

Initial Report - CMAR Selection
Construction Manager at Risk Contract
Arizona Department of Transportation
Cordes Junction Traffic Interchange Improvements
Yavapai County, AZ

Cordes Junction CMAR
Initial Report for SEP 14
017 YV 261 H426901C
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A. Introduction

The Arizona Department of Transportation submits this initial report under the provisions of Special Experimental Project Number 14 (SEP 14) for the use of innovative contracting practices. This initial report includes a description of the scope of the CMAR project, a brief history of the contract selection process for Preconstruction Services, industry comments on the process and lessons learned to date.

Approval to use the Construction Manager at Risk (CMAR) alternative delivery process was given by the Federal Highway Administration (FHWA) on May 6, 2008. The Department prepared the Request for Statements of Qualifications and advertised in December 2009.

A seven member selection team consisting of ADOT employees and representatives from the contracting and consulting communities evaluated and scored the submitted Statements of Qualifications (SOQs). The highest ranked firms were invited for oral interviews. The selection team evaluated and scored the oral interviews and the scores were combined with the SOQ scores. The Department negotiated a Preconstruction Services Contract with the highest ranking firm and the contract was executed on July 19, 2010.

B. Scope

The scope of work for this traffic interchange improvement project consists of the design and construction of interchange improvements to the Cordes Junction Traffic

Interchange (1-17/SR 69 TI). The work includes complete removal of three bridges, construction of seven new bridges, reconstructing local access roads, and construction of two modern roundabouts. The new TI is a diamond interchange located approximately Y4 mile north of the current 1-17/SR 69 TI. The project also includes aesthetic treatments, landscaping and erosion control.

C. History

Development of the Request for Statements of Qualifications

After approval of the SEP 14, the project team finalized the Request for SOQs. The evaluation criteria in the Request for SOQs were developed to illicit responses from the prospective CMARs that would allow the Selection Team to evaluate the firms and determine which could provide the most value as a member of the project team.

The Department adopted a scoring method used by the Utah DOT in their Construction Manager General Contractor (CMGC) program. The scoring method was based on a normal distribution of data which shows that 90% of values will be within 1.65 standard deviations of the mean. The Selection Team's scores were compiled. Individual Selection Team Member scores that deviated from the average combined SOQ and interview scores by more than 1.65 times the standard deviation were identified. Scores that fell outside of this range were discarded. The firm's average score was then recalculated using the remaining scores. This scoring method reduces the impact of an individual Selection Team Member's scores that differ significantly from the average scores. The scoring process was presented to the contracting community for their input prior to its use. The scoring process was described in detail in the Request for SOQs.

Advertisement:

The Department advertised the Cordes Junction CMAR project on December 2, 2009. The Request for Statements of Qualifications, design plans, technical reports and environmental documentation were made available. The plans included roadway geometries, pavement structural sections and cross sections, removal plans, bridge plans, preliminary aesthetic treatments, and pavement marking plans. The following technical reports and environmental documents were provided:

- Final Environmental Assessment and related documentation
- Draft Foundation Report
- Draft Hydrology Report
- Draft Geotechnical Investigation Report
- Traffic Volumes
- Preliminary Bridge Selection Reports

This material was made available in two forms, a proposal package by which prequalified contractors could submit an SOQ, and an informational package for others. Sixteen proposal packages and nine informational packages were purchased.

Prior to the advertisement for SOQs, potential CMARs had the option to discuss the project or ask questions of ADOT and design consultant staff. Once the project was advertised, all contact between the Department and prospective CMARs was through the Contracts and Specifications representative. The C&S representative received, documented and responded to all questions. One addendum was issued which changed the submittal date from January 5 to January 12, 2010.

The advertisement stated that interviews would be conducted with at least three and up to five firms.

Proposals Received

Fourteen SOQs were submitted. All submittals were reviewed to make sure they complied with the requirements described in the Request for Statements of Qualifications. One submittal was rejected for not complying with the SOQ requirement limiting the submittal to 20 pages. The contractor submitting the SOQ protested the rejection and after consideration, the State Engineer upheld the rejection.

Evaluation of the SOQs

The selection team was comprised of five ADOT employees, a senior management employee of a licensed contractor not submitting an SOQ, and a senior management employee of a civil engineering design firm not involved in the design of the project. Arizona Revised Statutes require that at least half of the team be registered engineers or architects. The Department employees on the Cordes Junction CMAR Selection Team were all registered engineers, three representing construction and two representing design.

A Selection Team kickoff meeting was held on January 19, 2010 to distribute the SOQs to the team to evaluate, to provide guidance to the team on the selection process, and to review the selection team schedule. A brief presentation on the project was given by the Department's design consultant. Selection Team members evaluated each prospective CMAR's responses to the evaluation criteria listed below. Points were assigned to each criterion based on its importance. A maximum total score of 110 could be achieved.

Evaluation Criteria and Possible Points:

- **Qualifications of Firm, Maximum Score: 15**

The prospective CMAR is asked to provide three comparable projects; describe their method of allocating staff, material and equipment to projects; describe how they will interface with stakeholders; provide methods they will use to address project issues, contract modifications and schedule recovery; list . all ADOT projects where the firm provided CMAR, construction management and general

or subcontractor services in the last five years; and describe their approach to constructability reviews and value engineering.

- **Experience of Key Personnel**, Maximum Score: 20

The firm is asked to list all key personnel to be assigned to the project; how long the key personnel have been with the firm; list a minimum of two comparable projects.

- **Understanding of the project and approach to performing the required services**, Maximum Score: 45

Prospective CMARs are asked to discuss the major issues they have identified on the project and how they will address them; describe their project management approach and CMAR organization for preconstruction and construction; describe the approach to coordinating with the project team and other stakeholders; and discuss their understanding of traffic control and construction sequencing required for the project.

- **Safety Program**, Maximum Score: 10

Firms are requested to provide their overall approach to safety and to provide their Worker's Compensation Experience Modifier Rate (EMR) certification for the past five years.

- **Miscellaneous Other**, Maximum Score: 20

This category asks prospective CMARs to identify any contract or subcontract held by the firm or officers of the firm that have been terminated within the last five years; identify claims or issues arising from a contract that have resulted in litigation, arbitration or have risen through the Department's Escalation Level/Issue Resolution Ladder; describe the circumstances and outcomes. The firms are asked to list all ADOT projects where liquidated damages were assessed and explain why they were assessed; and to explain how the firm would manage construction quality control, traffic control and subcontractors during the construction phase.

The Selection Team submitted their scores to the C&S representative prior to the Selection Team meeting held on February 3rd, 2010. The team was presented with the combined scores and was given the opportunity to provide comments and discuss final SOQ scores. The team determined the number of firms to be invited for oral interviews and generate a list of questions to be asked at the interviews. After thorough discussion, agreement was reached to invite four firms for oral interviews. The four top ranked firms were invited to interview. They were informed by phone and confirmation letter. The other firms were notified by mail.

Oral interviews were held on February 17 and 18, 2010. The order of interviews was determined randomly. Each firm was limited to a 45-minute presentation, a 35-minute question and answer period and a 10-minute wrap-up. A moderator timed each segment of the interviews. After each presentation, the moderator asked each firm the questions generated by the selection team. Twelve questions were asked of all firms followed by firm specific questions. As time permitted, additional questions related to the presentation were asked by selection team members. The maximum score achievable on the oral interview was 25 points. Oral interview scores were added to the SOQ scores to determine the final score and rank order of each potential CMAR.

Using the scoring criteria specified in the SOQ, the four firms were ranked. Elimination of outlying scores did not affect which firm was ranked number one. The use of the scoring criteria did affect the order of the second and third ranked firms.

The Selection Team's rankings of the top four firms were presented to the State Engineer. The State Engineer concurred with the rankings and the firms were notified by telephone within five business days after the final interview. The firms were told what their ranking was and the names of the other firms on the final list in alphabetical order. Arizona Revised Statutes states that until execution of a contract by the Department, only the name of each firm on the final list may be made available to the public.

A brief outline of the project milestones is given below:

Advertise Request for SOQs	December 2, 2009
Issuance of Addendum No. 1	December 15, 2009
Submittal deadline for SOQs (4:00PM MST.)	January 12, 2010
Selection panel kickoff meeting	January 19, 2010
Panel meeting to shortlist for oral presentations	February 3, 2010
Oral interviews	February 17 & 18, 2010
Notified highest ranked firm	February 23, 2010

After the preconstruction services contract was executed with the CMAR, firms submitting SOQs were given the opportunity for a debriefing.

Negotiation Process

On March 8, 2010 a seeping meeting was held to introduce Vastco/Sundt Joint Venture, the top ranked CMAR, to the project team and to discuss the project scope. Roles and

responsibilities of the team members were discussed and agreed upon. The project scope was presented along with the critical milestones and general project timeframes.

After the seeping meeting, negotiations for a preconstruction services contract began. An initial cost proposal for preconstruction services was submitted by Vastco/Sundt JV on April 14, 2010 and after negotiations, the contract was executed on July 19, 2010. The preconstruction services contract initially had a completion date of March 1, 2011. That date subsequently extended to May 30, 2011.

Had the Department and the top ranked firm not been able to come to agreement on the preconstruction services contract, the Department would have the option to begin negotiations with the next highest ranked firm.

D. Lessons Learned

1. Selection Team Comments:

This is the third CMAR project undertaken by the Department, but the first utilizing Federal funds. The following summary presents feedback from various selection team members on the selection process and how it might be improved. These comments will be considered by the Department as potential process improvements for future CMAR projects:

- a) Use the standard deviation scoring method on the SOQ scores to determine which firms to invite for interviews. This suggestion was agreed upon by the entire Selection Team.
- b) Develop a method to address tied scores in the event that they occur. Based on this suggestion, the Department is working to develop a process.
- c) Provide a list of what the Department wants covered in the oral interview presentations. Provide the list to the firms with their invitation to interview. This suggestion met with mixed responses. While some members agreed, others felt that evaluating what the potential CMARs elected to present was an important part of the selection process. In a qualifications based selection process, allowing firms the opportunity to present what they believe is important may separate them from their competition which is the goal of the selection process.
- d) Questions should be provided to the firms prior to the oral presentation/ interview. The panel members were somewhat split on this issue. Evaluating how the potential CMAR's key personnel work together, think on their feet and interact is a part of the interview process along with their presentation. Providing the questions to the firms in advance would remove that component of the evaluation.

e) The point total for the oral interviews should be increased compared to the total possible points for the SOQ. Scoring for this project was 11 0 and 25 points for SOQ and interview respectively. Several panel members thought 60% of the points should be allocated to the SOQ and 40% to the interview. The Department will incorporate comment 1 (a) into its future CMAR projects.

The Department is working on a process for handling tied scores and it will be incorporated once it is finalized. Comments 1 (c) and 1 (d) are under consideration and may be incorporated as the CMAR process evolves. Comment 1 (e) is being discussed. It is likely that the next CMAR project will have a higher percentage of the possible points allocated to the interview but it will be less than 40%. The decision for assignment of points to the SOQ and oral interviews will be made on a project by project basis.

2. Lesson Learned from the Selected CMAR:

The firm ranked number one is a joint venture between Sundt Construction and Vastco Inc. Sundt is a large construction company with past alternative delivery experience both for ADOT and various local agencies. Vastco, a local Northern Arizona contractor, did not have experience with the CMAR process but was interested in developing that expertise. Vastco and Sundt came together to combine Sundt's knowledge of the CMAR process and Vastco's local experience in the project area. Sundt proposed to mentor Vastco in the CMAR process providing value to the Department by increasing the pool of experienced CMAR contractors.

This Joint Venture illustrates one creative solution for firms wanting to obtain experience in an alternative delivery method.

E. Industry Comments

The Arizona AGC solicited comments from their members on the Department's CMAR selection process. The following comments were submitted:

1. No debrief, small short list, hard to get foot in the door to even be interviewed

Arizona Revised Statute (ARS 28-7366 G) states that no information other than the names of the firms on the final list can be made public until the execution of a preconstruction services contract. After execution of the contract, contractors who submitted SOQs have the opportunity for a debriefing.

The number of firms to be interviewed is governed by statute. ARS states that the number of firms to be interviewed will be at least the number of firms that will be on the final list and no more than the number of firms on the final list plus two.

If it is difficult to get a foot in the door then the qualifications based selection process is working. Only the most qualified firms will be invited to interview.

2. Selection Panel should not have a contractor representative on the panel that just won an ADOT project as part of a JV but that is not proposing as part of the one they are a panelist for. Watch this more carefully.

To minimize perceived conflicts of interest, the Department will request two or three contractors as possible members to the Selection Team. After the SOQs have been submitted, the State Engineer will select which contractor will serve on the Selection Team considering possible relationships between the proposed panel members and those firms submitting SOQs.

Although design firms were not mentioned in the above comment, the Department will also monitor possible relationships between the designer on the selection team and contractors submitting SOQs to minimize any perceived conflicts of interest.

3. Department should not hard bid the project if they can't negotiate GMP with contractor; they should go to who received the next highest score.

While Arizona Revised Statutes would allow the Department to start the process again with the firm ranked second, the Department made the decision early in its development of CMAR specifications to not allow that option. The Department will make every effort to come to an equitable GMP for a given project. However, by the time that it is determined that an agreement cannot be reached with the first-ranked firm, the design phase of the project will be nearing completion. Consequently, the Department will elect to hard-bid the project at this stage.

4. CMAR's should not be used for projects < \$10m. It is a waste of department and contractor time.

This comment supports the Department's premise for selection of projects for the CMAR process. However, there may be exceptions. Highly specialized or complex projects under \$10 million may come along that would benefit from the use of the CMAR alternative delivery method. While construction costs for FMS and landscape projects will probably be under \$10 million, the Department may consider using CMAR on these types of projects.

5. Selection panels are too large and no one listens to the professional or most experienced - dilutes the opinions and the vote.

The Department strives to assemble the best selection team for each project. All members of the team are professionals. The size of the panel allows individuals with varying backgrounds to provide input. All members have the opportunity to evaluate the firms and express their opinion and point of view. There is no vote. The standard deviation scoring methodology is used to keep extreme outliers from unduly affecting the ranking of firms.

6. Why are only short listed proposals given out for review in debrief?

To date the Department has made only the winning firm's SOQ available for viewing during the debriefings. The Department has reviewed this policy and will continue to provide only the winning firm's SOQ for viewing. The firm receiving a debriefing will also receive a comparison of their scores to the winning firm's scores and a compilation of comments made by the Selection Team on their SOQ and interview.

7. Too many bells and whistles that used that mean nothing to building the work. Rated down for no ADOT experience, but plenty of other experience.

The Department agrees that too many bells and whistles used by firms in the SOQs mean nothing. Since the selection process is qualifications based, it is incumbent on the proposer to relate their experience to the project in their SOQ. ~ Questions requesting ADOT experience have been revised to ask for relevant experience.

8. Get away from the same people being selected to do the work, boils down to who the department wants to do the work.

The selection process is qualifications based. The core fundamentals of the CMAR method do not allow for, or even allude to, rotation. This should not happen in any procurement method. It suggests bid rigging and collusion.

9. Should be qualifications, not politics

In response to comments 8 and 9, the selection of the CMAR is a qualifications based process. Decisions and evaluations are made based on the information provided in the SOQs and oral interviews. The Department is committed to refining its selection process by preparing project specific evaluation criteria that allow the Selection. Team to determine which potential CMAR can provide the best value for each CMAR project.

10. Education component lost to panel members, panel members need to be objective, qualified, understanding of industry and those constructing. You can't take hard bid mentality into CMAR selection panel.

The Department concurs that you can't take a hard bid mentality into the CMAR Selection Panel. Selection team members are required to attend training prior to serving on a selection team. All parties are on a learning curve in this process. The Department agrees that selection of the CMAR should not be based on the same thinking as on a hard bid project.

11. Direct panel on how to make decisions (Rob Samour, Dallas Hammit or individual or similar to advise and direct panel)

Executive management is not looking to direct or dictate selection. Their challenge is to ensure that the best panel is assembled for each project.

The panel is given a project overview and is instructed on the selection process. Decisions and scoring are based on the Selection Team member's evaluation of the SOQs and oral interviews.

12. Should use blind submittal to select short list participants

This is an interesting suggestion but it would be difficult to implement. References and past experience are a large factor in evaluating the prospective CMARs. The Department will continue to review and discuss this suggestion.

13. Make sure projects have 30 percent plans designed for CMAR

This is excellent feedback. There has been and will continue to be discussion on what is the appropriate time to bring the CMAR onto the project team on each individual project.

14. Owner should be aware of projects contractors have with other owners before selecting CMAR.

While the Department would prefer to have this information, it is not essential. The Department is not going to micromanage the contractor. If the CMAR doesn't provide their "A-team" and perform, they may find it difficult to repeat as the top ranked firm on other qualifications based selections.

15. Evaluate panel after the selection is done, have panel members anonymously evaluate each other

These are interesting ideas. The Department will consider how to implement this on future alternative delivery project selection teams. .

Executive management considers individuals and the selection team as a whole when assembling the team. The Department will discuss additional measures to assemble the best team for each project, to provide effective team instructions and to provide post selection team evaluations to improve the CMAR process.

16. Find a way to debrief those not selected earlier. ARS does not allow debriefs until after the preconstruction service contract is executed. The Department is working to see if the preconstruction services negotiation process can be streamlined.

G. Conclusion

The Department believes that it has developed a well thought out CMAR alternative delivery process. As the Department does more CMAR projects, the selection process will be refined and improved based on experience and lessons learned.

- Developing the Request for SOQs and aligning project specific questions that allow firms to present their qualifications and strengths is one of the most important steps in a successful qualifications based selection.

The Department received several outstanding Statements of Qualifications from the contracting community for the Cordes Junction CMAR project. The number of responses exceeded the Department's expectations and they were very competitive.

Archived