



**Professional Services Amendment  
CITY OF AUSTIN  
RECOMMENDATION FOR COUNCIL ACTION**

**AGENDA ITEM NO.:** 16  
**AGENDA DATE:** Thu 04/15/2004  
**PAGE:** 1 of 5

**SUBJECT:** Authorize negotiation and execution of an amendment to the professional services agreement with MALCOLM PIRNIE, INC., Austin, TX, for the Govalle Tunnel Odor/Corrosion Control Project in the amount of \$5,895,192 for a total contract amount not to exceed \$8,247,639.

**AMOUNT & SOURCE OF FUNDING:** Funding in the amount of \$5,895,192 is included in the Fiscal Year 2003-2004 Capital Budget of the Austin Water Utility.

**FISCAL NOTE:** A fiscal note is attached.

**REQUESTING** Public Works  
**DEPARTMEN** for Austin Water Utility;  
**T:**

**DIRECTOR'S**  
**AUTHORIZATION:** Sondra Creighton

**FOR MORE INFORMATION CONTACT:** Gary Jackson, 974-7115; Randy Pohren, P.E., 972-0223; Laura Bohl, 974-7064

**PRIOR COUNCIL ACTION:** 10/5/95 – Govalle Tunnel Odor/Corrosion Control Improvements Project Preliminary Engineering Services; 3/5/97 – Design and construction phase services; 1/14/99 - Construction Phase Services - Odor Control; 8/22/02 - Design, Bid, Construction and Warranty Phase Services- Lockheed Site Relocation; 8/22/02 - Emergency Procurement for the Inspection of the Onion Creek Wastewater Tunnel Liner.

**BOARD AND COMMISSION ACTION:** Recommended by the Water & Wastewater Commission.

**PURCHASING:** N/A

**MBE / WBE:** 10.1% MBE and 18.3% WBE subcontractor participation to date.

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The Govalle tunnel transports wastewater flows from the Govalle service area (central Austin and downtown) to the South Austin Regional Wastewater Treatment Plant. The tunnel was constructed in 1988 and consists of an 8-mile long, 96-inch diameter concrete tunnel, which ranges in depth from 80 to 120 feet. Continuous operation of the tunnel is critical to the City in order to maintain uninterrupted wastewater service to its customers in the service area. The Utility observed that the tunnel was releasing odors and suspected damage to the interior due to corrosive gases generated by the wastewater.

The objectives of the overall project as stated in the original Request for Qualifications (RFQ) were to provide the following services "planning, design, and construction management of (1) improvements to cost-effectively and reliably control odors originating in the Govalle Tunnel System; and (2) improve corrosion protection of the tunnel." To accomplish this, the following activities were identified to occur in phases:

- Phase 1 – evaluate the entire tunnel system and evaluate the appropriate alternate means of odor control; evaluate the corrosion control/protection needs of the tunnel system and recommend improvements as may be appropriate;
- Phase 2 – prepare detailed final plans, specifications, and cost estimates for the construction of the improvements identified in Phase 1; the consultant shall develop the construction sequencing and scheduling requirements for the improvements identified;



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- Phase 3 – to provide construction and post construction phase professional engineering services for the designs identified in the previous phases.

As stated in the RFQ, "the City intends to retain the consultant selected under this procurement for all phases of the project." To accomplish these objectives, the project has been broken down into six main components: (1) study to investigate odor and corrosion, (2) design and construction of odor control facilities, (3) investigation of conflicts with the Texas Department of Transportation's (TxDOT) improvements, (4) inspection of the tunnel interior to determine the corrective action necessary, (5) rehabilitation report for corrective action necessary, and (6) design and construction for long term rehabilitation of the tunnel facilities.

The first component, a study to investigate the odor and corrosion of the Govalle Tunnel was awarded in the original Professional Services Agreement, which was approved by Council on October 5, 1995. This work was a preliminary engineering assessment of the Govalle Tunnel system. These initial studies evaluated wastewater flows, wastewater constituents, airflow patterns, air sampling and analysis, and corrosion of the tunnel system structures. The Utility originally planned to have some inspection of the Tunnel occur in this phase, however, once the study began it was determined that the gases present were too dangerous to proceed, particularly at the Lockheed Shaft site, without specially designed access shafts. In order to properly design the shafts, additional time and funding was needed for the contract. This additional time and funding was awarded to the consultant in Supplemental Amendment No. 3.

The second component of the overall project was to design and construct odor control facilities. The Utility was notified by a County Commissioner of several citizen complaints about odors in the Govalle Tunnel area. Additionally, the Utility received several letters from the Texas Commission on Environmental Quality (TCEQ), formerly the TNRCC, regarding the odors. TCEQ required that corrective action be taken immediately and that the odors be eliminated as quickly as possible. Keeping this in mind, the Utility brought Supplemental Amendment No. 1 to Council on March 5, 1997. This contract amendment was for the design of odor control units at four shaft sites identified in the preliminary phase. Due to dangerous concentrations of hydrogen sulfide gas at the Lockheed Shaft site, a *feasibility study for adding chemicals upstream of the Lockheed Shaft to mitigate the gases* was included in Supplemental Amendment No. 1. Because of the dangerous gases at the Lockheed Shaft site, a work plan had to be developed that emphasized safety, so that the work could be conducted in this extremely hazardous, confined environment under live-flow conditions. It was anticipated due to the limitations of existing technology that additional access shafts would need to be designed and constructed. Plans and specifications for constructing the odor control units required to comply with the TCEQ order were prepared. Supplemental Amendment No. 3 was approved by Council on January 14, 1999 for *construction phase services for the construction of the odor control units*. Key Enterprises was awarded the construction contract for the odor control units in March 1, 1999 and final acceptance of the units occurred on August 15, 2000. Completion of this aspect of the project satisfied the TCEQ requirement to eliminate the odors in the area.

The third major project component, to investigate potential conflicts with TxDOT's improvements in the area, was accomplished through an administrative contract amendment in April of 1998 (Supplemental Amendment No. 2). This amendment was required because while evaluating access to the tunnel system for inspection, it was discovered that potential conflicts existed with the tunnel, related structures, and



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some proposed TxDOT highway improvements. Coordination with TxDOT occurred, and is still required and ongoing. The coordination with TxDOT necessitated Supplemental Amendment No. 5., which again had an impact on the schedule and costs of the project. This amendment was approved by Council on August 22, 2002, provided for engineering services to relocate, design, and provide construction phase services for a new Lockheed Shaft site. This was determined to be necessary based on the TxDOT improvements identified in Supplemental Amendment No. 2. These structures were badly deteriorated due to corrosion and would have required significant rebuilding. Continuous changes in the scope and design of the highway project had an adverse impact on the Govalle Tunnel project schedule. The relocation and construction of the new Lockheed Shaft site is being funded from the utility relocation fund and will be reimbursed by TxDOT.

The fourth component of the project was inspection of the tunnel interior to determine the corrective action necessary. Supplemental Amendment No. 4 was an administrative amendment that did not alter any existing authorized or contracted dollar amounts -- this action restructured the contract to accommodate less expensive and improved methods for accessing the tunnel based on state-of-the-art tunnel inspection technology. This technological advancement saved the Utility an estimated \$2,500,000 in design and construction costs of the intermediate tunnel access shafts, which were now no longer necessary. Plans and specifications for bidding the inspection of the Govalle Tunnel were completed and Council awarded the inspection contract to J.F. White on January 17, 2002. This inspection identified the extent and degree of corrosion and provided necessary information to define the rehabilitation and other improvements needed for the tunnel system. The inspection was completed in August 2003.

Council approved supplemental Amendment No. 6 on August 22, 2002, which allowed the consultant to provide engineering services for a preliminary tunnel inspection at seven access shafts and to assist the city in preparing an Emergency Response Plan in the event of a failure of the Onion Creek Tunnel liner. *The preliminary tunnel inspection provided basic information for planning a full-length tunnel inspection* to assess the liner failure and subsequent remedial actions. This work was not part of the original scope of services identified in the RFQ awarded to Malcolm Pirnie in 1995. However, because the work is similar in nature to the Govalle Tunnel Odor/Corrosion Control Project, and because of the urgent nature of the liner failure, staff recommended awarding the amendment for initial evaluation to Malcolm Pirnie. A separate RFQ for selection of an engineering firm to evaluate the condition of the Onion Creek tunnel liner and make recommendations as appropriate was brought forward to Council and awarded to the firm, HDR.

The current action before Council will accomplish major project component five, the preparation of the rehabilitation report for the necessary corrective action, and major project component six, design and construction for long-term rehabilitation of the tunnel facilities. Other previously approved components of the project are complete. The rehabilitation report for the tunnel and its associated laterals, access shafts and drop structures indicates that advanced corrosion is present in all the shafts and laterals which require corrective action. However, only short reaches of the main tunnel will require rehabilitation. Rehabilitation will extend the long-term viability of the tunnel and associated facilities. Due to the significant repairs required at each shaft and lateral, the design will include wastewater flow diversion into the tunnel via the rehabilitated shafts and laterals.

It is intended that this will be the last amendment on this multi-phased project. Phasing was required



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because of the need to evaluate the tunnel conditions, put together a work plan for the inspection, and review the results of the inspection prior to proceeding with the design and construction phases of the project. This amendment includes design and construction phase services for the rehabilitation of the Govalle Tunnel to address the corrosion and future protection of the tunnel. This final amendment will also be prioritized and implemented in phases as funding is identified.

**GOVALLE TUNNEL ODOR/CORROSION CONTROL PROJECT AGREEMENT HISTORY**

<u>ACTION</u>	<u>Description</u>	<u>Amount</u>	<u>Total</u>
10/05/95	Professional Services Agreement (Phase 1) for a preliminary engineering assessment of the Govalle Tunnel System for odor, corrosion protection and control	\$150,000	\$150,000
03/05/97	Supplemental Amendment No.1 (Phases 1 & 2) Design of odor control and corrosion investigations and repairs	\$1,499,000	\$1,649,000
04/27/98 Administrative	Supplemental Amendment No. 2 Investigations into conflicts with Texas Department of Transportation facilities	\$35,294	\$1,684,294
01/14/99	Supplemental Phase Amendment No.3 (Phase 3) Construction Services for Odor Control Facilities	\$200,859	\$1,885,153
03/30/01 Administrative	Supplemental Amendment No. 4 Delete remaining activities of Section V of SA 1 and section V of SA 2 and reallocate these funds to perform the tunnel inspection.	\$0	\$1,885,153
08/22/02	Supplemental Amendment No. 5 (Phases 2 & 3) Design, Bid, Construction and Warranty Phase Services for relocation of the Lockheed Site Lateral and Odor Control Facilities	\$392,468	\$2,277,621



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08/22/02	RCA for Supplemental Amendment No. 6 Onion Creek Wastewater Tunnel Lines	\$74,826	\$2,352,447
Proposed	Supplemental Amendment No. 7 (Phases 2 & 3) Design, Bid, Construction and Warranty Phase Services for Odor/ Corrosion Control Project	\$5,895,192	\$8,247,639

Participation goals stated in the solicitation were 10% MBE and 10 % WBE. Subconsultant participation goals for this Phase are:

<u>NON M/WBE TOTAL – PRIME</u>	<u>\$ 4,163,192</u>	<u>70.6%</u>
Malcolm Pirnie, Inc.	\$ 4,163,192	70.6%
<u>MBE TOTAL – SUBCONSULTANTS</u>	<u>\$ 595,000</u>	<u>10.1%</u>
(MH) The Arizpe Group (construction inspection services)	\$ 355,000	6.0%
(MB) HVJ & Associates (geotechnical services)	\$ 80,000	1.4%
(MA) Gupta & Associates, Inc. (electrical design services)	\$ 160,000	2.7%
<u>WBE TOTAL – SUBCONSULTANTS</u>	<u>\$ 1,078,000</u>	<u>18.3%</u>
(FR) A.K. Young & Associates (environmental permitting services)	\$ 120,000	2.0%
(FR) Dynamic Reprographics (reproduction services)	\$ 66,000	1.1%
(FR) Coleman & Associates (landscape architecture services)	\$ 60,000	1.0%
(FR) McGray & McGray Land Surveyors (land surveying services)	\$ 93,000	1.6%
(FR) K. Friese & Associates, Inc. (wastewater design and traffic control design services)	\$ 539,000	9.2%
(FB) Group Solutions RJW (community involvement)	\$ 200,000	3.4%
<u>NON M/WBE TOTAL – SUBCONSULTANTS</u>	<u>\$ 59,000</u>	<u>1.0%</u>
Wiss, Janney, Elstner Associates, L.P. (structural services)	\$ 59,000	1.0%

Overall Subconsultant participation for this project including this Phase is: 10.1% MBE, 18.3% WBE, and 1.0% Non-M/WBE. Original participation goals did not include sub goals. This amendment meets all current sub goals.

No. 040704-A  
WATER AND WASTEWATER COMMISSION RESOLUTION  
AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH MALCOLM PIRNIE, INC., IN  
THE AMOUNT OF \$5,895,192.00 FOR A TOTAL CONTRACT AMOUNT NOT TO EXCEED \$8,172,818.00

April 7, 2004  
REGULAR MEETING  
VOTE: 5-1-2-1

Motion made by: Miller  
Commissioners Consenting: Coleman, Raun, Chan, Pool  
Commissioners Dissenting: Warner  
Commissioners Abstaining: Friese, Lee  
Commissioners Absent: Kirfman

The Water and Wastewater Commission recommends the Council authorize execution of an amendment to the professional services agreement with MALCOLM PIRNIE, INC., 100 Congress Avenue, Suite 225, Austin, Texas 78701 for Govalle Tunnel Odor/Corrosion Control Project in the amount of \$5,895,192.00 for a total contract amount not to exceed \$8,172,818.00.

Commissioner Coleman requested to be briefed of all possible steps of the RCA process, be notified of any timeline changes, and be made aware of the review process. Commission would also like to be notified of Council action or inaction.

Chairman Warner dissented on this item. He believes this item should be resubmitted for an RFP.

Commissioner Friese abstained on this item due to conflict of interest.

Commissioner Lee abstained on this item because the project's construction phase budget is not allocated at this time. It was presented by the staff to be approximately \$15,000,000.00. Approving a professional service agreement in an amount of approximately \$5,900,000.00 at this time may be premature.

  
Michael Warner, Chairperson  
Water and Wastewater Commission

4/7/04  
Date

# CIP FISCAL NOTE

**DATE OF COUNCIL CONSIDERATION:**  
**WHERE ON AGENDA:**  
**DEPARTMENT:**

4/15/2004  
Resolution  
Austin Water Utility

**DESCRIPTION:**

Authorize negotiation and execution of an amendment to the professional services agreement with MALCOLM PIRNIE, INC., Austin, TX, for the Govalle Tunnel Odor/Corrosion Control Project in the amount of \$5,895,192 for a total contract amount not to exceed \$8,172,818.

**FINANCIAL INFORMATION:**

Parent Project Name:	Wastewater Unfunded Future
Project Authorization:	2003-04 Approved Capital Budget
Funding Source:	Commercial Paper
Number:	4570 237 2017

Current Appropriation	\$ 410,907,293.00
Unencumbered Balance	185,219,116.92 *
Amount of This Action	<u>(5,895,192.00)</u>
Remaining Balance	<u>\$ 179,323,924.92</u>
Current Available Balance	\$ 190,380,075.55
Less Outstanding Commitments	<u>(5,160,958.63)</u>
Estimated Unencumbered Balance	<u>\$ 185,219,116.92 *</u>

Utility Finance:



David Anders, Utilities Finance Manager

Date: 3/24/04

REF. #4570 237 8931

