

United Water Florida

1400 Millcoe Road PO Box 8004 Jacksonville, FL 32239-8004 telephone 904 721 4600 facsimile 904 721 4680

980214-WS

September 9, 1998

Ms. Blanco Bayo Division of Records and Reporting Public Service Commission Capital Circle Office Center 2540 Shumard Oak Blvd Tallahassee, Fl 32399-0850

Re: South Ponte Vedra Association, Inc.

Dear Ms. Bayo:

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The purpose of this letter is to respond to an inquiry made by Mr. John Underwood, Director of the South Ponte Vedra Association, Inc., regarding the lack of fire hydrants.

Mr. Underwood indicated two separate areas that presently lack fire hydrants. These areas can be described as follows;

• Approximately 300 dedicated ocean front lots and tracts that run in a line in a north-south orientation between the Atlantic Ocean and the eastern side of state highway A1A. The Guana River State Park also borders this area on the north and south. (Section 1)

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• The second and smaller area consists of approximately 42 ocean front lots located south of the above-mentioned group, from 3095 to 3137 South Ponte Vedra Boulevard (A1A), between the Atlantic Ocean and the eastern side of state highway A1A. (Section 2)

The enclosed map indicates these areas as indicated above.

United Water Florida "UWF" has reviewed the Association's inquiry and would like to offer the following information regarding this matter.

AFAWater and wastewater service is provided to the area in question by UWF's Ponce deAPPLeon facilities. Water supply is provided to the system by three independent waterCAFwell, high service pump capability, aeration and chlorine disinfection capabilities. TheCMUPonce de Leon site has a 0.5-mg ground storage tank. The storage capacity available atCTRthe other sites consists of a 0.015-mg hydropneumatic tank at each system to maintainEAGsystem pressure.

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 Image: UWF believes that the original Ponce de Leon facilities served the area currently being served by the A1A North and A1A South WTPs. As was the case for many older systems, the distribution system and water treatment plants were designed to provide only

DOCUMENT NUMBER - DATE

09946 SEP 108

domestic water service to homes along A1A. Many of the homes at that time were summer homes and part-time residences. New developments in the southern portion of the service area were designed and constructed to provide fire flow as well as domestic water service. In conjunction with these new developments, the Ponce de Leon WTP was constructed which has the storage and pumping capability to provide fire flows.

We have reviewed the areas in question as to what improvements would be necessary to provide a level of fire flow of 500 gpm @ 20 psi. The difficulty in providing fire flow to all sections of the distribution system is limited by the distribution system itself. Briefly, the distribution system consists of a single pipeline running north –south along A1A. The length of the pipeline is approximately 40,000 feet, the majority of which is six inches in diameter. The newer subdivisions are located off of this pipeline in the southern portion of the distribution system. A drawing is attached to further clarify the layout of the distribution system. The area consisting of approximately 300 homes is shown as section 1 and the smaller area of 42 homes is indicted by section 2.

In order to provide a fire flow of 500 gpm @ 20 psi the following improvements are necessary;

- <u>Section 1</u> The installation of approximately 10,000 feet of 8 inch water main from the A1A North WTP to end of the system to the north would be required. In addition 20 hydrants would need to be installed at 500-foot intervals. Improvements required at the A1A North WTP would include the construction of a 0.200 mg ground storage tank and the addition of a 750 gpm high service pump. From the A1A North WTP to the south end of Section 1, twenty one hydrants would need to be installed on the existing water main.
- <u>Section 2</u> The installation of 20 hydrants on the existing 8 inch water main would be needed.

The estimated cost to provide the above improvements can be summarized as follows;

•	Section 1	
	• Installation of 10,000 feet of 8" PVC water main	\$400,000
	 Construction of a 0.200mg ground storage tank, aerator and high service pump. Installation of 41 fire hydrants 	\$425,000 <u>\$123,000</u>
	Total Section 1	\$948,000
•	Section 2	
	• Installation of 20 fire hydrants	<u>\$ 60,000</u>
	Total Section 2	\$ 60,000
	Total Improvements for Sections 1 & 2	<u>\$1,008,000</u>

The above improvements to provide fire flow to all the areas specified represent a major capital investment. UWF has already interconnected the three water treatment plants (A1A North, A1A South, Ponce de Leon) to improve water pressure and overall water service in the Ponce de Leon sub service area. UWF has been and continues to make significant investments to improve its overall water and wastewater systems. In Docket No. 980214-WS, UWF's two year capital improvement plan will result in approximately \$32,000,000 of net capital improvements in 1998 and 1999, which will improve water and wastewater service in UWF's system.

The \$1,008,000 total improvements for Sections 1 & 2 are not a part of the two year (1998-1999) capital improvement plan. UWF will continue to review the fire flow needs of the Ponce de Leon facilities and possibly initiate a program in 2000 to install 10 hydrants per year in locations where a minimum flow of 500 gpm @ 20 psi is available. In 1999, if UWF's capital expenditures are under budget, UWF would consider installing ten fire hydrants as described above. The program would be initiated in Section 2 in the first years and continue north through Section 1 in subsequent years where a minimum flow of 500 gpm @ 20 psi is available.

Please review the above information at your earliest convenience. If you should have any questions, please feel free to contact me at (904) 721-4601 ext.4606.

Sincerely

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Todd D.Mackey, P.E. Manager Engineering & Technical Services

cc: G. Moseley Mr. John Starling - PSC