



**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CA09-071**

**1. Agenda Item Number:**  
**28**  
**2. Council Meeting Date:**  
September 25, 2008

**TO: MAYOR & COUNCIL**

**3. Date Prepared:** September 8, 2008

**THROUGH: CITY MANAGER**

**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Award a project agreement to Layne Christensen Co. for Tumbleweed Aquifer Storage and Recovery (ASR) Well #8 Drilling, Project No. WW0701-401, in an amount not to exceed \$560,994.

**6. RECOMMENDATION:** Staff recommends Council award a project agreement to Layne Christensen Co. for Tumbleweed Aquifer Storage and Recovery (ASR) Well #8 Drilling, Project No. WW0701-401, in an amount not to exceed \$560,994.

**7. BACKGROUND/DISCUSSION:** ASR wells are needed to support the reclaimed water distribution system. ASR wells are used to inject reclaimed water in the upper aquifer when irrigation demands are low. When irrigation water demand is high, these wells are pumped to recover the stored effluent water for use in the reclaimed water distribution system.

This project agreement provides for the drilling of one ASR well in the Tumbleweed Recharge area. A construction management services contract for the drilling of the well will be awarded separately.

**8. EVALUATION PROCESS:** Staff solicited and received statements of qualifications for well drilling and rehabilitation services from five (5) firms. The selection process was conducted in accordance with established City policies and procedures. The selection committee consisted of the following members:

- John Knudson, Senior Engineer
- Joshua Plumb, Engineering Project Manager
- Bob Blankenship, Water Systems Maintenance Superintendent
- Lorna Tremaine, Contractor/Resident

The selection committee met on April 16, 2007, and reviewed statements of qualifications from Zim Industries, Inc., Stewart Brothers Drilling Co., Layne Christensen Co., WDC Exploration & Wells, and Arizona Beeman Drilling. The panel recommended Layne Christensen Co. for award of the well drilling JOC.

**9. FINANCIAL IMPLICATIONS:**

Cost: \$560,994  
Savings: None  
Long Term Costs: None  
Fund Source:

Acct. No.:	Fund Name:	Program Name:	CIP Funded:	Amount:
615.3910.0000.6817.8WW189	WW Operating	Effluent Reuse Storage & Recovery Wells	FY 07/08	\$560,994

**10. PROPOSED MOTION:** Move that Council award a project agreement to Layne Christensen Co. for Tumbleweed Aquifer Storage and Recovery (ASR) Well #8 Drilling, Project No. WW0701-401, in an amount not to exceed \$560,994.

**ATTACHMENTS:** Location Map, Project Agreement

**APPROVALS**

**11. Requesting Department**

Robert Mulvey, Assistant Municipal Utilities Director

**13. Department Head**

Dave Siegel, Municipal Utilities Director

**12. City Engineer**

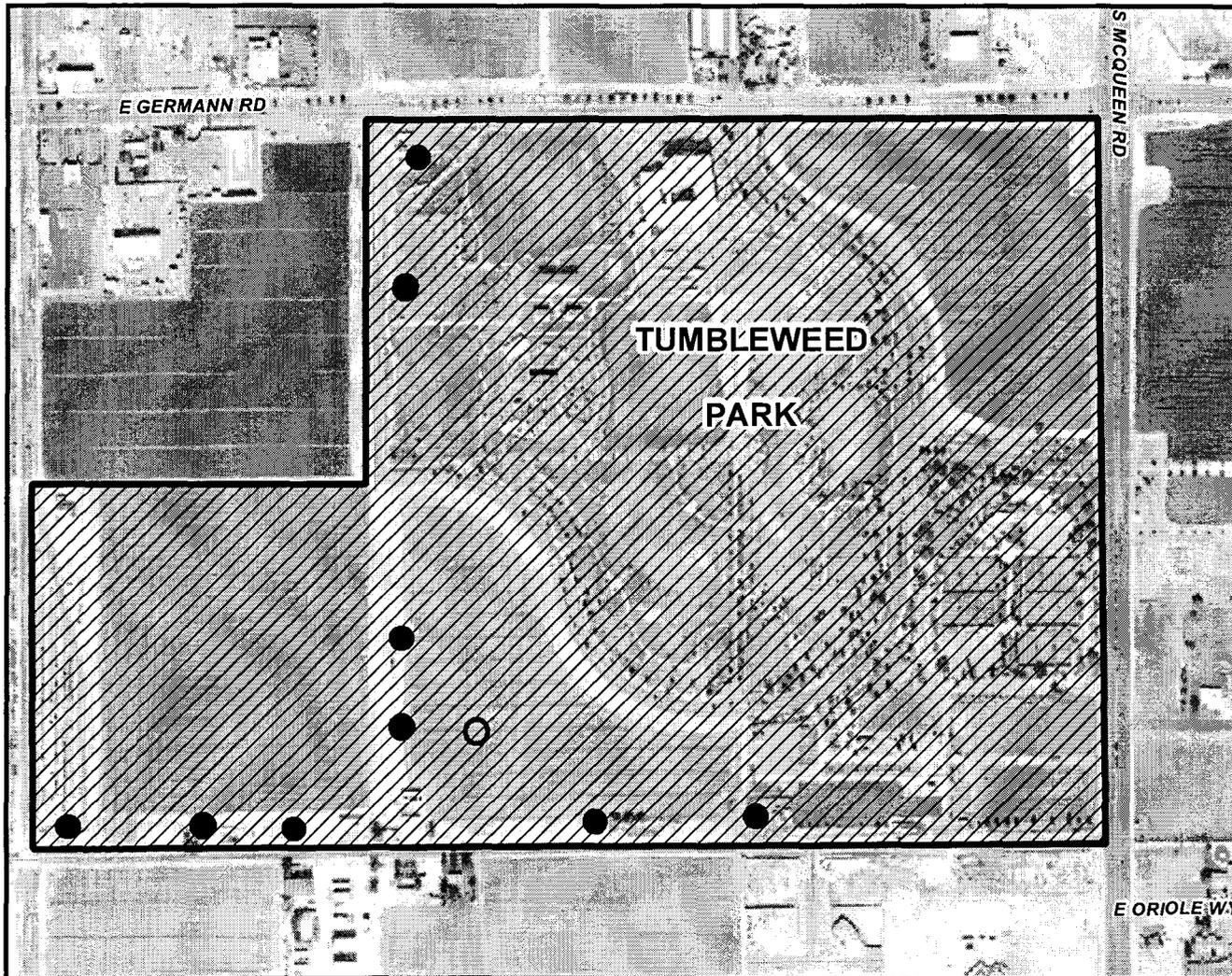
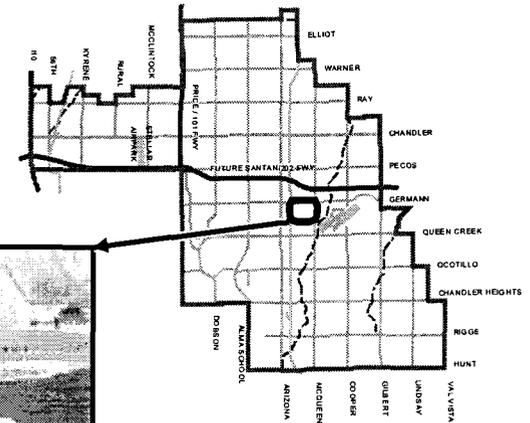
Sheina Hughes, Assistant Public Works Director/  
City Engineer

**14. City Manager**

W. Mark Pentz



# TUMBLEWEED ASR WELL NO. 8 PROJECT NO. WW0701 - 401



MEMO NO. CA09-071

**LEGEND:**

- Existing ASR Wells
- Future ASR Well NO. 8





**EXHIBIT A  
SCOPE OF WORK**

JOC shall drill, test, and complete one (1) aquifer storage and recovery (ASR) well at the Tumbleweed Recharge Facility.

**EXHIBIT B  
FEE SCHEDULE**

<b>NO.</b>	<b>DESCRIPTION</b>	<b>ESTIMATED QUANTITY</b>	<b>UNIT</b>	<b>UNIT PRICE</b>	<b>EXTENDED PRICE</b>
1	Mobilization/Demobilization	1	LS		\$37,309
2	Surface Casing Construction	40	LF	\$500	\$20,000
3	TW-ASR 8 Site Preparation	1	LS		\$2,000
4	Pilot Hole Drilling	500	LF	\$82	\$41,000
5	Geophysical Logging	1	LS		\$4,500
6	Borehole Reaming (to 26 inches)	400	LF	\$78	\$31,200
7	18-Inch Stainless Steel Well Casing	150	LF	\$563	\$84,450
8	18-Inch Stainless Steel Well Screen	250	LF	\$687	\$171,750
9	2-Inch SS sounding Tube and 2-Inch SS Transducer Tube	800	LF	\$43	\$34,400
10	Casing and Screen Installation	400	LF	\$10	\$4,000
11	Silica Sand Filter Pack	50	Ton	\$790	\$39,500
12	Bentonite Seal	15	CF	\$95	\$1,425
13	Cement Grout Seals	10	CY	\$475	\$4,750
14	Air Lift/Swab Development	40	Hour	\$400	\$16,000
15	Pump/Surge Development	24	Hour	\$295	\$7,080
16a	Gyroscopic Plumbness/Alignment Test	1	Each	\$3,500	\$3,500
16b	Dummy Plumbness/Alignment Test	1	Each	\$1,000	\$1,000
17	Final Well video	1	Each	\$2,500	\$2,500
18	FI&R Well Test Pumping Equipment	1	Each	\$16,000	\$16,000
19	Pump Tests	34	Hour	\$295	\$10,030
20	Project Allowance	1	LS		\$25,000
21	Rig Without Crew	8	Hour	\$150	\$1,200
22	Rig With Crew	8	Hour	\$300	\$2,400
<b>TOTAL</b>					<b>\$560,994</b>