348 should be refunded to the Owner.

#### 5. Direct Labor and Direct Labor Burden

The Owner entered into a design-build cost plus contract with a guaranteed maximum price. Under the contract, the Owner agreed to reimburse the Design-Builder for the direct labor cost including burden of Design-Builder employees. The Design-Builder should be required to provide payroll records including timesheets of every employee with labor costs allocated to the Owner's project. This information is required for the Owner to perform verification that they are reimbursing the Design-Builder for employees that are directly involved with the Owner's project at the Design-Builder's cost. While we were unable to verify the total hours allocated to the project by employee, we were able to analyze the direct labor and direct labor burden and compare the labor costs billed to the Owner to market data. Market data obtained from local unions in the project's area indicate that labor burden, on average, should be between 60% and 65% of direct labor costs. We found that the Owner paid labor burden on direct labor costs in excess of 84%. This resulted in the Owner overpaying the Design-Builder for direct labor burden by approximately \$120,000.

#### Recommendation:

Payroll records should be reconciled, recalculated, and compared to the direct labor costs and direct labor burden billed to the Owner on a monthly basis. Direct labor burden rates should be recalculated and compared to market data and to actual costs incurred by the Design-Builder. The direct labor burden recorded by the Design-Builder was not substantiated as actual costs resulting in the guaranteed maximum price shared savings being understated. The understated shared savings in the amount of approximately \$90.000 should be refunded to the Owner.

#### 6. Change Order Pricing - Fees

The original budgeted schedule of values includes fees for architecture/engineering, construction management, applied overhead, general/liability insurance, project development and earnings. As a percentage of hard construction costs, these fees should remain consistent throughout the contract, including change orders. However, the pricing on the change orders included higher fees as a percentage of hard costs. The recalculated fees priced consistently with the original budget result in a total fee reduction of \$76,287.

#### Recommendation:

The contract language should be updated to specify the amount or percentage of the fees on change orders. In addition, the change order requests should include a calculation of the fees charged in relation to the hard construction costs on each item. With the current contract, it is assumed that the fees charged on change orders should be charged at the same rates as the original budget unless otherwise noted on the change order. The overpayment of fees should be returned to the owner.

#### 7. Change Order Responsibility - Contract Specifications

Design-build contracts are generally simplified in the fact that, when designed properly, the need for a change order for unforeseen conditions on the project is typically minimized. However, on this project there was a number of change orders that lacked the support best practices would dictate: Owner's request, itemized cost breakout and full descriptions. The Design-Builder initiated change order request number one to "install 3" underground gas line between Example Building and campus interconnect for \$16,200 which was approved by the Owner. However, the design-build contract specifications under Site Construction and cost code 02550 Fuel Distribution indicate that "gas service, including piping, tap, pressure reducer, valves and meters will be provided and installed".

#### Recommendation:

Change order requests should be analyzed to ensure the Owner isn't being asked to approve a change order for costs that should be included under the base contract. The change order identified above requested by the Design-Builder and approved by the Owner resulted in the guaranteed maximum price shared savings being understated. The understated shared savings in the amount of \$12,150 should be refunded to the Owner.

#### **Opportunities for Improvement**

The following opportunities for improvement contain considerations for suggested contract language that could have significant legal consequences. We recommend that you consult with your attorney prior to incorporating any concepts/language listed herein as part of your standard construction contract documents.

#### 1. Contract Documentation and Recordkeeping

The level of contract documentation and recordkeeping was below expectations for a prominent health care facilities and accounting department. Therefore, we recommend the following opportunities for improvement:

- > Maintain a permanent archive of the project specifications and plans.
- > Maintain a permanent archive of all subcontract agreements.
- > Maintain a permanent archive of subcontractor bid spread analysis and competitive quotes.
- Maintain a permanent archive of material supplier bid spread analysis and competitive quotes.
- Maintain a permanent archive of all weekly and monthly project status reports.
- > Maintain a permanent archive of the Design-Builder's applications for payment including supporting documentation.
- > Maintain a permanent archive of the subcontractor's applications for payment including supporting documentation.
- > Formally document process controls surrounding the contract accounting function.

#### 2. Contract Language – Definition of the Cost of Work

The language in the contract does not provide a clear definition of costs for contractors to follow. For example, Article 15.3 defines "Cost" as the amount charged to the project by the design-builder. Contractors may believe costs include a markup to cover costs of the contractor's principal office. We recommend using "Actual costs paid" to remove any ambiguity as to their meaning. The contract is also silent with regard to labor burden and how much, if any, can be charged for premium discounts for workers' compensation costs, or provide instruction concerning discretionary profit sharing plans. Language related to material and equipment costs could be improved.

Baker Tilly Virchow Krause, LLP recommends changing the contract language to more clearly define the cost of the Work. Clearly defining costs that are allowed to be charged helps avoid conflict during the project and reduces the risk of overpaying the contractor. We have included sample language for you to consider that better defines costs, see Exhibit A, Cost Definitions.

Also consider requiring that contractors to include a Labor Rate exhibit detailing the costs included in the labor rate at the time they submit their proposal or bid. The rates can be accepted or negotiated before the project is formally awarded. We have attached a sample Labor Rate exhibit to this report, see Exhibit C.

#### 3. Contract Language - Change Order Pricing

The change order information provided to Baker Tilly Virchow Krause, LLP lacked a descriptive and itemized cost breakout to legitimize the change order. Unless there were significant changes to the design implemented by the owner after plan approval, we would expect very limited change orders to the original design-build contract. Change order pricing should include a specific breakout of labor, materials, equipment or other cost that allows the owner to verify that the change order pricing is consistent and in accordance with the base contract.

In addition, the change order language used does not clearly define the method a Design-Builder should use to price change orders. Change order pricing should include a specific breakout of labor, materials, equipment or other cost that allows the Owner to verify that the change order pricing is consistent and in accordance with the base contract. For example, Article 5.1.1 states, "the Owner will pay the reasonable cost of professional services applicable in connection with Article 11.2.2 to evaluate the request". Article 5.1.1 also provides for "any related expenses and profit" included in the cost of the work. Both Sections are ambiguous.

In order to avoid conflicts or possible delays caused by disagreements over the methods a Design-Builder uses to price change orders we recommend your contracts include language similar to that at Exhibit B, Change Orders, Extra Work and Claims.

#### 4. Contract Language – Contingency

The contract has no definition of construction contingency, its use, or any restrictions. The exclusion of this definition allows the contractor to potentially increase the contract sum through the issuance of change orders for items that should be covered in the contingency budget. We recommend that the contract have specific language that addresses when contingency should be used versus the issuance of a change order or inclusion of the costs in the general requirements budget.

#### 5. Contract Language – Reporting Requirements to the Owner

The language in the contract does not require the contractor to provide cost detail to the owner. The contract should require the contractor to provide detailed cost information such as electronic copies of subcontract and vendor invoices, timesheets of approved employees included in the contractor's direct labor and a reconciliation of owner direct purchases including copies of invoices received from suppliers.

#### 6. Contract Language - Selection of Subcontractors

The contract language included in Article 14.4 requires the contractor to provide the owner with the names of the subcontractors on demand. We recommend that the contract define the subcontractor selection process such as requiring at least three bids from pre-qualified subcontractors before awarding the work. Competitive bids should also be required before allowing the prime contractor to self-perform work and the owner should consider the hidden fees such as burden and overhead allocations before allowing self-performed work.

#### 7. Contract Language – Job-Owned Items

On large projects contractors will purchase tools, equipment or other supplies for use on the job and charge the job for the entire cost of the item. At the end of the job, the contractor often keeps these tools and equipment for use on other jobs. We recommend that the contract include language that states that the owner is to receive a credit for the salvage value or take possession of all job-owned tools, equipment or supplies at the end of the work.

#### 8. Contract Language - Soft Cost Pricing

Under the current contract, the profit, construction management fee, applied overhead, and project development fees are not defined or limited to a maximum amount or percentage. We recommend that the costs that are includable in applied overhead and project development be defined to ensure that the contractor is not double-charging for certain overhead costs which may be also included in direct costs. Also, the construction management fee and contractor profit is typically limited to a percentage of total direct construction costs.

#### 9. Contract Language - General Conditions

The language in the contract does not specifically address the types of expenses that are allowed to be included in general conditions. The absence of this specific language gives the contractor latitude to include charges in general conditions that might otherwise be expected to be paid out of the contractor profit. We recommend contract language that specifically defines the types of costs that are includable in general conditions and the rates at which these costs are to be paid.

#### 10. Contract Language - Right-to-Audit Clause

Article 15.4 of the contract contains general wording that gives the Owner the right to request that the design-builder's current auditor verify that the design-builder's method of charging costs to the project for construction work is consistent with the method the design-builder has used on other projects. The wording does not give the Owner the right to interview the Design-Builder's employees nor does it require that the right-to-audit flow down to all material suppliers, subcontractors and sub-subcontractors. Exhibit D contains language that more clearly defines the Owner's rights and expands the responsibility of the Design-Builder in the audit process. Consider attaching the Right-to-Audit Exhibit to the contract, adding the wording to the heading in Article 15 See Exhibit D "Right to Audit." The wording in Article 15.4 could then be deleted.

#### **Exhibit A: Cost Definitions**

The term Cost of the Work shall mean <u>reasonable</u> costs necessarily incurred by the Contractor in the proper performance of the Work, except to the extent already included in the General Conditions Amount."

#### 1. Labor

- a. Direct Labor Labor costs to be included shall be the actual cost per hour paid by the contractor plus Labor Burden. Labor burden shall be defined as employer's net actual cost of payroll taxes (FICA, Medicare, SUTA, FUTA), net actual cost for employer's cost of union benefits (or other usual and customary fringe benefits if the employees are not union employees), and net actual cost to employers for worker's compensation insurance taking into consideration adjustments for experience modifiers, premium discounts, dividends, rebates, expense constants, assigned risk pool costs, net cost reductions due to policies with deductibles for self-insured losses, assigned risk rebates, etc. Contractor shall reduce their standard payroll tax percentages to properly reflect the effective cost reduction due to the estimated impact of the annual maximum wages subject to payroll taxes. Labor burden shall not include discretionary costs such as profit sharing and the costs of administering the profit sharing plan.
- b. Indirect Labor and Supervision and Project Management Costs of Indirect labor shall include wages and salaries paid for supervision and managerial and clerical support performed at the job site or elsewhere with the Owners permission above the level of working foreman. Labor costs to be included shall be the actual cost per hour paid by the Contractor plus Labor Burden, as defined in paragraph "a" above.

#### 2. Material

a. Charges for material shall be the Contractors net actual cost for the purchase of the material required to complete the Work. A reasonable allowance shall be made for waste and scrap. All materials purchased that exceed the quantities required to complete the work shall be returned or sold for scrap with the proceeds credited to the Owner. Credits for cost reductions available to the Contractor due to trade discounts, free material credits, and/or volume rebates will accrue to the benefit of the Owner. Cash discounts available on material purchases shall be credited to Owner if the Contractor is provided Owner funds in time for Contractor to take advantage of any such cash discounts. The Contractor is required to notify the Owner should the cash discount on a particular purchase equal or exceed \$1,000 to allow the Owner the opportunity to participate in the cash discount.

#### 3. Equipment

- a. Contractor supplied equipment used on the project shall be defined as tools and equipment with an individual purchase cost of more than \$1,000. For contractor owned equipment, the "bare" equipment rental rates allowed to be used for pricing change order proposals shall be 75% of the monthly rate for the region listed in the most current publication of The AED Green Book divided by 173 to arrive at a maximum hourly rate to be applied to the hours the equipment is used. Further, for contractor owned equipment, the aggregate equipment rent charges for any single piece of equipment used in any change order work shall be limited to 75% of the fair market value of the piece of equipment when first brought on to the job site. Fuel necessary to operate the equipment will be considered as a separate direct cost.
- b. Equipment rented from third parties shall be priced at the net actual rental cost, considering all trade and other discounts available to the Contractor. Costs of third party or rental equipment supplier insurance shall be declined and the insurance of such equipment shall be under the insurance program for the entire project. Arrangements such as rent-to-own shall be made known to and shall accrue to the benefit of the Owner. Any and all equipment acquired during this project due to a rent-to-own arrangement shall be the property of the Owner. At the conclusion of the project any of this equipment may, at the discretion of the Owner, may be sold to the Contractor or others at a price to be negotiated at that time.
- 4. Bonds, Insurances and Workers Compensation
  - c. The cost of bonds, insurances and workers compensation shall be that cost paid by the contractor after consideration of all experience modifiers, rate premium adjustments and experience modifiers.

#### **Exhibit B: Change Orders, Extra Work and Claims**

- 1. The contract language contained in this Article will supplement and take precedence over all other change order pricing contract provisions in the contract documents provided by either the Customer, General Contractor (Contractor) and/or Architect/Engineer. It is understood that these contract provisions will govern the pricing and administration of all change order proposals to be submitted by the General Contractor (Contractor), Prime Contractors, Trade Contractors or Subcontractors (Subcontractor), and all other lower tier Contractors (SubSubcontractors) working on the Project. In the event of a conflict between the language in this Article and the other contract documents used for the project, the change order pricing and contract provisions in this Article shall govern.
- 2. The Contractor agrees that it will incorporate the provisions of this Article into all agreements with lower tier Contractors, Subcontractors, etc. It is understood that these change order pricing provisions apply to all types of contracts and/or subcontracts, specifically including lump sum or fixed price contracts, unit price contracts, and/or cost plus contracts with or without a guaranteed maximum. It is further understood that these change order provisions will apply to all methods of change order pricing specifically including lump sum change order proposals, unit price change order proposals, and cost plus change order proposals.
- 3. The term change order shall include Extra Work and Claims unless specifically excluded or further described.
- 4. Whenever change order proposals to adjust the contract price become necessary, the Customer will have the right to select the method of pricing to be used by the contractor in accordance with the pricing provisions found in this Article. The options will be (1) lump sum change order proposal, (2) unit price change order proposal, or (3) cost plus change order proposal as defined in the following provisions:
  - a. Lump Sum Change Order Proposals The Contractor will submit a properly itemized Lump Sum Change Order Proposal covering the additional work and/or the work to be deleted. This proposal will be itemized for the various components of work and segregated by labor, material, and equipment in a detailed format satisfactory to Customer. The Customer will require itemized change orders on all change order proposals from the Contractor, subcontractors, and sub-subcontractors regardless of tier. Details to be submitted will include detailed line item estimates showing detailed materials quantity take-offs, material prices by item and related labor hour pricing information and extensions (by line item by drawing as applicable).

- b. Labor: Estimated labor costs to be included for self-performed work shall be based on the actual cost per hour paid by the contractor for those workers or crews of workers who the contractor reasonably anticipates will perform the change order work. Estimated labor hours shall include hours only for those workmen and working foremen directly involved in performing the change order work. Supervision above the level of working foremen (such as general foremen, superintendent, project manager, etc.) is considered to be included in the agreed upon Markup Percentages as outlined in paragraph 8 of this Article.
- c. Labor Burden Labor burden allowable in change orders shall be defined as employer's net actual cost of payroll taxes (FICA, Medicare, SUTA, FUTA), net actual cost for employer's cost of union benefits (or other usual and customary fringe benefits if the employees are not union employees), and net actual cost to employers for worker's compensation insurance taking into consideration adjustments for experience modifiers, premium discounts, dividends, rebates, expense constants, assigned risk pool costs, net cost reductions due to policies with deductibles for self-insured losses, assigned risk rebates, etc. Contractor shall reduce their standard payroll tax percentages to properly reflect the effective cost reduction due to the estimated impact of the annual maximum wages subject to payroll taxes. Labor burden shall not include discretionary costs such as profit sharing and the costs of administering the profit sharing plan.
- d. Material: Estimated material change order costs shall reflect the contractors reasonably anticipated net actual cost for the purchase of the material needed for the change order work. Estimated material costs shall reflect cost reductions available to the Contractor due to trade discounts, free material credits, and/or volume rebates. Cash discounts available on material purchased for change order work shall be credited to Customer if the Contractor is provided Customer funds in time for Contractor to take advantage of any such cash discounts. Price quotations from material suppliers must be itemized by each specific item to be purchased. "Lot pricing" quotations will not be considered sufficient substantiating detail.

- e. Equipment: Allowable change order estimated costs may include appropriate amounts for rental of major equipment specifically needed to perform the change order work (defined as tools and equipment with an individual purchase cost of more than \$1,000). For contractor owned equipment, the "bare" equipment rental rates allowed to be used for pricing change order proposals shall be 75% of the monthly rate listed in the most current publication of The AED Green Book divided by 173 to arrive at a maximum hourly rate to be applied to the hours the equipment is used performing the change order work. Further, for contractor-owned equipment, the aggregate equipment rent charges for any single piece of equipment used in any change order work shall be limited to 50% of the fair market value of the piece of equipment when the first change order is priced involving usage of the piece of equipment. Fuel necessary to operate the equipment will be considered as a separate direct cost associated with the change order work.
- 5. The allowance for combined overhead and profit included in total cost to Customer shall be based on following schedule:
  - For Contractor, for Work performed by Contractor's own forces, 10 percent of the cost.
  - **b.** For Contractor, for Work performed by Contractor's Subcontractor, **10** percent of the amount due Subcontractor.
  - **c.** For each Subcontractor or Sub-subcontractor involved, for Work performed by Subcontractor's or Sub-subcontractor's own forces, **10** percent of cost.
  - **d.** For each Subcontractor, for Work performed by Subcontractor's Subsubcontractors, **10** percent of amount due Sub-subcontractor.
  - **e.** Cost to which overhead and profit is to be applied shall be determined in accordance with paragraph 4 of this Exhibit.
  - f. In order to facilitate checking of quotations for extras or credits, proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a charge over five hundred dollars (\$500) be approved without such itemization.
  - **g.** When computing change orders with deductions, overhead and profit will be deleted from deductions.

Note: The rates included are not a recommendation, but are used as an example.

- 6. As a further clarification, the agreed upon Markup Percentage Fee is intended to cover the contractor's profit and all indirect costs associated with the change order work. Items intended to be covered by the Markup Percentage Fee include, but are not limited to; home office expenses, branch office and field office overhead expense of any kind, project management, superintendents, general foremen; estimating, engineering, coordination, expediting, purchasing, detailing; legal, accounting, data processing or other administrative expenses, shop drawings, permits, comprehensive general liability insurance, auto insurance and umbrella insurance, pick-up truck costs. The cost for the use of small tools is also to be considered covered by the Markup Percentage Fee. Small tools shall be defined as tools and equipment (power or non-power) with an individual value of \$1,000 or less.
- 7. The application of the markup percentages referenced in the preceding paragraphs will apply to both additive and deductive change orders. In the case of a deductive change order, after the net credit is computed by applying the sliding scale percentages as outlined, an adjustment will be made to the computed credit by multiplying the credit amount by a factor of .975 to arrive at a final credit amount to be issued to the Customer. In those instances where a change involves both additive and deductive work, the additions and deductions will be netted and the markup percentage adjustments will be applied to the net additive or deductive amount.
- 8. In no event will any lump sum or percentage amounts for "contingency" be allowed to be added as a separate line item in change order estimates. Unknowns attributable to labor hours will be accounted for when estimating labor hours anticipated to accomplish the work. Unknowns attributable to material scrap and waste will be estimated as part of material costs.
- 9. The Contractor's proposals for changes in the contract amount or time shall be submitted within seven (7) calendar days of the Customer's request, unless the Customer extends such period of time due to the circumstances involved. If such proposals are not received in a timely manner, if the proposals are not acceptable to Customer, or if the changed work should be started immediately to avoid damage to the project or costly delay, the Customer may direct the Contractor to proceed with the changes without waiting for the Contractor's proposal or for the formal change order to be issued. In the case of an unacceptable Contractor proposal, the Customer may direct the Contractor to proceed with the changed work on a cost-plus basis with an agreed upon "not-to-exceed" price for the work to be performed. Such directions to the Contractor by the Customer shall be confirmed in writing by a "Notice to Proceed on Changes" letter within seven (7) calendar days. The cost or credit, and or time extensions will be determined by negotiations as soon as practical thereafter and incorporated in a Change Order to the Contract.

- 10. In the event the Contractor has been required to furnish performance and/or payment bonds as part of the base contract price, a final contract change order will be processed to account for the contractor's net increase or decrease in bond premium costs associated with change orders to Contractor's base contract price. Contract adjustments related to any such increased or decreased costs of related to insurance and/or bond coverage will not be subject to any Contractor markup for overhead and profit.
- 11. Unit Price Change Order Proposals As an alternative to Lump Sum Change Order Proposals, the Customer or the Construction Manager acting with the approval of the Customer may choose the option to use Contract Unit Prices. The Contractor will submit within seven (7) days after receipt of the Customer's written request for a Unit Price Proposal, a written Unit Price proposal itemizing the quantities of each item of work for which there is an applicable Contract Unit Price. The quantities must be itemized in relation to each specific contract drawing.
- 12. Contract Unit Prices will be applied to net differences of quantities of the same item. Such Contract Unit Prices will be considered to cover all direct and indirect costs of furnishing and installing the item including the subcontractor's Markup Percentage Fee.
- 13. Cost Plus Change Order Proposals As an alternative to either Lump Sum Change Order Proposals or Unit Price Change Order Proposals, the Customer may elect to have any extra work performed on a cost plus markup percentage fee basis. Upon written notice to proceed, the Contractor shall perform such authorized extra work at actual cost for direct labor (working foremen, journeymen, apprentices, helpers, etc.), actual cost of labor burden, actual cost of material used to perform the extra work, and actual cost of rental of major equipment without any charge for administration, clerical expense, general supervision or superintendence of any nature whatsoever, including general foremen, or the cost or rental of small tools, minor equipment, or plant (fabrication), plus the approved markup percentage fee. The intent of this clause is to define allowable cost plus chargeable costs to be the same as those allowable when pricing Lump Sum Change Proposals as above. Customer and contractor may agree in advance in writing on a maximum price for this work and Customer shall not be liable for any charge in excess of the maximum. Daily time sheets with names of all Contractor's employees working on the project will be required to be submitted to the Customer for both labor and equipment used by the Contractor for time periods during which extra work is performed on a cost plus fee basis. Daily time sheets will break down the paid hours worked by the Contractor's employees showing both base contract work as well as extra work performed by each employee.

- 14. Accurate Change Order Pricing Information: Contractor agrees that it is responsible for submitting accurate cost and pricing data to support its Lump Sum Change and/or Cost Plus Change Order Proposals or other contract price adjustments under the contract. Contractor further agrees to submit change order proposals with cost and pricing data, which is accurate, complete, current and in accordance with the terms of the contract with respect to pricing of change orders.
- 15. Right to Verify Change Order Pricing Information: Contractor agrees that any designated Customer's representative will have the right to examine the contractor's records to verify the accuracy and appropriateness of the pricing data used to price change proposals. Even after a Change Order Proposal has been approved, Contractor agrees that if the Customer later determines the cost and pricing data submitted was inaccurate, incomplete, not current or not in compliance with the terms of the contract regarding pricing of change orders; then an appropriate contract price reduction will be made.
- 16. Requirements for Detailed Change Order Pricing Information: Contractor agrees to provide and require all subcontractors to provide a breakdown of allowable labor and labor burden cost information as outlined in this Article. This information will be used to evaluate the potential cost of labor and labor burden related to change order work. It is intended that this information represent an accurate estimate of the Contractor's actual labor and labor burden cost components. This information is not intended to establish fixed billing or change order pricing labor rates. However, at the time change orders are priced, the submitted cost data for labor rates may be used to price change order work. The accuracy of any such agreed upon labor cost components used to price change orders will be subject to later audit. Approved change order amounts may be adjusted later to correct the impact of inaccurate labor cost components if the agreed upon labor cost components are determined to be inaccurate.
- 17. The Contractor is required to notify the Customer within seven (7) calendar days subsequent to an event that may lead to a claim by the Contractor or Subcontractor of any tier. The claim is to be perfected and the Customer provided a full accounting for all costs associated with the claim within thirty (30) calendar days, unless the Contractor requests in writing and the Customer agrees to a specific extension of this time. The reason for the extension is to be made known to the Customer in the written request. Any claims that are not promptly and accurately reported in keeping with this article will not be entertained. The Customer has the right to verify amounts claimed in the same manner as described in paragraphs 15 and 16 of this article.

## **Exhibit C: Labor Rate Template for Contractors**

Rate Applicability Period:	Occupation:		
From:	Straight		Double
То:	Time	Overtime	Time
Base Wage (\$ Per Hour)			
Taxable Benefits (Vacation -As applicable)			
Subtotal Taxable Wages & Benefits			
Union Benefits (if applicable)			
Pension			
Health & Welfare			
Industry Fund			
Training Fund			
Unemployment Fund			
Apprenticeship Training Fund			
Supplemental Fund			
Annuity Fund			
Legal Fund			
Health Safety Fund			
Supplemental Employment			
Scholarship			
Other Benefits (List Below)			
1 DC 401k			
2			
Total Union Benefits			
Subtotal Base Rate + Fringes			
Insurance:			
Workers Compensation (%)			
Liability Insurance (%)			
Payroll Taxes:			
State Unemployment			
Fed Unemployment			
F.I.C.A.			
Total Tax & Insurance			
Cost Per Hour			
Hourly Charge should be			

#### INSTRUCTIONS FOR LABOR EXHIBIT

List the occupation and the period the rates are valid at the top of the form. Use copies of this form for each application.

Occupations – are to include superintendent, foreman, journeyman, apprentices, etc. Include all labor classifications. If the contractor is affiliated with a union, then wage components and worker classifications are to be in accordance with prevailing union labor agreements. Note: Subcontractor is to attach a copy of the Union Wage Rate and Fringe Benefit provisions to this Exhibit.

#### Rates are to be developed as itemized below:

<u>Base Wage</u> shall be the actual wage rate paid to the labor classifications per the union or mutual agreement.

<u>Vacation Allowance</u> shall be the hourly rate per the union or mutual agreement.

<u>Insurance</u> – indicate the percent of the total taxable hourly wage. Provide a copy of the rate sheets from the worker compensation and general liability policies.

<u>Taxes</u> - use 7.65% of the Total Taxable Wages for FICA. Federal Unemployment Tax

<u>laxes</u> - use 7.65% of the Total Taxable Wages for FICA. Federal Unemployment Tax equals the annual tax of \$56 divided by 2,080 hours or 3 cents per hour. State Unemployment Tax equals the contractor's state tax rate multiplied by the state taxable wage limit divided by 2080 hours.

#### **Exhibit D: Right-to-Audit**

- 1. Whenever the Customer enters into any type of contractual arrangement including but not limited to lump sum contracts (i.e. fixed price or stipulated sum contracts), unit price, cost plus or time & material contracts with or without a guaranteed maximum (or not-to-exceed amounts), Contractor's "records" shall upon reasonable notice be open to inspection and subject to audit and/or reproduction at during normal business working hours. Customer's representative or an outside representative engaged by Customer may perform such audits. The Customer or its designee may conduct such audits or inspections throughout the term of this contract and for a period of three years after final payment or longer if required by law.
- 2. Contractor's "records" as referred to in this contract shall include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in Customer's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Contract Document. Such records shall include (hard copy, as well as computer readable data if it can be made available), written policies and procedures; time sheets; payroll registers; cancelled checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, etc.); original estimates; estimating work sheets; correspondence; change order files (including documentation covering negotiated settlements); backcharge logs and supporting documentation; general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends; and any other contractor records which may have a bearing on matters of interest to the Customer in connection with rite contractor's dealings with the Customer (all foregoing hereinafter referred to as "records") to the extent necessary to adequately permit evaluation and verification of: a) contractor compliance with contract requirements, b) compliance with Customer's business ethics policies, and c) compliance with provisions for pricing change orders, invoices or claims submitted by the contractor or his payees.

- 3. Contractor shall require all payees (examples of payees include subcontractors, insurance agents, material suppliers, etc.) to comply with the provisions of this article by incurring the requirements hereof in a written contract agreement between Contractor and payee. Such requirements to include flow-down right of audit provisions in contracts with payees will also apply to Subcontractors and Sub-Subcontractors, material suppliers, etc. Contractor will cooperate fully and will cancel Related Parties and all of Contractor's subcontractors (including those entering into lump sum subcontracts) to cooperate fully in furnishing or in making available to Customer from time to time whenever requested in an expeditious manner any and all such information, materials and data. The Contractor shall not charge the Owner for providing access to the information requested.
- 4. Customer's authorized representative or designee shall have reasonable access to the Contractor's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this contract and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this article.
- 5. If an audit inspection or examination in accordance with this Article, discloses overpricing or overcharges (of any nature) by the contractor to the Customer in excess of one-half of one percent (.5%) of the total contract billings the reasonable actual cost of the Customer's audit shall be reimbursed to the Customer by the Contractor. Any adjustments and/or payments which must be made as a result of any such audit or inspection of the contractor's invoices and/or records shall be made within a reasonable amount of time (not to exceed 90 days) from presentation of Customer's findings to Contractor.

# Close-Out Construction Audit Report BMC

This report is solely intended for the use of BMC internal management and is not intended to be and should not be used by any other parties without prior written consent from Baker Tilly Virchow Krause, LLP

# **Contents**

EXECUTIVE SUMMARY2
SCOPE AND OBJECTIVES6
PROCEDURES PERFORMED7
GOOD PRACTICES8
DETAILED OBSERVATIONS – QUESTIONED COSTS9
DETAILED OBSERVATIONS – UNSUPPORTED COSTS14
DETAILED OBSERVATIONS – PROJECT CONTROLS18
CONTRACT IMPROVEMENT OPPORTUNITIES – CONSTRUCTION MANAGER CONTRACT20
CONTRACT IMPROVEMENT OPPORTUNITIES – ARCHITECT AGREEMENT36

APPENDIX A: SUBCONTRACTOR PAYMENT VARIANCES 46
APPENDIX B: QUESTIONED GENERAL CONDITIONS CHARGES. 47
APPENDIX C: QUESTIONED JOB CONDITIONS CHARGES 48
APPENDIX D: QUESTIONED CHANGE ORDER FEE CHARGES 49
APPENDIX E: QUESTIONED DIRECT COSTS, DAMAGES 50
APPENDIX F: UNSUPPORTED SUBCONTRACT AMOUNTS 51
APPENDIX G: UNSUPPORTED DIRECT COSTS, AHCA LUNCH CHARGES
APPENDIX H: UNSUPPORTED CHANGE ORDER CHARGES, LABOR BURDEN
APPENDIX I: UNSUPPORTED CHANGE ORDER CHARGES, WARRANTY
APPENDIX J: SUBCONTRACTOR BILLING AND PAYMENT VARIANCES

Appendix A-J excluded for page preference considerations but available upon request.



Candor. Insight. Results.

# **Executive Summary**

The close-out construction audit identified \$4,102,466 in questioned and unsupported costs on the The Children's Hospital Adult Tower Expansion project. Our observations have been separated into four categories based on the nature of the observation: Questioned Costs, Unsupported Costs, Project Control Recommendations, and Contract Improvement Opportunities. The following table summarizes the questioned and unsupported costs identified during this review.

Observation		
No.	Description	Costs
1	Questioned Subcontractor Payments	\$ 337,744
2	Questioned General Conditions Charges	111,851
3	Questioned Job Conditions Charges	42,178
4	Questioned Change Order Fee Charges	18,128
5	Questioned Direct Costs	13,146
6	Questioned Direct Labor Charges	2,369
	Subtotal: Questioned Costs	\$ 525,416
7	Unsupported Subcontract Amounts	\$ 3,126,442
8	Unsupported Direct Costs	408,590
9	Unsupported Change Order Charges	39,886
10	Unsupported Labor Costs	2,132
	Subtotal: Unsupported Costs	\$ 3,577,050
	Total: Questioned and Unsupported Costs	\$ 4,102,466

#### A. Questioned Costs

Questioned costs totaling \$525,416 were identified during the close-out construction audit. Questioned costs are charges that were not in accordance with the contract terms or were identified as potentially duplicate costs. Potential recoveries are subject to a Construction Manager Fee credit upon final negotiation. All costs listed below were billed to BMC (BMC).

- 1. <u>Subcontractor Payments</u> Payments made by BCC to thirteen subcontractors exceeded the subcontract amounts by a total of \$337,744. These variances were identified during reconciliation of the amounts paid to date by BCC and subcontract amounts reported on the Subcontract Status Report (see Observation No. 1 and Appendix A).
- General Conditions Charges BCC billed BMC for duplicate general conditions costs totaling \$111,851 (see Observation No. 2 and Appendix B).
- 3. <u>Job Conditions Charges</u> Materials used for blocking/wall protection totaling \$42,178 were billed as reimbursable costs; however, these charges appear to be protection of finishes costs which were included in the GMP as lump sum costs (see Observation No. 3 and Appendix C).
- 4. <u>Change Order Fee Charges</u> Project change orders included \$487,320 in deductice changes that were subject to a fee adjustment per Contract Article 5.3.4; however, BCC did not reduce the Construction Manager fee resulting in questioned fee charges of \$18,128 (see Observation No. 4 and Appendix D).
- 5. <u>Direct Costs</u> Project charges for repairing damages to personal property as the result of construction activity and charges belonging to other BCC construction projects were identified totaling \$13,146 (see Observation No. 5 and Appendix E).
- 6. <u>Direct Labor Charges</u> Direct labor charges appear to have been billed in excess of actual costs incurred resulting in an overcharge of \$2,369 (see Observation No. 6).

#### B. Unsupported Costs

During the construction close-out unsupported costs were also identified totaling \$3,577,050. Unsupported costs are assumed to be allowable project charges that were not adequately supported to validate actual costs incurred, cost description and/or applicable project. Additional support could result in reclassification to questioned costs or removal as an observation. Unsupported costs are unlikely to result in credits to BMC since these costs are assumed to be legitimate and allowable; however, we are unable to validate the charges based on the support provided. If items remain unsupported or are determined to be unallowable charges after support is provided, potential recoveries are subject to a Construction Manager Fee credit upon final negotiation. All listed costs were billed to BMC.

- 7. <u>Unsupported Subcontract Amounts</u> Subcontract and change order support provided by BCC did not reconcile to the final subcontract amounts recorded in the Subcontract Status Report which resulted in unsupported subcontract values totaling \$3,126,442 (see Observation No. 7 and Appendix F).
- 8. <u>Unsupported Direct Costs</u> Supporting cost documentation to validate costs billed to BMC was not provided for charges totaling \$408,590 including the following (see Observation No. 8 and Appendix G):
  - Deferred job conditions \$348,292
  - Rental equipment for rework on the Kidswalk \$55,084
  - AHCA lunch charges \$3,514
  - Allowance for rework on the Kidswalk \$1,700
- 9. <u>Unsupported Change Order Charges</u> Lump sum change orders included unsupported labor burden and warranty costs totaling \$39,886. These charges were billed to BMC (see Observation No. 9 and Appendices H and I).
- 10. <u>Unsupported Labor Costs</u> Labor support was not provided for one sampled transaction posted on December 31, 2011 in the amount of \$2,132. Additionally, our review identified three BCC Carpenters with excessive hours charged to the project. All of the charges were fully supported; however, there was no apparent reason for the excess hours so additional information should be provided to explain the excessive project overtime charges (see Observation No. 10).

#### C. Project Control Recommendations

The following observations are specific to project controls. Insufficient or ineffective project controls may result in overcharges to the Owner. Implementing control recommendations can strengthen monitoring and review activities and reduce overpayments.

- 11. <u>Authorization of Contractually Non-Compliant Charges</u> It was observed on multiple occasions that BMC relied on verbal approvals to authorize BCC charges and transactions that were not in accordance with the Construction Manager contract terms and conditions. Examples of charges and transactions verbally approved by BMC that were contrary to the contract terms include, but are not limited to:
  - Not reducing the Construction Manager Fee for deductive changes (see Observation No. 4)
  - Lump sum deferred job conditions charges (see Observation No. 8)
  - Lump sum contract warranty charges (see Observation No. 9)

We recommend BMC implement program controls requiring the execution of contract amendments to alter contract terms, conditions and approved cost types. BMC should also implement controls requiring documented/written Owner approval for charges that are not contractually compliant including requirement of a justification explaining why BMC is allowing the charges.

- 12. <u>Job Conditions Billings</u> BCC billed job conditions as a lump sum amount of \$3,621,213; however, not all job conditions costs were contractually lump sum. Additionally, based on job cost reporting actual costs incurred for job conditions totaled \$1,949,314. Combining lump sum and reimbursable cost line items in a single cost category can create additional project risks including: Reducing project savings, charging lump sum charges as cost reimbursable and duplicate project charges. We recommend BMC implement controls preventing comingling lump sum and cost reimbursable charges within one cost category. Additionally, detailed support should be submitted and reviewed prior to approving lump sum contract amounts (see Observation No. 11).
- 13. <u>Subcontractor Payments</u> Construction Manager controls were not in place to ensure the subcontractor payment application data was complete, accurate and current. Subcontractor payment applications reflected Total Work in Place amounts exceeding actual payments made by BCC for subcontract work. The identified billing and payment variances totaled \$250,358. We recommend BCC reconcile all subcontractor payment application data to ensure accuracy prior to billing the Owner for subcontract charges. Additionally, BCC should implement controls requiring the subcontractors to make any necessary payment application revisions prior to processing the payments and billing the Owner (see Observation No. 12 and Appendix J).

#### D. Contract Improvement Opportunities

The contract terms and conditions in the Construction Manager and Architect agreements executed for the The Children's Hospital Adult Tower Expansion project were evaluated to identify contract strengths, weaknesses and financial risks. This report section provides a contract risk analysis including contract improvement opportunity recommendations. We recommend BMC establish standardized construction agreements to be utilized on all construction projects instead of using contractor provided agreements with BMC reviewed and modified terms. Undefined or incomplete contract terms could result in plan delays, project delays and overcharges to BMC.

In summary, the Construction Manager contract had 31 identified improvement opportunities and the Architect agreement had 18 identified improvement opportunities (see the Contract Improvement Opportunities – Construction Manager Contract and Architect Agreement report sections).

Please see the report body for further information on the above questioned cost, unsupported cost, project control and contract improvement opportunity observations.

## **Scope and Objectives**

BMC (BMC, "Owner") engaged Baker Tilly Virchow Krause, LLP (Baker Tilly, "we" or "our") to perform a close-out construction audit on the The Children's Hospital Adult Tower Expansion project. BCC Construction (BCC) was the Construction Manager and Stanley, Beaman & Sears, Incorporated was the Architect.

The primary objective of this engagement was to determine whether construction expenditures billed to BMC were reasonable, supported and in accordance with the construction agreement. Additionally, our engagement included performance of a contract risk assessment to identify contract strengths, weaknesses and financial risks. Construction project controls testing was limited to accounting and financial controls supporting contractor payments and billing transactions. Our review included cost documentation from project inception through Payment Application No. 37 dated October 31, 2013. As of Payment Application No. 37 the project was substantially complete and total construction costs were \$74,136,945.

#### **Audit Process**

Baker Tilly uses a targeted, risk-based approach to determine which costs to test. Our procedures focus on areas of the contract which, upon our review of the contract documents, appear to be subject to the most risk to the Owner from a contract cost perspective.

A construction contract audit requires cooperation from all parties involved. Both BCC and BMC have been forthcoming with answers to questions during the audit process. BMC provided all requested audit support in a timely manner; however, due to delays in the provision of support from BCC our audit schedule and report delivery dates were extended. The document request was sent to BCC on July 17, 2014. The requested documents were delivered from July 21, 2014 through September 8, 2014. A Potential Issues List documenting preliminary audit observations was provided to BCC on September 26, 2014 to request additional support and responses as appropriate. BCC submitted additional support and responses on October 9, 2014 and October 10, 2014.

## **Summary of Procedures Performed**

Our testing scope included cost documentation from project inception through Payment Application No. 37 dated October 31, 2013. There were 23 fully executed project change orders and the final Construction Manager contract amount totaled \$74,136,945. The close-out construction audit included the following audit procedures:

- > Performed contract risk assessments on the following contract documents:
  - Construction Manager contract
  - Guaranteed Maximum Price (GMP) Amendment No. 1
  - Architect agreement
  - Architect Amendment Nos. 1 and 2
- > Conducted project controls interviews with BMC construction project management and accounting personnel
- Verified payment application arithmetic and performed a recalculation and roll forward of Payment Application Nos. 1 through 37.
  Reconciled Payment Applications Nos. 1 through 37 to costs incurred and recorded in the job cost detail.
- > Reconciled fully executed subcontract documents to amounts billed to BMC and verified lien waivers were collected and reconciled to subcontract payments.
- > Tested authorization, approval, and non-financial contract term compliance
- > Analyzed Construction Manager project change orders:
  - Verified all change orders were executed and authorized by appropriate parties
  - Tested the mathematical accuracy of each change order
  - Traced supporting cost documentation to the change order charges
  - Reviewed labor, material, subcontract, equipment, labor burden, tax, insurance, warranty and overhead and fee charges for compliance with contract terms
- > Performed direct labor testing:
  - Reviewed direct labor entries to validate the charges were cost reimbursable
  - o Reconciled employee hours reflected on time card support to the hours billed on the job cost detail
  - o Reviewed for excessive overtime charges
  - o Verified employee labor rate charges were consistent
- > Direct cost testing:

С

- Reconciled amounts billed to BMC for direct costs, including personnel expense reports, with actual costs documented on the supporting invoices
- o Verified costs were allowable per the contract terms and charged to the correct project and appropriate cost code
- > Equipment rental testing:
  - Tested equipment transactions to validate charges billed were cost reimbursable
  - o Reconciled amounts billed to BMC with actual costs documented on the supporting invoices
  - Verified charges were allowable per the contract terms and charged to the correct project and appropriate cost code

>	Overhead, general conditions and job conditions charges were tested to verify lump sum budgets were not exceeded and to identify any lump sum costs charged as cost reimbursable.		

#### **Good Practices**

During our review the following good practices were noted:

- > Contract language for the handling of selected goods was detailed and provided specific direction on approved billing processes and application of Construction Manager fee
- > Owner and Construction Manager practices implemented to track selected goods was accurate and reconciled to the amounts reflected on the monthly payment applications
- > Construction Manager fee charges for selected goods were in accordance with the contract terms and conditions
- > Contract verbiage specific to subcontract approval was detailed and provided differing requirements based on contract type
- > The contract language stipulating billing support requirements for negotiated subcontract agreements was concise and in accordance with industry good practices
- > Contract terms specified that preconstruction costs were to be reimbursed at actual cost plus Construction Manager Fee
- > Exclusion of general conditions from the savings calculation

This report section provides our detailed audit observations and recommendations specific to questioned costs. Questioned costs are charges that were not in accordance with the contract terms or were identified as potentially duplicate costs. Potential recoveries are subject to a Construction Manager Fee credit upon final negotiation. All costs listed below were billed to BMC.

#### **Questioned Costs**

#### No. Observation Recommendations **Observation Response** BCC: 1 **Subcontractor Payments** BCC should provide the supporting documentation for Payments made by BCC to thirteen subcontractors exceeded the subcontract As with the schedule A payments made to amounts by a total of \$337,744. These variances were identified during discussion the auditor was not subcontractors in excess of reconciliation of the amounts paid to date reflected on the BCC SL looking at the most current data contract values. Any charges Subcontractor Status Report through August 2014 and the AP Job Payments for subcontract completed and that are not further supported report dated August 5, 2014 (see Appendix A). stored. The "Vendor Payment or duplicate subcontract work History" report is not laid out for It is possible these payments were made for supplies or services outside of scope should be reimbursed to subcontracts. See the attached the subcontract scope of work; however, BCC did not provide additional BMC. excerpts from the "Subcontract supporting documentation, such as invoices, with their response to the BMC should require full cost Status Report" for the correct Potential Issues List on October 10, 2014 to verify these amounts did not support be delivered with each numbers. duplicate the subcontract scope of work. The subcontract payments in excess pay application on future GMP of subcontract values totaling \$337,744 were billed to BMC. Follow-Up Audit Notes: projects. The subcontract support used in

testing was provided by BCC.
The updated reports and support provided did not close the items

reported.



No.	Observation	Recommendations Observation Response
2	General Conditions Charges  BCC billed BMC for duplicate general conditions costs totaling \$111,851.  Review of the BCC job cost ledger identified \$107,554 in cost reimbursable charges that should have been included in the lump sum general conditions billings. Additionally, BCC responses to the Potential Issues List on October 10, 2014 confirmed general conditions costs totaling \$4,297 were billed as reimbursable costs (see Appendix B).  Guaranteed Maximum Price (GMP) Amendment No. 1, Section A.1.1.5.1 states, "General Conditions are a lump sum amount, as previously approved, and not included in any split savings." The amendment did not stipulate other allowable general conditions costs nor did the amendment state general conditions costs incurred prior to the execution of the amendment were to be charged as reimbursable costs. The fixed general conditions amount should include all project general conditions. This amendment was fully executed on May 27, 2011 and items included in the lump sum general conditions package were confirmed by BCC on August 5, 2014.	<ul> <li>BCC should reimburse BMC for the duplicate charges.</li> <li>BCC should implement billing controls to verify items included in lump sum amounts are not billed as reimbursable.</li> <li>Costs included in general conditions should be defined on future contracts.</li> </ul> Follow-Up Audit Notes: Job 31005 is the BCC lump sum general conditions job number.
3	Job Conditions Charges  Materials used for blocking/wall protection totaling \$42,178 were billed as reimbursable costs; however, these charges appear to be protection of finishes costs. Per Amendment No. 1, Exhibit A, protection of finishes costs are lump sum so these costs appear to be duplicate charges to BMC (see Appendix C).	<ul> <li>BCC should reimburse BMC for the duplicate charges.</li> <li>BCC should implement billing controls to verify items included in lump sum amounts are not billed as reimbursable.</li> </ul> BCC: This is blocking/wall protection. Cost of the work.



**Observation Response** No. Observation Recommendations **Change Order Fee Charges** BCC: 4 BCC should reimburse BMC \$18,128 for fee overcharges. Although this is not specifically Project change orders included \$487,320 in deductive changes that were stated in the contract, Baptist subject to a fee adjustment in accordance with Contract; however, BCC did BMC should include direct agreed early on that fee would not reduce the Construction Manager Fee resulting in questioned fee charges contract language on future not be given back on deductive paid to BCC of \$18,128. Contract Article 5.3.4 states, "If no specific provision projects related to fee changes. Please confirm with is made in Section 5.1.1 for adjustment of the Construction Manager's Fee in adjustments on deductive change orders. BMC. the case of changes in the Work, or if the extent of such changes is such, in the aggregate, that application of the adjustment provisions of Section 5.1.1 **Follow-Up Audit Notes:** will cause substantial inequity to the Owner or Construction Manager, the BMC's approval of this contract Construction Manager's Fee shall be equitably adjusted on the basis of the verbiage change does not appear Fee established for the original Work." Based on application of the original to have been in writing nor Work fee of 3.72 percent this resulted in questioned fee charges of \$18,128 executed in a contract (see Appendix D). amendment.



**Observation Response** No. Observation Recommendations **Direct Costs** 5 **Batson Cook:** BCC should reimburse BMC for these charges. BCC noted \$3,740 "As Project charges for repairing damages to personal property as the result of discussed recently with BMC, construction activity and charges belonging to other BCC projects were BCC should implement billing this should not have been cost identified totaling \$13,146 as follows: controls to verify charges are of the work." billed to the correct projects Charges for repairing damages to pedestrian vehicles from precast BCC noted \$7.014 as and billings exclude charges overspray, tire damage, and other damages as the result of construction that should not be billed to the "extenuating circumstances activity totaling \$11,241. These costs should have been back charged to Owner. where we agreed to repairs to the responsible subcontractor or the Construction Manager depending keep this person happy." BMC should require all project on the circumstances and not billed to BMC (see Appendix E). Noted \$289 "not entirely sure damages, losses, and incidents Charges were identified that should have been charged to another BCC what this was for" and \$198 as to be reported immediately. project in the amount of \$1,430. This includes rental equipment of "damage to Marty's tire on site." These items should be included \$1,200 and travel expenses for David Poole totaling \$230. in monthly reporting submitted BCC noted \$1.430 "this was These costs should not have been billed to BMC. to project management and overlooked and should not have reviewed regularly with the been charged to this project." project billings to verify repair costs are not passed through to BMC. 6 **Direct Labor Charges** BCC should reimburse BMC for BCC: Per Jordan at BCC he was not the labor overcharges. Direct labor charges appear to have been billed in excess of actual costs able to further support or provide incurred resulting in an overcharge of \$2,369. Reconciling the BCC Timberline BCC should implement controls more detail on the variance Labor Billing Summary to the job cost ledger reflected a direct labor to verify labor charges billed to calculated during his overcharge of \$2,369. This was confirmed during review of the BCC labor the Owner reconcile with the reconciliation of labor costs. project labor and job cost reconciliation showing the same variance. BCC implemented a new reporting prior to inclusion in accounting system during this project which could explain the variance; monthly billings. however, all labor costs billed to BMC should be represented on the labor billing summary and supported with payroll records.

This report section provides our detailed audit observations and recommendations specific to unsupported costs. Unsupported costs are assumed to be allowable project charges that were not adequately supported to validate actual costs incurred, cost description and/or applicable project. Unsupported costs are unlikely to result in credits to BMC since these costs are assumed to be legitimate and allowable; however, we are unable to validate the charges based on the support provided. If items remain unsupported or are determined to be unallowable charges after support is provided, potential recoveries are subject to a Construction Manager Fee credit upon final negotiation. All listed costs were billed to BMC.

**Unsupported Costs** 

# Recommendations Observation Response

#### 7 Unsupported Subcontract Amounts

No.

Subcontract and change order support provided by BCC did not reconcile to the final subcontract amounts recorded in the Subcontract Status Report which resulted in unsupported subcontract values totaling \$3,126,442 (see Appendix F).

Observation

BCC provided the subcontract documents on July 23, 2014 and the Subcontract Status Report was provided on August 5, 2014. The unsupported subcontract amounts were paid to the subcontractors and billed to BMC.

- BCC should provide fully executed subcontract documents to support the identified variances.
- Any remaining unsupported amounts should be reimbursed to BMC.
- BCC should implement controls to ensure all project subcontract documents are stored in a centralized location so complete support can be provided upon request.

# BCC:

See attached file "Subcontract Value Variance 10-7-14." Conclusion was drawn on accurate but outdated data. The current reports were not used. Proper report provided.

#### Follow-Up Audit Notes:

No additional subcontract documents were provided for review.



**Observation Response** No. Observation Recommendations 8 **Unsupported Direct Costs** BCC: BCC should provide cost The deferred job conditions was support to validate all cost Supporting cost documentation to validate costs billed to BMC was not reimbursable project charges. an amount that was reviewed provided for charges totaling \$408,590 as follows: and agreed to with BMC early BMC's written approval of the • Deferred job conditions totaling \$348,292 - Amendment No. 1 does not on in the project. In recent deferred job conditions costs classify these charges as lump sum in the verbiage or Exhibit A. Exhibit discussions with BMC, the being billed as lump sum A clearly notes other charges as LS, or lump sum. All deferred job charges should be provided. format by which this handled conditions charges should be supported. Documentation showing the Corresponding cost support was agreed to be adequate. Owner's written approval prior to BCC billing deferred job conditions as reviewed by BMC prior to BCC noted rental equipment for lump sum costs was requested on September 11, 2014 but was never written lump sum approval rework on the Kidswalk "This provided. should also be provided. was not part of the GC • Rental equipment for rework on the Kidswalk totaling \$55,084 – General Support should be provided agreement. Pedestrian walkway conditions included equipment rental charges; however, detail was not showing the equipment used in over the access drive agreed to provided showing the equipment specifics or rental rates used in the rework on the Kidswalk does by BMC." lump sum general conditions calculations, therefore we were unable to not duplicate general AHCA lunches were noted by determine if the equipment charges on Strickland Supplies Invoice No. conditions. BCC "It was agreed with BMC 3815 duplicated lump sum general conditions costs. Written BMC approval should that this is a reimbursable cost." • AHCA lunch charges totaling \$3,514 - The costs are not listed as be provided for the AHCA lunch allowable project charges in Contract Section 6.1.2. BCC stated BMC charges including approved these charges; however, written approval was not provided in Follow-Up Audit Notes: corresponding emails and accordance with Contract Section 6.1.2.15 which states, "Other costs other related communications. No additional cost support was reasonably and properly incurred in the performance of the Work to the provided to support the \$1,700 BMC should implement extent approved in writing by the Owner." Additionally, these types of allowance charge for rework on controls to mandate all contract charges are typically part of general conditions (see Appendix G). pricing and term changes are the Kidswalk, this item remains • Allowance for rework on the Kidswalk totaling \$1,700 – All charges for documented in fully executed unsupported. contract documents. usage of allowance funds should be supported to verify actual costs incurred and authorized use of the allowances.



No. Observation
 9 Unsupported Change Order Charges
 Lump sum change orders included unsupporte

Lump sum change orders included unsupported costs in the amounts billed to BMC totaling \$39,886. Change orders included \$26,286 for labor burden charges; however, the BCC labor charges did not include labor position information or provide labor rates used to calculate the labor costs. We were unable to determine if the labor charges were for lump sum or cost reimbursable project personnel. Additionally, we could not validate rate consistency or determine if any duplicate labor charges were included. Labor burden of 33.71 percent was added to all labor charges (see Appendix H). Additionally, BCC added warranty costs to several change order line items at a rate of 0.10 percent of the line item value totaling \$13,600. Warranty charges were calculated on labor, labor burden, material, equipment, subcontract, bond costs, insurances and overhead and profit. There was not a stipulated contract rate for warranty charges or terms that allowed application to change order work. Warranty charges represent a prepayment for costs that may not be incurred (see Appendix I).

Further, contract terms set forth in AIA 201 Articles 3.5 and 12.2.2 provide for labor and materials warranty and work after substantial completion. Any warranty work under these provisions is not subject to Construction Manager charges. Also, subcontract work should be warrantied for a period of at least one year. During the warranty period the Owner would contact the manufacturers or subcontractors directly; therefore, there would be no additional cost to the Construction Manager.

#### Recommendations

- BCC should provide a detailed labor break down with each change that includes personnel, hours and labor rates.
- Change order warranty charges should be validated with actual cost support. Any unsupported or contractually non-compliant charges should be refunded to BMC.
- BMC should require change order pricing support include a labor breakdown as described above prior to approval.
- If BMC allows warranty charges in a contract, the costs should require cost support to validate the charges and should be reimbursed as the costs are actually incurred. If prepayment is agreed to, the contract terms should stipulate any unused amounts are refunded to BMC at the end of the warranty period.

# **Observation Response**

# BCC:

As it relates to labor burden charges this seems to be a difference in how we account for labor. There are instances where we list a base rate for a "crew" over a duration of time as a lump sum based on their hourly rates. These rates don't include labor burden, fringes & workers compensation insurance.

It was agreed by BMC that warranty charges would be calculated in this manner although it is not directly spelled out in the contract.



**Observation Response** No. Observation Recommendations BCC: 10 **Unsupported Labor Costs** BCC should provide supporting documentation to validate the The \$2.132 was transferred to Labor support was not provided for one sampled transaction in the amount of unsupported labor charge. phase 17006 -- Allowance, \$2,132. The charge was for time posted on December 31, 2011. This cost Rework Kidswalk under cost was billed as part of an allowance charge and should require appropriate BCC should implement type 1 L1. However, the amount support to verify use of this allowance was authorized. controls to verify job cost was transferred from phase transfers can be traced and Our review also identified three BCC carpenters with excessive hours 01904 -- Demo Kidswalk under reconciled to the original charged to the project. All charges were fully supported; however, the project cost type 3 M1. It appears to be entries. was not fast-tracked therefore additional information should be provided to labor related based on the BCC should provide written explain the excessive project overtime charges: description of the transfer "PR explanations to document the • Walter Jarvis Jr. averaged 60 hours per week in 100 weeks of the Post checks summary." Unable reasons for excessive project sampled labor transactions including 24 weeks with over 70 hours to figure out which line items overtime hours worked by the worked in one week. make up the \$2.132 amount listed employees. • Larry Carroll Jr. averaged 60 hours per week in 58 weeks of the being transferred. sampled labor transactions including 10 weeks with over 70 hours Specific to the overtime hours worked in one week. charged, BCC stated, "These Joshua Castrejon averaged 51 hours per week in 86 weeks of the employees were all carpenters sampled labor transactions including 4 weeks with over 70 hours on the project. We forwarded worked in one week. additional information to 10/9/14 Explanations for the overtime hours worked were requested with the Potential to ensure that the number of Issues List; however, the explanations were not provided with BCC's hours was being correctly calculated." responses. **Follow-Up Audit Notes:** Charges were recalculated; however, no explanation for the hours was provided in BCC's response.

# **Project Control Observations**

This report section provides audit observations and recommendations specific to project controls. Insufficient or ineffective project controls may result in overcharges to the Owner. Implementing control recommendations can strengthen monitoring and review activities and reduce overpayments.

#### **Project Control Observations** No. Observation Recommendations **Observation Response** This is a BMC control observation 11 BMC should implement **Authorization of Contractually Non-Compliant Charges** program controls requiring and BCC was not asked to It was observed on multiple occasions that BMC relied on verbal approvals to the execution of contract respond. authorize BCC charges and transactions that were not in accordance with the amendments to alter Construction Manager contract terms and conditions. All changes to the contract terms, conditions contract terms and conditions should be documented in a contract and approved cost types. amendment executed by both parties. Additionally, BMC approval of charges BMC should implement that are not contractually compliant should be documented in writing with a controls requiring justification explaining why the charges were deemed allowable. Examples of documented/written Owner charges and transactions verbally approved by BMC that were contrary to the approval for charges that contract terms include, but are not limited to the following: are not contractually Not reducing the Construction Manager Fee for deductive changes compliant including a (see Observation No. 4) required justification explaining why BMC is Lump sum deferred job conditions charges (see Observation No. 8) allowing the charges. Lump sum contract warranty charges (see Observation No. 9)



# **Project Control Observations**

No.	Observation	Recommendations Observation Response	
12	Job Conditions Billings  BCC billed Job Conditions as a lump sum amount of \$3,621,213; however, not all job conditions costs were contractually lump sum. Of 20 job conditions cost line items, 15 were lump sum and 5 were cost reimbursable. Additionally, based on the job cost reporting costs incurred for job conditions totaled \$1,949,314. Combining lump sum and cost reimbursable line items in a project cost category can create additional project risks including, but not limited to: Reducing project savings, charging lump sum charges as cost reimbursable and duplicate project charges.	> BMC should implement controls preventing the combination of lump sum and cost reimbursable charges within one cost category. Additionally, detailed cost support should be submitted and reviewed prior to approving lump sum contract amounts.  This is a BMC control observation and BCC was not asked to respond.	n



# **Project Control Observations**

**Observation Response** No. Observation Recommendations **Subcontractor Payments** BCC: 13 BCC should reconcile all Construction Manager controls were not in place to ensure the subcontractor subcontractor payment Conclusion was drawn on accurate payment application data was complete, accurate and current. Subcontractor application data to ensure but outdated data. The current accuracy prior to billing the payment applications reflected Total Work in Place amounts exceeding actual reports were not used. Proper Owner for subcontract payments made by BCC for subcontract work. The identified billing and reports provided. It is apparent by charges. this 50% sampling of data that the payment variances totaled \$250,358. It was noted that the Total Work in Place and Material on Hand amounts exceeded the recorded subcontract values. auditors did not have the current BCC should implement Additionally, all of the noted subcontractors had Owner Purchased Materials controls requiring the pay application data to review. on Hand deductions; we were not able to determine if this contributed to the subcontractors to make any variances. Final lien waivers were provided by all of the subcontractors (see necessary payment **Follow-Up Audit Notes:** application revisions prior to Appendix J). The subcontract support used in processing the payments testing was provided by BCC. The and billing the Owner. updated reports and support provided did not close the items reported.

# **Construction Manager Contract**

This report section provides a summary of our Construction Manager contract review observations, associated risks and improvement recommendations. We recommend BMC establish standardized construction agreements to be utilized on all construction projects instead of utilizing contractor agreements with BMC reviewed and modified terms. Undefined or incomplete contract terms could result in project delays and overcharges to BMC. Any and all recommended contract term changes should be reviewed by legal counsel prior to implementation.

Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	Undefined	There are no provisions for Construction Manager self-performed work.	Contract agreements should contain contract and cost terms specific to self-performed work to prevent overcharges to the Owner.	Contract terms should be included for Construction Manager self-performed work. If the Owner would like to allow self-performed work, the contract terms should stipulate the following:
				<ol> <li>Definition of self-performed work</li> <li>Requirement of competitive bids prior to Owner approval of self-performed work</li> <li>Basis of award options using Owner approved cost types</li> <li>Stipulation in this Article and other Articles specific excluding self-performed work from the fee calculation</li> <li>Allowed markup percentage applicable to self-performed work</li> <li>A good practice is to limit self-performed work, for example no</li> </ol>
				more than 15 percent of subcontract work can be self-performed.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	Undefined	Contract terms do not include liquidated damages provisions.	Owner may not be compensated for lost revenue or additional costs due to late project completion.	A provision for liquidated damages should be inserted into the contract terms stipulating damages equal to a dollar value for each calendar day Substantial Completion is delayed. If the Owner does not want to implement this penalty the dollar value can be zero; however, this should be standard contract verbiage evaluated for each project agreement.  The amount typically increases when the Substantial Completion delay exceeds 30 calendar days.
A121	Undefined	There is no language requiring disclosure of related parties.	Subcontracts not competitively bid or awarded based solely on local preference could result in increased Owner costs.	Construction agreements should include contract language requiring disclosure of related parties.
A121	2.2.3	The estimated Cost of the Work shall include the Construction Manager's contingency, a sum established by the Construction Manager (but subject to Owner's approval) for the Construction Manager's exclusive use to cover costs arising under Article 2.2.2 and other costs which are properly reimbursable as Cost of the Work but not the basis for a Change Order.	Lack of Owner cost control including approval of contingency fund usage could result in line item overages, lump sum general conditions overage reimbursement, and/or reimbursement of unallowable costs.	We recommend the contract require Owner or Owner Representative approval of contingency usage. This will allow the Owner better overall project cost control and will help ensure usage of contingency is in accordance with the terms and conditions set forth in Article 2.2.2 and Article 6.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	4.2	Preconstruction payment terms and conditions did not include billing requirements.	Preconstruction payments may not be adequately supported resulting in overbillings.	The contract should include preconstruction payment requirements consistent with the Article 4.1.1 terms. Since preconstruction is reimbursed based on actual cost plus fee, terms should require complete cost support to validate all billed costs.
A121	5.1.1	For the Construction Manager's performance of the Work as described in Article 2.3, the Owner shall pay the Construction Manager in current funds the Contract Sum consisting of the Cost of the Work as defined in Article 6 and the Construction Manager's Fee determined as follows: 3.72% of the Cost of the Work shall be the Construction Manager's Fee.	Owner paid fee on the project for items that should not be included in construction fee calculations.	Contract verbiage should exclude insurance, performance bonds, permits and self-performed work from cost of work for fee calculation purposes. For example, "the following costs shall be excluded from the cost of the work for the Construction Manager's fee calculation" This verbiage should also be present in Article 6.1.1 Cost of the Work.
A121	5.2.2	If the sum of the actual Cost of the Work and the Construction Manager's Fee is less than the Guaranteed Maximum Price, as such Guaranteed Maximum Price may have been adjusted over the course of the project, the difference (the "Savings") shall be shared as follows: 25% to the Construction Manager and 75% to the Owner.	Owner could pay for cost savings based on overestimated or inflated GMP values.	Savings split should exclude unused allowance and contingency funds which should both revert to the Owner at 100 percent. Additionally, this provision should only be present in contracts that required complete GMP cost support to validate the initial GMP amount to ensure it is not inflated to help ensure savings at the end of the project.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	5.2.3	Savings shall be calculated and paid as part of the final payment under Article 7 hereof, with the understanding and agreement that to the extent the Construction Manager incurs cost after final completion which would have been payable to the Construction Manager as the Cost of the Work, the Construction Manager shall be entitled to payment from the Owner for that portion of such costs that were distributed to Owner as Savings (that portion of the Cost of the Work which is designated as "Contingency" is subject to the Savings).	Potential overcharges to the Owner.	There should be a requirement that all costs incurred after the final billing must be fully vouched, or supported, for reimbursement consideration to avoid overcharges.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	5.3	§ 5.3.3 In calculating adjustments to the Contract, the terms "cost" and "costs" as used in the above-referenced provisions of A201 ™-1997 shall mean the Cost of the Work as defined in Article 6 of this Agreement, and the term "and a reasonable allowance for overhead and profit" shall mean the Construction Manager's Fee as defined in Section 5.1.1 of this Agreement.  § 5.3.4 If no specific provision is made in Section 5.1.1 for adjustment of the Construction Manager's Fee in the case of changes in the Work, or if the extent of such changes is such, in the aggregate, that application of the adjustment provisions of Section 5.1.1 will cause substantial inequity to the Owner or Construction Manager, the Construction Manager's Fee shall be equitably adjusted on the basis of the Fee established for the original Work.	Fee overcharges to the Owner.	These contract clauses should either:  (1) Refer to AIA201 Contract Articles 7.2 and 7.3 for additive and deductive fee adjustments, or (2) Stipulate the fee adjustments be consistent with the contractually stated fee percentage, as applicable.  Adjustments to the original contract amount would result in fee additions/ deductions consistent with Article 5.1.1. Changes specific to a previously issued change order would apply additive/ deductive fee in accordance with the stipulated change order fee percentage. Inequitable changes should be reviewed and approved by the Owner on a case-by-case basis and should not be applied to deductive changes.
A121	6.1.1	The term "Cost of the Work" shall mean costs necessarily incurred by the Construction Manager in the proper performance of the Work. Such costs shall be at rates not higher than those customarily paid at the place of the Project except with prior consent of the Owner. The Cost of the Work shall include only the items set forth in this Article 6.	Fee overcharges to the Owner.	Insert verbiage to exclude insurance, bond, permit, sales tax, and fee/overhead and profit charges from the Construction Manager fee and overhead calculations.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	6.1.2.1	Wages of direct employees of the Construction Manager performing the Work at the Site or, with Owner's agreement, at locations off the Site.	Undefined and/or vague allowable cost verbiage could result in labor and labor burden overcharges.	Contract language was removed from the contract specific to allowable labor burden charges which is not recommended. Contract Article 6.1 is applicable to all costs incurred prior to execution of Amendment No. 1.  Amendment No. 1 was executed in May 27, 2011; however, billings began in June 2010.  We recommend adding contract verbiage for further labor charge definition as follows:  1. Costs paid or incurred by the Construction Manager for labor burden including taxes, insurance, and customary benefits such as health benefits, sick leave, holiday and vacation leave. For personnel covered under labor agreements it should also include contributions and other benefits required by law or collective bargaining agreements.  2. This Article should stipulate labor costs shall not include merit or any other bonuses.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	6.1.2.5	Costs less salvage value of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by the workers that are not fully consumed in the performance of the Work and which remain the property of the Construction Manager, including the costs of transporting, inspecting, testing, handling, installing, maintaining, dismantling and removing such items.	Owner could pay for materials not used during construction.	The Contract Article does not address unused excess materials. This verbiage was removed from the contract and we recommend the verbiage be added back in to prevent the Owner from paying for unused materials.  Recommend insertion of, "Unused excess materials, if any, shall be handed over to the Owner at the completion of the Work or, at the Owner's option, shall be sold by the Construction Manager; amounts realized, if any, from such sales shall be credited to the Owner as a deduction from the Cost of the Work."



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	6.1.2.7	Subject to the limitation on certain rental charges and costs set forth below, rental charges and the costs of transportation, installation, minor repairs and replacements, dismantling and removal of temporary facilities, machinery, equipment and hand tools not customarily owned by the workers which are provided by the Construction Manager at the Site, whether rented from the Construction Manager or others, and incurred in the performance of the Work. (However, with respect to certain rental costs, the Construction Manager and negotiated Subcontractors will use a Construction Manager generated and Owner approved rental schedule for reimbursement. With respect to certain tools. The Construction Manager will purchase as a Cost of the Work any tools or equipment that are likely to incur a higher rental cost than the purchase value, and such tools or equipment will be turned over to the Owner upon completion of the Project.)	Use of Construction Manager owned equipment in the performance of change order work could result in overcharges to the Owner due to cumulative project charges exceeding the equipment's fair market value. Additionally, monthly Construction Manager owned equipment rental charges are not limited and could result in overcharges.	<ul> <li>The current contract verbiage does not limit Construction Manager owned equipment charges. The following modifications are recommended:</li> <li>1. Monthly rental rates should be stated not to exceed the average of local prevailing rates. If the Owner wants to limit the monthly rental charges to a percentage of local prevailing rates then verbiage should be added to state "Monthly rental costs not to exceed XX percent of local prevailing rates."</li> <li>2. Verbiage requiring that Construction Manager owned equipment charged cumulatively to the project cannot exceed a percentage of the individual equipment's fair market value (FMV) based on a stipulated source (i.e. Blue Book). FMV should be contractually required to be established the first time the equipment is used on the project and should consider the equipment make, model and year. Maximum percentage of FMV typically ranges from 70 to 80 percent.</li> <li>3. Minor repairs and replacements of equipment should be better defined to impose cost limits. Additionally, replacements should exclude equipment parts due to wear and tear.</li> </ul>



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	6.1.2.12	The cost of defending suits or claims for infringement of patent rights arising from the use of particular design, process, or produce required by Owner, paying legal judgments against the Construction Manager resulting from such suits or claims, and paying settlements made with Owner's consent.	Fee overcharges to the Owner.	Contract verbiage excluding these costs from the fee calculation was removed and should be added back into this Article. The Owner should not be paying fee on these costs. Recommend insertion of the following verbiage after Owner's consent, "however, that such costs of legal defenses, judgment and settlements shall not be included in the calculation of the Construction Manager's fee."
A121	Article 6.1	Construction Manager premiums for insurance and bonds are not listed as reimbursable costs.	Charges to the Owner for costs not listed as reimbursable.	Contract Article 6.1.2.2 allows for reimbursement of "any insurance and bond payments incurred by Subcontractors"; however, these charges are not otherwise listed as reimbursable. Verbiage should be inserted allowing Construction Manager bond and insurance charges and stipulating the basis for reimbursement (actual cost or set percentage).  Any set percentages should be compared to industry averages and based on cost support provided by the Construction Manager to validate this is not a profit center.
A121	Article 6.1	Reimbursable costs did not include field office charges such as project trailers, office equipment, supplies, shipping/ postage, reproductions, or utilities.	Charges to the Owner for costs not listed as reimbursable.	Contract language should include reimbursable charges related to site office/working space.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	6.2.1.8	Any cost not specifically and expressly described in Article 6.1.	Charges to the Owner for excessive or non-reimbursable costs.	This verbiage was removed from the agreement and should be inserted. This is to ensure excessive or unreasonable charges are not billed to the Owner. GMP agreements should have detailed allowable cost definition in Article 6.1.
A121	Article 6.2	Costs not reimbursable per the contract should include costs not in compliance with contractually required approvals and exceeding cost limitations set forth in the agreement.	Charges to the Owner for excessive or non-reimbursable costs.	Recommend insertion of Article 6.2.1.10, "Costs incurred prior to the Owner's approval, when such prior approval is required by the Contract Documents; and costs incurred in excess of the Owner's limitations or contrary to the Owner's restrictions, when such limitations or restrictions are imposed by the Owner pursuant to the Contract Documents."
A121	6.4.1	The Construction Manager shall keep full and detailed accounts and exercise such controls as may be necessary for proper financial management under this Contract; the accounting and control systems shall be satisfactory to the Owner. The Owner and the Owner's accountants shall be afforded access to the Construction Manager's records, books, correspondence, instructions, drawings, receipts, subcontracts, purchase orders, vouchers, memoranda and other data relating to this Project, and the Construction Manager shall preserve these for a period of three years after final payment, or for such longer period as may be required by law.	Owner may not be reimbursed for overcharges.	We recommend insertion of Article 6.4.2 to state the Construction Manager will return all excess payments inclusive of contractually noncompliant charges identified during the audit to Owner.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	Article 7.1	There is no contract verbiage requiring complete cost support for the Owner to validate actual costs incurred.	Charges to the Owner for non-reimbursable costs, charges that exceed actual costs incurred, costs for other projects and duplicate charges.	Contract verbiage that was removed should be insert into the GMP contract terms stating:  "With each Application for Payment, the Contractor shall submit payrolls, petty cash accounts, receipted invoices or invoices with check vouchers attached, and any other evidence required by the Owner or Architect to demonstrate that cash disbursements already made by the Contractor on account of the Cost of the Work equal or exceed (1) progress payments already received by the Contractor; less (2) that portion of those payments attributable to the Contractor's Fee; plus (3) payrolls for the period covered by the present Application for Payment."  This requirement is especially important for agreements with split savings.
A121	Article 7.1	Excludes a provision prohibiting the Construction Manager from making advance payments to the subcontractors.	Advance payments should not be made without prior written Owner consent to ensure the project is not charged for goods not actually received.	Contract verbiage that was removed should be insert into the contract terms as follows:  "Except with the Owner's prior written approval, the Contractor shall not make advance payments to Subcontractors for materials or equipment which have not been delivered and stored at the site."



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
A121	11.1.1	BCC Company/ Construction Manager will use the Subguard program as a method of bonding all subcontractors for this project.	Duplicate subcontract bonding costs.	Requirement in Article 11.1.1 duplicates payment and performance required in Article 8.3.1 for subcontracts.  The verbiage in Article 11.1.1 was also unclear as to whether the Construction Manager is responsible for obtaining the policy. It should be clearly stated the Construction Manager is to obtain the policy and charge it on the schedule of values as one line item. This provides rate visibility to the Owner.
A201	7.1.2	A Change Order shall be based upon agreement among the Owner, Contractor and Architect; a Construction Change Directive requires agreement by the Owner and Architect and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Architect alone.	Based on the final part of the Contract Article which states, "an order for a minor change in the Work may be issued by the Architect alone" the Architect could approve minor changes without Owner approval that change the contract cost and/or time.	The contract verbiage should include a reference to Article 7.4.1 which provides conditions for Architect approval of minor changes. For example, "an order for a minor change in the Work may be issued by the Architect alone in accordance with Contract Article 7.4.1 which provides the Architect cannot approve changes adjusting the contract amount or time."
A201	Article 7.2	Change Order conditions do not include a stipulation for fee adjustments.	Owner could overpay Construction Manager fee on deductive change orders.	Should insert verbiage covering fee adjustments for additive and deductive change orders or refer to the contract terms set forth in Change Directives Article 7.3.7.
Amendment No. 1	N/A	Amendment is not dated nor does it list an effective date. Based on a letter from BCC it appears to have been fully executed on May 27, 2011.	Could result in overcharges or duplicate charges to the Owner since the Amendment incorporates general conditions costs into a lump sum amount.	All contract Amendments should include the date of execution and the effective date. This is to document the date the contract term changes take place which is important for proper billing and cost compliance.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
Amendment No. 1	A.1.1.5.1	General Conditions are a lump sum amount, as previously approved, and not included in any split savings.	Owner is at risk of overpaying for general conditions, duplicate costs and contractually unallowable costs.	It is not recommended to approve lump sum general conditions on cost reimbursable projects. To ease billing constraints the Owner can rely on contract rates for labor and equipment; however, these rates should be audited for reasonableness and to ensure they are in accordance with actual costs incurred. In instances the Owner feels lump sum general conditions charges is their best option, these amounts should be audited against cost support to validate project costs are based on reasonable and supported estimates.  Any time lump sum general conditions are included in the contract there should audit provisions to review lump sum costs at 50 percent and near 100 percent completion. This allows Owner visibility to ensure this was not overestimated and serving as an additional Construction Manager profit center.  Additional contract terms specific to the billing of lump sum costs is recommended. Billing terms should include the monthly billing for lump sum general conditions be aligned with the percentage of project completion to ensure the Construction Manager is not prebilling general conditions and corresponding fee.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
Amendment No. 1	A.1.1.5.3	Changes to the work are subject to a 5% fee and a 5% overhead cost.	The Owner will pay increased fees on all project change orders which is not consistent with industry averages.	This contract verbiage allows the Construction Manager to charge 5 percent overhead and 5 percent profit on lump sum general conditions and administrative contract charges such as insurance, Subguard, sales tax and labor burden. Further, the verbiage allows the application of the 5 percent fee to the 5 percent overhead charges.
				Contract verbiage should prohibit the application of overhead and fee to all of the above mentioned costs. We also recommend the Construction Manager fee on change orders remain consistent with the stipulated contract fee percentage on future projects. This practice is consistent with the industry standard.
Amendment No. 1	Exhibit A	The Job Conditions comingled lump sum and reimbursable cost of work line items.	The Owner is at risk of paying excess cost that should have been credited to the owner. Additionally, the construction manager could use	The contract should not include comingled cost types in one category as this practice increases the Owner's risk of overpayment.
			budget savings to subsidize divisions of work that are over budget.	Additionally, all costs proposed as lump sum should be audited for reasonableness and to ensure they align with actual costs expected to be incurred prior to approval. Additional contract terms specific to the billing of lump sum costs is also recommended.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
Amendment No. 1	Exhibit A	Subguard - Included in the subcontract amounts within the GMP detail. It was unclear if the policy was held individually by the subcontractors (provides for varying rates and some may not be eligible for coverage) or if the Construction Manager held the Subguard policy on the project for all subcontracts. We noted the Bond Costs were charged at 0.67 percent and Subguard appears to be charged at 1.2 percent.	Duplicate subcontract bonding costs.	Contract Article 11.1.1 stipulates the Construction Manager will use Subguard to bond all subcontractors; however, these costs duplicate the Construction Manager payment and performance bonds required in Contract Article 8.3.1. Additionally Subguard may be selectively used on high risk subcontractors. Selective use helps minimize Subguard premium costs as compared to insuring the entire subcontractor workforce.
Amendment No. 1	Exhibit A	Overhead, or General Conditions, did not include a breakdown of costs included in this package. Since these were lump sum costs this detail should have been included in Exhibit A prior to Owner approval. Costs that should be identified include but are not limited to:  Trailers Vehicles Project management team Utilities, data, postage/shipping, other trailer expenses Portable toilets Safety program/awards Travel/meals Employee drug testing Copier/fax, other office equipment Drinking water	The Owner is at risk of duplicate payments for general conditions charges included as cost reimbursable charges.	Any costs agreed to as lump sum charges should include an itemization of all charges reflecting units, unit pricing and subtotals for all costs included in the cost category. This detail should be comprehensive to provide Owner visibility in all lump sum costs.  Further, all costs proposed as lump sum general conditions should be audited for reasonableness and to ensure the estimates align with actual costs expected to be incurred prior to approval.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
Amendment No. 1	Exhibit A	Warranty - This work should be warrantied per standard AIA contract terms set forth in AIA 201 Articles 3.5 and 12.2.2 which provide for labor and materials warranties and work after substantial completion that was not in accordance with the contract documents. Any warranty work under these provisions are not subject to contractor charges.  Subcontract work should be warrantied for a period of at least one year. During the warranty period the Owner would contact the manufacturers or subcontractors directly; therefore, there would be no additional cost to the Construction Manager.	The Owner is at risk of paying the Construction Manager \$90,948 for warranty costs that may not be incurred. An additional \$13,600 was charged for warranty on project change orders increasing the warranty costs to \$104,548.  Payments made for warranty work could increase the Construction Manager profit.	Verbiage should be included in the contract terms specific to the allowability of warranty charges. The terms should include cost support to substantiate costs actually incurred. Any billings for warranty work should include a cost justification describing the work performed. The Owner should review all charges and ensure the costs should not be included as non-chargeable warranty work per Contract Articles 3.5 and 12.2.2 prior to approval and payment.  Any instances of contracts with prepaid warranty work costs should also include terms requiring a refund of unused amounts paid.

# **Architect Agreement**

This report section provides a summary of our Architect contract review observations, associated risks and improvement recommendations. We recommend BMC establish standardized agreements to be utilized for all Architectural and Engineering firms hired for construction projects. Undefined or incomplete contract terms could result in plan delays, project delays and overcharges to BMC.

Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	Undefined	General contract modification comment:  A total of six contract articles were manually crossed out in red ink and noted "See Amendment No. 1."  Although the bottom of these pages were initialed by the Architect, the contract change itself was not initialed by both parties and dated, therefore, it was not clearly shown when the contract was altered (before or after execution). The altered Contract Articles were:  1.1.2.6  1.3.5.7  1.4.2.8  1.4.2.13  1.5.4.1  1.5.9	The Owner may not be able to hold Architect accountable to altered contract terms as it could be argued the changes were made after contract execution.	Contracts are legal documents and should not be altered after execution. BMC should implement procedures ensuring both parties (Owner and Architect or Contractor) initial the alteration at the site of the change and document the date approved.  Also, all contract pages should be initialed, not just the pages with changes. This helps the Owner ensure the Architect and/or Contractor has read the terms and conditions and is in agreement.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	Undefined	There is no right to audit contract language.	The Owner may not have adequate rights/recourse during an audit.	Contract Article 1.4.2.6 provides language for a four-year document retention period and specifies access; however, does not reserve the right to audit the costs including reimbursable expenses. We recommend adding a Right To Audit Article including:  1. Owner right to access and audit all Architect and consultant project records and documents  2. Owner should be allowed to copy records and obtain electronic copies of records and documents  3. Definition of what records and documents includes (books, correspondence, drawings, receipts, vouchers, labor records, payment records, insurance certificates, home office data, etc.)  4. Requirement for Architect and all consultants or contractors to retain project records for a specified number of years for audit purposes
B141-1997 Part 1	1.1.1	This Agreement is based on the following information and assumptions.  (Note the disposition for the following items by inserting the requested information or a statement such as "not applicable," "unknown at time of execution" or "to be determined later by mutual agreement.")	Contract could be altered at a later date.	Insert the requested information or notate this Article with "not applicable," "unknown at time of execution" or "to be determined" per the contract instructions. Contract terms should never be left blank.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	1.1.2.6	The following verbiage was manually crossed out using red ink and noted, "See Amendment No. 1."  The time parameters are: Substantial completion is anticipated to be achieved by the end of the first quarter of 2011, if not sooner.  Article 1.1.2.6 was not addressed in Amendment Nos. 1 or 2.	There is no contractually stated substantial completion date so the Owner may be unable to hold the Architect responsible for timely completion or construction delays due to incomplete work.	All contract terms that are negated in the original agreement and noted "See Amendment No.1" should be revised in the referenced contract amendment to ensure the contract terms coincide with the Owner's intent and are complete, accurate and current.
B141-1997 Part 1	1.1.4	No contract verbiage requiring Owner approval for key personnel performing services.	Changes in personnel could cause Owner to incur additional costs.	Contract verbiage should include language in Article 1.1.4 stating key personnel listed in the project team (firm employees, contractors and consultants) will substantially perform services. Architect should be required to provide qualifications and obtain written Owner approval for changes.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	1.3.5.7	The following verbiage was manually crossed out using red ink and noted, "See Amendment No. 1."  The parties hereto acknowledge and agree that each party has had the opportunity to have this Agreement review by counsel and that each party has reviewed and negotiated the terms and provisions of this Agreement and contributed to its revision or has had the opportunity to do so. Accordingly, the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement and the terms and provisions of this Agreement shall be construed fairly as to all parties hereto and not in favor of or against any party, regardless of which party was generally responsible for the preparation of this Agreement. In the event a dispute arises under this Agreement, resulting in litigation, whether in contract or in tort, including, but not limited to enforcement of the fee provisions hereof, the losing party shall pay the prevailing party all the prevailing party's costs of such litigation, including all of prevailing party's reasonable attorney's fees.  Article 1.3.5.7 was not addressed in Amendment Nos. 1 or 2.	Undefined contract terms specific to disputes, litigation and reimbursement of associated legal costs could result in the Owner incurring costs that would have otherwise been reimbursable.	All contract terms that are negated in the original agreement and noted "See Amendment No. 1" should be revised in the referenced contract amendment to ensure the contract terms coincide with the Owner's intent and are complete, accurate and current.  If the intent of the Owner was to delete this verbiage it should be removed and noted "Deleted in its entirety."



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	Article 1.3.8	There is no provision for the Architect to provide Instruments of Service to the Owner upon termination.	Owner may not have pertinent project documents that were paid for.	The contract should include verbiage stating the Architect shall provide record copies of the Instruments of Service to the Owner both in hard copy (paper) and electronic form upon termination regardless of reason.
B141-1997 Part 1	1.3.9.4	Direct Personnel Expense language does not specify unallowable charges, such as employee bonuses, training, certifications and morale programs.	Owner may be charged for costs that should not be reimbursable.	Verbiage should be added to state Direct Personnel Expenses do not include charges for personnel bonuses, training, certifications, employee morale programs or principal's bonuses.
B141-1997 Part 1	1.4.1.3	Other documents as follows: (List other documents, if any, forming part of the Agreement.)	Contract could be altered at a later date.	If there are no other documents at the time of execution, this section should be noted as "not applicable." Contract terms should never be left blank.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	1.4.2.8	The following verbiage was manually crossed out using red ink and noted, "See Amendment No. 1."  The Architect represents that to the best of its knowledge, it, its employees and its consultants have never (i) been convicted of, or indicted for, a crime related to health care, or listed by the OIG, the GSA or other Federal agency as debarred, excluded or otherwise ineligible for participation in a federally-funded health care program (e.g., Medicare or Medicaid) or federal procurement or non-procurement program (or notified of such action); or (ii) otherwise engaged in conduct for which an entity or person can be so convicted, indicted or listed (as described in (i) above). The Architect agrees not to knowingly employ or utilize any entity or person (including a consultant or subcontractor) in connection with any of the work to be performed under this Agreement who is, knows or reasonably should know has been so convicted, indicted, or listed (as described in (i) above). The Architect further agrees to notify the Owner in the event that it becomes aware of any such conviction, indictment, or listing (as described in (i) above) pertaining to it or any of its employees, subcontractors, consultants or agents	Striking this verbiage and not replacing it could result in the Architect employing personnel that have been convicted of healthcare related crimes or that are ineligible for participation in federally funded programs without the Owner's knowledge. Further, if the Owner does find out about the employment of personnel fitting specified criteria, the Owner may not have the ability to act appropriately.	All contract terms that are negated in the original agreement and noted "See Amendment No. 1" should be revised in the referenced contract amendment to ensure the contract terms coincide with the Owner's intent and are complete, accurate and current.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
		arising during the term of this Agreement or the three (3) year period following termination or expiration of this Agreement. Upon the receipt of such notice by the Owner, or if the Owner otherwise becomes aware of such conviction, indictment, or listing (as described in (i) above), if such Agreement is still in effect the Owner shall have the right to, at its reasonable option, terminate this Agreement immediately or require the Architect to immediately replace such entity or person acceptable to the Owner.  Article 1.4.2.8 was not addressed in Amendment Nos. 1 or 2.		
B141-1997 Part 1	1.4.2.13	The following verbiage was manually crossed out using red ink and noted, "See Amendment No. 1."  Not Used.  Article 1.4.2.13 was not addressed in Amendment Nos. 1 or 2. It is unclear what the Owner's intent for this article was.	The Owner's intent for this section within Scope of Services and Other Special Terms and Conditions was unclear.	All contract terms that are negated in the original agreement and noted "See Amendment No. 1" should be revised in the referenced contract amendment to ensure the contract terms coincide with the Owner's intent and are complete, accurate and current.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	1.5.4.1	Article 1.5.4 states, "For Reimbursable Expenses and charges as described in Section 1.3.9.2, and any other items included in Section 1.5.5 as Reimbursable Expenses, the compensation shall be computed as a multiple of One and one-tenth 1.10) times the expenses incurred by the Architect, and the Architect's employees and consultants, for expenses other than the following."  The CADD Graphics Printing and Plotting Charges referenced in Article 1.5.4 were manually crossed out using red ink and noted, "See Amendment No. 1."  Article 1.5.4.1 was not addressed in Amendment Nos. 1 or 2.	The Owner could be overbilled due to the application of markup on charges that were not intended to be eligible for markup.	All contract terms that are negated in the original agreement and noted "See Amendment No. 1" should be revised in the referenced contract amendment to ensure the contract terms coincide with the Owner's intent and are complete, accurate and current.
B141-1997 Part 1	1.5.6	The rates and multiples for services of the Architect and the Architect's consultants as set forth in this Agreement shall be adjusted in accordance with their normal salary review practices.	Owner could be overcharged for rate changes.	Verbiage should be added to limit rate adjustments. Architect should be required to inform the Owner in writing of rate changes. Adjustments should be limited to annually with the stipulation the first rate change should occur no sooner than one year after the contract effective date.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
B141-1997 Part 1	1.5.8	Payments are due and payable Thirty (30) days from the date of the Architect's invoice. Amounts unpaid Sixty (60) days after the invoice date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the principal place of business of the Architect.  (Insert rate of interest agreed upon.)  1.00% monthly	Owner may imply acceptance of work by paying invoices and lack recourse for items not correctly completed, identified regulatory issues or compliance issues.	Should include language stating Owner's payment of an invoice does not constitute acceptance of the work performed by the Architect.
B141-1997 Part 2	2.8.3	The Architect shall furnish or provide the following services only if specifically designated: The table lists Services, assigns Responsibility, and has a Location of Services Description field that was left blank.	Misinterpretation of services to be provided by Architect could result in additional Owner costs.	The Location of Service Description column should be completed to reference applicable contract terms. At a minimum, this should be completed for all items assigned to the Architect and items designated as TBD or Joint Responsibility.
Amendment 1	Compensation	Lump sum compensation of \$7,553,275.00 to be increased by \$300,000 per January 29, 2010 WCHAT Project Re-Initiation Fee Summary (Copy Attached) This was not attached to Amendment No. 1 as submitted by BMC and was not provided separately. None of the documents provided under separate cover were named or dated in accordance with the contract reference and the totals did not reconcile to \$300,000.	Incomplete or unsupported contract document copies could result billing disputes, contractually approved duplicate scope and/or overpayments to the Architect.	Any contract documents referenced in the contract language should be attached to the contract amendments and/or change orders. Supporting documents, especially for cost increases, should be reviewed and approved prior to change order execution to ensure there is no duplicate scope and the amounts and pricing are clearly stated.



Contract Document	Contract Article	Existing Contract Language	Risk	Improvement Recommendations
Amendment 2	N/A	The copy of Amendment No. 2 provided by BMC was not executed by BMC.  Amendment No. 2 was executed by Burn Sears, Vice President of Stanley Beaman & Sears, Inc. on August 24, 2011. It was provided by BMC on August 22, 2014; however, was not executed by BMC.	Unexecuted contract documents could result in poor cost and document control and unenforceable contract term modifications. Additionally, costs could be overbilled to the Owner.	All contract documents should be executed at the time of agreement. BMC approved and processed billings against an unexecuted contract document which is not a good practice and could result in overpayments to the Architect. This amendment increased the contract amount by \$373,797.
Amendment 2	As Follows:	Professional A/E Services for program additions and alterations of the WCHAT on Floors 2, 6, 10 and 11 as described in the attachments provided but generally including:  2nd Floor- Program Changes in Adult and Pediatric Operating Areas 6th Floor - Convert shell to Typical Adult Bed Floor 10th Floor - Program Revisions to Non-Inpatient Room Areas 11th Floor - Delete Clinic and convert to Shell Space The referenced attachments were not attached to Amendment No. 2 as submitted by BMC and were not provided separately. None of the documents provided under separate cover were named in accordance with the contract references and the totals did not reconcile to \$373,797.	Incomplete or unsupported contract document copies could result billing disputes, contractually approved duplicate scope and/or overpayments to the Architect.	Any contract documents reference in the contract language should be attached to the contract amendments and/or change orders. Supporting documents, especially for cost increases, should be reviewed and approved prior to change order execution to ensure there is no duplicate scope and the amounts and pricing are clearly stated.