

ORIGINAL



0000063855

WATCO

P.O. BOX 1270 SHOW LOW, AZ 85902/PHONE 928-537-8739/FAX 928-537-8739

28DR

RESPONSE TO STAFF DATA REQUEST
FINANCING APPLICATION
DOCKET NO. W-01979A-06-0357
November 13, 2006

- 1) For breakdown of costs please see Attachment A. Please note that the enclosed Engineer's Cost Estimate is not wholly applicable to the proposed project; it contains estimates for future projects as well. The numbers pertaining to the proposed project can be found in the Engineer's Cost Estimate on lines 1, 3, 4, 5 (one hydrant assembly priced at \$5,000), and 8. These numbers total \$868,500. Engineering Services and Contingencies equal ten percent of the aforementioned number; this equals \$86,850. The final total of the proposed project is \$955,350.
- 2) Watco, Inc. is unable to provide projected construction schedules and completion dates for the Tie-Line and Storage Tank due to the variables involved. Before schedules and dates can be provided, Watco, Inc. needs to receive Approval from two agencies. From ACC: Approval of a Finance Application (Docket No. W-01979A-06-0357) and a Rate Case (Docket No. W-20475A-06-0550). From WIFA: Approval of funding. However, Watco, Inc. would like to begin construction in the Spring of 2007 and have the project completed by Spring of 2008.
- 3) Watco, Inc.'s office does not have a copy of the WIFA Application that was submitted. The Application has been requested from WIFA and will be forwarded as soon as it arrives.
- 4) To understand the requirement of additional storage and issues relating to fire flow, please see Engineer's Report marked as Attachment B.

Arizona Corporation Commission

DOCKETED

NOV 14 2006

DOCKETED BY

AZ CORP COMMISSION
DOCUMENT CONTROL

2006 NOV 14 P 12:08

RECEIVED

ATTACHMENT A

COST ESTIMATE

Item	Unit	Unit Price	Qty	Total Price
1. Watermain, 8" PVC	LF	\$50	5,200	\$260,000
2. Watermain, 6" PVC	LF	\$45	15,900	\$715,500
3. Watermain, 8" DIP	LF	\$75	400	\$ 30,000
Exposed installed on Piers				
4. 0.5M Gal Storage Tank	LS	\$425,000	1	\$425,000
5. Hydrant Assembly	EA	\$5,000	28	\$140,000
6. Pumps and Controls	EA	\$18,000	2	\$ 36,000
7. Valves	EA	\$800	40	\$ 32,000
8. Meter Assemblies	EA	\$550	270	<u>\$148,500</u>
TOTAL				\$1,787,000
Engineering Services (5%)				\$ 89,000
Contingencies (5%)				<u>\$ 89,000</u>
TOTAL				\$1,965,000

If the existing wells cannot produce required flows another well will need to be drilled.

1a. Pumps, Controls, Site and Power	LS	\$20,000	1	\$ 20,000
2a. Well	LS	\$80,000	1	<u>\$ 80,000</u>
TOTAL				\$ 100,000
Engineering Services				\$ 5,000
Contingencies				<u>\$ 5,000</u>
TOTAL				\$ 110,000

ATTACHMENT B



FLEETWOOD ENGINEERING, LLC
PO Box 1158 Lakeside, AZ 85929-1158
928-368-8759

October 1, 2006

WATCO
Attn: Mark Grapp
POB 1270
Show Low, AZ 85902

RE: WATCO System Improvements and Interconnection with Bourdon Ranch Estates

Mr. Grapp,

After reviewing the existing conditions of WATCO Water Company and the terrain between the two service areas it appears to be a necessary idea to connect the two distribution systems and increase the storage and flow capabilities of the system to enhance the management, economic feasibility, reliability, and provide forest and domestic fireflows. Contained in this report are the requirements to achieve this goal and the estimated costs.

Let's begin with a description of what the WATCO Water Company is trying to accomplish by improving their system and connecting the Bourdon Ranch Estates and Silver Lake Estates Subdivisions. Improvements in the existing system will provide fire protection to the residents of Silver Lake Estates & Bourdon Ranch Estates. This forest and domestic fire protection will be possible by providing a larger storage tank and larger watermains throughout the subdivisions. The connection between the two water systems will give redundancy to both systems, since now the systems will be able to draw from two wells. The increased flow and storage will better protect the residents against forest fire danger. Fire protection service will be provided by Show Low Fire Department and system will be designed to Show Low Fire Department specifications.

See attached Design Report and Cost Estimate for details.

Thank You,

Marc Fleetwood

Marc Fleetwood, PE



Marc M. Fleetwood

WATCO Water Company
Design Report to Add Fireflows to the System
And Connect to Bourdon Ranch Estates Distribution System

The existing wells for WATCO are 538 feet deep for Silver Lake Estates and 440 feet deep for Bourdon Ranch Estates. The well pumps produce 58 gpm and 31 gpm, respectively. The current system has two storage tanks of 100,000 gallons and 25,000 gallons. To provide fireflow, WATCO will have to locate a large reservoir on a high point near the subdivisions and increase the size and loop many of its watermains.

The current total pumping capacity per day is 96,120 gallons per day. This amount is based on pumps running 18 hours per day. Use of 18 hours per day is conservative to allow for filling of storage tanks and times when the pump is off during low water demand. Silver Lake Estates experiences high summertime demand when its well runs continuously.

By the end of construction, total number of connections is estimated to be 330. The peak month usage is about 400 gpd and is equivalent to 132,000 gallons per day. That amount is already above the pumping capacity and does not include any forest or domestic fire protection.

The fireflow required from Show Low Fire Department for this rural setting is 1,000 gpm for two hours or 120,000 gallons. Show Low Fire Department will be the responding department.

The pumping capacity of the wells should be set at the peak demand and one-half the fireflow, or 192,000 gallons per day. This gives combined production of the two wells at 145 gpm. If this amount cannot be met with the two existing wells an additional well may be needed.

The elevated storage should be a minimum of 500,000 gallons and 24 feet tall. This will allow for two days storage and the required fireflow.

The distribution system will need many upgrades to accommodate the required fireflow. Many of the 4" watermains will need to be replaced with 6" watermains throughout Silver Lake Estates. An 8" watermain will need to be installed to the storage reservoir and in between Silver Lake Estates and Bourdon Ranch Estates. All dead-end lines will need to be looped. Fire hydrants will need to be installed in all areas of both subdivisions. See below for quantities and estimated costs.

This project will need to be reviewed and approved by Arizona Department of Environmental Quality (ADEQ).