Project Update Summary

This summary is to provide the Gran Mutual Water Company board members and shareholders the current status of our water system repairs and upgrades project. Once the water company reached a decision to move forward with the project proposal I felt the best way to proceed was to carry out the complete project in stages or phases. By sectioning the project into phases it enables us to have more control over project management and project cost. It is easier to develop phase entrance and exit strategies than to attempt the complete project as a whole. Also this allowed contracts to be developed by phase as opposed to one contract for the entire project. This legally binds the water company and the contractor to a single phase and not to the entire project. This will allow the water company or the contractor to terminate the relationship at any time if project is not proceeding in a satisfactory manner to either party. This also allowed us to move forward with the project without the water company having the complete funding in place.

The water company decided the most critical system deficiencies should be addressed first. One of the existing water storage tanks has heavy corrosion and the tank will need to be replaced. Based on North Starr engineering's system evaluation the system is capable of meeting a 2 hour fire flow and peak home usage demand with one well that will deliver 325 gallons per minute and both water storage tanks online. If the faulty water storage tank were to be taken off line the water company would not be able to deliver the 2 hour demand with the single well. We felt the best way to proceed would be to start with the construction of the new well. With the additional production capacity of a new well the water company could safely take the faulty tank offline and deliver the peak 2 hour demand with a single water storage tank and both wells online. This gives us some clearer project phases and what order each phase should be implemented.

- Phase #1- Construct, test, and sterilize the new well at the water storage tank site.
- Phase #2- Install a new well pump, backup generator, plumbing, electrical, monitoring equipment, and sterilization equipment required to bring the #2 well online.
- Phase #3- Replace the existing faulty water storage tank. Install required plumbing. Upgrade the security fencing to re-secure the project site.
- Phase #4- Remove and rehab the #1 well & pump system. Install backup generator, electrical, sterilization equipment, and upgrade the security fencing.
- Phase #5- Inspect and recoat as needed the existing 85,000 gallon water storage tank. Replace booster shed doors.
- Phase #6- Install new fire hydrants in locations recommended by Butte County Fire Department. Upgrade existing wharf style fire hydrants to standard dual outlet hydrants.
- Phase #7- Install distribution system water meters with lockout shutoff valves. Install landscaping around Site #1 and Site #2.

Any project of this size and scope will have challenges that arise during the construction of the project. It has been and will be our goal to achieve our project objectives and to complete these objectives within our allotted project budget without any major sacrifices. We have currently completed Phase #1 of the project. We are approximately 50% complete with Phase #2. We are close to beginning Phase #3. At this point I will summarize how Phase #1 transpired and the current status of Phase #2 and Phase #3.

In mid July of 2006 I met with Dave Storey c/o Storey Drilling Services at the well #2 site. After careful review of bids received we chose Storey Drilling Services to construct the new well. The initial site

Project Update Summary

meeting was to let us know what preparations would be required to construct the new well. At that meeting we learned that the site would need to be modified in order to accommodate all the equipment that would be needed to construct the new well. These required modifications were not revealed to Durham Pump during the bidding phase of the well construction. The site was not large enough to accommodate all the equipment needed and also the slope of the grade was too steep. We anticipated that site access was going to be very difficult and also anticipated there was a challenge as to where large volumes of water could be legally discharged. Durham Pump and Gran Mutual entered negotiations with For H Investments to lease the lot that boarders the water company's lot. The agreement would allow easier site access for large construction equipment and a safe area to discharge water. What was not anticipated was that the sloping grade of the water company's lot was going to hinder the well construction. We decided that a temporary gravel ramp would need to be constructed to provide a level area on the lot where the driller's equipment needed to be set up. Durham Pump mobilized equipment and had fill gravel hauled in to the site. We constructed the temporary ramp. We anticipated that a partial section of the existing fence would need to be removed and temporary fencing would be installed in order to gain easier site access. We intended to cut off the fence post leaving them in a manner that new posts could be connected to part of the posts removed. However we found the posts had been cemented into the underlying lava. The posts had to be completely removed and new post will need to be installed after completing Phase #3. After installing the gravel ramp under our prior agreement with the property owner of the leased lot we cleaned up debris off the leased lot and constructed a temporary retention pond on the lot for discharge water storage. We obtained permission from the Rocky Bluffs Homeowners Association to set up a temporary sprinkler system on the strip of land bordering the subdivision to safely discharge the water that would be pumped from the new well. At that time temporary fencing was brought in and installed to improve security of the project site.

On August 29th Storey Drilling Services mobilized his equipment to the site and started construction of the new well. The first step was to drill a 12" diameter test hole to explore for water. Geological studies can be performed to determine a site to drill a well but they can be very expensive and sometimes inconclusive. The advantage of having the new well drilled at the water storage tank site was it would allow the capability of one generator to keep the entire water distribution system online during a power failure. Also there are limitations on how close a new well can be drilled to an existing well. This ruled out drilling at the existing well site. The only other choice would be for the water company to purchase a new lot to install a new well. A new lot would require all new infrastructures. We felt the most cost effective way to proceed would be to explore the water storage tank site for water by drilling a test hole. We have found that standard contracts with hard rock drillers include a penetration clause. If the driller encounters hard rock that slows down the drilling process the per foot cost rate of construction converts to an hourly rate. This requires that construction is closely monitored to detour excessive cost overruns. Several times during the drilling of the test hole the driller converted to an hourly rate. The driller encountered several areas where water was entering the test hole. After completion of the test hole and electronic log of the test hole was performed to determine water bearing areas of the rock formations that were penetrated. After review of the data it was estimated the well could produce approximately 200 gallons per minute. There are three areas at different levels that had water bearing capabilities. Our target production for the well was 300+ gallons per minute. After review of the cost incurred at the completion of the test hole it was decided to explore an additional 100 feet of depth. That exploration found after a short penetration of more hard rock a stratum of undesirable clay. At this point a decision had to be made as to the viability of proceeding with the well construction. Based on our knowledge of the well at the Tuskin Ridge Golf course and based on the drillers experience and the data provided by the electronic log we felt we could construct a viable well. After review of materials penetrated we concluded that the well would be very different than well #1. The water would flow into the well from water bearing cracks in the hard rock. Water flows into well #1 from a sand & gravel strata. The amount of well screen that would be required was 200 feet at 3 different intervals. We had budgeted 100 feet at one interval. We budgeted to

Project Update Summary

construct the well with mild steel blank casing and stainless steel screen casing with dielectric couplers to couple the stainless to the mild steel. Both the stainless screen and the dielectric couplers are very expensive. With the cost overrun incurred during the test hole exploration, the estimated cost of well completion, the additional cost for screening three zones, and the delay time in obtaining the additional amount of stainless screen & couplers a decision was made to proceed with the well construction using mild steel screen. By using mild steel screen it enabled the screen to be welded to the blank casing requiring no special couplers. At this point the driller started "reaming" the 12" diameter test hole to 22" diameter. The materials were ordered and would arrive ahead of the final borehole completion. Again several times during the reaming of the final borehole the driller encountered hard rock and converted to an hourly rate. At one point near the completion of the final borehole the drilling rate slowed dramatically due to hard rock. The driller suggested removal of the 22" drilling bit and completing the borehole with a 17-1/2" drilling bit. After review of the cost incurred I disagreed knowing that we would obtain a higher production rate from the well with the larger borehole and improved filtering capability with a thicker gravel pack. The driller continued with the 22" borehole and penetrated the harder rock and entered softer rock. The driller completed the bore hole within the time estimated at the beginning of the reaming process. The casing, gravel pack, borehole seal were then installed. The driller then began the well cleaning and development by air lifting. The water was discharged into the retention pond and then pumped out at a slower rate through the temporary sprinkler system. The first day of air lifting showed the well production to be much lower than expected. The driller injected a foaming agent to assist in removal of the driller's mud used as a lubricant and sealant during the test hole and final borehole construction. The driller also injected a non toxic chemical to assist in breaking down the polymers in the driller's mud. The next day the driller started air lifting and as the driller's mud was removed from the well the water production continued to increase throughout the day. Once the bulk of the drillers mud was removed from the well and the retention pond was filled beyond its design point we had the driller discontinue air lifting and begin demobilizing his equipment. At that point the driller estimated the well would produce between 200 to 300 gallons per minute.

The next step was to select a pump for the new well. We now knew that the water level in the well was standing at 429 feet from the surface. However we did not know how far the water level would draw down while being pumped. Our budget was set for a 50 hp pump that would deliver 300+ gallons per minute. I selected 3 different model pumps and discussed the benefits of each model with the board members. Since the well is new and has no pumping history we decided the best way to precede would be to set a 60 hp. pump close to the bottom of the well. Worst case scenario would be the pumping water level could reach the pump. Under this case scenario the pump chosen would continue to deliver 250 gallons per minute. By setting the pump close to the bottom of the well the water company would have the capability to continue to deliver close to our target production rate if the pumping level were to drop at initial testing or during drought years. Also with the pump at the lower setting we could perform a more effective well sterilization.

On November 6th 2006 we installed the 60 hp. pump on 672 feet of 5" steel drop pipe in the new 700 foot 12 " diameter well. Beginning on November 7th 2006 we started cleaning out the remaining driller's mud and testing the well for production and water level drawdown. The testing showed at a rate of 325 gallons per minute the pumping water level is 435 feet. This calculates to a specific capacity of 46.43 gallons per foot of drawdown (the standing water level came up to 428 feet after final cleaning). Due to the limitations of discharging the water being pumped we were limited to 3 to 4 hour duration run times. We filled and emptied the 80,000 gallon retention pond a total of 6 times plus one final time that it had filled with rainwater towards the end of Phase #1. To date the total amount of water air lifted and pumped from the well has been 500,000 gallons. The concrete slab around the well and for the chlorination equipment shed was installed.

The next step was sterilization and taking water samples. Once we found the water samples showed

Project Update Summary

and absence of total coli form bacteria we backfilled the retention pond and moved the temporary fencing to the original fence location. Construction of Phase #1 of the project was completed on January 2nd 2007. We have received the lien release from the drilling contractor and the statement of disinfection was submitted to the county to close the well permit. We are currently working on closing Phase #1 in Durham Pump's accounting system.

Phase #2 is about 50% complete. The well pump is installed and we are currently waiting for PG&E to complete the electrical installation. The backup generator is scheduled to arrive in February. Chico Electric is working with PG&E and expects to complete the electrical installation in Mid March. This will complete Phase #2. At that time it is our intention to bring the new well online and take the faulty water storage tank offline on the same day. This will begin Phase #3 of the project. Once the faulty water storage tank has been isolated from the system it can dismantled and legally disposed of. We have selected a tank contractor and we are currently drawing up the contract for Phase #3. The tentative schedule is to remove the tank and complete the tank site preparations prior to the tank contractors construction start date of this coming June. Expected tank completion is August 15th 2007. With the new well and new storage tank in the system the water company will have the capability to take either tank or either well pump offline for servicing and be still be capable of meeting the systems peak 2 hour demand.

Kevin C. O'Shea

Account Manager

Durham Pump Inc.

STOREY DRILLING SERVICES

P.O. BOX 98 • MIDLAND, OREGON 97634
(541) 884-3990 • (800) 245-8122
Fax #: (530) 528-2562

CONTRACTOR'S LICENSES:
OR #601 • CA #583153 • NV #38199

Durham Pump, Inc.
P. O. Box 60
Durham, California 95938

START: August 29, 2006
FINISH: October 26, 2006

WELL LOCATION: GRAN MUTUAL WATER CO. - COMMUNITY SUPPLY WATER WELL
North side of Skyway between Chico, CA & Paradise, CA in Rocky Bluffs Subdivision at the east end of Eagle Nest Drive. NW¼ SW¼ S4 T21N R2E

WELL LOG

0 - 1	Gravel & red clay topsoil
1 - 17	Weathered basalt
17 - 39	Brown basalt
39 - 54	Lava ash rock
54 - 56	Gray basalt
56 - 64	Broken black basalt
64 - 77	Black basalt
77 - 86	Broken black basalt
86 - 98	Gray basalt
98 - 105	Black lava with streaks clay ash
105 - 134	Hard broken black basalt
134 - 139	Gray basalt
139 - 152	Black basalt
152 - 171	Black ash rock with black lava
171 - 175	Black basalt
175 - 201	Soft black lava
201 - 241	Brown clay with streaks fine gravel
241 - 338	Yellow shale with brown clay and lava rock
338 - 353	Black basalt
353 - 366	Yellow shale with lava rock
366 - 406	Yellow shale
406 - 409	Yellow shale with lava rock
409 - 473	Yellow shale
473 - 487	Yellow shale with lava rock
487 - 500	Broken black basalt
500 - 518	Yellow shale with lava rock
518 - 560	Gray sandstone with sandy gray clay
560 - 590	Yellow shale with streaks sand
590 - 639	Sandy yellow clay
639 - 665	Semi-cemented gravel
665 - 681	Hard broken gray basalt
681 - 685	Black basalt with yellow clay
685 - 710	Semi-cemented gravel
710 - 741	Brown shale with black basalt
741 - 756	Brown shale
756 - 770	Brown shale & clay with black basalt
770 - 784	Yellow clay & shale
784 - 800	Green clay

STOREY DRILLING SERVICES

P.O. BOX 98 • MIDLAND, OREGON 97634
(541) 884-3990 • (800) 245-8122
Fax #: (530) 528-2562

CONTRACTOR'S LICENSES:
OR #601 • CA #583153 • NV #38199

Durham Pump, Inc.
P. O. Box 60
Durham, California 95938

START: August 29, 2006
FINISH: October 26, 2006

WELL LOCATION: GRAN MUTUAL WATER CO. - COMMUNITY SUPPLY WATER WELL
North side of Skyway between Chico, CA & Paradise, CA in Rocky Bluffs Subdivision
at the east end of Eagle Nest Drive. NW¼ SW¼ S4 T21N R2E

WELL LOG
(Continued)

22 inch diameter hole from 0 to 711feet and 12¼ inch diameter hole from 711 to 800 feet;
Well electric logged from 0 to 710 feet.
Well gravel packed with 1/8 by 3/8 inch pea gravel from 58 to 711 feet.
705.5 feet of 12¾ inch O.D. x .250 wall steel casing set at 704.5 feet with 220 feet of 12 inch diameter mild steel
Johnson Ag Screen 0.050 slot – Solid casing and screen set as follows:

+1 foot to 339 feet solid steel casing
339 feet to 499 feet Ag Screen
449 feet to 519 feet solid steel casing
519 feet to 619 feet Ag Screen
619 feet to 639 feet solid steel casing
639 feet to 699 feet Ag screen
699 feet to 704.5 feet solid steel casing
At 704.5 feet a 12¾ inch diameter schedule 40 domed steel cap welded on casing

Weatherford/Gemaco casing centralizers attached around casing at 330 feet, 520 feet, and 700 feet.
Sanitary seal from 0 to 58 feet with 120 sacks cement
Well airlifted to develop aquifers
Static water level: 428 feet

Test pumped __________ GPM at _______ feet. (By Durham Pump, inc.)

Well Development & Testing Log

Durham Pump

Customer: Gran Mutual Water

Date: 11/7/2006

Location: Eagle Nest Drive

Start Time: 1:00 PM

Pump Set: 672 ft.

Water Level Ref. Pt: Top of Sounding Tube

SWL: 429'

Stop: 4:00 PM

Operator: Phil Guffy

TIME	Engine/ Pump RPM	Q (GPM)	PWL (ft.)	Totalizer	Sand (cc)	Surges	Discharge Description
		Start Test Pumping					
PM				302728			Dark
1:00	3450	150	429'				
1:15	3450	150	430'				
1:30	3450	150	431' 6"				
2:00	3450	150	432'				
2:20	3450	150	432' 8"				
2:30	3450	325	436'		2" 10 min		Dirty/Stained After
							10 min.
3:00	3450	325	436'				
	Sand Test At 325 6PM						
0	3:30	325	435'		-		Dirty
5	3:35	325	435' 8"		0.32		Stained
10	3:40	325	435' 10"		0.5		Stained
20	3:50	325	436'		0.65		VLC
30	4:00	325	436'		0.73		Clear
	5 min. Return 429' 6"						

Well Development & Testing Log

Durham Pump

Customer: Gran Mutual Water **Date:** 11/8/2006

Location: Eagle Nest Drive **Start Time:** 8:15 am

Pump Set: 672 ft. **Water Level Ref. Pt:** Top of Sounding Tube

SWL: 428' **Stop:** 3:00 PM **Operator:** Phil Guffy

TIME	Engine/ Pump RPM	Q (GPM)	PWL (ft.)	Totalizer	Sand (cc)	Surges	Discharge Description
		Start Test Pumping					
8:15	3450	325	435'		.3 in 10 min		Dirty for 5 to 10 min
8:30	3450	325	435'				
8:45	3450	325	435'				
9:00	3450	325	435'				
9:15	3450	325	435'				
9:30	3450	325	435'				
9:45	3450	325	435'				
10:00	3450	325	435'		Light		
10:30	3450	325	435'		Light		
10:40	3450	325	435'		.2 in 15 min		Stained
Off							
12:50	Start	140	431'		Light		Clear*
1:20		206	432' 2"		Light		Clear*
1:50		325	435'		.2 in 30 min		Clear*
2:20		325	435'		0.2		Clear*
3:00	Stop	325	435'		0.2		Clear*
	5 min. Return 429'						