



---

# MEMORANDUM

---

Date: August 9, 2010

To: Honorable Chairman and Members  
Pima County Board of Supervisors

From: C.H. Huckelberry  
County Administrator 

**Re: Water Reclamation Campus Design/Build/Operate Procurement Project Status Update**

As you directed during the Board of Supervisors meeting of October 20, 2009, this memorandum is an additional status report of the progress being made in the capital project that will replace the existing Roger Road Treatment Facility.

## Background

After careful deliberation by the Board of Supervisors (Board) on October 20, 2009, the Regional Wastewater Reclamation Department (RWRD) was authorized to proceed with the issuance of a Request for Proposals (RFP) from three qualified firms to design, build and operate (DBO) a new wastewater treatment facility to replace the existing Roger Road Wastewater Reclamation Facility. As previously reported to the Board, the Arizona Department of Environmental Quality (ADEQ) has mandated that Pima County upgrade the quality of the Roger Road Facility effluent discharged into the Santa Cruz River to meet State and Federal requirements by January 2015. The need for a new facility was a result of extensive engineering and economic studies provided in the Regional Optimization Master Plan (ROMP) completed in November 2008 and approved by the Board.

The RWRD completed the preparation of the RFP for the new Water Reclamation Facility, including incorporation of specific requirements directed by the Board, and issued the final RFP to the shortlisted companies in November 2009. The Board stipulated requirements are summarized below:

- Provide regular reports of the RFP process;
- Determine initial term of the contract after analysis of contract terms of varying lengths;
- Engage in communications with RWRD staff to assure incorporation of County staff considerations;
- DBO company to offer employment to existing RWRD operations and maintenance (O&M) staff for no fewer than 75 percent of the O&M

positions included in the DBO company's staffing plan; RWRD staff transitioning to DBO company employment is strictly voluntary;

- No RWRD staff will lose their employment with the County as a result of this DBO procurement.
- Employee Issues:
  - Transferred employees shall not serve a probationary period and will not suffer any negative salary or benefit consequences.
  - Personnel policies of the DBO are to be similar to Pima County policies to the extent practicable and legally possible.
  - The Service Contract shall include employer/employee relations identical to those contained in the current Memorandum of Understanding between Pima County and SEIU to the extent practicable and legally possible.
- Accountability provisions will be included in the Service Contract to require:
  - Maximum County control of DBO company performance;
  - Expanded termination for cause provisions;
  - Periodic reports to the Board of the DBO performance throughout the contract term.

RWRD has examined and studied each of the requirements and conditions and has incorporated the above requirements to the extent practical into appropriate sections of the Service Contract and its appendices.

In preparation for the Board's consideration to continue to proceed with the DBO Procurement, background information was submitted to your offices on October 20, 2009 (Attachment 1).

#### DBO Firms Selection Process Progress

The new Water Reclamation Facility to replace the existing Roger Road treatment facility procurement process is under the authority of ARS Title 34 procurement rules and procedures. The procurement process began by the County with the issuance of a Request for Qualifications. Five national and internationally recognized DBO companies responded to the County's invitation by submitting a Statement of Qualifications (SOQ). In accordance with the stipulations of the procurement requirements, the DBO companies were shortlisted to three. These companies were recommended to the Board of Supervisors and were part of the October 20, 2009 action approved by the Board. Since the October Board action, one of the three DBO companies decided to withdraw from the procurement process.

The two remaining firms have been actively preparing and submitting preliminary technical proposals and supplemental materials to the County for review and comment in accordance with the specific requirements of the RFP. Also, the DBO companies have been reviewing and commenting on a draft Service Contract that defines the requirements and obligations of the project.

### DBO Procurement Terms

A multi-discipline team has been assembled by the County to develop the RFP and review the comprehensive submissions from the competing DBO Companies. The County staff and consultant team includes expertise from the engineering, operations and maintenance, procurement, financial and legal disciplines. Collectively, this group has been assembled to help assure that the County's interests are protected and that the County realizes the benefits of the DBO project delivery.

As indicated above, the Board action of October 20, 2009 required the team to analyze and evaluate various options for the term of the DBO service contract. Each of the term options examined had an aggregate of 20 years in keeping with the action item of the Board.

The terms examined were:

- 15-year term, with one 5-year renewal option
- 10-year term, with two 5-year renewal options
- 5-year term, with three 5-year renewal options
- 5-year, with a 15-year renewal option

After careful analysis of the possible term options, I previously recommended (see Attachment 2) that we proceed with a one-term option: a 15-year initial term with a 5-year renewal (15 plus 5 Term Option). The key reasons supporting this recommendation are discussed below.

The 15 Plus 5 Term Option is almost certain to result in the lowest price to the County.

Under each of the term options considered, the DBO company must commit to guaranteed performance at fixed pricing for a full 20 years. The performance guarantees of the Service Contract include both regulatory compliance and capital maintenance responsibility for the full term. This means that, absent the occurrence of contractually defined "Uncontrollable Circumstances" such as a "Change in Law," the DBO company bears the risk that it will cost more to operate and maintain the project in accordance with the performance guarantees than anticipated by the DBO company in submitting its price proposal. If for example, the DBO company must consume more power than its

guaranteed level of utilization in order to meet the performance guarantees, the DBO company (not the County) must bear the cost of such excess power. Other examples of potential cost overruns include greater than anticipated use of consumables and more frequent or more costly maintenance required over the course of the term. These risks are allocated to the DBO company (not the County) under the Service Contract for the full 20 years.

Under the 15 plus 5 Term Option, the DBO company is able to spread the cost of these guarantees, as well as costs associated with guaranteeing the design-build work, mobilization/demobilization and projected company profit over a longer period than under the shorter term options, resulting in lower pricing to the County. In fact, while the competing DBO companies may be willing to propose on the basis of a 10-year initial term, it is not clear that both companies would propose on the basis of a five-year initial term option.

As discussed below, both firms have raised objections concerning the shorter term options through the course of the procurement to date, suggesting that the 15 plus 5 Term Option is the most advantageous to the County. Five-year contracts are routinely entered into for simple "contract operations" of existing facilities where there is no design-build element, limited performance guarantees and where capital maintenance responsibility is allocated to the governmental owner. Five-year initial operating terms for DBO contracts, however, are rare to nonexistent. This is believed to be due to the long-term objectives of the operating services companies that guarantee these contracts. It involves substantial risk and commitment to gear up, manage and execute a DBO contract of this magnitude, and it cannot be said with certainty that the County's prequalified firms will find the opportunity sufficiently attractive to settle for only a five-year initial term contract, with the uncertain promise of three additional five-year terms. The County will be best served by the longer initial term of a 15-year option. The advantages of this option are:

#### Advantages of a Single 15-year Initial Term

- Provides long-term stability to County employees hired by the DBO firm to work in a sustained environment for career growth and advancement;
- Evaluation of bid price is less complicated, less prone to manipulation using multiple terms (applies apples-to-apples in the evaluation phase);
- Reduced administrative costs associated with contract renewals;
- Benefit of reduced price associated with long-term commodity pricing and/or leasing arrangements;
- Equipment selection and operation optimized for the long term versus optional contract duration (a desirable feature of DBO contracts);
- Creates clarity in the selection process;

- Promotes long-term value with lowest responsible life cycle costs. Does not enable proposers to utilize equipment and configurations based on what is least expensive in the short term;
- By contract the County can take over the facility at any time without a complex set of pricing options. Option will result in the lowest, competitively-derived, net present value costs to the County for the project.

For the foregoing reasons, I reaffirm my recommendation that the final RFP include only the single, 15 plus 5 Term Option.

#### Termination for Cause

In addition to the convenient termination rights, the County always has the right to terminate the DBO company for cause in the event of a failure of performance by the DBO company. In the event of a termination for cause, the County has no obligation to pay any termination fee to the company and also has the right to pursue actual damages associated with the failure of performance.

#### Termination for Convenience

The Service Contract enables the County to terminate the Company's right to further performance at any time, for its convenience and without cause. Under the convenience termination provisions of the current draft of the negotiated Service Contract, the convenience termination fees are as follows:

1. Prior to the commencement of construction: \$1,500,000;
2. After the commencement of construction and prior to the Acceptance Date: \$3,000,000;
3. For the period beginning on the Acceptance Date and ending on the fifth anniversary of the Acceptance Date: \$6,000,000, reduced by \$50,000 for each month that elapses during the period;
4. For the period beginning on the fifth anniversary of the Acceptance Date and ending on the expiration of the initial term: \$2,000,000, reduced by 1/120 of such amount for each month that elapses during the period;
5. During the five-year renewal term (assuming the 15 plus 5 Term Option): \$0;
6. At anytime during the Operation Period in the event of an uncontrollable circumstance causing a "total constructive loss" of the project or an "extraordinary increase" in the County's costs: \$0;
7. At anytime during the Operation Period in the event of a determination by the County that a change to the financial condition of the Guarantor significantly reduces the security for performance provided by the Guaranty Agreement: \$0.

These convenience termination fees are in addition to certain demobilization costs payable to the DBO company and are intended to reimburse the DBO company for losses associated with terminating its right to perform the contract, including lost opportunity and lost profit. Importantly, the County has the right to exercise its termination for convenience option at its sole discretion, at any time, without any requirement to demonstrate the reasonableness of its determination.

#### Transfer of Designated Employees

A primary consideration of the Water Reclamation Facility project is that no current RWRD employee will lose his or her job as a result of the design, construction or operation of the new facility. Only interested and willing RWRD employees will be transferred to the new Water Reclamation Facility operations. Those RWRD employees not interested or willing to transfer will be retained within the County and will be reassigned to positions of equal grade and salary. The RWRD has assessed that employees who do not elect to transfer can be absorbed within the labor pool of the department due to vacancies created by normal labor attrition and employee retirements.

Based on information submitted through the RFP process, RWRD anticipates the operations and maintenance staffing of the new facilities will require substantially less staff than the current staff level at the existing Roger Road facility. Currently, RWRD is undertaking steps to reduce staff at the Roger Road facility to an effective minimum workforce at the time of the existing plant shutdown. Part of this process is the creation of a multi-skill program that will increase workforce efficiency and reduce current plant staffing; reserving vacancies (over 24 percent of staff are eligible to retire within five years) in the remaining RWRD organization for those who do not transfer to the DBO company; and modifying the balance between contract and in-house operations and maintenance efforts so that remaining employees will be effectively utilized. These actions will minimize the staffing impacts at the time of the shutdown and transfer to the new facilities and will permit RWRD to effectively absorb all those employees not electing to transfer to the new facility.

The DBO companies are required to offer employment to RWRD staff to fill 75 percent of the Operations and Maintenance positions at the new facilities, a number stipulated by the Board as a County requirement. Other stipulations, such as no probationary period for employment, equal or better salaries and benefit packages and a personnel policy similar to the County's policy are requirements of the Board and requirements in the Service Contract.

Within the County's personnel policy there are some provisions that a private company cannot legally employ, such as compensatory time off in lieu of overtime. Other routine company personnel policies requirements, such as pre-employment and random drug testing (not in the County's personnel policy), are standard within the wastewater industry

and a standard in all facilities operated by the DBO companies. Making a special provision to require special exemption for personnel in the Pima County facility would place a hardship on the companies in enforcing fair and uniform employment practices. In summary, the personnel policies of the DBO companies are comparable and substantially equivalent to Pima County's personnel policies, and for some County employees, the DBO company personnel policies would be preferable to those offered by the County.

Regarding employer/employee labor relations, the goal is to achieve provisions similar to those contained in the current Memorandum of Understanding between Pima County and SEIU. To that end, special provisions have been incorporated into the Service Contract, which include the following:

- [A] *Existing Labor Agreements. The Company acknowledges that, as of the Contract Date, the County is a party to the Meet and Confer Memorandum of Understanding between SEIU Arizona Local 5 and Pima County, Arizona. The Company shall substantially comply with the provisions of such memorandum of understanding with respect to the employment of the transferred Employees, subject to the requirements of Applicable Law.*
  
- [B] *New Labor Agreements. In accordance with Applicable law, the Company shall bargain in good faith with any recognized collective bargaining agent representing Company employees. The provisions of this Section 7.2 shall apply unless and until superseded by the terms of any new labor agreement entered into in accordance with the provisions of Applicable Law.*

As part of the RFP review process, RWRD has learned that each of the DBO companies preparing a response to the RFP has worked with many different unions in regard to their other facility operations. Included in those unions is SEIU, which represents a portion of the RWRD staff. The DBO companies have initiated preliminary talks with SEIU to understand the current labor relations agreements and to incorporate the equivalent of those into their proposals.

Accordingly, I am satisfied that the DBO companies fully understand the Board's directives concerning transferring RWRD employees to DBO company employment. I will ensure that the Board requirements are included in the Service Contract to the extent allowed by applicable law.

#### Service Contract Negotiations Progress

Many service contract elements have been analyzed and reviewed by the team to insure the County's interests are fully protected as a result of executing the Service Contract for the Water Reclamation Facility. For example, the Service Contract provisions allow the

County to maintain tax-exempt status of debt, establish a cost ceiling of \$240 million for design and construction costs in accordance the project budget and transfer significant risk to the DBO company. Risk transfers to the DBO company include design omissions, construction cost overruns and change orders, compliance with regulatory requirements, operation cost overruns, odor guarantees, capital maintenance and others.

The Service Contract includes significant liquidated damages and possible termination for odor violations or noncompliance with project schedules or facility effluent criteria. These issues will be closely monitored by RWRD throughout the term of the Service Contract, and if necessary, the County will take action to remove the DBO company from the project execution, including operations of the facility, regardless of the term of the contract. Further, in addition to termination for cause, there are provisions for termination for convenience by the County as discussed previously.

Along with the review of the preliminary technical submissions by the DBO companies, the team to date has had three significant negotiation sessions on the Service Contract with each of the DBO companies. The first was in March 2010, the second in April 2010 and the third in June 2010. These sessions have enabled both parties to explain, review and comment on any and all the requirements and provisions within the Service Contract. Some provisions of the draft Service Contract have been revised to sharpen the definitions of the requirements and to clarify the responsibility of risk during the term of the contract. The Service Contract is nearing the final stages of completion, and in accordance with the procurement requirements under ARS Title 34, will become the Service Contract that the selected proposer will be required to execute.

#### RWRD Due Diligence

In addition to extensive technical reviews of the proposed wastewater treatment facilities from each of the DBO companies and the negotiations of the requirements and provisions of the Service Contract, the team has selected eight existing facilities, four each cited by each of the two DBO companies, as being comparable to their proposed facilities envisioned for Pima County for a "hands on" site visit. Each site was selected from many offered by the DBO companies based on similar treatment technology, or construction features, or delivery method or operations and maintenance requirements of the facility.

The site visits have been concluded and included a separate meeting with the owner of each facility, a meeting with the operations and maintenance staff (in some cases the construction management staff) and a meeting with the staff proposed by the DBO companies for the Pima County project that were involved in the site being visited. A tour was conducted to see the physical facility and view the condition and upkeep of the equipment, systems and grounds. The site visits were enlightening with respect to the corporate cultures of the DBO companies; their approach to the design, construction, and

operations and maintenance of facilities; and the capabilities and working relationships of the individuals identified to be involved in the Pima County project. The site visit information will be presented to the selection committee as a consideration in the final selection process.

### Next Steps

Project procurement remains on schedule for compliance with the Arizona Department of Environmental Quality's mandate for upgraded effluent quality. Currently, the DBO companies are to review and comment on the latest revisions to the Service Contract provided to them by the County. Following receipt of the final round of comments, the County will prepare the final Service Contract and issue it to the DBO companies by August 13, 2010. After issuance of the final Service Contract by the County and before the submission of the proposals by the DBO companies, a final presentation of the technical submission will be made. This presentation will enable the DBO companies the opportunity to clarify any technical issues that may appear ambiguous to Pima County prior to their final technical submission. Costs will not be discussed during the technical presentations in accordance with procurement rules and policy.

The final technical, construction and operations and maintenance cost proposal from each DBO company is due to the County on September 14, 2010. The technical proposal will be evaluated separately from the cost proposal in accordance with the evaluation criteria and the procurement rules under ARS Title 34.

Criteria for evaluation include:

- Capital and life cycle costs
- Implementation schedule compliance
- Permitting capabilities
- Regulatory compliance
- Achievement of performance guarantees
- Engineering design quality
- Operation and maintenance systems capabilities
- Construction quality
- Startup and commissioning capabilities
- Accountability of DBO companies
- Transfer of designated staff considerations

Evaluations of the technical and cost portions of each proposal will be completed by November 12, 2010 with a recommendation prepared for Board action. The current schedule is to have the recommendation of the selection committee to the Board for an action to accept or reject the recommendation at a Board meeting in December 2010.

The Honorable Chairman and Members, Pima County Board of Supervisors  
Re: **Water Reclamation Campus DBO Procurement Project Status Update**  
August 9, 2010  
Page 10 of 10

The DBO procurement process for the Water Reclamation Facility, including the development of the final Service Contract and incorporation of the Board's directives, is proceeding as detailed in this report. Please advise me of any questions or concerns you may have regarding this process.

CHH/mjk

**Attachments**

c: John Bernal, Deputy County Administrator for Public Works  
Michael Gritzuk, Director, Regional Wastewater Reclamation Department

# ATTACHMENT 1



---

# Board of Supervisors Memorandum

---

October 20, 2009

## Roger Road Water Reclamation Facility Replacement

The Board of Supervisors' Agenda for October 20, 2009 contains an item from the Regional Wastewater Reclamation Department (RWRD) and the Procurement Department. That item requests Board of Supervisors approval to proceed to the second step of the Request for Proposal (RFP) phase of the Design/Build/Operate (DBO) project for the Water Reclamation Campus that will replace the aging Roger Road WRF.

Pursuant to A.R.S. Title 34-603(G), until an award and execution of a contract is accomplished, only the name of each firm on the final list may be made available to the public. This limits our ability to engage in open public discussion about the competitive submissions or our evaluation of them. However, given the significant scope and cost of this ongoing project development, I believe the Board should be provided certain additional information not subject to this nondisclosure limitation. Accordingly, I am sending this additional information to you in conjunction with the item from the Procurement Department requesting Board action on October 20, 2009 (Attachment 1).

This memorandum supplements my prior memoranda to you regarding this project dated September 30, 2008, February 12, 2009 and April 20, 2009.

### SELECTION OF THE DBO ALTERNATIVE

To identify the best delivery method for the new Water Reclamation Campus Treatment Facility, RWRD and a team of nationally recognized multidisciplinary consultants conducted an exhaustive evaluation of the following project delivery methods:

- Design-Bid-Build (DBB)
- Construction Manager at Risk (CMAR)
- Design Build (DB)
- Design Build Operate (DBO)
- Design Build Finance Operate (DBFO)

The evaluations of each method included:

- Capital and life cycle cost comparisons
- Risk and risk transfer analyses including development and comparison of risk-adjusted life cycle costs
- Implementability in the market-place
- Financial analysis
- Implementation schedules/regulatory compliance schedule
- Design quality/design competition
- Cost competition
- Accountability, responsibility, liability
- Staff considerations
- Level of County Control/Service Contract

The evaluations of each method included:

- Capital and life cycle cost comparisons
- Risk and risk transfer analyses including development and comparison of risk-adjusted life cycle costs
- Implementability in the market-place
- Financial analysis
- Implementation schedules/regulatory compliance schedule
- Design quality/design competition
- Cost competition
- Accountability, responsibility, liability
- Staff considerations
- Level of County Control/Service Contract

The results of this analysis showed clearly that DBO was the best, and by far the least costly, alternative for the new Water Reclamation Facility. The DBO contracting entity (Company) is responsible for meeting the project delivery implementation schedule established by the County in accordance with the regulatory implementation schedules mandated by the Arizona Department of Environmental Quality (ADEQ). These schedules are contained in the effluent discharge permit issued to the County by ADEQ.

Selection of this project delivery method by the Board of Supervisors will be Pima County's first experience with the Design-Build-Operate project delivery method. However, as evidenced by the attached memorandum (Attachment 2), numerous wastewater utilities have successfully employed this method around the United States. While there have been some instances of project termination prior to completion of the contract term, these instances were generally unrelated to the contractor's performance. The vast majority of DBO contracts have produced successful results.

All costs associated with designing, permitting, and successfully testing and placing the project into operation are included in the successful proposer's fixed design-build price, which is subject to adjustment only in the event of contractually defined uncontrollable circumstances. Cost overruns incurred by the DBO Company in meeting the implementation schedule and achieving regulatory compliance are the responsibility of the Company and not the County. Additionally, under DBO, the DBO Company's responsibility for the facility's assets extends for the entire term of the contract (typically 15 to 20 years), during which the DBO Company must guarantee performance for a fixed service fee. This guarantee of performance means that the DBO entity (and not the County) is responsible for any fines or penalties associated with a failure of regulatory compliance. In contrast, if the County were to operate the plant, any fines would ultimately be borne by the ratepayers. Moreover, under DBO, the Company also bears the critical risk that if it costs more to operate and maintain the facility than the fixed service fee, the DBO entity is responsible for the cost overruns without recourse to the County. This risk transfer has significant value to the County and, in conjunction with other advantages associated with the DBO delivery method, results in the conservative estimate that the DBO delivery method offers life cycle savings on the order of \$30 to 80 million over the life of the service agreement as compared to a DBB or CMAR procurement and on the order of \$20 to 40 million as compared to a DB procurement. Finally, a DBO procurement offers the greatest assurance of meeting regulatory requirements.

Key contributors of cost savings under a DBO procurement over a traditional DBB model are:

- The responsibility to operate and maintain the plant, including capital maintenance, at a fixed service fee over the long term.
- The design and construction costs of the project are determined in an extremely competitive environment. The DBO process creates intense pressure among the three firms submitting technical and cost proposals to produce the most cost effective facility over the project's lifecycle.
- The integration of the facility Design Professional, Contractor and Operator throughout the proposal design and construction phases will produce the optimal design for the project.
- A shorter implementation schedule is achieved by having design and construction phases overlap – which has a direct impact on reducing costs.
- The DBO Company brings a wide range of available resources (process expertise, labor, equipment and supplies) to meet the demands of the services provided at competitive costs.

The operator's presence in the DBO entity ensures a reasonable measure of quality in the resulting project because the operator will have to operate and maintain the facility in accordance with all regulatory and contractual requirements for a period of the entire term of the contract at a fixed price with a guaranteed level of performance. As indicated above, if it costs more for the DBO Company to operate the facility than the DBO Company receives through its fixed O&M fee, the DBO Company is responsible for the excess costs. As such, the successful DBO Company has an intense incentive to design and build a cost effective facility that will enable it to meet its performance guarantees within the fixed O&M fee for the term of the contract.

In the event that the DBO Company fails to perform in accordance with the contract, the contract can be quickly terminated for cause, and County personnel will assume control of facility operations. The County would also have recourse against the DBO Company and its guarantor for the additional expenses incurred as the result of a takeover. In addition to these default termination rights, the DBO contract will include County convenience termination rights at all times during the term of the contract, enabling the County to terminate the contract for its convenience and without cause upon the payment to the contractor of a stipulated convenience termination fee that diminishes over time. Thus, risk to the County is substantially reduced when compared to other procurement methods.

Many more details of the DBO procurement process were presented to you in my attached memoranda of September 30, 2008 and February 12, 2009. The February 12<sup>th</sup> memorandum also describes the steps of Board involvement and authorizations during the procurement process. This project has reached the stage **bolded** in the following listing of future Board of Supervisors actions:

- **Authorization of the three short-listed firms to be requested to respond to a Request for Proposals for a DBO or an alternatively delivery method.**
- Selection of the DBO contractor based on the Request for Proposals results or other considerations determined by the Board to be pertinent to this process. (Note: This action is expected to occur in the fall of 2010.)
- Award of a contract to the DBO contractor after conclusion of negotiations or authorization of discontinuance of negotiations if conditions warrant. This will include a comparison to Pima County's benchmark based on operation by Pima County staff.

- Acceptance of the completed construction of the Water Reclamation Campus facility, including authorization to commence with commissioning of the completed treatment plant.
- Acceptance of the completed and functioning facility based on complete adherence to the contract specifications for delivery of treated wastewater meeting all regulatory requirements. (Must occur by no later than January 2015.)

## **SCHEDULE CONSIDERATIONS**

The requirements and considerations that go into selecting a DBO Company are far different from those that go into selecting a DB contractor and the Board should be aware that shifting from a DBO to a DB procurement at this point would require canceling the current procurement process and starting over. DBO teams are typically led by an operations services company rather than a construction company or an integrated design-build firm, as is the case under DB. A shift from DBO to DB at this stage in the implementation of this project would therefore require a new request for qualifications to perform the DB services and the subsequent development of an RFP for the DB services. In contrast to DBO, the DB contractor does not have a long-term performance incentive under DB, as its responsibility for the assets will end upon passing the facility acceptance tests, subject only to limited warranties of construction. Under DB, therefore, the County must be mindful of the potential that the County's minimum design requirements will be the DB contractor's maximum requirements, providing only the minimum necessary to pass the facility acceptance tests. An RFP for DB services must address this fact by spelling out detailed quality, design and construction requirements in a manner that is not necessary under a DBO procurement where the DBO Company assumes the risk of long-term performance. The time required to develop appropriate quality, design and construction requirements for a DB RFP is significant and would further expand the overall procurement schedule.

Shifting from the current DBO procurement process to a DBB or CMAR process would involve an even greater impact on schedule, as the County would need to procure a design engineer to complete the 100 percent design of the project prior to issuing a solicitation for bids to perform the construction services. These methods do not involve the schedule efficiencies associated with DB or DBO, as construction would begin only after the completion of design, thus further extending the schedule for the overall completion of the project. Additionally, in contrast to both DB and DBO, the County would retain the responsibility and liability for the design under a DBB or CMAR. This means that any changes to the design required during construction under the DBB or CMAR methods would be the subject of a change order with the County responsible for any cost and schedule implications.

The first mandated deadline in the implementation schedule is for the County to award an executed contract for construction by January 2011. It is not possible for the County to achieve this deadline were it to shift course at this date and start over with a new procurement process. However, it might be possible to compress the allowable design and construction schedule with a DB procurement to meet the second mandated deadline of January 2015 for compliant operations of the new facility. A compressed construction schedule could likely increase overall project costs as the pricing would include the additional resources necessary to complete the project in a shorter period of time. Accordingly, in addition to the overall benefits associated with cost efficiencies and risk transfer under DBO, continuing with the current DBO procurement process offers the County the greatest assurance that it will meet the mandated implementation schedule in the most cost effective manner.

The additional concern with not complying with the first mandated deadline is that Pima County would be subject to a review of the regulatory requirements by ADEQ. The likely result of a missed deadline from our current regulatory schedule is the imposition of a Consent Order or a court-imposed Consent Decree that would contain additional intermittent deadlines and stipulated monetary penalties in the event of non-performance on newly established deadlines.

#### **ACCOUNTABILITY OF DBO COMPANY TO COUNTY**

A concern has been raised as to whether a DBO Company would have the same level of accountability to the Board of Supervisors as Pima County employees have. Our review of this issue concludes that there would be equal or superior accountability under a DBO contract.

Accountability for public health and environmental protection are inherent in the ADEQ permits under which all wastewater treatment facilities in Arizona operate. The regulatory requirements are the same, whether they are publicly or privately operated. Penalties for not meeting environmental permit requirements can result in punitive fines, and even imprisonment, for those found responsible for such violations.

RWRD accountability to the Board of Supervisors and to ADEQ does not change when a private sector firm operates one of the County's treatment facilities. What does change is the party that is financially responsible and liable for any failure to meet environmental or public health requirements. A DBO Company will contractually agree to a fixed price for its services, including compliance with all County and regulatory requirements and is responsible for correcting and paying for any failures to comply with its contractual responsibilities. This is of particular value to the County due to the extremely more stringent effluent quality requirements that must be achieved in the ROMP program. Therefore, if a treatment facility were assessed fines for non-compliance, the DBO Company, not the Pima County rate payer, would be responsible for paying those fines, as well as all capital investment necessary to bring the facility into compliance with regulatory requirements. The DBO Company is also backed by the project guarantor that assumes ultimate liability for any non-compliance and penalty issues. This reality provides great incentives to the DBO Company to quickly correct any problems that may arise.

The DBO Company has additional pressure to perform because a failure to perform in Pima County would impair the company's ability to expand its business by responding to RFQs and RFPs for other DBO projects. Continuous regulatory compliance is a hallmark of all DBO Companies and is always a significant element in the measurement of qualifications required in submittals for DBO projects of a DBO firm to provide DBO services. Any blemish in that record would not only be an issue in Pima County but with all potential clients of the DBO Company.

As in our public sector operations, PCRWRD will conduct all regulatory compliance testing and submittals of monthly "discharge monitoring reports" to ADEQ, even though this could be the contractor's responsibilities under typical DBO arrangements. This direct testing will give the County early warning of any potential compliance issues and the ability to direct immediate corrective action by the DBO firm. In addition, the DBO service contract will provide the County with the monitoring and contract administration tools necessary to ensure that the DBO Company is performing in accordance with the contract.

The County retains ultimate authority over the DBO Company as the County has the power to terminate the contract at any time during the term of the contract either for cause or for convenience. The DBO Company thus is fully accountable to the County for project performance over the term of the contract.

The County Attorney's Office will be a key participant in assuring that the DBO contract contains necessary provisions to assure Pima County's control over the DBO contractor and to guarantee that Pima County is able to monitor all phases of contract performance throughout the life of the contract to assure full satisfaction of our needs. The current working draft of the Service Contract is attached for your information (Attachment 3).

The cancellation provisions in the draft are contained in the following sections:

- Section 13.2 (p 157) Events of Default by the Company
- Section 13.6 (p 163) County Convenience Termination During Design Bid Period
- Section 13.7 (p 163) County Convenience Termination During Operation Period
- Section 13.8 (p 165) General Provision Regarding Convenience Termination
- Section 13.9 (p 166) County Odor Termination Rights During Operation Period

#### **SHORT LIST OF DBO COMPANIES**

Qualification Statements were received from multiple national/international firms that were evaluated by the Selection Committee. To assist the Selection Committee in its evaluation of the Qualifications Statements, various multidisciplinary subcommittees and consultants also evaluated the Qualification Statements and provided input to the Selection Committee. The Selection Committee also included an outside executive with construction expertise. The Finance Subcommittee included a management level staff member from the Finance Department. The overall DBO process is closely monitored and managed by the Procurement Department. In accordance with A.R.S. Title 34-603, the following three firms were short listed (listed in alphabetical order):

- American Water Operations & Maintenance, Inc.
- CH2M Hill Engineers, Inc.
- EPCOR United Water, L.L.C.

#### **PROJECT BUDGET**

The overall ROMP implementation budget is \$720 million of which the not-to-exceed design and construction cost budget for the Water Reclamation Campus is \$240 million. The Request for Qualification Statements (RFQ) advertised by the County emphasized this budget to potential submitters with instructions not to submit in the event they had any reservations about the not-to-exceed budget. Five national/international DBO Companies submitted qualifications statements with no reservations about the established budget.

During the Request for Proposal (RFP) phase, the three short-listed DBO Companies will be required to submit detailed preliminary technical proposals incorporating all of the County's technical, construction quality and regulatory requirements. The firms also know they are in design competition with the two other short-listed firms and thus will incorporate innovations in design to improve and make the design more cost effective to construct and operate. The terms of the Service Contract are negotiated with the firms to develop contract language that all three firms and the County find acceptable. Once the three technical proposals and the contract language are negotiated to a level of acceptance to the Selection Committee, the three DBO Companies will be invited to submit Final Technical Proposals and Cost Proposals. No further negotiation of the contract language occurs. The Technical Proposals are scored first after which the Cost Proposals are opened and scored.

The three DBO contractors know that the Cost Proposals are weighed at 40 percent of the overall score. Also, knowing that they are competing with the other DBO Companies, it is expected that their cost proposals will be under, and even substantially under, the design and construction cost budget and life cycle cost as is demonstrated by actual completed and operating DBO projects in the following list of cost savings.

The pressure to be selected is also significantly driven by the technical investment and costs incurred by the DBO competitors. By the time their Final Technical and Cost Proposals are submitted, each firm will have invested in excess of \$1.0 million in the preparation of these documents; therefore, they are highly motivated to be competitive.

The current annual operations and maintenance budget for the Roger Road Treatment facility is approximately \$9.0 million of which the labor cost is approximately \$3.4 million. It is expected that this budget will be reduced by approximately 45 percent as a result of the DBO procurement, primarily due to such factors as automated operations, less solids handling costs, a smaller capacity treatment facility, more efficient mechanical equipment, predictive maintenance, and a smaller staff.

Actual history of other completed water sector DBO projects have shown substantial savings over traditional public sector operations as illustrated below:

<b>Name</b>	<b>Estimated Cost Savings</b>
Cranston, RI	\$35 million
Phoenix, AZ	\$27 million
San Diego, CA	\$40 million
Seattle, WA (Tolt River)	\$70 million
Seattle, WA (Cedar River)	\$50 million
Tampa Bay, FL	\$85 million

Seattle first constructed the 120 million gallon per day Tolt River Water Treatment Plant using DBO. They were so pleased with the results that they selected DBO for delivery of a second major water treatment plant, the Cedar River plant.

The City of Phoenix also experienced great success with their DBO project. That project (in which RWRD director Michael Gritzuk had a major role) realized an estimated cost savings of over \$27 million or approximately 8 percent below the originally established benchmark of \$369.2 million. Change orders in the project totaled approximately \$2,500,000 of which \$2,100,000 was directly attributable to City sales tax, prompted by the City's annexation of the treatment facility site after the award of the DBO contract. The DBO Company delivered this project within four years compared to six years that would have been necessary for a Design-Bid-Build procurement.

#### **STAFFING AND LABOR ISSUES**

Due to the expected high degree of automation that will be incorporated into the design of the Water Reclamation Facility, it is expected that the staffing level at the Water Reclamation Facility will be in the range of 15 to 25 operations and maintenance personnel. The current staffing level at Roger Road is at 54 active employees; with 6 vacancies. The 54 active employees include 41 O&M positions with the remaining 13 positions in managerial, supervisory and administrative functions.

We can assume the DBO Company will need approximately 20 O&M employees, many of whom will be required to hold Arizona certifications. The Company will logically hire most or all of those employees from existing staff who will already hold the required certifications and/or experience. The remaining department employees will be placed in vital vacancies, although due to the high rate of retirements, it is not likely that there will be a need to place 21 excess operations/maintenance personnel nor the 13 other positions by the time the new plant becomes operational in late 2014. Vacancies through retirements continue to challenge RWRD to fully staff its facilities even during these difficult economic times. For example, in recent months, Ina Road has experienced eight new vacancies in the O&M area. Due to the Multi-Skill Program recently initiated in the Department, these positions do not have to be filled at this time, and if the Multi Skill Program is successful, they will not have to be filled after its permanent implementation

In addition to the above mentioned eight positions, the department is expecting to lose ten more employees through retirement within this fiscal year as well as two other employees who are pursuing long-term disability status. The positions being vacated are difficult to fill; however, efforts will be made to fill at least some of them as the department must continue to operate and maintain their very labor intensive and aging facilities for the next five years while the new ROMP facilities are being constructed.

RWRD anticipates that growing retirement rates will continue to impact staffing levels. If we arrive at the completion of the Water Reclamation facility with more employees than are required to staff other facilities, the excess is expected to be minimal. We will also have to assign a group of employees to decommissioning activities at the existing Roger Road plant. These activities will take approximately one year.

## **SERVICE CONTRACT**

The proposed Service Contract will include the following primary provisions:

- Guaranteed fixed design-build price
- Guaranteed compliance with all regulatory implementation and performance requirements
- Liquidated damages and service fee offsets for violation of service contract performance requirements
- Guaranteed service fee (with escalators tied to and pre-agreed to the consumer price index or some other index)
- Equivalent or better salaries and benefits for County workers that transfer to the DBO Company
- Job protection for County workers that transfer to the DBO Company
- Training for County personnel to ensure proper operations during emergencies
- Guaranteed maintenance of facility assets, including capital maintenance with the DBO contractor assuming the risk of capital maintenance cost overruns
- Guaranteed effluent quality
- Security for Performance provided by parent company guaranty, bonds and service fee offset rights
- Default termination provisions
- Convenience termination rights

## RECOMMENDATION

For the above reasons, it is recommended that the Board of Supervisors approve proceeding with the DBO process for implementation of the Water Reclamation Campus Project to replace the existing Roger Road WRF. The cost efficiencies and risk transfer associated with the DBO delivery method results in the conservative estimate that the DBO delivery method offers life cycle savings on the order of \$30 to 80 million over the life of the service agreement compared to a DBB or CMAR procurement and on the order of \$20 to 40 million as compared to a DB procurement with greater assurance of meeting regulatory requirements. Changing the project delivery method at this late stage would increase overall project costs and create a need to develop and issue a new solicitation with revised requirements, revised project implementation schedule and revised evaluation criteria that would have serious schedule and project cost implications and would imperil the County's ability to meet regulatory deadlines.

This recommended action is conditioned upon the following:

1. The Board will receive regular reports of the Request for Proposal process that is expected to extend through the fall of 2010.
2. The initial term of the DBO contract will be determined after analysis of alternative cost proposals for contract terms of varying lengths including:
  - a. 15-year term, with one 5-year renewal option;
  - b. 10-year term, with two 5-year renewal options; and
  - c. 5-year term, with three 5-year renewal options.
3. RWRD will engage in communications with staff to assure incorporation of County employee considerations in the Service Contract prior to presenting a DBO contract to the Board of Supervisors for approval.

Respectfully submitted,



C.H. Huckelberry  
County Administrator

CHH/mjk (October 9, 2009)

Attachments (3)

- c: John Bernal, Deputy County Administrator – Public Works  
Michael Gritzuk, Regional Wastewater Reclamation Department Director  
George Widugiris, Procurement Department Director

# ATTACHMENT 2



---

# MEMORANDUM

---

Date: January 27, 2010

To: Honorable Chairman and Members  
Pima County Board of Supervisors

From: C.H. Huckelberry  
County Administrator

A handwritten signature in black ink, appearing to be "C.H. Huckelberry", is written over the printed name and title.

Re: **Regional Optimization Master Plan (ROMP)**  
**Water Reclamation Campus Treatment Facility – Follow-up**

On October 20, 2009, the Board of Supervisors approved proceeding with issuance of the Request for Proposals (RFP) to initiate the second step of the Design-Build-Operate (DBO) contractor selection for implementation of the Water Reclamation Campus Project to replace the existing Roger Road Water Reclamation Facility. This approval was conditioned upon the following:

1. The Board will receive regular reports of the Request for Proposal process that is expected to extend through Fall 2010.
2. The initial term of the DBO contract will be determined following analysis of alternative cost proposals for contract terms of varying lengths including:
  - a. 15-year term, with one five-year renewal option;
  - b. 10-year term, with two five-year renewal option;
  - c. 5-year term, with three five-year renewal option; and
  - d. 5-year term, with a fifteen-year renewal option.
3. The Regional Wastewater Reclamation Department (RWRD) will engage with staff to assure incorporation of County employee considerations in the service contract prior to presenting a DBO contract to the Board of Supervisors for approval. The communication with staff will also involve active staff members of SEIU.
4. The DBO contractor will be contractually required to retain at least 75 percent of its proposed operations and maintenance staff from existing RWRD Operations and Maintenance staff, provided that RWRD staff is willing to voluntarily leave Pima County employment and transfer to employment with the DBO company.

The Honorable Chairman and Members  
Pima County Board of Supervisors  
Re: **Regional Optimization Master Plan (ROMP)**  
**Water Reclamation Campus Treatment Facility – Follow-up**  
January 27, 2010  
Page 2

5. Employee issues:
  - a. RWRD employees hired by the DBO company shall not serve a probationary period and will not suffer any negative salary or benefit consequences.
  - b. The service contract shall include personnel policies to be implemented by the DBO contractor that are similar to Pima County personnel policies to the extent practical and legally possible.
  - c. The service contract shall include provisions related to employer/employee relations identical to those contained in the current Memorandum of Understanding between Pima County and SEIU to the extent practical and legally possible.
  
6. The accountability provisions of the service contract will be enhanced to require:
  - a. Maximum County control of the DBO company performance;
  - b. Expanded Termination for Cause provisions; and
  - c. Periodic reports to the Board of Supervisors on the DBO company performance of the requirements of the service contract throughout the term of the contract.

#### Procurement Activities

Following the Board action of October 20, 2009, the RFP was revised to incorporate the Board's conditions and issued by the Pima County Procurement Department on November 6, 2009 to the three short-listed firms that were, in alphabetical order, as follows:

1. American Water Operations and Maintenance, Inc.
2. CH2M Hill Engineers, Inc.
3. EPCOR United Water, LLC

The RFP requires a comprehensive and in-depth technical proposal that includes planning, designing, constructing, operating and maintaining a wastewater treatment reclamation facility that adheres to all Pima County's requirements. Additionally, each of the firms must submit a separate cost proposal with guaranteed pricing for operation and maintenance services for a 20-year period under each of the four term options contained in the October 20, 2009 Board of Supervisors approval action.

The Honorable Chairman and Members  
Pima County Board of Supervisors  
Re: Regional Optimization Master Plan (ROMP)  
Water Reclamation Campus Treatment Facility – Follow-up  
January 27, 2010  
Page 3

On December 21, 2009, American Water Operations, Inc. (American Water) expressed multiple concerns with the RFP and indicated they were uncertain about continuing if their concerns could not be resolved before submission of preliminary technical proposals on February 15, 2010. On December 23, 2009, the Procurement Department responded to American Water that some of the issues they raised would require substantial changes to the procurement, County policies, and the approved Regional Optimization Master Plan and, further, that under A.R.S. Title 34, the County could not discuss these issues with American Water until after submission of preliminary technical proposals. American Water's list of concerns also included objections to some of the conditions established by the Board as well as others that were specifically incorporated into the RFP because they were in the best interest of Pima County and should not be modified. On December 28, 2009, American Water formally withdrew from the procurement.

American Water's withdrawal from the procurement leaves only two short-listed firms from which to request technical and cost proposals in the second-step competition.

Among the concerns leading to their withdrawal, American Water expressed specific objection to the necessity of preparing and submitting multiple cost proposals based on different initial terms of the DBO contract and advocated for a single defined initial term for the DBO contract. In responding to the Board of Supervisors' directive to analyze the financial consequences of terms of varying lengths, an analysis of the considerations for length of initial operations terms has been undertaken and is contained in a report entitled "Water Reclamation Facility DBO Project Considerations Related to The Length of Initial Operations Term, November 20, 2009" (Attachment 1). This analysis concludes with certain relevant points as follows:

1. The magnitude of this DBO Contract involves a substantial investment by the DBO company and the prospect of a short initial term provides uncertainty as to a return on the DBO company investment. The concern expressed that one or more of the pre-qualified companies might drop out from the competition has, in fact, occurred, and we anticipate a negative effect on a competitive procurement that could result in higher project costs because of the potentially reduced number of proposing firms.
2. There is substantial likelihood of a higher annual cost for the DBO contract associated with a five-year initial term when compared to the annual cost with a 15-year initial term. Unless the DBO company is willing to gamble that the County will exercise the options to renew the contract for the full 20 years, the

successful DBO company will seek a substantial short-term return to recover their investment during the initial five-year term.

3. A longer initial term does not preclude Pima County from discontinuing the contract with the selected DBO company if there is dissatisfaction with performance or if there are other reasons why the operation and maintenance of the plant should be undertaken in a different manner before the end of the initial term. The termination rights in the contract for cause or for convenience are clearly defined and provide a great deal of flexibility for Pima County in administering this contract.
4. Under a Termination for Convenience, Pima County is liable for payment of a termination fee that is diminished over time. Termination for Convenience during the first five years of a 15-year initial term would likely cost Pima County no more than the cost associated with Termination for Convenience during a five-year initial contract term.
5. By executing a longer initial term contract, Pima County transfers the performance burden and liability to the company under contract, thus enhancing the probability of higher quality technical proposals and associated technology and equipment.

#### DBO Industry Track Record

In an effort to review the ongoing experiences of other water and wastewater providers using DBO arrangements, an assessment of various DBO contracts throughout the country was undertaken to assess the ongoing experience of numerous communities with such a contractual arrangement. The November 13, 2009 memorandum (Attachment 2) provides a review of such contracts and concludes that the DBO procurement methodology provides strong, investment grade project contract guarantees with virtually no cost overruns and no significant permit violations. Furthermore, the transfer of project risk to the private sector and the opportunity to take advantage of private sector ingenuity to achieve a cost effective solution for the implementation of these projects is evident from this review. Of further note is that the majority of these operating contracts are in the range of 15- to 20-year initial terms.

The Honorable Chairman and Members  
Pima County Board of Supervisors  
Re: Regional Optimization Master Plan (ROMP)  
Water Reclamation Campus Treatment Facility – Follow-up  
January 27, 2010  
Page 5

### Summary

Based on the qualitative analysis of the length of the initial operations term and the advantages to Pima County of a longer initial term, the designation of a specific initial term is deemed appropriate for advancing the ongoing RFP process with the remaining pre-qualified DBO contractors. A contract with a shorter initial term would not be advantageous to Pima County from a cost perspective. Finally, the termination provisions to be incorporated into the final service contract provide Pima County with the necessary legal means for contract termination for cause or for convenience, thus providing the maximum flexibility and control over the selected contractor.

Given the current status of the DBO procurement process and the assessment that has been completed, I recommend the following actions:

1. Establish the term for the ROMP Water Reclamation Campus Treatment Facility DBO to be a 15-year initial operations term with one five-year renewal option.
2. Continue to provide the Board of Supervisors with periodic status reports as to the on-going RFP process.

Please advise me if you are interested in additional information regarding this matter.

CHH/mjk

### Attachments

- c: John Bernal, Deputy County Administrator – Public Works  
Michael Gritzuk, Regional Wastewater Reclamation Department Director  
George Widugiris, Procurement Department Director