



CITY AUDITOR'S OFFICE

Job Order Contracting

June 6, 2014

AUDIT REPORT NO. 1409

CITY COUNCIL

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June 6, 2014

Honorable Mayor and Members of the City Council:

Enclosed is the audit report for *Job Order Contracting*, which was included on the Council-approved FY 2013/14 Audit Plan. Job order contracting (JOC) is an alternative delivery method used for procuring construction-related services. The Public Works Division's Capital Projects Management department manages the City's JOC program, which has ranged from almost \$5 million to as much as \$34 million in recent years.

The audit identified opportunities for improvement in documenting cost proposal pricing reviews and scope of work details, involving client departments to the extent they prefer, and establishing policies and procedures to guide the program. In particular, some scope of work and cost proposals are vague or have not been formally approved before work begins. Better evidence is needed to support CPM efforts to control costs. Client departments provided examples where their own research identified more cost effective alternatives to CPM JOC cost proposals. CPM should retain documentation of required steps, such as preconstruction conferences, approval of subcontractors, progress meetings and contractor daily reports. Also, CPM should enforce key contract terms for project close out, including determination of substantial completion, final acceptance, and settlement of claims prior to final payment.

If you need additional information or have any questions, please contact me at (480) 312-7867.

Sincerely,

Sharron E. Walker, CPA, CFE
City Auditor

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
BACKGROUND	3
Figure 1. Organization Chart for Job Order Contracting Program	3
Figure 2. City JOC Contract and Job Order Process	5
Figure 3. JOC and On-Call Engineering Costs by Fiscal Year	6
Exhibit A: Key Terms	7
OBJECTIVES, SCOPE, AND METHODOLOGY	9
FINDINGS AND ANALYSIS	11
1. Cost controls for Job Order Contract (JOC) projects are not evident.	11
Table 1. Documented Negotiations for 6 Reviewed Projects	13
Table 2. Task Descriptions Provided by the Same Contractor for JOC and non-JOC Projects	15
2. Formal JOC program policies and procedures have not been established to provide scope and cost controls.	16
3. Some key JOC contract terms are not enforced.	18
MANAGEMENT ACTION PLAN	21

EXECUTIVE SUMMARY

This audit of *Job Order Contracting* was included on the Council-approved FY 2013/14 Audit Plan.

Job Order Contracting is an alternative delivery method allowed by state law for procuring construction-related services. The Public Works Division's Capital Projects Management department manages the City's JOC program, which uses individual job orders written against a "master" contract. This contract structure allows the City to procure and start smaller construction projects more quickly and provides incentives for better contractor service. On-call contracts for engineering services follow a similar process. The City currently spends about \$22 million a year through JOCs and on-call engineering contracts.

After going through a qualifications phase to select JOC contractors, CPM writes job orders for specific projects that are generally less than \$1 million in cost. Each JOC contract is for a type of construction-related service, such as landscaping or vertical construction.

To determine pricing, many public entities use a standard price book and negotiate the contractor's desired price multiplier that is to be applied to the book's base prices. Rather than negotiating contractor fees through the JOC contract, CPM's policy is to review and negotiate prices on a job-by-job basis. This policy may result in paying higher job prices. Further, in our review of six specific job orders, including all related scope of work and cost adjustments, we found little evidence of cost negotiation.

We found indications that cost proposals could be reviewed more carefully. For example, there were instances where incorrect sales tax and overhead supplies had been included. Also, scope of work statements lacked sufficient detail to enable comparison to non-JOC contract pricing. Client departments provided past examples where they researched alternate sources, including the state JOC, and found pricing lower than CPM's JOC costs.

In addition, policies and procedures are needed to guide the JOC program's operation. For example, client departments are not required to sign off on scope and cost adjustments made to their JOC projects, and contractors sometimes started work before the City Engineer approved the related cost proposal. Also, contractors are not required to prepare cost proposals and invoices at a useful level of detail for review of proposed costs and comparison to supporting records. Further, cost proposals are not required to be submitted timely. In one instance noted, the contractor did not submit a cost proposal for work to be performed, but later submitted an invoice with a brief description of scope to support the requested cost adjustment.

As there is little guidance, the types of records retained to support work progress vary from project to project. As well, written guidelines have not been developed for evaluating whether to choose JOC over other construction delivery methods or for assigning JOC projects to available contractors.

Further, some key JOC contract terms are not enforced. Specifically, the contracts require pre-construction conferences and progress meetings, which have not been consistently documented as occurring. The contractor is to submit daily reports, which are often not retained by City staff. As well, City approval of the contractor's subcontractor selections is required but not specifically given. And close out steps, such as documenting substantial completion, final acceptance, and settlement of claims, are not being consistently performed.

BACKGROUND

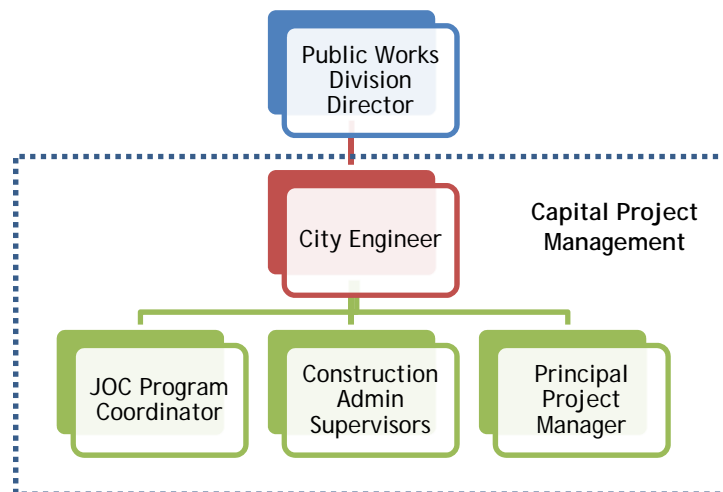
The Capital Project Management (CPM) department within the Public Works Division is the responsible unit for City capital improvement projects. The City's Purchasing Director has delegated procurement authority for design and construction services, including architects, engineers and construction managers, to CPM through the Public Works Division Director. Job order contracting (JOC), which uses individual job orders written against a "master" contract, is one of the methods CPM uses to procure these services.

Job Order Contracting (JOC) is a way of getting simple, small, and commonly encountered construction projects done easily and quickly.

-Arizona State University Alliance for Construction Excellence

Key terms used in this report are defined in Exhibit A on page 7.

Figure 1. Organization Chart for Job Order Contracting Program



SOURCE: Auditor analysis of JOC program.

Title 34, Chapter 6, of the Arizona Revised Statutes authorizes government entities to use alternative delivery methods to procure construction and professional services in addition to the traditional design-bid-build approach.¹ As one of the alternative procurement methods, job order contracting is designed to expedite smaller, commonly encountered construction projects, and particularly those that are time sensitive.

JOC contracts are procured through a qualifications-based selection process. In Arizona, government entities use a Request for Qualifications (RFQ) solicitation to establish a short list of qualified contractors. After this, statute allows the entity to either negotiate pricing and contract terms, starting with the highest ranked contractor, or to issue a Request for

¹ With the design-bid-build project delivery method, the government entity separately procures contracts for the design and the construction of a project.

Proposals (RFP) to those on the final list. On-call engineering contracts are procured in a similar manner except through an RFQ-only process. Each of these on-call and JOC contracts then establishes the terms and general requirements for all projects to be completed by the contractor under the contract.

Once the contracts are established, the specific projects are procured through individual job orders, and project terms, such as scope of work, price, and timeframe, are specified in the job order document. While a limit is not put on the number of job orders that can be completed under a single contract, ARS sets the individual JOC project limit at \$1 million unless the public entity establishes a different limit.

After the initial term, on-call and JOC contracts may be annually extended for up to four additional years. This extension option is an incentive for the contractor to provide better customer service, one of the goals of a JOC program.

Because many small projects can be completed through one procurement contract, JOC contracts can result in significant time savings. In Scottsdale, the RFQ process can take four months or longer. However, once the JOC contracts have been established, a specific job order can begin within a matter of weeks. CPM does not track this timespan, but for projects reviewed during the audit, this period varied from three to fourteen weeks.

CPM'S JOC PROCESS

Annually, CPM determines the types of JOC contracts that are likely to be needed. Based upon the capital improvement plan, an RFQ will be issued for each specific type of construction, such as vertical (buildings), horizontal (streets/bridges) or landscaping, and engineering services. The RFQ typically describes the number of contractors that will be selected, the potential types of projects involved, the evaluation criteria, and insurance and bonding requirements for the contractor.

CPM evaluates the proposers' qualifications and ability to perform the requested work and selects the companies for JOC contracts. CPM then submits the recommended JOC contracts for City Council approval. The one-year JOC construction contracts, with four available one-year renewals, typically have a maximum value of \$5 million annually. The on-call engineering contracts typically range from \$400,000 to \$900,000 per year.

As projects arise, they are evaluated for JOC based upon estimated cost, schedule and the type of work. When multiple JOC contractors are available for the particular construction type, the JOC Program Coordinator tries to divide the work equally. However, the Coordinator also assigns contractors to sites or projects where they have previously worked due to their familiarity.

The Program Coordinator sometimes requests a project cost proposal from the selected JOC contractor and provides the quote to CPM's assigned project manager and construction admin supervisor for review. In other instances, the project manager or construction admin supervisor requests the cost proposals.

When the City started using JOC about nine years ago, CPM used a “price book” pricing approach, establishing agreed-upon unit prices for common construction tasks and a price multiplier, but it has since discontinued this approach. The pre-established price approach, common for many entities using a JOC process, can use an industry standard price book or an internally developed list of common construction tasks and unit prices.² The contractor’s price multiplier (also known as the coefficient), which covers other contractor costs, is negotiated into the JOC contract. Some entities choose to negotiate the unit prices into the JOC contract. With this approach, all JOC contractors know the price basis and each states in its individual price proposals the multiplier that will be applied to these standard prices. For example, a JOC contractor may state it will apply a 1.10 multiplier, or a 10% increase, to the price book amounts for the project tasks. The price multiplier is what each contractor considers necessary to cover its costs, overhead and profit. Rather than using a price book, CPM reviews the provided proposal and determines if the price is acceptable.

During the job order phase, after CPM’s contractor assignment and cost review process, the JOC Program Coordinator writes a job order document that includes scope and cost information for review and signature by the JOC contractor, client department, and City Engineer. Once the JOC job order has been approved, the contractor begins work.

Figure 2. City JOC Contract and Job Order Process



SOURCE: Auditor review of JOC program

² Other local and state JOC programs, the Center for Job Order Contracting Excellence, and Alliance for Construction Excellence at Arizona State University reference the use of price books.

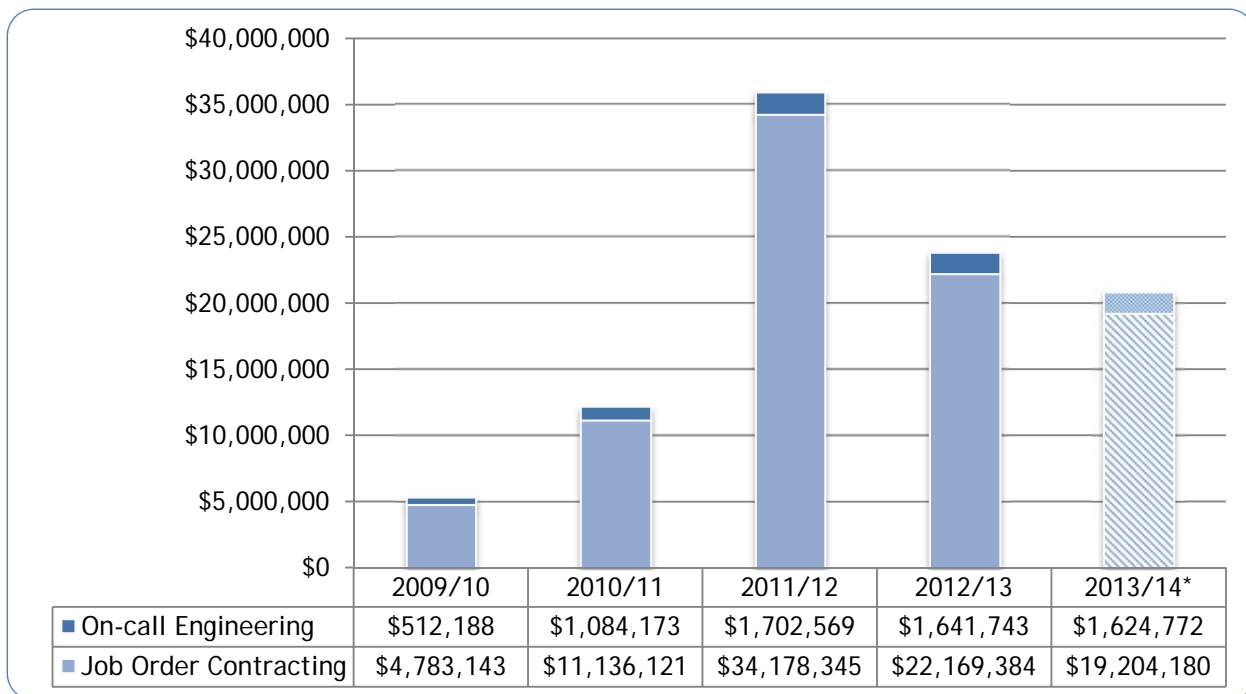
As work progresses, project scope, cost and time adjustments are often made. CPM does not require client department approval for these adjustments, but at least one department has requested to authorize any project changes as well.

JOC STATISTICS

As of March 2014, CPM had 12 JOC contracts for: landscaping, preserve trails, water treatment, water infrastructure, civil construction, vertical construction, and transportation. CPM also had 14 on-call engineering contracts for various specializations.

As shown in Figure 3, the City has spent significant amounts each year on JOC and on-call engineering contracts, growing from \$5.3 to almost \$36 million. However, JOC expenditures are trending down in FY 2013/14, which is consistent with the overall lower level of capital improvement project funding. During the last two complete fiscal years, CPM wrote an average of 90 JOC job orders per year.

Figure 3. JOC and On-Call Engineering Costs by Fiscal Year



*FY 2013/14 is estimated based upon actual costs through December 2013.

SOURCE: Auditor analysis of JOC and on-call engineering contracts and related SmartStream expenditure data.

Exhibit A: Key Terms

REQUEST FOR QUALIFICATIONS (RFQ)

A solicitation for Statement of Qualifications used to qualify a short list of providers based on criteria outlined in the RFQ document. This may be used as the sole selection process for certain types of services, but is often pre-qualification for a subsequent Request for Proposal (RFP). Typically this type of solicitation does not require submitting price information; price is negotiated after the selection process unless an RFP is issued. Responses to RFQs are reviewed and ranked by a selection committee to establish a short list of qualified providers.

REQUEST FOR PROPOSAL (RFP)

A solicitation for contractor proposals that includes qualifications, specifications, prices, and other requirements as outlined in the RFP documents. This type of procurement is often used for more complex work, and selection is not based on cost alone. For Job Order Contracting, RFP submissions typically include a technical proposal and a price proposal.

ARIZONA REVISED STATUTES TITLE 34, CHAPTER 6

This section of state statutes governs the procurement of professional and construction services for public buildings and improvements. It authorizes public entities to procure design or construction services through Design-Bid-Build, Construction-Manager-At-Risk (CMAR), Design-Bid, or Job-Order-Contracting (JOC) project delivery methods and establishes procurement guidelines.

UNIT PRICE BOOK (UPB), OR PRICE BOOK

A book or database of standard construction tasks with pre-set prices for each unit of work (unit price). A UPB can be internally developed or purchased commercially. Job order contracting typically uses the base price, which includes labor, materials, and equipment. Price books should be regularly updated and adjusted to the city's cost index.

PRICE COEFFICIENT, OR PRICE MULTIPLIER

An adjustment factor that the contractor proposes to be applied to the unit price to reflect all other contractor costs not included in the unit price. This may include costs such as contractor fee, indirect labor and supplies, mobilization costs, insurance and bond premiums, taxes, and other overhead. The types of costs included in the unit price and those in the price coefficient should be well defined in the JOC contract.

SOURCE: Auditor analysis of Arizona Revised Statutes and JOC training materials prepared by the ASU Alliance for Construction Excellence.

OBJECTIVES, SCOPE, AND METHODOLOGY

An audit of *Job Order Contracting* was included on the City Council-approved fiscal year 2013/14 Audit Plan. The audit objective was to evaluate controls over and effectiveness of the job order contracting system used to manage construction and on-call engineering contractors.

To gain an understanding of the generally accepted JOC process we reviewed audits completed by other local governments. We also reviewed online publications, training materials, and other literature issued by the Alliance for Construction Excellence at Arizona State University, the Center for Job Order Contracting Excellence, Reed Construction Data, and the Gordian Group.

To learn how the City uses JOC, we interviewed the JOC Program Coordinator, as well as a Capital Project Management project manager, construction admin supervisor, and inspector. Further, we also interviewed client contacts from various departments to gain an understanding of their role within and objectives for the JOC program.

As criteria used for this audit, we reviewed Arizona Revised Statutes Title 34, Chapter 6, and City of Scottsdale Procurement Code as well as the selected JOC contracts and job orders. Additionally, to establish benchmarks for government use of JOC, we interviewed staff representatives of three local municipalities who also use job order contracting.

To evaluate the JOC process, we selected six construction and three on-call engineering job orders for detailed review to determine if:

- Each selected project had a documented scope of work and cost proposal before work began.
- There was evidence of pricing review and/or cost negotiations.
- Changes to the scope of work or costs were properly documented and approved.
- JOC payments were within contract limits.
- There were adequate controls over invoicing and payment, including comparison of invoices to the cost proposal and any adjustments, evidence of CPM staff monitoring project progress and evidence of CPM staff accepting the final deliverables.

In addition, to assess compliance with the contract's project and annual spending limits, we compiled JOC purchase orders for comparison to project and contract limits.

Our audit found that there are opportunities for improvement in documenting cost proposal pricing reviews and scope of work details, involving client departments to the extent they prefer, establishing policies and procedures to guide the program and ensuring contract terms are followed.

We conducted this audit in accordance with generally accepted government auditing standards as required by Article III, Scottsdale Revised Code, §2-117 et seq. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Audit work took place from November 2013 through April 2014.

FINDINGS AND ANALYSIS

1. Cost controls for Job Order Contract (JOC) projects are not evident.

Documentation was usually not available for price review and negotiations for the original scopes of work or for later project adjustments.

- A. Contractor fees and prices are not established during the JOC contract procurement process, a price book is no longer used, and documentation of later negotiations during the job order phase is lacking.

- 1. Capital Projects Management's JOC contract procurement process did not include negotiation of contractor compensation or a Request for Proposals component to determine pricing, as provided by Arizona Revised Statutes. Instead, according to CPM management, the department negotiates pricing on a job-by-job basis after the JOC contracts have been awarded.

ARS §34.604(E) states that the contracting agent shall conduct negotiations with the RFQ's highest ranking finalists as determined by the qualifications-based selection process. Negotiations shall include compensation and other contract terms as determined to be fair and reasonable to the agent, and if agreement is not reached, continue to the next highest ranking finalist(s). As an alternative, the entity can issue a Request for Proposals, to include pricing information, to only those qualified candidates on the final list.

CPM understands this statutory provision to allow flexibility for the contracting agent to determine what terms will be negotiated. However, CPM's practice of not negotiating contractor fees or prices until after the contract is awarded leaves the City at risk of paying higher prices. If fair and reasonable prices are not reached at the project stage, the City may accept higher prices or may have to delay work to use a different procurement method.

On-call engineering contracts are procured through an RFQ-only process. While it is CPM's stated practice to include the agreed-upon fee schedules in the contract, we found this in one of the three contracts we reviewed.

- 2. CPM no longer uses the approach of pre-established unit prices and price coefficients as the pricing basis. Traditionally, one of the advantages of JOC programs has been quicker job cost estimates through the use of an established price book which sets base prices for various common construction tasks and materials.³ With this method, the entity and the JOC contractor negotiate the "price coefficient", a multiplier applied to the base prices, that the contractor deems acceptable to cover all other contractor costs, such as overhead and profit. For the less common items not included in a standard price book, pricing would be estimated and negotiated with the potential contractor.

³ There are industry standard price books with regionally-adjusted market prices, though some entities choose to create a price book internally or negotiate specific task prices into the contract. The commercially available price books, which can often be obtained electronically, are periodically updated based on market conditions.

A survey of three of the Valley's larger cities along with review of the state JOC process, authoritative literature and other audits of JOC programs found that the use of an adopted price book and a contractor price coefficient is the commonly accepted practice. As well, state statutes reference the use of pre-established unit pricing in the JOC procurement process.

CPM used price books when the City adopted the JOC program, but abandoned them during the recent recession as management believed the prices were not being timely adjusted. With about 90 job order cost proposals each year and numerous job order adjustment cost proposals, CPM staff may not have time to adequately evaluate the reasonableness of cost proposals without the use of a price book.

Although establishing task prices and contractor fees up-front requires more work in the program planning, solicitation, and contract negotiation phases, it will provide more assurance that job prices are fair and reasonable. Further, when base prices and contractor fees are pre-established, the staff reviewing cost proposals can focus on appropriateness of the included tasks and materials. Currently employees review the cost proposals based on their professional experience without documenting market prices for the proposed construction tasks. Using an industry price book and an established contractor-specific price multiplier can help ensure fair pricing.

3. Policies and procedures have not been established related to evaluating and negotiating cost proposals, so it appears negotiations either occur infrequently or are not documented. Further, although it is CPM's stated practice to negotiate individual job orders, it is not clear whose responsibility this is or whether it is consistently done.

According to CPM management, the JOC Program Coordinator is responsible for maintaining documentation of the JOC process. Communications with the contractor regarding project scope and cost are often handled by the individual project managers or construction admin supervisor. Occasionally, cost negotiations are prompted by the client department's objections to the cost proposals that CPM has presented. According to two client departments, these negotiations are often unsuccessful and the client department is not invited to participate in the process. As shown in Table 1 on page 13, of the six projects selected for review, two had documented communications with the contractor about costs.

(continued on page 13)

Table 1. Documented Negotiations for Six Reviewed Projects

	Cost Proposal	Final Project Cost	Documented Negotiations	CPM Identified Savings
1	\$467,206	\$974,438	No	-
2	\$820,320	\$966,678	No	-
3	\$500,000	\$510,496	No	-
4	\$1,268,055	\$1,390,155	No	-
5	\$131,914	\$166,729	Yes	\$7,208
6	\$781,877	\$814,342	Yes	\$9,240
	\$3,969,372	\$4,822,838		\$16,448

SOURCE: Auditor Review of CPM project files

To further ensure reasonable job order prices, management should establish procedures for evaluating and negotiating cost proposals, including documenting decision-making and involving the client departments to the extent each prefers.

- B. Once CPM accepts a cost proposal and the JOC project contract is signed, the job order is treated as a fixed price agreement unless some part of the scope is adjusted. Therefore, the cost proposal reviews should be thorough to ensure fair pricing.
 - 1. In one project reviewed, auditors noted that the contractor overestimated the sales taxes cost by about \$9,400. This resulted from the contractor applying an incorrect sales tax rate, applying the sales tax rate to the calculated sales tax amount, and sometimes applying sales tax to materials.
 - *Applying incorrect sales tax rates*—Construction contractors pay 65% of the total sales tax rate (8.95% in the City of Scottsdale at the time of this project). There were seven different cost proposals associated with this contractor’s project due to scope adjustments. Instead of applying the correct 5.82% rate in each of the seven cost proposals, the contractor applied sales taxes rates varying from 5.82% up to 10.8%.
 - *Applying the sales tax rate to the sales tax amount*—The cost proposal also included an additional tax amount that appeared to be the tax rate applied to the tax amount. While this amount is small on a project-by-project basis, it appears that the contractor consistently includes this amount. Over the course of an annual \$5 to \$7 million contract, this could equate to about \$17,000 to \$24,000 each year.
 - *Including sales tax on the cost of materials*—At this time, contractors are exempt from paying sales tax on materials used in a project because they pay sales taxes on the total project amount.

Auditors observed a few instances where invoices that were submitted to support cost estimates showed that the materials cost included sales tax.

For one of these instances, the contractor also provided a later supplier invoice for the same purchase; the second one did not include sales tax. This indicates the contractor requested an adjustment from its supplier after the job order price had been approved.

Further, the contractor bases its overhead markup and additional sales tax calculation on these inflated materials amounts, therefore the impact is multiplied. In this example, the additional markups totaled about \$950.

2. In one cost proposal, the contractor included overhead supplies, such as paper towels, gloves, earplugs, water coolers, and paper cups. Also included were purchases of small tools, such as dollies and work lights, which appear to have been retained by the contractor. These types of items are typically included in the contractor's overhead costs. After deleting two items specifically noted by the client department, CPM approved this cost proposal including the other supplies and small tools.
3. In a JOC water treatment plant construction project, several tasks for engineering services were subcontracted totaling \$144,000. The original cost proposal included two tasks for the engineering services firm. Two subsequent job order adjustments added two additional tasks.

CPM does not require contractors to submit subcontractor invoices, but they were obtained upon auditor request. The subcontractor invoices obtained from this contractor showed that cost estimates for the first two engineering tasks were overestimated by nearly 95% (about \$38,000) and the cost estimate for the last task was underestimated by 40% (also about \$38,000). The first two tasks, which were originally proposed, included a fairly detailed scope of work from the subcontracting engineering firm. However, the last task, which was added through a job order adjustment, did not include the engineering firm's scope of work description. Further, the contractor's open-ended scope description indicated this task and its pricing may have incorporated work performed on multiple capital projects.

As a result of this project's engineering costs, the client department and CPM agreed that going forward professional services subcontracted through JOC would be limited to \$25,000 or less. This is the limit established in the City's procurement code for direct selection of professional services providers. However, professional services subcontracted through on-call engineering contracts are still allowed to exceed \$25,000.

- C. As a further measure of cost negotiation, we attempted to compare task or material pricing between JOC projects and non-JOC projects. But the vague scope and task descriptions and differing units of measure made this comparison difficult for the JOC projects we reviewed. Table 2 on page 15 provides examples of the variation found in task descriptions, even within the same contractor's proposals and contracts.

Table 2. Task Descriptions Provided by the Same Contractor for JOC and Non-JOC Projects

JOC Proposal	Non-JOC Proposal
Golf Course Tee Construction	Golf Course Tee Construction <ul style="list-style-type: none"> • Proposed Tee Core-Out and Sub Grade Prep - Avg. 5" Depth • 4" Perf. Tee Tile with Gravel • Mortar Sand and Install - Avg. 5" Depth • Laser Level Finish Grade
Golf Course Bunker Construction with Sand	Golf Course Bunker Construction <ul style="list-style-type: none"> • Bunker Sand Core-Cut - 5" Depth • Remove Existing Drainage & Gravel • Bunker Edging & Subgrade Prep • 4" Perf. Bunker Tile with Gravel - 15" Spacing • Better Billy Bunker Liner • Augusta White Bunker Sand and Install - 4" Depth

SOURCE: Auditor analysis of Capital Project Management contracts.

- D. As a result of the difficulty in comparing costs between different contracts, we consulted with departments that are CPM clients and have specialized staff, including engineers. Several examples were provided where the client departments believed, based upon their research, the JOC proposal approved by CPM was too high. In one case the department declined the JOC proposal and used the State of Arizona's JOC contract to procure the services. This resulted in \$20,400 savings after paying a 5% administrative fee of about \$37,000 to the state's third-party administrator. Because client department funds and capital plans are being affected by JOC program decisions, their participation should be allowed in cost negotiation and decision making.

Recommendations:

The Public Works Division Director should:

- A. Require CPM to negotiate contractor fees and prices during the JOC contract procurement process. This may be accomplished by adopting a price book and documenting negotiations or using an RFP process. Further, CPM should establish policies and procedures for the evaluation and negotiation of job order prices.
- B. Require CPM to document a thorough review of JOC cost proposals to eliminate unnecessary costs.
- C. Require CPM to obtain specific scope of work and task descriptions, along with material quantities, subcontractor tasks, if any, and other details applicable to each project before approving cost proposals and initiation of work.
- D. Require CPM to develop procedures for client department participation in JOC scope of work development, cost negotiations and other decision making.

2. Formal JOC program policies and procedures have not been established to provide scope and cost controls.

Even though the City's JOC program has been in place for about nine years, the program does not have written policies and procedures besides what is stated in the JOC contracts and a process diagram. Current procedures are communicated informally by CPM management and the program coordinator to other CPM staff, client departments and contractors. This informal method does not provide consistent guidance to staff regarding roles and responsibilities or clarity for client departments and contractors regarding program operations.

A. Adjustments to job order scope and costs were not required to be reviewed and approved by the client department, and work sometimes started before the cost proposals were approved by the City Engineer. With the exception of one department, CPM does not require that job order adjustments be approved by client departments. For the projects we reviewed, the adjustments ranged from 2% to 109% of the original job order amount.

1. In seven of 23 job order and work order adjustments reviewed, work started before the request for adjustment was submitted and the City Engineer's approval was documented. There is no indication that the work was of an emergency nature. In these instances, it appears that the field inspector, construction admin supervisor, or project manager may have directed the contractor to begin work, but that instruction is not clearly documented. Further, CPM had not given these positions authority to approve work that results in added costs.⁴

2. Adjustments to project scope and cost impacted the client department's budget, yet the department's consent was not obtained. In one JOC project reviewed, the project work being done affected logo-stamped concrete paths owned by the homeowners association. The CPM project manager approved a request to have a concrete stamp designed and manufactured to customize the replacement concrete with a matching logo. In addition to the two logo stamps ordered for production, the project manager added a third custom stamp so it could be given to the homeowners association as "thank you" gift. The three stamps costing more than \$500 were charged to the client department's cost center without getting its approval. In addition, the client department reported to us that they would not have approved the expense if asked.

On the same project, another department submitted a request for the contractor to do additional landscaping work across the street. The CPM project manager approved the added work as it saved money to do the project while construction crews were already on site. However, the client department was not asked to approve the additional work, and \$26,000 in additional costs was charged to its project. These costs may have been more appropriately paid out of a different department's budget.

3. CPM staff does not appear to be providing contractors with consistent direction on required procedures. We noted a couple payments where contractors billed substantial work to investigate a project without providing a cost estimate for this preliminary work. The client department's staff indicated they had only

⁴ CPM project managers have signature authority for amounts less than \$20,000 for Public Works Division cost centers only.

requested preparation of a cost estimate, and the department had not been billed for these in the past. In another instance, the CPM project manager approved a contractor to perform additional work, but did not require a request for adjustment until the pay request was submitted.

By allowing work to be performed without first obtaining cost estimates and management approval, City departments may have to spend more than necessary or pay for work that the client department does not deem to be of highest priority.

B. More consistent documentation is needed to support amounts paid. Cost proposals and invoice details vary significantly by contractor, and monitoring documentation varies by staff member.

1. Though some contractors provide cost proposals based on units of work; some submit cost proposals in categories, such as labor, materials, subcontractor costs; and others use a combination of both.

- For one project adjustment reviewed, the CPM project manager did not require the contractor to submit a cost proposal. Instead, the project manager accepted a brief email that additional work had been performed and the contractor's invoice for \$20,000.

Before CPM made an adjustment to cover this invoice, the contractor submitted a brief scope of work description stating the contractor would also coordinate the work of a subcontractor. The contractor proposed \$20,000 to respond to City requests regarding transportation related matters and oversee the subcontractor. The cost proposal also listed \$25,000 for the subcontractor, a former CPM employee, but no further detail was provided on the subcontractor's work.

This request was approved as submitted and CPM adjusted the project cost for \$45,000. The contractor's invoice, submitted at the same time, billed for 100% of the contractor's work and 39% of the subcontractor's stated amount. (An additional payment has subsequently been made for the subcontractor's work.)

- Another contractor's cost proposals included details on labor hours, materials, equipment, and subcontracted work, but submitted pay requests at a highly summarized level. This invoicing made it difficult to determine what portions of the cost proposal's scope had been completed and earned.
- Some contractors submit invoices for their materials and subcontracted work with their pay requests; others do not submit any support.
- Because there is not a required pay request format, the program coordinator takes the contractor submitted information and types it into a standard form.

2. Besides contractor inconsistencies that are allowed, staff work is also inconsistently documented. Specifically, the field inspector, the construction admin supervisor, and/or the project manager may sign off on the contractor's pay request and submit it to the program coordinator for payment. However, the individual staff members determine the documentation kept to support the project's work progress and payment

approval. For example, three of the six JOC projects reviewed did not have sufficient supporting details in the field inspector logs, such as inspections and measurements of completed work, materials received, and progress meetings with the contractor.

- C. Various other issues can also be addressed by establishing JOC program policies and procedures:
1. *Guidelines for choosing JOC over other construction delivery methods*—The JOC method is best suited for smaller, less complex projects that need to be completed quickly, while other delivery methods may be better suited for larger, more complex projects and those that are more budget sensitive. During our review, we noted 4 of the 12 JOC contracts were modified to allow higher individual project limits, some as high as \$1.75 million. However, there was no documentation to indicate why JOC was a more cost-effective choice for the City compared to other procurement methods.
 2. *Policy and documentation requirements for assigning JOC projects*—There is currently no written guidance on how to evaluate project assignment when there are multiple qualified JOC contractors. Having a management policy and defined process with documentation will help minimize the potential for an appearance of favoritism.

Recommendations:

The Public Works Division Director should ensure policies and procedures are developed for the JOC and on-call engineering programs. Specifically, the policies and procedures should:

- A. Require CPM to evaluate and approve JOC cost proposals, and any adjustments, before contractor work is performed. The cause for any exceptions to this requirement should be documented. Further, consider establishing policies and procedures regarding client department approval of scope and cost changes.
- B. Provide documentation minimum requirements to include the level of detail for contractor cost proposals and pay requests and staff documentation of project monitoring to validate costs and provide progress and quality assurance before payments are made.
- C. Provide a process for evaluating the best suited procurement/delivery method for a given project, and evaluating project assignments.

3. Some key JOC contract terms are not enforced.

Although included in the standard JOC contract terms, CPM is not enforcing or documenting certain requirements. These include project progress reporting and project close-out and subcontractor selection reviews.

- A. The JOC contract requires the contractor and City staff to hold a pre-construction conference to discuss project schedule, cost breakdown (including a schedule of values), and coordination of work and responsibilities among all parties. The contract also requires the contractor and City staff to have progress meetings before pay requests are submitted. City employees did not consistently document

these meeting discussions. In fact, some explained the contractor may be requested to prepare the meeting notes.

Further, the JOC contract requires the contractor to keep daily reports with detailed information such as work performed, equipment utilized, and workers on site, and provide the reports to the field inspector or project manager. However, CPM staff is not consistently requiring these reports to be submitted. We found evidence of these types of reports for 3 of the 6 projects reviewed.

- B. CPM is not reviewing the contractor subcontractor selections for compliance with approved procedures. The JOC contract provides CPM's subcontractor selection procedures as required, but allows the contractor to use its own subcontractor selection plan if the plan is approved by the City.

Five of the six JOC contractors we reviewed had included a description of their subcontractor selection plan in the Statement of Qualifications as required by the RFQ.⁵ However, there is no indication that these plans were reviewed and approved by the City. If approved, ARS 34-605 requires the alternative selection plan to be included in the contract.

In addition, the JOC contract requires the contractor to provide its recommended subcontractors based on the approved selection plan. The City is to subsequently provide written approval of the subcontractors. Based on file reviews and discussion with the program coordinator, it appears subcontractors were considered approved as included in the cost proposals.

Besides compliance with statute, reviewing the subcontractor selection process helps ensure that the City receives quality work at a fair and reasonable price.

- C. Steps required to close out a project were infrequently performed although the JOC contract provides detailed requirements. Specifically, for the tested projects, we did not find documentation of:
- *Substantial Completion* - When essentially all construction has been completed, except for the final punch list work, the City is to perform a walk-through inspection with the contractor and issue a Certificate of Substantial Completion. This certificate establishes the job order's end date for purposes of determining whether the project was completed timely and whether any liquidated damages are applicable.
 - *Final Acceptance* - After City staff and the contractor perform a final walk-through inspection and the City receives all relevant operating and maintenance documents, the City is to issue a Final Acceptance Letter. This letter establishes the beginning of the warranty period.
 - *Final Payment Request* - After the Final Acceptance Letter has been issued, the City is to make the final payment after the contractor has provided an Affidavit Regarding Settlement of Claims, indicating there are no remaining claims that may affect the City's interests relating to this project, and a General Release waiving, upon receipt of final payment, all further claims against the City.

⁵ RFQ documents reviewed did not inform applicants of the option to use the City's subcontractor selection process. It only required applicants to provide a description of their subcontractor selection plans.

These contract requirements were not completed by CPM for four of the six JOC job orders reviewed by auditors and were partially completed for the other two. For one of these two projects, the file contained the affidavit and the general release of claims; the other project file documented the Final Acceptance notice.

Based on interviews with CPM staff, the final inspections and close out documents were not considered to be a priority and are only performed for some JOC projects.

Recommendations:

The Public Works Division Director should:

- A. Ensure CPM is adhering to contract terms, such as requiring preconstruction conferences, progress meetings, and contractor daily reports or document exceptions.
- B. Require CPM to review subcontractor selections and document any necessary changes or approval.
- C. Require CPM to complete the project close out procedures to document substantial completion, final acceptance and settlement of claims prior to final payment.

MANAGEMENT ACTION PLAN

1. Cost controls for Job Order Contract (JOC) projects are not evident.

Recommendations:

The Public Works Division Director should:

- A. Require CPM to negotiate contractor fees and prices during the JOC contract procurement process. This may be accomplished by adopting a price book and documenting negotiations or using an RFP process. Further, CPM should establish policies and procedures for the evaluation and negotiation of job order prices.
- B. Require CPM to document a thorough review of JOC cost proposals to eliminate unnecessary costs.
- C. Require CPM to obtain specific scope of work and task descriptions, along with material quantities, subcontractor tasks, if any, and other details applicable to each project before approving cost proposals and initiation of work.
- D. Require CPM to develop procedures for client department participation in JOC scope of work development, cost negotiations and other decision making.

MANAGEMENT RESPONSE: Agree, with changes to recommendation

PROPOSED RESOLUTION: Management concurs with recommendation 1A as it appeared in the original draft report, that CPM ensure compliance with statutory requirements for establishing prices, rather than specifically requiring negotiation of fees and prices during the JOC contract procurement process.

ARS Title 34 does not require the City to negotiate contractor fees and prices as part of contract procurement. Instead, the statute allows the flexibility of either including specific fees and pricing in the base contract, or allowing negotiated fees and pricing when the City executes individual job orders. Historically, CPM has used each of these options depending on the specific needs of the City.

Negotiating fees and pricing in the basic contract has advantages, but also has clear disadvantages:

- The scope of some JOC's is often made up primarily of specialty items that do not lend themselves readily to unit pricing. The vertical construction and water infrastructure JOC's are examples.

- For items that are appropriate for unit pricing, negotiating pricing at the time of contract execution means a contractor has to honor that pricing for the term of the contract, usually at least one full year. Contractors often cannot get firm bids from suppliers or subcontractors for that length of time, and their response is generally to price risk into their unit pricing, resulting in higher unit prices for the City.

- In earlier contracts where we negotiated prices at the time of contract award we included contractual clauses to allow for subsequent adjustments to unit prices to reflect current economic conditions. While allowing some flexibility, these procedures all require a

second set of negotiations to make the adjustment, and there is no guarantee the parties will be able to arrive at mutually agreeable terms for adjustments.

Management agrees that, in some cases, negotiating fees and unit pricing prior to award of the basic contract is advantageous, and will consider using this option in appropriate situations. We feel, however, that it is counterproductive to limit ourselves by eliminating an option that complies with the statutes and which we have used with success. Instead, we agree with the overall intent of this recommendation to conduct a more structured negotiation process, and then to document it fully.

We propose to better ensure full compliance with statutory requirements by developing a "Job Order Contracting Procedures Manual" to establish required steps and documentation for price negotiation, cost proposal review, and work and task description minimum required documentation.

RESPONSIBLE PARTY: City Engineer

COMPLETED BY: 12/31/2014

2. Formal JOC program policies and procedures have not been established to provide scope and cost controls

Recommendations:

The Public Works Division Director should ensure policies and procedures are developed for the JOC and on-call engineering programs. Specifically, the policies and procedures should:

- A. Require CPM to evaluate and approve JOC cost proposals, and any adjustments, before contractor work is performed. The cause for any exceptions to this requirement should be documented. Further, consider establishing policies and procedures regarding client department approval of scope and cost changes.
- B. Provide documentation minimum requirements to include the level of detail for contractor cost proposals and pay requests and staff documentation of project monitoring to validate costs and provide progress and quality assurance before payments are made.
- C. Provide a process for evaluating the best suited procurement/delivery method for a given project, and evaluating project assignments.

MANAGEMENT RESPONSE: Agree

PROPOSED RESOLUTION:

- Per finding #1, a "Job Order Contracting Procedures Manual" will be prepared to establish process for evaluation and approval of JOC cost proposals, including any exceptions (note deadline for this item is 12/31/14).
- Significant changes in work scope to be reviewed with client department to ensure compliance with project goals and established budget.
- Selection of procurement method for any project to be approved by Project Manager, Construction Administration Supervisor and City Engineer based on nature of project,

schedule, budget and other project specific issues identified during design and documented as memo to file with decision rationale.

RESPONSIBLE PARTY: City Engineer

COMPLETED BY: 6/30/2014

3. Some key JOC contract terms are not enforced.

Recommendations:

The Public Works Division Director should:

- A. Ensure CPM is adhering to contract terms, such as requiring preconstruction conferences, progress meetings, and contractor daily reports or document exceptions.
- B. Require CPM to review subcontractor selections and document any necessary changes or approval.
- C. Require CPM to complete the project close out procedures to document substantial completion, final acceptance and settlement of claims prior to final payment.

MANAGEMENT RESPONSE: Agree

PROPOSED RESOLUTION: A project "check list" will be prepared and documented in the procedures manual for each project listing contractual requirements to be completed (preconstruction meeting, progress meetings, contractor daily reports, subcontractor selections, substantial completion, final acceptance form, settlement of claims form), with documentation to be filed in the project files.

RESPONSIBLE PARTY: City Engineer

COMPLETED BY: 6/30/2014

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