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May 10, 2010

Dan Conners
Harvey VanDyke
Wheeler Crest Community Service District
129 Willow Road
Swall Meadows, CA 93514

Reference: Wheeler Crest Community Service District – Hilltop Water System

Dear Mr. Conners and Mr. Van Dyke;

Based on the "Existing Water System Study" of the Hilltop Water System prepared for the Wheeler Crest Community Service District in April of 2006 numerous deficiencies were noted:

A. The artesian well operates as a siphon at times, which is subject to siphon loss and failure. The effect of draught years on the artesian strata is unknown.
B. Well is almost certainly not sealed from potential contaminates at upper levels. This is particularly concerning since septic in this area is discharged into leach fields.
C. There is only one source for water.
D. Water pressure at some lots is minimal.
E. System requires manual chlorination.
F. Aging System. Pipelines are small diameter and old, laterals are thin wall pipe buried at shallow depths. Reservoir could corrode through.
G. No meters
H. Old service lateral valving
I. There is no fire protection.

The deficiencies listed above as A, B and C are of particular concern. If there is a failure of the existing artesian well to produce water, there could be an extended water outage.

Figure 1 on the following page shows the existing water community service area as well as the location of the inlet of the feed pipe to the community. There are numerous advantages of having the source of water located within the boundaries of the community that it is serving. This limits the amount of pipe construction required. There is no practical area in the current reservoir easement for installation of the project. There is no financial or logistical advantage to having it located anywhere west of North Valley View Road.

WCCSD Water Lines -- Hilltop Estates No. 1

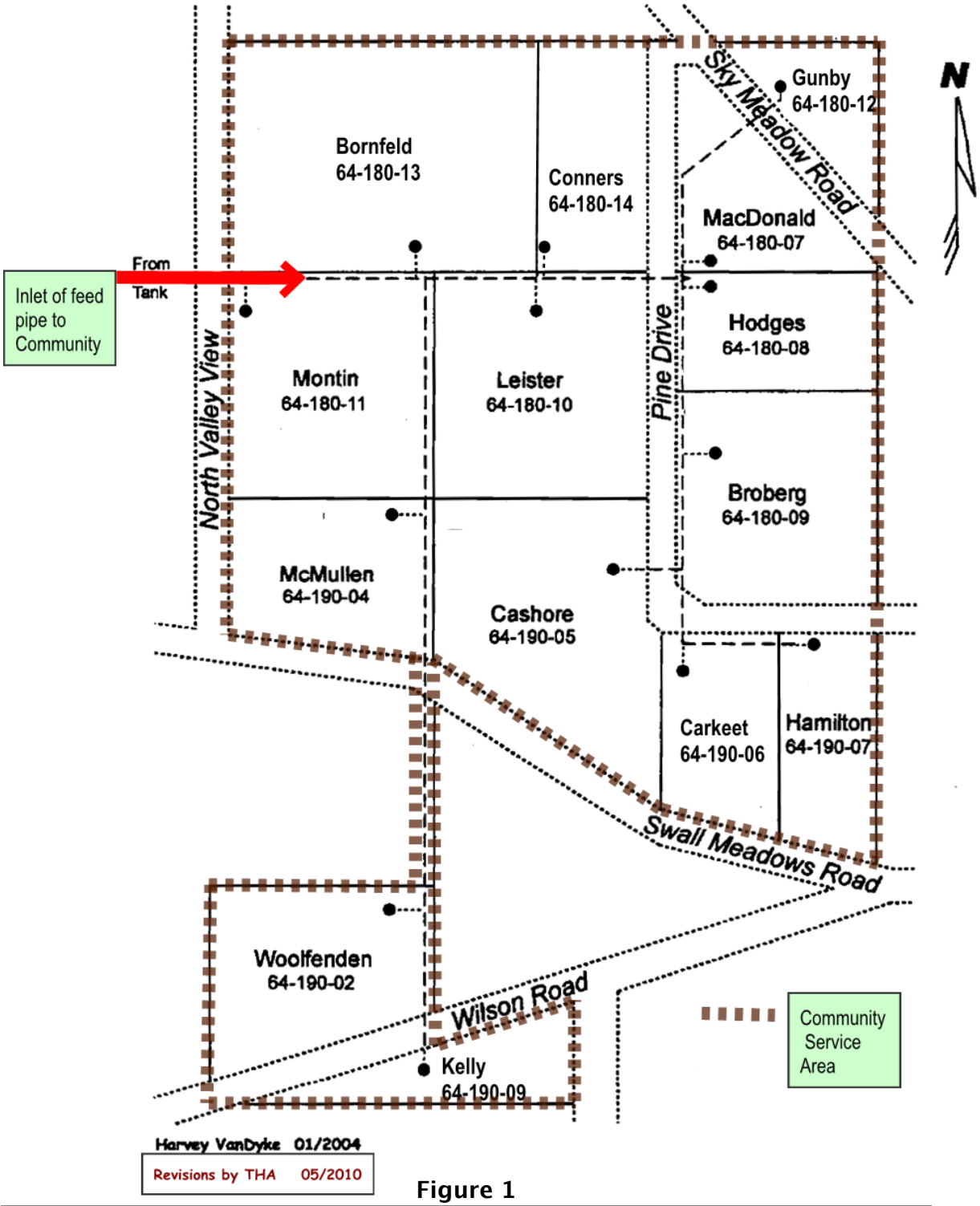


Figure 1

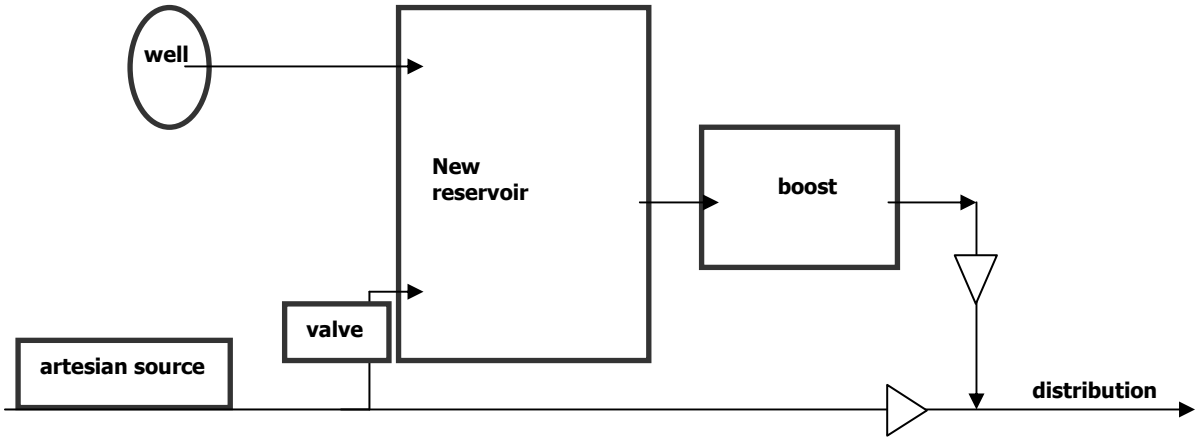


Figure 2

A proposed solution, shown above in Figure 2, includes the following facilities installed within a new easement located in the Hilltop Estates area:

- **Well and pump** with a predicted flow rate of 40 gpm.
- **Reservoir** sized to limit cycling by the well pump. Approximate site 1400 gallons.
- **Booster-pump system** designed to match the pressures in the existing distribution system.
- **Interconnection** to the existing artesian line to allow alternating use while the existing artesian system remains operable, and allow the use of either the artesian well or the new well independently.
- **Well Pump station controls** to allow the system to alternate filling the new reservoir with either the new Well and Pump or the existing artesian well.

This solution solves items A and C. Also if the existing artesian well becomes contaminated as identified in item B above, the water system can switch completely to the new well, which would then solve deficiency item B. This proposed system can also resolve deficiencies noted in items D and E, once the pipelines in the existing system are improved to a point where they could support higher line pressures.

The proposed solution provides a low visibility design. It includes three modules. This includes:

- a small well head, with a footprint of approximately 5 feet by 5 feet
- An underground reservoir with a footprint of approximately 10 feet by 5 feet
- A small appurtenance vault, including the Booster Pump Station, with a footprint of approximately 5 feet by 5 feet.

With the small size as well as the buried nature of most of these system facilities they would be not very visible after the surrounding brush has regrown.

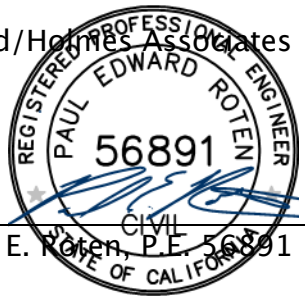
A preliminary cost estimate is shown in Figure 3, based on our present understanding of the project.

Well System Costs						
		Quantity	*Units*	*unit price*	*Item costs*	**Subtotals**
Well No. 1 - Domestic / Fire (300gpm)						**$ 42,500**
	Initial Study - Geotechnical	1	LS	5000	**$ 5,000**	
	Drill Costs ($75 per foot 150 foot depth)	150	VF	$ 75.00	**$ 11,250**	
	Well Drilling Inspection - Geotechnical (25% of drilling	1	LS	25%	**$ 2,813**	
	Develop Well (50% of well)	1	LS	50%	**$ 5,625**	
	Develop Well - Geotechnical (25% of well)	1	LS	25%	**$ 2,813**	
	Pump and Motor	1	LS	5000	**$ 5,000**	
	Pipe and appurtanences	1	LS	5000	**$ 5,000**	
	Well & System Controls	1	LS	5000	**$ 5,000**	
Underground Storage Tank		1400	Gallon	$ 1.00	**$ 1,400**	**$ 1,400**
Booster Pump System						**$ 7,000**
	booster pump	1	LS	2000	**$ 2,000**	
	booster pump housing	1	LS	5000	**$ 5,000**	
Water system						**$ 4,750**
	Solenoid Valve	1	ea	250	**$ 250**	
	Water line	100	lf	40	**$ 4,000**	
	Check Valve	2	ea	250	**$ 500**	
	Well System total					**$ 55,650**
	Combined					**$ 55,650**
25%	contingencies					**$ 13,913**
	Complete Water System Total					**$ 69,563**
Cost per Unit		*Units*	*14*			*$ 4,969*

Figure 3

It is recommended that this solution be implemented at the earliest possible time to avoid potential long term water outages. If you have any questions, please contact me at 760.934.7588, or by email at proten@thainc.com.

Triad/Holmes Associates



Paul E. Roten, P.E. 56891