

# ***ANNUAL REPORT***

OF

FALLS WATER COMPANY, INC.

**NAME**

1770 Sabin Dr, Idaho Falls, ID 83406

**ADDRESS**

TO THE

**IDAHO PUBLIC**

**UTILITIES COMMISSION**

FOR THE

YEAR ENDED December 31, 2004

RECEIVED  
FILED  
2005 APR 18 AM 8:32  
IDAHO PUBLIC  
UTILITIES COMMISSION

**ANNUAL REPORT FOR WATER UTILITIES TO  
THE IDAHO PUBLIC UTILITIES COMMISSION  
FOR THE YEAR ENDING December 31, 2004**

**COMPANY INFORMATION**

1 Give full name of utility Falls Water Company, Inc.  
 Telephone Area Code (    ) 208-522-1300  
 E-mail address scott@fallswater.com  
 2 Date of Organization January 9, 1959  
 3 Organized under the laws of the state of Idaho  
 4 Address of Principal Office (number & street) 1770 Sabin Drive  
 5 P.O. Box (if applicable) \_\_\_\_\_  
 6 City Idaho Falls  
 7 State Idaho  
 8 Zip Code 83406  
 9 Organization (proprietor, partnership, corp.) Not -for-profit Corporation  
 10 Towns, Counties served Bonneville County and portions of Ammon, Idaho

11 Are there any affiliated companies? No  
 If yes, attach a list with names, addresses & descriptions. Explain any services provided to the utility.

12 Contact Information	Name	Phone No.
President (Owner)	Kelly D Howell	208-522-2525
Vice President		
Secretary	Cindy Howell	208-522-2525
General Manager	K. Scott Bruce	208-522-1300
Complaints or Billing	K. Scott Bruce	208-522-1300
Engineering	Tony Wise	208-522-1300
Emergency Service	Tony Wise	208-522-1300
Accounting	K. Scott Bruce	208-522-1300

13 Were any water systems acquired during the year or any additions/deletions made to the service area during the year? Yes  
 If yes, attach a list with names, addresses & descriptions. Explain any services provided to the utility.

14 Where are the Company's books and records kept?  
 Street Address 1770 Sabin Drive  
 City Idaho Falls  
 State Idaho  
 Zip 83406

NAME: Falls Water Company, Inc.

**COMPANY INFORMATION (Cont.)**

For the Year Ended December 31, 2004

15 Is the system operated or maintained under a service contract? Yes

16 If yes: With whom is the contract? Frontier Properties Group

When does the contract expire? Month-to-Month

What services and rates are included? All Labor, both field and office

17 Is water purchased for resale through the system? Yes, Leased well site within FWC's service area

18 If yes: Name of Organization Evans Grain & Elevator

Name of owner or operator Well operated by Falls Water Company, Inc.

Mailing Address PO Box 3765

City Ogden

State UT

Zip 84409

	Gallons/CCF	\$Amount
Water Purchased	10,753,050 gallo	\$ 1,112.00

19 Has any system(s) been disapproved by the Idaho Division of Environmental Quality? No

If yes, attach full explanation

20 Has the Idaho Division of Environmental Quality recommended any improvements? Yes

If yes, attach full explanation

21 Number of Complaints received during year concerning:

Quality of Service No Record

High Bills No Record

Disconnection No Record

22 Number of Customers involuntarily disconnected 42

23 Date customers last received a copy of the Summary of Rules required by IDAPA 31.21.01.701? June 2004

Attach a copy of the Summary

24 Did significant additions or retirements from the Plant Accounts occur during the year? No

If yes, attach full explanation and an updated system map

NAME: Falls Water Company, Inc.

**REVENUE & EXPENSE DETAIL**

For the Year Ended December 31, 2004

ACCT #	DESCRIPTION		
<b><u>400 REVENUES</u></b>			
1	460	Unmetered Water Revenue	121545.09
2	461.1	Metered Sales - Residential	317101.43
3	461.2	Metered Sales - Commercial, Industrial	12616.81
4	462	Fire Protection Revenue	0
5	464	Other Water Sales Revenue	0
6	465	Irrigation Sales Revenue	0
7	466	Sales for Resale	0
8	400	Total Revenue (Add Lines 1 - 7) (also enter result on Page 4, line 1)	451263.33
9	* DEQ Fees Billed separately to customers		Booked to Acct # _____
10	** Hookup or Connection Fees Collected	135100.00	Booked to Acct # <u>271</u>
11	***Commission Approved Surcharges Collected		Booked to Acct # _____
<b><u>401 OPERATING EXPENSES</u></b>			
12	601.1-6	Labor - Operation & Maintenance	76432.22
13	601.7	Labor - Customer Accounts	7303.88
14	601.8	Labor - Administrative & General	81288.32
15	603	Salaries, Officers & Directors	6877.00
16	604	Employee Pensions & Benefits	10800.00
17	610	Purchased Water	1112.00
18	615-16	Purchased Power & Fuel for Power	78233.94
19	618	Chemicals	0.00
20	620.1-6	Materials & Supplies - Operation & Maint.	18424.66
21	620.7-8	Materials & Supplies - Administrative & General	37254.14
22	631-34	Contract Services - Professional	6802.50
23	635	Contract Services - Water Testing	5756.00
24	636	Contract Services - Other	11384.04
25	641-42	Rentals - Property & Equipment	14169.73
26	650	Transportation Expense	8700.94
27	656-59	Insurance	8542.00
28	660	Advertising	1778.82
29	666	Rate Case Expense (Amortization)	0.00
30	667	Regulatory Comm. Exp. (Other except taxes)	0.00
31	670	Bad Debt Expense	5179.38
32	675	Miscellaneous	3416.52
33	<b>Total Operating Expenses (Add lines 12 - 32, also enter on Pg 4, line 2)</b>		383456.09

Name: Falls Water Company, Inc.

**INCOME STATEMENT**

For Year Ended December 31, 2004

ACCT #	DESCRIPTION		
1	Revenue (From Page 3, line 8)		<u>451263.33</u>
2	Operating Expenses (From Page 3, line 33)	383456.09	
3	403 Depreciation Expense	35238.00	
4	406 Amortization, Utility Plant Aquisition Adj.		
5	407 Amortization Exp. - Other		
6	408.10 Regulatory Fees (PUC)	893.74	
7	408.11 Property Taxes	4150.92	
8	408.12 Payroll Taxes	0.00	
9A	408.13 Other Taxes (list)      DEQ Fees	7982.00	
9B		0.00	
9C		0.00	
9D		0.00	
10	409.10 Federal Income Taxes	0.00	
11	409.11 State Income Taxes	4084.00	
12	410.10 Provision for Deferred Income Tax - Federal	0.00	
13	410.11 Provision for Deferred Income Tax - State	0.00	
14	411 Provision for Deferred Utility Income Tax Credits	0.00	
15	412 Investment Tax Credits - Utility	0.00	
16	Total Expenses from operations before interest (add lines 2-15)	435804.75	
17	413 Income From Utility Plant Leased to Others	0.00	
18	414 Gains (Losses) From Disposition of Utility Plant	0.00	
19	Net Operating Income (Add lines 1, 17 & 18 less line 16)		<u>15458.58</u>
20	415 Revenues, Merchandizing Jobbing and Contract Work	0.00	
21	416 Expenses, Merchandizing, Jobbing & Contracts	0.00	
22	419 Interest & Dividend Income	0.00	
23	420 Allowance for Funds used During Construction	0.00	
24	421 Miscellaneous Non-Utility Income	64059.19	
25	426 Miscellaneous Non-Utility Expense	5912.81	
26	408.20 Other Taxes, Non-Utility Operations	0.00	
27	409-20 Income Taxes, Non-Utility Operations	0.00	
28	Net Non-Utility Income (Add lines 20,22,23 & 24 less lines 21,25,26, & 27)		<u>58146.38</u>
29	Gross Income (add lines 19 & 28)		<u>73604.96</u>
30	427.3 Interest Exp. on Long-Term Debt		<u>7852.25</u>
31	427.5 Other Interest Charges		<u>0.00</u>
32	NET INCOME (Line 29 less lines 30 & 31) (Also Enter on Pg 9, Line 2)		<u><u>65752.71</u></u>

Name: Falls Water Company, Inc.

**ACCOUNT 101 PLANT IN SERVICE DETAIL**  
For Year Ended December 31, 2004

SUB ACCT #	DESCRIPTION	Balance Beginning of Year	Added During Year	Removed During Year	Balance End of Year
1 301	Organization				
2 302	Franchises and Consents				
3 303	Land & Land Rights	3,329.00			3,329.00
4 304	Structures and Improvements	8,707.00			8,707.00
5 305	Collecting & Impounding Reservoirs				
6 306	Lake, River & Other Intakes				
7 307	Wells	52,805.00	2,740.00		55,545.00
8 308	Infiltration Galleries & Tunnels				
9 309	Supply Mains				
10 310	Power Generation Equipment	16,693.00			16,693.00
11 311	Power Pumping Equipment	195,807.00	6,876.00		202,683.00
12 320	Purification Systems	15,865.00	1,216.00	1,478.00	15,603.00
13 330	Distribution Reservoirs & Standpipes	494.00			494.00
14 331	Trans. & Distrib. Mains & Accessories	154,392.00	280,663.00		435,055.00
15 333	Services				
16 334	Meters and Meter Installations	173,351.00	50,362.00		223,713.00
17 335	Hydrants				-
18 336	Backflow Prevention Devices				-
19 339	Other Plant & Misc. Equipment				-
20 340	Office Furniture and Equipment	9,182.00	4,636.00	5,344.00	8,474.00
21 341	Transportation Equipment	28,703.00	11,668.00	13,261.00	27,110.00
22 342	Stores Equipment	13,630.00	2,435.00	2,737.00	13,328.00
23 343	Tools, Shop and Garage Equipment				
24 344	Laboratory Equipment				
25 345	Power Operated Equipment				
26 346	Communications Equipment				
27 347	Miscellaneous Equipment				
28 348	Other Tangible Property				
29	<b>TOTAL PLANT IN SERVICE</b> (Add lines 1 - 28)	<b>672,958.00</b>	<b>360,596.00</b>	<b>22,820.00</b>	<b>1,010,734.00</b>

Enter beginning & end of year totals on Pg 7, Line 1

Name: Falls Water Company, Inc.

**ACCUMULATED DEPRECIATION ACCOUNT 108.1 DETAIL**

For Year Ended December 31, 2004

SUB ACCT #	DESCRIPTION	Depreciation Rate %	Balance Beginning of Year	Balance End of Year	Increase or (Decrease)
1 304	Structures and Improvements				
2 305	Collecting & Impounding Reservoirs				
3 306	Lake, River & Other Intakes				
4 307	Wells		27161	29342	2181
5 308	Infiltration Galleries & Tunnels				
6 309	Supply Mains				
7 310	Power Generation Equipment		5112	5947	835
8 311	Power Pumping Equipment		116603	124785	8182
9 320	Purification Systems		15865	14448	-1417
10 330	Distribution Reservoirs & Standpipes		494	494	0
11 331	Trans. & Distrib. Mains & Accessories		64093	70434	6341
12 333	Services				
13 334	Meters and Meter Installations		84489	99771	15282
14 335	Hydrants				
15 336	Backflow Prevention Devices				
16 339	Other Plant & Misc. Equipment				
17 340	Office Furniture and Equipment		6381	2151	-4230
18 341	Transportation Equipment		16049	7344	-8705
19 342	Stores Equipment				
20 343	Tools, Shop and Garage Equipment		10067	8082	-1985
21 344	Laboratory Equipment				
22 345	Power Operated Equipment				
23 346	Communications Equipment				
24 347	Miscellaneous Equipment				
25 348	Other Tangible Property				
26	TOTALS (Add Lines 1 - 25)		346314	362798	16484

Enter beginning & end of year totals on Pg 7, Line 7

Name: Falls Water Company, Inc.

**BALANCE SHEET**

For Year Ended December 31, 2004

		<u>ASSETS</u>			
ACCT #	DESCRIPTION		Balance Beginning of Year	Balance End of Year	Increase or (Decrease)
1	101	Utility Plant in Service (From Pg 5, Line 29)	672,958.00	1,010,734.00	337,776.00
2	102	Utility Plant Leased to Others			
3	103	Plant Held for Future Use			
4	105	Construction Work in Progress			
5	114	Utility Plant Aquisition Adjustment			
6		Subtotal (Add Lines 1 - 5)	672,958	1,010,734	337,776
7	108.1	Accumulated Depreciation (From Pg 6, Line 26)	346314	362798	16484
8	108.2	Accum. Depr. - Utility Plant Lease to Others			
9	108.3	Accum. Depr. - Property Held for Future Use			
10	110.1	Accum. Amort. - Utility Plant in Service			
11	110.2	Accum. Amort. - Utility Plant Lease to Others			
12	115	Accumulated Amortization - Aquisition Adj.			
13		Net Utility Plant (Line 6 less lines 7 - 12)	346314	362798	16484
14	123	Investment in Subsidiaries			
15	125	Other Investments			
16		Total Investments (Add lines 14 & 15)	0	0	0
17	131	Cash	36287	126484	90197
18	135	Short Term Investments			
19	141	Accts/Notes Receivable - Customers	34096	40629	6533
20	142	Other Receivables			
21	145	Receivables from Associated Companies			
22	151	Materials & Supplies Inventory			
23	162	Prepaid Expenses			
24	173	Unbilled (Accrued) Utility Revenue			
25	143	Provision for Uncollectable Accounts	1300	1300	0
26		Total Current (Add lines 17 -24 less line 25)	69083	165813	96730
27	181	Unamortized Debt Discount & Expense			
28	183	Preliminary Survey & Investigation Charges			
29	184	Deferred Rate Case Expenses			
30	186	Other Deferred Charges			
31		<b>Total Assets (Add lines 13, 16 &amp; 26 - 30)</b>	<b>415397</b>	<b>528611</b>	<b>113214</b>

Name: Falls Water Company, Inc.

**BALANCE SHEET**

For Year Ended December 31, 2004

<b>LIABILITIES &amp; CAPITAL</b>		Balance	Balance	Increase
ACCT #	DESCRIPTION	Beginning of Year	End of Year	or (Decrease)
1	201-3 Common Stock	25000	25000	0
2	204-6 Preferred Stock			
3	207-13 Miscellaneous Capital Accounts			
4	214 Appropriated Retained Earnings			
5	215 Unappropriated Retained Earnings	34468	114717	80249
6	216 Reacquired Capital Stock			
7	218 Proprietary Capital			
8	Total Equity Capital (Add Lines 1-5+7 less line 6)	59468	139717	80249
9	221-2 Bonds			
10	223 Advances from Associated Companies	121164	115966	-5198
11	224 Other Long - Term Debt	0	77232	77232
12	231 Accounts Payable	5970	25979	20009
13	232 Notes Payable	60956	233159	172203
14	233 Accounts Payable - Associated Companies	11077	14951	3874
15	235 Customer Deposits (Refundable)			
16	236.11 Accrued Other Taxes Payable			
17	236.12 Accrued Income Taxes Payable	0	4054	4054
18	236.2 Accrued Taxes - Non-Utility			
19	237-40 Accrued Debt, Interest & Dividends Payable			
20	241 Misc. Current & Accrued Liabilities			
21	251 Unamortized Debt Premium			
22	252 Advances for Construction			
23	253 Other Deferred Liabilities			
24	255.1 Accumulated Investment Tax Credits - Utility			
25	255.2 Accum. Investment Tax Credits - Non-Utility			
26	261-5 Operating Reserves			
27	271 Contributions in Aid of Construction	139226	208875	69649
28	272 Accum. Amort. of Contrib. in Aid of Const. **	-2118	-5827	-3709
29	281-3 Accumulated Deferred Income Taxes			
30	Total Liabilities (Add lines 9 - 29)	336275	674389	338114
31	<b>TOTAL LIAB &amp; CAPITAL ( Add lines 8 &amp; 30)</b>	<b>395743</b>	<b>814106</b>	<b>418363</b>

\*\* Only if Commission Approved

Name: Falls Water Company, Inc.

**STATEMENT OF RETAINED EARNINGS**  
For Year Ended December 31, 2004

1	Retained Earnings Balance @ Beginning of Year	48964
2	Amount Added from Current Year Income (From Pg 4, Line 32)	65753
3	Other Credits to Account	
4	Dividends Paid or Appropriated	
5	Other Distributions of Retained Earnings	
6	Retained Earnings Balance @ End of Year	114717

**CAPITAL STOCK DETAIL**

7	Description (Class, Par Value etc.)	No. Shares Authorized	No. Shares Outstanding	Dividends Paid
	COMMON	1000	25	

**DETAIL OF LONG-TERM DEBT**

8	Description	Interest Rate	Year-end Balance	Interest Paid	Interest Accrued
	Frontier Property Group (formerly Wilcox Constr	6%	116121	7178	
	Frontier Property Group (1999 Ford Pickup)	8%	9753	66.67	
	DEQ	Unknown*	77232	0	Unknown*
	* DEQ is providing interim financing until SRLF is finalized at the end of the Lincoln Road project				

Name: Falls Water Company, Inc.

**SYSTEM ENGINEERING DATA**

For Year Ended December 31, 2004

1 Provide an updated system map if significant changes have been made to the system during the year.

2 Water Supply:

Pump Designation or location	Rated Capacity (gpm)	Type of Treatment: (None, Chlorine Fluoride Filter etc.)	Annual Production (000's Gal.)	Water Supply Source (Well, Spring, Surface Wtr)
Well #1	750	SAND SEP	74575	WELL
Well #2	400		97346	WELL
Well #3	200		0	WELL
Well #4	1500	SAND SEP	88237	WELL
Well #5	750	SAND SEP	235846	WELL
Well #6 (Pump 6)	600	SAND SEP	185053	WELL
Pump #7 (In Well #6)	600		106462	WELL
Pwell #8	1500		2043	WELL
Sargent Well (Well Decommissioned in 2004)	30		3772	WELL

3 System Storage:

Storage Designation or Location	Total Capacity 000's Gal.	Usable Capacity 000's Gal.	Type of Reservoir (Elevated, Pressurized, Boosted)	Construction (Wood, Steel Concrete)
Well 2/4	5	1.8	Pressurized	Steel

(Duplicate form and attach if necessary. Asterisk facilities added this year.)

Name: Falls Water Company, Inc.

**SYSTEM ENGINEERING DATA**  
**(continued)**  
 For Year Ended December 31, 2004

4 Pump information for ALL system pumps, including wells and boosters.

Designation or Location & Type of Pump**	Horse Power	Rated Capacity (gpm)	Discharge Pressure (psi)	Energy Used This Year
Well #2 Turbine Pump #2	40	400	65	
Well #4 Turbine Pump #4	150	1500	65	
Well #6 Submersible Pump #6	75	600	65	
Well #7 Submersible Pump #7	75	600	65	
SUBTOTAL OF ABOVE	The Above are all on one Power meter Totaling			739520
Well #1 Turbine Pump #1	75	750	65	164052
Well #3 Submersible Pump #3	30	200	65	5861
Well #5 Turbine Pump #5	75	750	65	339408
Well #8 Turbine Pump #8	150	1500	65	9400
Sargent Well Submersible Pump	10	30	60	22069

\*\* Submit pump curves unless previously provided or unavailable. Asterisk facilities added this year.  
 Attach additional sheets if inadequate space is available on this page.

- 5 If Wells are metered:
- What was the total amount pumped this year? 789561383
  - What was the total amount pumped during peak month? 150529415
  - What was the total amount pumped on the peak day? No Record
- 6 If customers are metered, what was the total amount sold in peak month? 109628000
- 7 Was your system designed to supply fire flows? Yes  
 If Yes: What is current system rating? 4
- 8 How many times were meters read this year? 7  
 During which months? April, May, June, July, August, September, October
- 9 How many additional customers could be served with no system improvements except a service line and meter? 100  
 How many of those potential additions are vacant lots? 100
- 10 Are backbone plant additions anticipated during the coming year? Yes  
 If Yes, attach an explanation of projects and anticipated costs!
- 11 In what year do you anticipate that the system capacity (supply, storage or distribution) will have to be expanded? 2005

Name: Falls Water Company, Inc.

**SYSTEM ENGINEERING DATA**  
**(continued)**  
 For Year Ended December 31, 2004

**FEET OF MAINS**

1	Pipe Size	In Use Beginning Of Year	Installed During Year	Abandoned During Year	In Use End of Year
	2"	1532.95			1532.95
	4"	2262.64			2262.64
	6"	96377.77	15817.43		112195.2
	8"	27850.34		1251.96	26598.38
	10"	22198.95		3739.05	18459.9
	12"	4712.17	2830.94		7543.11

**CUSTOMER STATISTICS**

	Number of Customers		Thousands of Gallons Sold	
	This Year	Last Year	This Year	Last Year
2 Metered:				
2A Residential	1852	1541	425907	457313
2B Commercial	35	32	24484	25173
2C Industrial				
3 Flat Rate:				
3A Residential	577	623	N/A	N/A
3B Commercial				
3C Industrial				
4 Private Fire Protection				
5 Public Fire Protection	224	185	N/A	N/A
6 Street Sprinkling				
7 Municipal, Other				
8 Other Water Utilities				
<b>TOTALS (Add lines 2 through 8)</b>	<b>2688</b>	<b>2381</b>	<b>450391</b>	<b>482486</b>

# CERTIFICATE

State of Idaho )  
 ) ss  
County of \_\_\_\_\_ )

WE, the undersigned Kelly D Howell, President  
and \_\_\_\_\_  
of the Falls Water Co Inc  
utility, on our oath do severally say that the foregoing report has been prepared under our direction,  
from the original books, papers and records of said utility; that we have carefully examined same, and  
declare the same to be a correct statement of the business and affairs of said utility for the period  
covered by the report in respect to each and every matter and thing therein set forth, to the best of our  
knowledge, information and belief.

Kelly D Howell  
(Chief Officer)

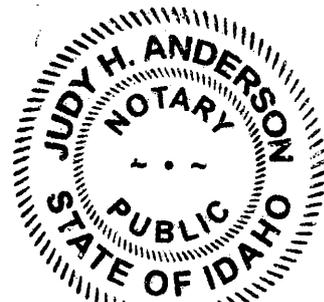
\_\_\_\_\_  
(Officer in Charge of Accounts)

Subscribed and Sworn to Before Me

this 15<sup>th</sup> day of April, 2005

Judy H Anderson  
NOTARY PUBLIC

My Commission Expires 3/1/2010



**Attachments for response to page 1 question 13:**

During 2004, Falls Water Company, Inc.'s service area changed in the following ways:

1. Four four-plexes were added to the system at:
  - a. 3270 East First Street, Idaho Falls, ID 83401
  - b. 3274 East First Street, Idaho Falls, ID 83401
  - c. 3278 East First Street, Idaho Falls, ID 83401
  - d. 3282 East First Street, Idaho Falls, ID 83401
2. Denise Subdivision Division 1 was added (Legal description is attached to this form).
3. Stone Arbor Subdivision (formally known as East Haven Estates) Division 1 was added (Legal description is attached to this form).
4. Calico Sky Subdivision Division 1 was added (Legal description is attached to this form).
5. Grayson Subdivision (aka Sargent Well Company) was integrated into the larger Falls Water Company, Inc. service area. The physical connection was made in October 2004. The Sargent Well Company well was abandoned and the water right was transferred to the Falls Water Company service area for use. Falls Water Company, Inc. purchased the Sargent Well Company in 1997.

**Attachments for response to page 2 questions 20 and 23:**

Question 20:

See attached letter to Dave Jorgensen regarding requirements to build Calico Sky subdivision with attached information from study prepared by Schiess & Associates.

Question 23:

Copy of summary of rules is found in The Falls Water Spout (see attached copy).

**Attachments for response to page 11 question 10:**

The planned improvement for 2005 is dependent upon our ability to obtain a water right that would enable us to drill a well in the area of Iona Road (on the north end of our water system). The estimated cost for a new well is \$534,000.00. In the attached pages are sections 7 and 8 from the draft of the study of Falls Water Company, Inc.'s water system, these sections contain the proposed projects and estimated cost for the projects. The draft has been reviewed by the Department of Environmental Quality and is awaiting final revision this summer as the study of the other water systems involved in this project are completed.

Sections 7 and 8 are the proposed upgrades to Falls Water's system to ensure the long term viability of the system. The projects listed in these sections were ranked based on priorities as understood at the time the draft was written. Project #1 was installed in

November and December 2004 (the final paperwork to conclude the project are still pending).

The well projects do not need to be completed with the storage tanks in the same project. The storage tanks and disinfection systems can be phased in when they become necessary. If Falls Water can not obtain the water right necessary to do a well in 2005, we would chose to do project # 5 elements for Monte Vista Ave. waterline upsize and First Street Water Line to loop dead ends. The estimated cost for this project would be \$400,000.00.

Falls Water Company, Inc  
1770 Sabin Dr  
Idaho Falls, ID 83406



Phone: (208) 522-1300  
Fax: (208) 522-4099  
Web site: www.fallswater.com

March 31, 2004

Benton Engineering  
550 Linden Dr  
Idaho Falls, ID 83401

### Water Service for Denise Subdivision Division 1

This confirms that Falls Water Company, Inc. has the ability, capacity, and willingness to provide domestic water utility service to the proposed development, Denise Subdivision Division No. 1, beginning at a point that is S0°00'19"W 648.36 feet and S87°04'33"E 478.60 feet from the West 1/4 Corner of Section 11, T. 2 N., R 38 E.B.M., and running thence S87°04'33"E 2078.44 feet along the South line of Victor F. Hanks Subdivision Division No. 2, Bonneville County, Idaho as shown on the recorded plat thereof to the Southeast Corner of said plat; thence S01°15'28"E 328.78 feet; thence N87°13'13"W 1243.54 feet; thence S00°01'59"W 7.36 feet to the Northeast corner of Summerset Subdivision, Bonneville County, Idaho as shown on the recorded plat thereof; thence N87°19'09"W 841.82 feet along the north line of said subdivision; thence N00°00'19"E 342.41 feet to the point of beginning, containing 16.04 acres. This is subject to the following conditions:

1. Installation and extension of the water system by the developer in accordance with Falls Water standards both within the development and connecting to the existing Falls Water system.
2. Approval by the Idaho Public Utilities Commission (IPUC).
3. In accordance with IPUC approved Rates and Tariff for Falls Water Company, Inc.
4. Payment by developer or by subsequent builders, homeowners, or lot purchasers of the connection fee in accordance with IPUC approved Rates and Tariffs.
5. System design and installation approved, inspected and accepted by Idaho Department of Health and Welfare, Division of Environmental Quality, Falls Water's designated professional engineer (Schuess and Associates Consulting Engineers), and by Falls Water's own internal staff.
6. Developer shall provide "as built" drawings on paper and computer disks in a format readable by Falls Water as the development progresses.
7. This will serve letter is valid for one year from the date of this letter.
8. In accordance with any other lawfully necessary provisions as agreed between developer and Falls Water.

FALLS WATER COMPANY, INC.

A handwritten signature in black ink that reads "K. Scott Bruce".

K. Scott Bruce  
Manager

Falls Water Company, Inc  
1770 Sabin Dr  
Idaho Falls, ID 83406



Phone: (208) 522-1300  
Fax: (208) 522-4099  
Web site: [www.fallswater.com](http://www.fallswater.com)

May 5, 2004

Mountain River Engineering  
1020 Lincoln Road  
Idaho Falls, ID 83401

### Water Service for East Haven Estates Division 1

This confirms that Falls Water Company, Inc. has the ability, capacity, and willingness to provide domestic water utility service to the proposed development, East Haven Estates Division No. 1, beginning at the monumented West 1/4 Corner of Section 24, Township 2 North, Range 38 East of the Boise Meridian; running thence N.0°05'20"E. 1076.43 feet along the section line; thence S.89°54'40"E. 155.83 feet; thence N.11°58'24"E. 89.75 feet; thence N.11°23'52"E. 127.25 feet; thence N.2°06'09"W. 35.00 feet to the North line of the Southwest 1/4 of the Northwest 1/4 of said Section 24; thence N.87°53'51"E. 625.07 feet along said North line; thence S.0°04'30"W. 1316.84 feet to the South line of said Northwest 1/4; thence S.87°55'33"W. 823.45 feet along said South line to the POINT OF BEGINNING. CONTAINING: 23.86 acres.

This is subject to the following conditions:

1. Installation and extension of the water system by the developer in accordance with Falls Water standards both within the development and connecting to the existing Falls Water system.
2. Approval by the Idaho Public Utilities Commission (IPUC).
3. In accordance with IPUC approved Rates and Tariff for Falls Water Company, Inc.
4. Payment by developer or by subsequent builders, homeowners, or lot purchasers of the connection fee in accordance with IPUC approved Rates and Tariffs.
5. System design and installation approved, inspected and accepted by Idaho Department of Health and Welfare, Division of Environmental Quality, Falls Water's designated professional engineer (Schuess and Associates Consulting Engineers), and by Falls Water's own internal staff.
6. Developer shall provide "as built" drawings on paper and computer disks in a format readable by Falls Water as the development progresses.
7. This will serve letter is valid for one year from the date of this letter.
8. In accordance with any other lawfully necessary provisions as agreed between developer and Falls Water.

FALLS WATER COMPANY, INC.

A handwritten signature in cursive script that reads "K. Scott Bruce".

K. Scott Bruce  
Manager

Falls Water Company, Inc  
1776 Sabin Dr  
Idaho Falls, ID 83406



Phone: (208) 522-1300  
Fax: (208) 522-4099  
Web site: www.fallswater.com

June 28, 2004

Benton Engineering  
550 Linden Drive  
Idaho Falls, Id.83401

### Water Service for Calico Sky Subdivision Division 1

This confirms that Falls Water Company, Inc. has the ability, capacity, and willingness to provide domestic water utility service to the proposed development, Beginning at a point that is N00°00'19"E 136.43 feet along the section line from the West 1/4 corner of Section 11, Township 2 North, Range 38 East of the Boise Meridian and running thence N00°00'19"E 539.25 feet along said section line; thence N43°42'44"E 189.61 feet; thence N28°36'01"E 75.52 feet; thence N17°35'16"E 360.67 feet; thence S72°24'44"E 217.84 feet; thence S20°23'18"W 27.38 feet; thence S72°24'44"E 128.50 feet; thence N17°35'16"E 31.07 feet; thence S89°59'41"E 253.44 feet; thence S00°00'19"W 15.00 feet; thence S89°59'41"E 295.00 feet; thence S00°00'19"W 1026.38 feet to the north line of the Eastern Idaho Railroad Right-of-way; thence N87°12'47" 1155.92 feet along said Railroad Right-of-way to the point of beginning, containing 25.51 acres.

This is subject to the following conditions:

1. Installation and extension of the water system by the developer in accordance with Falls Water standards both within the development and connecting to the existing Falls Water system.
2. Approval by the Idaho Public Utilities Commission (IPUC).
3. In accordance with IPUC approved Rates and Tariff for Falls Water Company, Inc.
4. Payment by developer or by subsequent builders, homeowners, or lot purchasers of the connection fee in accordance with IPUC approved Rates and Tariffs.
5. System design and installation approved, inspected and accepted by Idaho Department of Health and Welfare, Division of Environmental Quality, Falls Water's designated professional engineer (Schiess and Associates Consulting Engineers), and by Falls Water's own internal staff.
6. Developer shall provide "as built" drawings on paper and computer disks in a format readable by Falls Water as the development progresses.
7. This will serve letter is valid for one year from the date of this letter.
8. In accordance with any other lawfully necessary provisions as agreed between developer and Falls Water.

FALLS WATER COMPANY, INC.

A handwritten signature in black ink that reads "Tony Wise".

Tony Wise  
Chief Operator



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

900 North Skyline, Suite B • Idaho Falls, Idaho 83402-1718 • (208) 528-2650

Dirk Kempthorne, Governor  
C. Stephen Allred, Director

July 20, 2004

Dave Jorgensen  
Triple J LLC  
5500 S. Marbrisa Lane  
Ammon, ID 83406

**Re: Calico Sky Subdivision No.1 Water and Sewer System Plan and Specification Review  
Ammon, ID. DEQ # 04-26-10**

Dear Mr. Jorgensen

The DEQ has reviewed the revised project plans and specifications and found that they meet state standards and are approved on the following condition:

1. The hydraulic analysis of the Falls Water Company water system submitted by Schiess & Associates indicates that the minimum pressure requirements for the water system of 40 psi will not be met at 100% build out of the proposed development.

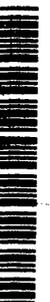
However, for the next two to three years with the projected 8% growth the system will be able to supply the needed pressures. The actual system pressures that have been monitored are actually higher than that indicated by the model suggesting that the model is conservative in its analysis.

With the Falls Water Company's proposed implementation schedule for improvements (for 2005 and 2006) to the overall water system, minimum pressure and flow requirements could be met for this development at complete build out. Falls Water Company will need to continue with the implementation of improvements which includes the following:

- a) Completion and submittal of the Final Water Facility Planning Study (FPS) currently being funded by Falls Water Company and DEQ in the fall of 2004.
- b) Design and construct a new well near Ioan Road and Crowley Road as recommended by their engineer (2006).
- c) Implement other needed improvements identified in the completed FPS.

IFRO

25998



- d) Prepare and propose to the Public Utilities Commission in 2005 a new rate structure for connection fees and monthly user fees for financing the operational and maintenance and future capitalization projects.

Our approval is for the design. We will give final project approval after the project is constructed and the as-built drawings submitted for our records. This office must review any deviations from the approved design that might result in violations of Idaho Regulations before field installation. This office must be kept informed of the scheduling of all construction phases so that we can make spot inspections as necessary.

This approval will expire **July 20, 2005**. If construction is not complete by the expiration date, plans will need to be resubmitted for approval before further construction proceeds. **Within 30 days after construction, a professional engineer registered in the State of Idaho must provide this office with as-built plans, or a letter of certification stating that the project was installed substantially according to the approved design.**

Please reference DEQ No. 04-26-10 when resubmitting future correspondence related to this project. If you have any questions regarding this letter or if we can be of further assistance, please call me at (208) 528-2650.

Sincerely,



William Teuscher PE  
Water Quality Engineer

Enclosure

cc: David Benton PE Benton Engineering 550 Linden Drive Idaho Falls, ID 83401 (enclosure)  
Bill Manwill, IBSD.  
Scott Bruce, Falls Water Company IF  
Kent Spencer, State Plumbing Inspector  
Plan File DEQ # 04-26-10 (enclosure)  
Read File

July 19, 2004

Scott Bruce  
 Falls Water Company Inc.  
 2025 E. First Street  
 Idaho Falls, ID 83401  
 (208) 522-1300

RE: Acceptable Future Development – Water Model Findings – 04097

Dear Scott,

Based on our meeting on July 9<sup>th</sup>, we have run water models for the current year, 2005, and 2006. The purpose of these runs was to determine the number and location of acceptable lots which can be added to the Falls Water system. We have based these runs on the model that was developed for the facilities planning study (FPS) as well as recent water connections, locations of unimproved lots, and 8% annual growth as out lined in the FPS. Although demand was added to specific subdivisions, their actual location within an area makes little difference in the model. The subdivisions have been grouped into the following two areas:

Subdivision Grouping	
North	South
Ammon Industrial	Centennial
Calico Sky	Crimson
Cornerstone	Fairmont
Denise	Fall Creek
Lincoln Industrial	Green Oak
Summit Park	North Springs
Victor Hanks	Stone Arbor
	Warm Springs

The following table shows number of lots added in the model to each area to represent demand in the years indicated.

	2003	2004	2005	2006
North		81	144	123
South		127	63	103
Total Lots Added		208	207	225
Total peak demand (gpm)	6,630	7,160	7,733	8,352

When the models were run with the appropriate yearly demands, the following peak pressures (in psi) were reported:

	2004	2005	2006
Calico Sky	42	26	8
Caribou	34	22	1
Centennial	40	26	3
Cloverdale	39	27	5
Cornerstone	50	37	19
Crimson	36	29	4
Falls Brook	53	41	24
Henderson	51	41	21
Hitt	49	38	30
Lawndale	53	42	26
Lincoln	44	31	13
McDonalds	54	43	25
Summit	44	29	11

The model was run with the new 12-inch line on Lincoln Road in place. The benefits of this line to help increase supply to North Springs and Caribou Meadows are lessened in part by the strong growth at Summit Park and Calico Sky.

Tony Wise of Falls Water indicated that pressures in Caribou Meadows have dropped to only 45 psi in the recent past, instead of 35 as calculated by the model. This difference in pressures is understandable considering the assumptions that were used in preparing the model. The peak for Falls Water was established by finding the highest flow during the summer of 2003 which was larger than the average day by a factor of 3.7. The peak factor used in the model was 4.0. The weather for the last few weeks has been cooler and wetter than we usually see this time of year which means that the system has not likely achieved a peak as high as the peak used in the model.

If growth occurs at a rate of 8% as reported in the FPS, then by the summer of 2005, pressures will fall below the required level of 40 psi under peak conditions.

Models were run with future 1,500 gpm wells on Iona Road and Crowley Road. The following peak pressures (in psi) were reported for just one well at Iona Road and for both wells:

	With well on Iona		With wells on Iona and Crowley	
	2005	2006	2005	2006
Calico Sky	70	63	81	76
Carabou	50	38	73	68
Centennial	53	39	78	71
Cloverdale	54	42	81	75
Cornerstone	67	59	81	77
Crimson	53	41	74	69
Falls Brook	68	60	83	79
Henderson	71	63	82	78
Hitt	64	58	72	69
Lawndale	69	61	83	79
Lincoln	62	53	77	72
McDonalds	70	61	84	80
Summit	70	62	80	76

It is evident that Falls Water Company should pursue development of the Iona Road well in 2005 and the Crowley Road well in 2006 at the latest in order to keep supply in pace with demand.



Paul H. Scoresby, PE

A handwritten signature in cursive script that reads "Chris A. Park".

Chris A. Park

The Falls Water Company has operated since 1959 and currently serves over 2,400 homes in the following areas of Bonneville County:

- ◆ Ammon-Lincoln Industrial
- ◆ Caribou Meadows
- ◆ Centennial Ranch (from Aschli Ln northward)
- ◆ Cloverdale Estates
- ◆ Cornerstone Community
- ◆ Country Corner Estates
- ◆ Crimson Valley
- ◆ Denise Subdivision
- ◆ East Park
- ◆ Fairmont Village
- ◆ Fall Creek Addition
- ◆ First Street Mobile Park
- ◆ Grayson Subdivision (Iona Rd)
- ◆ GreenOak Meadow
- ◆ Henderson Subdivision
- ◆ Lawndale Estates
- ◆ Lincoln Industrial Park
- ◆ Lincoln Park
- ◆ Lincoln Road (Hitt to Ammon Rd)
- ◆ Lincoln Townsite
- ◆ McDonald's Farm
- ◆ Mobile Home Estates (Fallsbrook)
- ◆ Monte Vista Subdivision
- ◆ North Springs
- ◆ Rettius Retreat
- ◆ Summerset Subdivision
- ◆ Summit Park
- ◆ Victor Hanks Subdivision
- ◆ Warm Spring Meadows
- ◆ Washington Park

**Memberships**  
American Waterworks Association  
Idaho Rural Water Association

**Regulated by**  
Idaho Public Utilities Commission  
Idaho Department of Health & Welfare  
Idaho Division of Environmental Quality  
Idaho Department of Water Resources  
U.S. Environmental Protection Agency

**Quality**  
**On Tap!**  
Our Commitment  Our Profession

# THE FALLS WATER SPOUT

**FALLS WATER COMPANY, INC.**

1770 Sabin Dr

Idaho Falls, ID 83406

**Phone: (208) 522-1300**

**FAX: (208) 522-4099**

Check us out on the web:

[www.fallswater.com](http://www.fallswater.com)

Falls Water Company's  
Information Pipeline

## 7.0 FALLS WATER IMPROVEMENT PLAN ALTERNATIVES

### 7.1 Capital Improvement Projects and Costs

Included in this section is a complete list of identified capital improvement projects and associated costs for the improvements identified on **Figure 5-7**. Further explanation is provided where necessary with each estimate of probable cost.

Priority Project No. 1 is necessary to aid in alleviating substandard pressures occurring in Caribou Meadows and in the southern reaches of Centennial Ranch. This project was initiated in 2004 by applying for and receiving an SRF loan through DEQ. This project should be completed by September 2004. The project will increase pressure in Caribou Meadows by providing a loop through connection to the line extending onto Lincoln Road from North Springs, extending west along Lincoln Road past Crowley Road, connecting to the 10-inch line in Crimson Valley, crossing the railroad tracks and connecting to the existing 12-inch dead end line west of the tracks. The future John Adams Parkway water line extension will provide a loop for the southern reaches of Centennial Ranch by installing and connecting the two dead-end lines together on each side of the railroad. It will connect 8-inch line on Cordell to 8-inch line on John Adams Parkway in Centennial Ranch. The costs of this project and scope are given on **Table 7-1**.

<b>Lincoln Road Waterline Extension</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 12" water pipe	lineal foot	2300	\$30	\$69,000
2	New hydrants	per each	5	\$2,500	\$12,500
3	New 12" tees, crosses, elbows	per each	4	\$1,200	\$4,800
4	New 12" valves	per each	4	\$1,500	\$6,000
5	Connection to existing system	per each	4	\$2,000	\$8,000
6	Railroad crossing	lineal foot	100	\$300	\$30,000
7	Traffic control	lump sum	1	\$6,500	\$6,500
8	Asphalt street repair	lineal foot	700	\$25	\$17,500
Estimated probable construction cost					<b>\$154,300</b>
<b>Future John Adams Parkway Waterline Extension</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 8" water pipe	lineal foot	900	\$15	\$13,500
2	New 8" tees, crosses, elbows	per each	5	\$600	\$3,000
3	New 8" valves	per each	4	\$800	\$3,200
4	Connection to existing system	per each	2	\$1,000	\$2,000
5	Railroad crossing	lineal foot	80	\$150	\$12,000
6	Traffic control	lump sum	1	\$1,000	\$1,000
7	Asphalt street repair	lineal foot	100	\$25	\$2,500
Estimated probable construction cost					<b>\$37,200</b>
Total estimated probable construction cost					<b>\$191,500</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$47,900</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$239,400</b>

**Table 7-1. Priority Project No. 1**

Priority Project No. 2 consists of installing a new well along Iona Road to serve Summit Park and the planned subdivisions of Red Rock Estates and Calico Sky. These three subdivisions combined have created a problem similar to that at Caribou Meadows and North Springs. The water system is becoming so spread out on the north end that Well No. 5 along with contributions from surrounding wells further south will not be able to provide the necessary flow and pressure for these subdivisions as early as the summer of 2005.

In an effort to plan home construction in this area, we have run several water model scenarios in this area. The data and conclusions of these water models are given in **Appendix B.1** in the form of three letters dated May 3, June 25, and July 19, 2004. The addition of these planned subdivisions to the north end of the system have necessitated that this new well move to Priority Project No. 2 in order to maintain adequate service. The costs of this well and future storage tank and booster station are given in **Table 7-2**. It is expected that development will fund in large measure the well and subdivision distribution pipes and that a general rate increase would be used to fund the booster station and tank. We recommend that the construction of the well be such that overall master planning objectives of a booster station and storage tank can be done without any reconstruction.

<b>Iona Road Well (Future Falls Water Well #10, Storage Tank &amp; Booster Station)</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New well, 16" dia. Casing, approximately 350 feet deep	lump sum	1	\$125,000	\$125,000
2	Building piping & site piping including flowmeter, valves, fittings, pump to waste, etc.	lump sum	1	\$60,000	\$60,000
3	Water storage tank, assume 1,000,000 gallons	lump sum	1	\$580,800	\$580,800
4	Well/booster pump building	square feet	1600	\$100	\$160,000
5	Pumps & controls including 50 hp well pump & (2) 60 hp booster pumps w/VFD's	lump sum	1	\$60,000	\$60,000
6	Chlorination system	lump sum	1	\$75,000	\$75,000
7	Emergency generator	lump sum	1	\$120,000	\$120,000
8	Fencing	lineal foot	600	\$15	\$9,000
Total estimated probable construction cost					<b>\$1,189,800</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$297,500</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$1,487,300</b>

**Table 7-2. Priority Project No. 2**

Priority Project No. 3 consists of constructing a new well in the northeast corner of Cloverdale Estates. The cost breakdown of this project is given in **Table 7-3**. There was a future well site identified and set apart for this location since the origination of Cloverdale Estates in the 1970s. This well site is owned by Falls Water Company. In keeping with the plan, we estimate that the capacity of this well needs to be a minimum of 1,000 gallons/minute. If more is obtainable, the need to provide future Well #11 or

future Well #12 could be delayed. In keeping with the plan to provide storage for the water system, we estimate that with a 1,000 gallon/minute well, there will be approximately 2,000 gallon/minute booster pump capacity and need, as a minimum, a 500,000-gallon storage tank. Construction of this well will provide the one and only well site on the east side of the railroad tracks.

<b>Cloverdale Well (Falls Water Company Well #9, Storage Tank &amp; Booster Station)</b>						
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost	
1	New well, 16" dia. Casing, approximately 350 feet deep	lump sum	1	\$125,000	\$125,000	
2	Building piping & site piping including flowmeter, valves, fittings, pump to waste, etc.	lump sum	1	\$50,000	\$50,000	
3	500,000 gallon water storage tank	lump sum	1	\$321,200	\$321,200	
4	Well/booster pump building	square feet	1120	\$100	\$112,000	
5	Pumps & controls including 50 hp well pump & (2) 60 hp booster pumps w/VFD's	lump sum	1	\$49,200	\$49,200	
6	Chlorination system	lump sum	1	\$50,000	\$50,000	
7	Emergency generator	lump sum	1	\$100,000	\$100,000	
8	Fencing	lineal foot	500	\$15	\$7,500	
Total estimated probable construction cost					<b>\$814,900</b>	
Engineering, administration, legal, & financing @ 25% of construction					<b>\$203,700</b>	
<b>Total Estimated Probable Project Cost</b>					<b>\$1,018,600</b>	

**Table 7-3. Priority Project No. 3**

This project is long overdue and should be initiated immediately. The long term benefits of this well will ensure that development on the east side of the railroad tracks will have adequate pressure and flow. Specifically, Caribou Meadows and North Springs pressure and flow will be restored to normal levels long term. An emergency generator and chlorination system should also be included in the design plan as shown.

Priority Project No. 4 consists of completely metering parts of the system that are currently do not have meters installed (most of Fallsbrook) and replacement of all old meters in the system that are manual read so that the entire water system is metered with touch-read technology. Most of the cost for this project is to convert Fallsbrook from unmetered to metered. There will be yard repair, some concrete flatwork repair, and perhaps some asphalt street repair associated with the conversion. A few touch read meters have already been installed, but are not allowed to be read by the PUC. The construction of the meters already installed, but not read, were taken into account on **Table 7-4.**

<b>Water Meters for Fallsbrook and other Unmetered Services, and Replace Many Old Meters with New</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	Meter unmetered services (those with curb stops only ) with 3/4" water meters with touch read technology placed in new plastic box including concrete & landscape repairs	each	125	\$1,000	\$125,000
2	Install meters in existing boxes in Fallsbrook with 3/4" touchread meters, touch read lids and insulation	each	450	\$250	\$112,500
3	Upgrade two thirds of manual read meters with 3/4" touch read meters, touch read lids and insulation	each	540	\$250	\$135,068
4	Upgrade one third of manual read meters with touch read meters using 3/4" meters including a new box assembly	each	271	\$1,000	\$270,540
Total estimated probable construction cost					\$643,108
Total rounded to the nearest hundred					<b>\$643,100</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$160,800</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$803,900</b>

**Table 7-4. Priority Project No. 4**

Priority Project No. 5 consists of installing several new waterlines including a new water line down 1<sup>st</sup> Street, a new waterline on Monte Vista, and new waterlines on Greenwillow and Crimson Drive in Cloverdale Estates to bring continuity to the water system by eliminating several dead ends and providing large waterlines to move water from location to location as needed. The 1<sup>st</sup> Street waterline project has been needed for some time and will also serve to improve pressure in the southern reaches of Centennial Ranch. Without the 1<sup>st</sup> Street line, all of the homes currently planned for Centennial Ranch between the existing constructed area and the railroad will likely have substandard water pressure as the area approaches build-out. This area has been annexed by Ammon and should reach build-out in the next several years. This line will also assure that adequate water pressure will be available when Warm Springs is fully developed. This line will also be necessary to transport water along 1st Street to additional development east of Crowley Road. This line will be necessary to distribute water away from the Central Well House to the southern part of the system upon the completion of Priority Project No. 6. This line is badly needed and, in our opinion, should have been installed as development in the area occurred.

In order to fully utilize the pumping capacity that will be provided with a new central wellhouse tank and booster station project identified in Priority Project No. 6, the Greenwillow Lane and Crimson Drive water line upsize project, Monte Vista Avenue water line upsize project, and 1<sup>st</sup> Street waterline project will allow upwards of 5,600

gallons/minute to be distributed away from the central wellhouse to outlying areas in the east and south of the system. The cost breakdown for these waterlines is given in **Table 7-5**. With the Monte Vista Avenue water line feeding the southern part of the water system and the Green Willow Lane project increasing transportability under the tracks from the central part of the water system to the east side toward Crimson Valley and Caribou Meadows, large amounts of water will be able to be transported away from the Central Wellhouse without high pressure losses. This water line project (Priority Project No. 5) should be completed with Priority Project No. 6. In addition, many meter improvements need to be made along these streets. The costs for these are included in Priority Project No. 4.

<b>Greenwillow Lane and Crimson Drive Waterline Upsize</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 12" water pipe	lineal foot	1000	\$30	\$30,000
2	New 10" water pipe	lineal foot	1800	\$28	\$50,400
3	New hydrants	per each	5	\$2,500	\$12,500
4	New 12" & 10" tees, crosses and elbows	per each	3	\$1,500	\$4,500
5	New 12", 10" and 8" valves	per each	6	\$1,400	\$8,400
9	Traffic control	lump sum	1	\$3,000	\$3,000
10	Asphalt street repair	lineal foot	2800	\$28	\$78,400
Estimated Probable Construction Cost					<b>\$187,200</b>
<b>Monte Vista Ave. Waterline Upsize</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 12" water pipe	lineal foot	1830	\$30	\$54,900
2	New 12" tees, crosses, elbows	per each	3	\$1,200	\$3,600
3	New 8" valves	per each	1	\$1,500	\$1,500
4	Traffic control	lump sum	1	\$2,000	\$2,000
5	Asphalt street repair	lineal foot	1830	\$25	\$45,750
Estimated Probable Construction Cost					<b>\$107,750</b>
<b>First Street Waterline Connector</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 10" water pipe	lineal foot	4930	\$28	\$138,040
2	New 6" water pipe	lineal foot	270	\$23	\$6,210
3	New hydrants	per each	7	\$2,500	\$17,500
4	New tees, crosses, elbows	per each	15	\$1,000	\$15,000
5	New valves	per each	21	\$1,200	\$25,200
6	Connection to existing system	per each	12	\$2,000	\$24,000
7	Railroad crossing	lineal foot	80	\$250	\$20,000
8	Traffic control	lump sum	1	\$10,000	\$10,000
9	Asphalt street repair	lineal foot	1200	\$25	\$30,000
Estimated probable construction cost					<b>\$285,950</b>
Total estimated probable construction cost					<b>\$580,900</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$145,200</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$726,100</b>

**Table 7-5. Priority Project No. 5**

Priority Project No. 6 consists of demolishing all current structures on the central well site with the exception of the wells themselves and construction of a new central wellhouse tank and booster station that will consist of a room for control of all well pumps, controls and space for a complete booster pumping station, and a 1.5 million gallon water storage tank. The costs and detailed work scope is shown in **Table 7-6**.

<b>Central Well House Storage Tank &amp; Booster Station</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	Demolition of existing building & pumps	lump sum	1	\$20,000	\$20,000
2	Building piping & site piping including flowmeters, valves, fittings, pump to wastes, connections to distribution system, etc.	lump sum	1	\$150,000	\$150,000
3	Water storage tank, 1,500,000 gallons	lump sum	1	\$786,000	\$786,000
4	New submersible well pumps, 20 hp, 50 hp, 60 hp, drop pipe and pitless units	lump sum	1	\$83,000	\$83,000
5	New booster pumps ((4) 100 hp) with VFD's, including manifold and cans	lump sum	1	\$100,000	\$100,000
6	Chlorination system	lump sum	1	\$175,000	\$175,000
7	New well and booster pump building	square feet	2400	\$100	\$240,000
8	Emergency generator, transfer switches & diesel tank to operate all pumps	lump sum	1	\$150,000	\$150,000
9	Purchase two lots south of central well house site for the storage tank	lump sum	1	\$30,000	\$30,000
10	Fencing	lineal foot	800	\$15	\$12,000
Total estimated probable construction cost					<b>\$1,746,000</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$436,500</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$2,182,500</b>

**Table 7-6. Priority Project No. 6**

This wellhouse is centrally located within the water system and has substantial well capacity. As the water system grows, this central wellhouse will be under utilized without the addition of booster pumps and storage. We estimate that a booster pumping rate at peak flow of 5600 gallons/minute is possible. When this project is completed, this wellhouse will provide the needs of the entire water system during the wintertime in the short term. The project also includes a 750-kW emergency generator, diesel driven to operate all pumps.

This central wellhouse, the largest pumping system in the system should be developed with the long term in mind. Due to the lowering groundwater trend in the area and the

fact that the wells on this site are rather shallow, and the age of the wells; we recommend that the wells all be converted to be used with submersible pumps and motors so that each well is accessible in the future for rehabilitation and/or deepening as required.

Priority Project No. 7 consists of general improvements that will be required to meet electrical codes in the wellhouses not scheduled for improvement a permanent office and maintenance building for Falls Water Company and improvements to the existing SCADA and telemetry system. The current telemetry system monitors pump operations and pressure only. This project will allow monitoring of all systems as noted in **Table 7-7**. Improvements and costs for this project are outlined.

<b>General Water System Improvements</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	General improvements to wellhouse #1 including electrical, removal of automatic waste capability, and addition of a VFD	lump sum	1	\$23,000	\$23,000
2	New water maintenance shop at Wellhouse No. 1 site	square feet	1,800	\$90	\$162,000
3	Convert manufactured home at Wellhouse #1 site to be the permanent Falls Water Company office	lump sum	1	\$50,000	\$50,000
4	General electrical improvements to wellhouse #3	lump sum	1	\$2,000	\$2,000
5	General improvements in wellhouse #8 including automatic opening louvers, electrical modifications, addition of a VFD, floor drain, and abandonment of water waste line.	lump sum	1	\$21,200	\$21,200
6	Upgrade SCADA and telemetry system to monitor generator operations, flow, door entry, system pressures, tank levels, and pump operations at each well house. Estimate includes home base at new office at Wellhouse #1, remote stations at all current locations (5), and (4) new locations	lump sum	1	\$100,000	\$100,000
Total estimated probable construction cost					<b>\$358,200</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$89,600</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$447,800</b>

**Table 7-7. Priority Project No. 7**

Falls Water Company should establish a central office and maintenance shop to provide for the long term needs and stability of the water system at the Well No. 1 site. Located there currently is a manufactured home that could easily be converted to an office without incurring high costs. There is adequate space, also, to construct a maintenance shop that could be used for storage of water equipment such as pipe, pipe fittings, valves, meters, meter boxes, and meter bench test equipment. These items are all included in general water system improvements and should be initiated with other major improvements to the system, especially the moving of the SCADA computer required as part of Priority Project No. 6. Priority Projects 4, 5, 6, and 7 should all be completed simultaneously and would give a strong, organized and long-term central core to the water system.

Priority Project No. 8 will allow additional transport of water from new Well #10 west along Iona Road. The costs for this project are given in **Table 7-8**.

<b>Iona Road Waterline Connector</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 12" water pipe	lineal foot	4700	\$30	\$141,000
2	New 8" water pipe	lineal foot	920	\$25	\$23,000
2	New hydrants	per each	10	\$2,500	\$25,000
3	New 12" tees, crosses, elbows	per each	6	\$1,200	\$7,200
4	New valves	per each	7	\$1,400	\$9,800
5	Connection to existing system	per each	4	\$2,000	\$8,000
9	Traffic control	lump sum	1	\$10,000	\$10,000
10	Asphalt street repair	lineal foot	1800	\$25	\$45,000
Total estimated probable construction cost					\$269,000
Total rounded to the nearest hundred					\$269,000
Engineering, administration, legal, & financing @ 25% of construction					\$67,300
<b>Total Estimated Probable Project Cost</b>					<b>\$336,300</b>

**Table 7-8. Priority Project No. 8**

This project will be necessary to connect Calico Sky and Red Rock Estates to Summit Park. Most of this project is expected to be funded and installed by developers. There is no way at this time to determine how much and by whom this project and Priority Project No. 2 will provide complete redundancy of water supply and conveyance to said subdivisions.

Priority Project No. 9 will construct a booster station, storage tank and upgrade the generator at Well No. 5. The system currently only has a single emergency generator located at Well No. 5. This is simply inadequate. Ultimately, emergency generation equipment should be provided system wide to meet at least summertime average daily flows. Contained within these priority projects is a generator at the central wellhouse, a generator on the east side of the tracks at future Well No. 9, generator improvements to be made at Well No. 5 and a generator to be included in the future Iona Road well on the north side of the railroad tracks (Priority Project No. 2). These planned generators will deliver water during power outages and meet summertime average daily flows.

<b>Booster Pump Station and Storage Tank at Well #5</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	Pump & motor control adjustments on existing turbine pump to pump into a tank	lump sum	1	\$8,000	\$8,000
2	Building piping & site piping including flowmeter, valves, fittings, pump to waste, etc.	lump sum	1	\$50,000	\$50,000
3	500,000 gallon water storage tank	lump sum	1	\$321,200	\$321,200
4	Expand well building to provide room for new booster pumps	square feet	500	\$100	\$50,000
5	Electrical improvements to comply with codes	lump sum	1	\$5,400	\$5,400
6	Chlorination system	lump sum	1	\$40,000	\$40,000
7	Booster pumps & controls ((2) 60 hp) w/VFD's	lump sum	1	\$25,000	\$25,000
8	Replace emergency generator with a 300 KW generator equipped with an auto transfer switch & new fuel tank	lump sum	1	\$80,000	\$80,000
9	Fencing	lineal foot	500	\$15	\$7,500
Total estimated probable construction cost					<b>\$587,100</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$146,800</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$733,900</b>

**Table 7-9. Priority Project No. 9**

Priority Project No. 10 consists of replacing all pipes in Fallsbrook that are upwards of 40 to 55 years old. This pipe is on the west side of Fallsbrook and on Monte Vista. This pipe, as described earlier in the report, should be replaced due to the pressure of known lead laden service connections and age. Most waterline leaks repaired by Falls Water maintenance staff occur here. The meter work to be done in this area is shown as part of Priority Project No. 4. The water line work needed on Monte Vista is part of Priority Project No. 5. The project breakdown and costs for this project are shown on **Table 7-10**.

<b>Replace 50 Year Old Pipes on West Side of Fallsbrook</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 8" water pipe	lineal foot	2940	\$25	\$73,500
2	New 6" water pipe	lineal foot	5200	\$23	\$119,600
3	New hydrants	per each	7	\$2,500	\$17,500
4	New tees, crosses, elbows	per each	15	\$1,000	\$15,000
5	New valves	per each	21	\$1,200	\$25,200
6	Connection to existing system	per each	12	\$2,000	\$24,000
7	Replace service lines to property line/future meter box	lineal foot	6000	\$16	\$96,000
8	Traffic control	lump sum	1	\$10,000	\$10,000
9	Concrete flatwork	square yard	200	\$35	\$7,000
10	Asphalt street repair	lineal foot	1200	\$25	\$30,000
Total estimated probable construction cost					\$417,800
Total rounded to the nearest hundred					<b>\$417,800</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$104,500</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$522,300</b>

**Table 7-10. Priority Project No. 10**

It is fortunate that part of the old pipe in the system is on Monte Vista, which was selected to be upsized as part of the plan to convert the Central Wellhouse to a central booster pump station and storage tank. It is also fortunate that Greenwillow and Crimson Drive in Cloverdale are the oldest lines in Cloverdale. These lines have also been identified for upsizing as part of Priority Project No. 5.

Priority Project No. 11 consists of extending a line from the north end of the cornerstone community south to connect to the existing 10-inch line in Ammon Road that terminates in the area of Lawndale to the west and Fallsbrook to the east and construction of a 12-inch line from Well No. 5 underneath the railroad going north to the east entrance into Summit Park. The scope and costs for this project are given on **Table 7-11**.

<b>Ammon Road Waterline Connectors</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 12" water pipe	lineal foot	1430	\$30	\$42,900
1	New 10" water pipe	lineal foot	2410	\$28	\$67,480
2	New 6" water pipe	lineal foot	230	\$23	\$5,290
3	New hydrants	per each	8	\$2,500	\$20,000
4	New tees, crosses, elbows	per each	8	\$1,200	\$9,600
5	New valves	per each	9	\$1,300	\$11,700
6	Connection to existing system	per each	7	\$2,000	\$14,000
8	Traffic control	lump sum	1	\$10,000	\$10,000
9	Asphalt street repair	lineal foot	1500	\$25	\$37,500
Total estimated probable construction cost					\$175,570
Total rounded to the nearest hundred					<b>\$175,600</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$43,900</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$219,500</b>

**Table 7-11. Priority Project No. 11**

The latter water line should be constructed as soon as possible to provide a redundant means of conveyance into Summit Park. Otherwise, Summit Park remains at risk if the single conveyance line is ever broken and shut down for repairs. The 10-inch line between Cornerstone and Lawndale should be installed to eliminate multiple dead ends, provide looping in the area and provide a large conveyance line to transport water back and forth from the wells in the system in the north or the wells in the system to the south in the event that wells typically used to maintain pressure go out of service for maintenance.

Priority Project No. 12 consists of a connector line along Crowley Road that would connect future Well No. 9 to the areas predominantly served by future Well No. 11 and the central wellhouse and provide a means of conveyance from well to well in the event that one well was down for service and the other relied upon for supply. The scope and cost of this project is shown on **Table 7-12**.

<b>Crowley Road Waterline Connector</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New 12" water pipe	lineal foot	4325	\$30	\$129,750
2	New hydrants	per each	8	\$2,500	\$20,000
3	New 12" tees, crosses, elbows	per each	5	\$1,200	\$6,000
4	New valves	per each	9	\$1,400	\$12,600
5	Connection to existing system	per each	5	\$2,000	\$10,000
9	Traffic control	lump sum	1	\$10,000	\$10,000
10	Asphalt street repair	lineal foot	1000	\$25	\$25,000
Total estimated probable construction cost					\$213,350
Total rounded to the nearest hundred					\$213,400
Engineering, administration, legal, & financing @ 25% of construction					\$53,300
<b>Total Estimated Probable Project Cost</b>					<b>\$266,700</b>

**Table 7-12. Priority Project No. 12**

Priority Projects No's 13 and 14 are for new wells, one in the southeast corner of the system and one on Lincoln Road centrally located in the system to meet demand required by projected future development nearby. The locations were selected based on where development is projected to occur.

We expect that the construction of these wells will be developer driven and paid for. It is the intention of Falls Water to obtain cash contributions from the developer, then manage construction of the wells themselves in order to assure the well construction meets all master planning criteria.

<b>Crowley/Centennial Ranch Well (Future Falls Water Well #11, Storage Tank &amp; Booster Station)</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New well, 16" dia. Casing, approximately 350 feet deep	lump sum	1	\$125,000	\$125,000
2	Building piping & site piping including flowmeter, valves, fittings, pump to waste, etc.	lump sum	1	\$50,000	\$50,000
3	Water storage tank, assume 500,000 gallons	lump sum	1	\$321,200	\$321,200
4	Well/booster pump building	square feet	1120	\$100	\$112,000
5	Pumps & controls including 50 hp well pump & (2) 60 hp booster pumps w/VFD's	lump sum	1	\$49,200	\$49,200
6	Chlorination system	lump sum	1	\$50,000	\$50,000
7	Fencing	lineal foot	500	\$15	\$7,500
Total estimated probable construction cost					<b>\$714,900</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$178,700</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$893,600</b>

**Table 7-13. Priority Project No. 13**

<b>Lincoln Road Well Near Fall Creek (Future Falls Water Well #12, Storage Tank &amp; Booster Station)</b>					
Item No.	Item	Unit	Quantity	Unit Cost	Total Cost
1	New well, 16" dia. Casing, approximately 350 feet deep	lump sum	1	\$125,000	\$125,000
2	Building piping & site piping including flowmeter, valves, fittings, pump to waste, etc.	lump sum	1	\$50,000	\$50,000
3	Water storage tank, assume 500,000 gallons	lump sum	1	\$321,200	\$321,200
4	Well/booster pump building	square feet	1120	\$100	\$112,000
5	Pumps & controls including 50 hp well pump & (2) 60 hp booster pumps w/VFD's	lump sum	1	\$49,200	\$49,200
6	Chlorination system	lump sum	1	\$50,000	\$50,000
7	Fencing	lineal foot	500	\$15	\$7,500
Total estimated probable construction cost					<b>\$714,900</b>
Engineering, administration, legal, & financing @ 25% of construction					<b>\$178,700</b>
<b>Total Estimated Probable Project Cost</b>					<b>\$893,600</b>

**Table 7-14. Priority Project No. 14**

The projects required due to additional and future development are Projects 2 and 12 through 14. Those necessary in the near future consist of Projects No. 1 through 11. Priority Project No. 1 will be completed in 2004. Priority Projects No. 2 through 11 amount to a total of \$8,478,200. Future Projects No. 12 through 14 amount to a total of \$2,053,900. Included in the project amounts are expected engineering, administration, legal, and financing costs. The costs for new water rights are not included. A summary

of all projects are provided on **Table 7-15**. The total estimated cost of all identified projects is \$10,809,000.

Priority Project No.	Project Name	Estimated Cost
1	Lincoln Road Waterline Extension Future John Adams Parkway Waterline Extension	\$239,400
2	Iona Road Well (Future Falls Water Well #10, Storage Tank & Booster Station)	\$1,487,300
3	Cloverdale Well (Falls Water Company Well #9, Storage Tank & Booster Station)	\$1,018,600
4	Water Meters for Fallsbrook and other Unmetered Services, and Replace Many Old Meters with New	\$803,900
5	Greenwillow Lane and Crimson Drive Waterline Upsize Monte Vista Ave. Waterline Upsize First Street Waterline Connector	\$726,100
6	Central Well House Storage Tank & Booster Station	\$2,182,500
7	General Water System Improvements	\$447,800
8	Iona Road Waterline Connector	\$336,300
9	Booster Pump Station and Storage Tank at Well #5	\$733,900
10	Replace 50 Year Old Pipes on West Side of Fallsbrook	\$522,300
11	Ammon Road Waterline Connectors	\$219,500
12	Crowley Road Waterline Connector	\$266,700
13	Crowley/Centennial Ranch Well (Future Falls Water Well #11, Storage Tank & Booster Station)	\$893,600
14	Lincoln Road Well Near Fall Creek (Future Falls Water Well #12, Storage Tank & Booster Station)	\$893,600
<b>Total Cost of All Capital Improvement Projects</b>		<b>\$10,771,500</b>

**Table 7-16. Capital Improvement Projects Summary**

This section of this report identified 14 projects necessary for Falls Water to serve a population of over 17,000 identified as necessary now and to provide adequate supply and distribution capability for the current population. As indicated the first 11 projects are required to bring the system to a sustainable service level to meet current needs and to be on par with their neighbors of equivalent size. Projects 12 - 14 will be required as development continues to enlarge the service area. Implementation of the first 11 projects will ensure that Falls Water Company meets current demands, has adequate storage and adequate back-up generating power to meet current pressure and flow requirements throughout the system. We recommend that Falls Water pursue these projects immediately.

## 7.2 Operation and Maintenance Costs

Implementation of the capital improvement projects proposed and required immediately to increase the level of service and reliability and redundancy of the system should have little effect on operations and maintenance. It is expected that fully metering Fallsbrook will save the Company thousands of dollars of pumping costs each year. Additional labor savings will be generated by having a fully metered system with touch-read technology. Upon completion of Priority Projects 6 and 9, the practice of wasting water

at the Central Wellhouse, Well #5, Well #1 and Well #8 will be discontinued and save on O&M between \$1000 to \$2000 every year in pumping costs. With the use of VFDs and with an improved and upgraded telemetry and SCADA system the pumping systems will effectively run themselves without wasting any water. The new pumping systems could operate at improved efficiencies if fitted with high efficiency motors. Due to the long term nature of the investment, high efficiency motors should probably be warranted. These projects should simplify pump operations and maintenance even though more water will be pumped than in past years due to growth. A daily visit at each wellhouse or booster station should always be made.

### **7.3 Salvage Value**

Approximately one half of the horsepower is necessary for a well pump pumping to a tank versus a well pump that pumps directly to a distribution system at system pressure. At the central wellhouse all of the existing well pumps and motors should be salvageable. In keeping with the design of the new system that will allow maintenance of the existing wells and deepening of the existing wells if it ever becomes necessary, our opinion is that conversion to submersible motors is better. The submersible motor on Pump 6 or 7 may be able to remain in service, although the pump will require bowl modifications to remain efficient. The remaining existing pumps and motors should be salvaged out. In the case of well #5, the well is already enclosed within a building and should remain. The well pump and motor should continue to be usable. The pump will need to be modified by reducing the number of bowls so that the pump pumps directly to the tank efficiently. Little else was identified as salvageable except for that noted above and the generator at Well #5.

### **7.4 Implementability**

The implementability of the proposed capital improvement projects is dependent on the cooperation and endorsement of the Idaho Public Utilities Commission (IPUC), DEQ, the consumers, and the ability to locate a funding mechanism of local developers, a combination of developer funds, grants and loans or strictly loans. It is expected that significant improvements can be made while keeping rates at a reasonable level when compared to neighboring water utilities. The subject of rates will be addressed further in Chapter 8.

### **7.5 Cost Escalation Factors for Energy Use**

It is expected that the recommended projects will not increase power consumption or increase demand charges from current conditions. With additional generators in the system, some demand changes may be eliminated with the exercising of well and booster pumps with generators during winter months rather than using the electrical power grid for pump exercising.

### **7.6 Final Public Input**

A subsequent hearing was held on \_\_\_\_\_ at the Idaho Falls electric building on \_\_\_\_\_. Representatives from Falls Water Company, ECIPDA, DEQ, Schiess & Associates, and the IPUC were present. The

comments received and recent news articles are included in **Appendix B.5**. From this the customers felt that:

## 8.0 FALLS WATER COMPANY SELECTED PLAN AND IMPLEMENTATION

### 8.1 Justification and Description of Selected Plan

To correct the deficiencies noted in Section 6.1 of this report and in accordance with the improvement plan endorsed by the IPUC (IPUC, please determine what you can endorse), the consumer, and approved by DEQ (DEQ, please comment), the selected plan for immediate pursuit of improvements includes projects 1-11 of **Table 7-15**. These are enumerated again in **Table 8-1**. Priority Project No. 1 will be constructed in the late summer of 2004. The rest are included here in the draft stage of this document as if they were all scheduled and completed between 2005 and 2006.

Priority Project No.	Project Name	Estimated Cost
1	Lincoln Road Waterline Extension Future John Adams Parkway Waterline Extension	\$239,400
2	Iona Road Well (Future Falls Water Well #10, Storage Tank & Booster Station)	\$1,487,300
3	Cloverdale Well (Falls Water Company Well #9, Storage Tank & Booster Station)	\$1,018,600
4	Water Meters for Fallsbrook and other Unmetered Services, and Replace Many Old Meters with New	\$803,900
5	Greenwillow Lane and Crimson Drive Waterline Upsize Monte Vista Ave. Waterline Upsize First Street Waterline Connector	\$726,100
6	Central Well House Storage Tank & Booster Station	\$2,182,500
7	General Water System Improvements	\$447,800
8	Iona Road Waterline Connector	\$336,300
9	Booster Pump Station and Storage Tank at Well #5	\$733,900
10	Replace 50 Year Old Pipes on West Side of Fallsbrook	\$522,300
11	Ammon Road Waterline Connectors	\$219,500
<b>Total Cost of Capital Improvement Projects</b>		<b>\$8,717,600</b>

**Table 8-1. Capital Improvement Projects Summary**

It is our opinion that completion of these projects are necessary immediately to adequately meet short term needs and to ensure the long term viability of the system. These projects will aid in getting water supply ahead of existing demand, and to make the big jump from a non-storage and non-disinfected system to a water system having these essentials. Falls Water should pursue inclusion of these essentials into the system and should be allowed to pursue these essentials by regulators.

### 8.2 Preliminary Design of Selected Plan

All contemplated distribution system improvements are shown on **Figure 8-1**. The distribution improvements are included in Priority Project Nos. 1, 4, 5, 8, 10 and 11. The remaining projects on **Figure 8-1** provide for storage, supply, and management. The

preliminary design of the work contemplated at the proposed Well No. 9 site, the Central Wellhouse, Well No. 1, and Well No. 5 are shown on the following **Figures 8-2 to 8-5**. It is apparent from study of each one of these preliminary plans that the planned improvements will fit on each site with the modifications shown on each site plan. The general location of the proposed tanks and buildings are shown on each figure.

In the case of the Central Wellhouse, two lots south of the existing well site will have to be replatted to be part of the Central Wellhouse site. At Well Site No. 1, it appears that the parking for the office may have to be behind the building. The site will include a drive through payment lane.

### **8.3 Environmental Impacts of Selected Plan**

It is expected that since all construction on this project will occur on private properties, properties set aside for improvements or in established public streets, that there will be little to no environmental impacts. ECIPTDA will complete all environmental reviews required by the funding agencies associated with project work. Upon completion, we set aside **Appendix A.2** for the environmental work and recommend that the environmental documents be added to **Appendix A.2**.

### **8.4 Water Rights**

Due to the deficiency of water rights, each new well drilled will have to have a water right attached to it. This is expected to be costly (approx. \$20,000/cfs) and take a minimum of 6 months. This is one of the first tasks that should be undertaken. As stated earlier in this report, a total of 10.5 cfs should be obtained to serve present needs, and a total of 25 cfs to meet future needs.

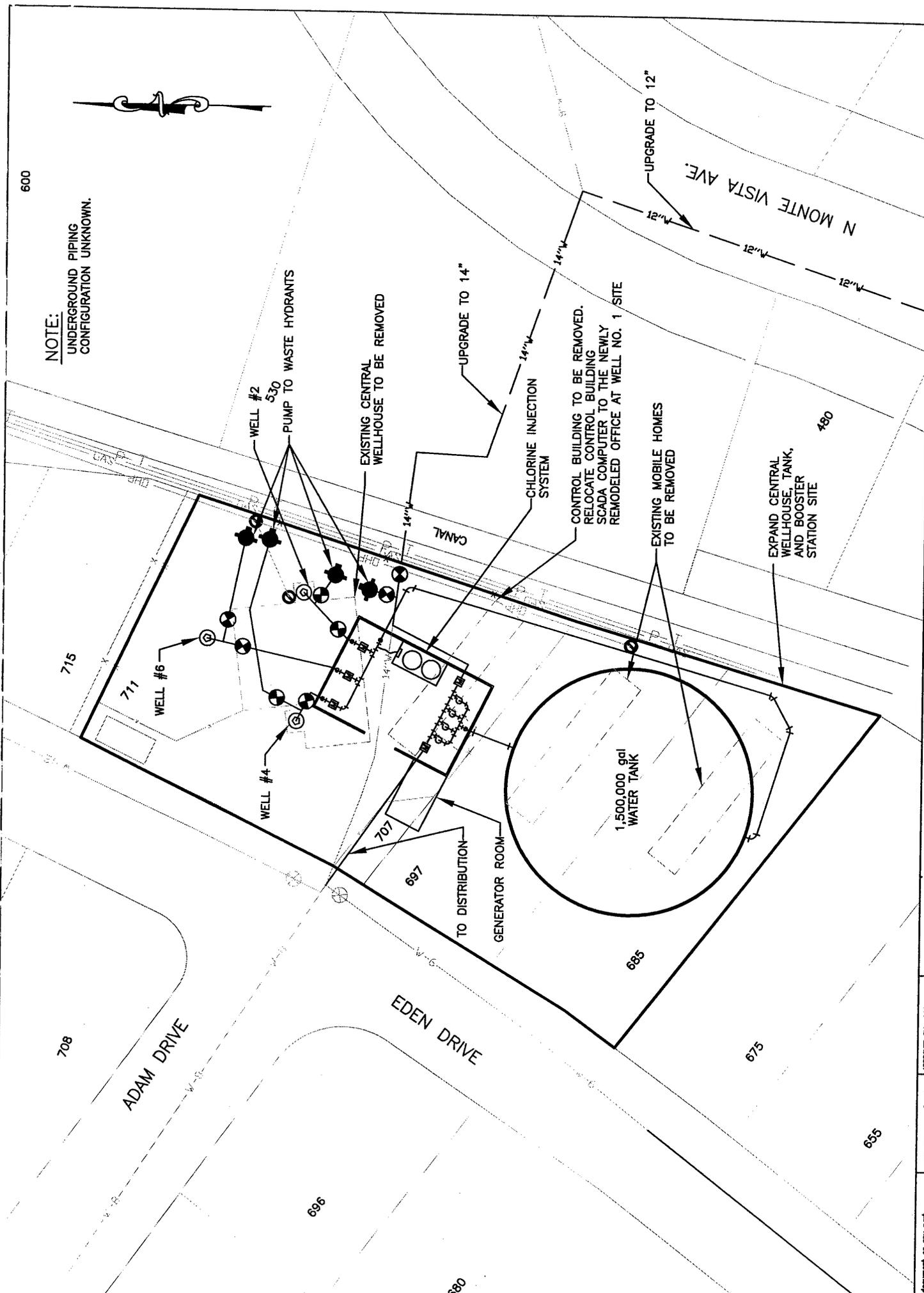
### **8.5 Operation and Maintenance Requirements**

O&M costs for the years 2002 and 2003 are given in the annual reports in **Appendix B.2**. We used those costs shown as a basis to estimate O&M costs of an improved system after the recommended improvements of **Table 8-1** are in place. **Table 8-2** gives the estimated O&M costs which total \$358,000 per year.



600

NOTE:  
UNDERGROUND PIPING  
CONFIGURATION UNKNOWN.



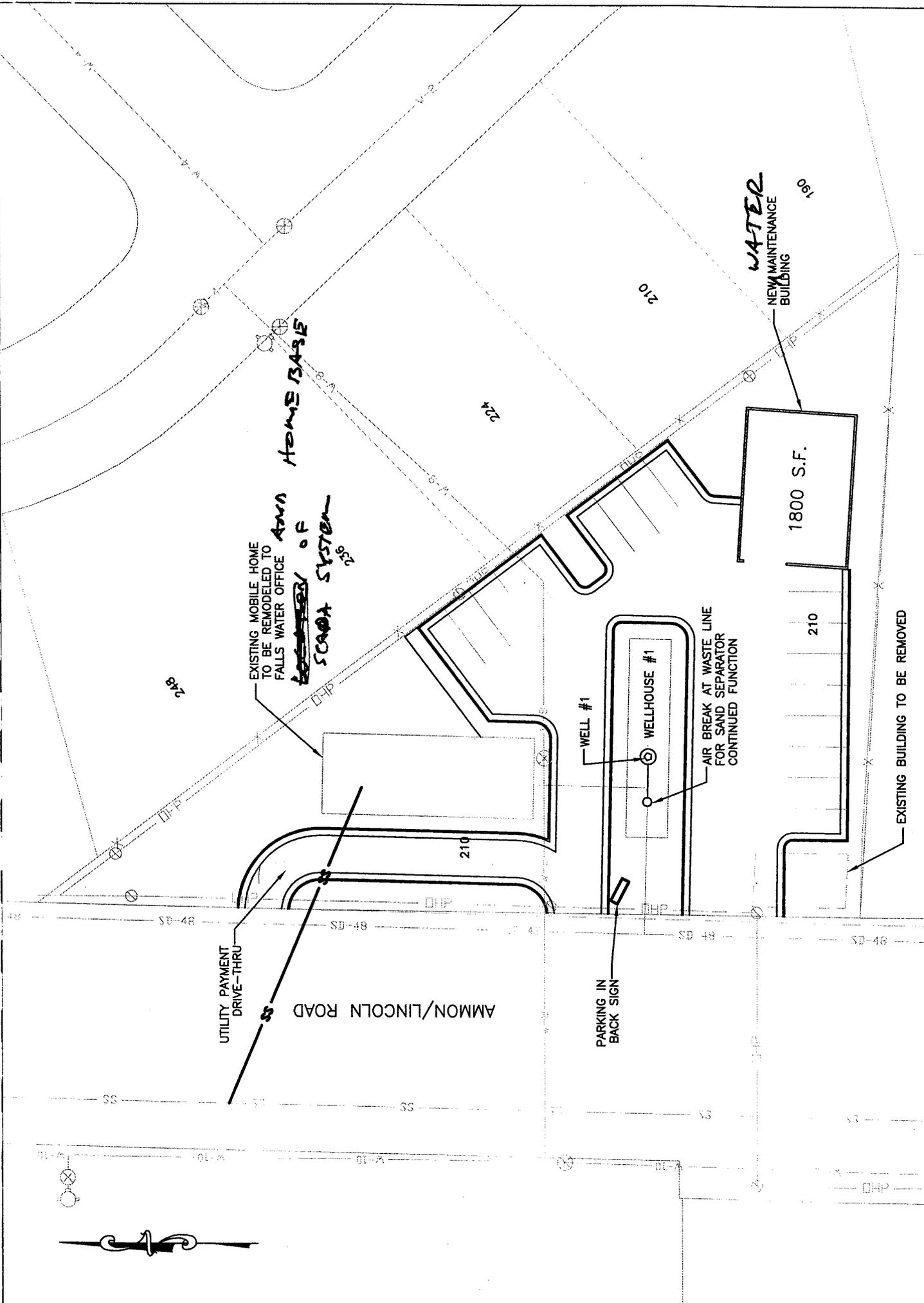
PROJECT NO.	02196
FIGURE NO.	8-3

FALLS WATER REGIONAL  
WATER STUDY

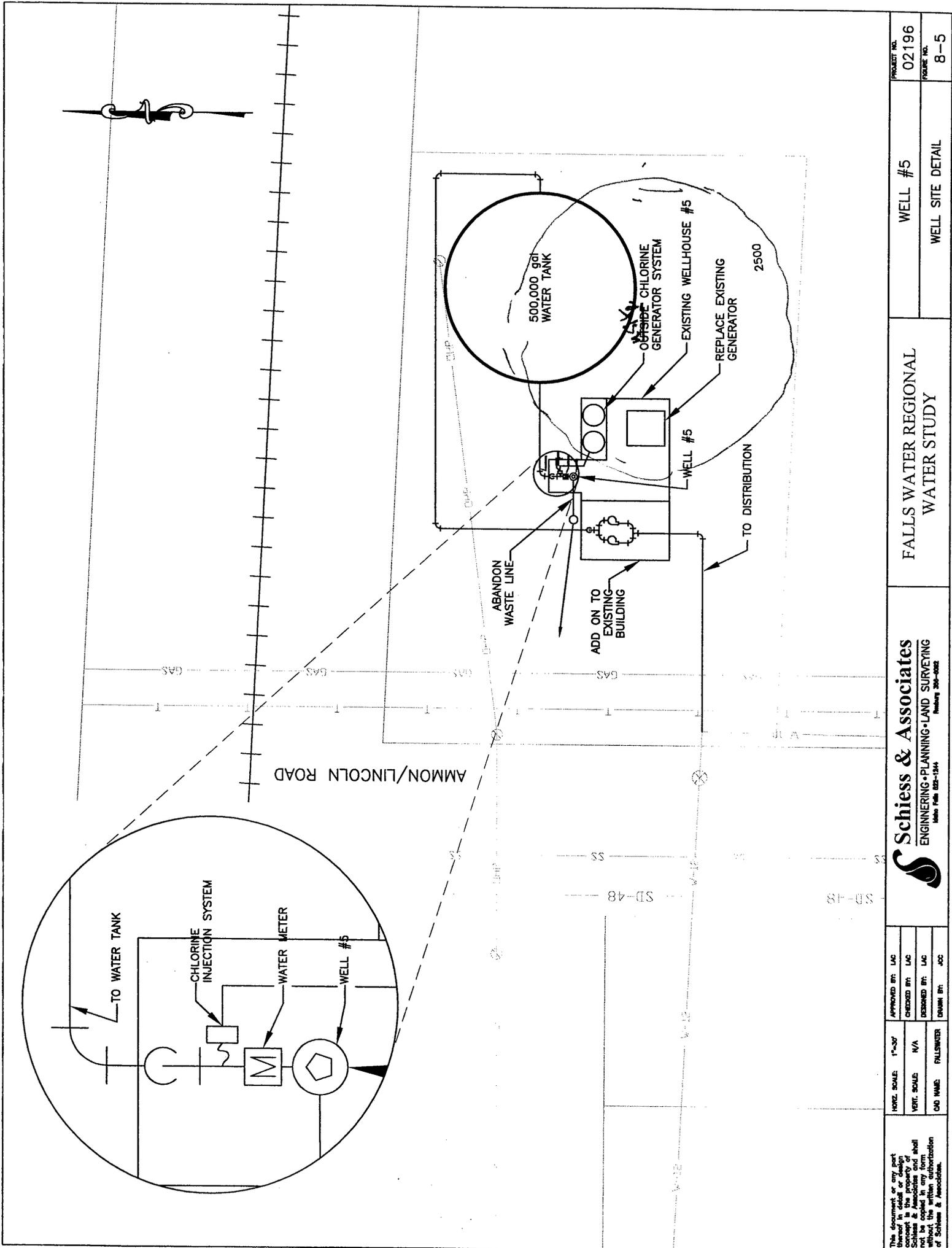
**Schies & Associates**  
ENGINEERING • PLANNING • LAND SURVEYING  
Main Phone 528-1344  
Fax 528-0822

HORIZ. SCALE:	1"=50'	APPROVED BY:	JAC
VERT. SCALE:	N/A	CHECKED BY:	JAC
DATE:	FALL 2007	DESIGNED BY:	JAC
DRAWN BY:	JCC		

This document or any part thereof in detail or design is the property of Schies & Associates and shall not be copied in any form without the written authorization of Schies & Associates.



This document or any part thereof is the property of Schiess & Associates and shall not be copied in any form without the written authorization of Schiess & Associates.	HORZ. SCALE: 1"=40' VERT. SCALE: N/A OLD NAME: FALLS WATER	APPROVED BY: LUC CHECKED BY: LUC DESIGNED BY: LUC DRAWN BY: JCC	<b>Schiess &amp; Associates</b> ENGINEERING • PLANNING • LAND SURVEYING Made Falls 825-1944	FALLS WATER REGIONAL WATER STUDY	GENERAL WATER SYSTEM IMPROVEMENTS WELL SITE DETAIL	PROJECT NO. 02196 FIGURE NO. 8-4
--	--	--	---	-------------------------------------	---	---



PROJECT NO. 02196  
 FIGURE NO. 8-5

WELL #5  
 WELL SITE DETAIL

FALLS WATER REGIONAL  
 WATER STUDY

**Schiess & Associates**  
 ENGINEERING • PLANNING • LAND SURVEYING  
 1400 N. 10th St. • Falls, WI 53122-1000  
 PHONE: 262-822-1344

HORIZ. SCALE: 1"=30'	APPROVED BY: LAC
VERT. SCALE: N/A	CHECKED BY: LAC
CD NAME: FALLSWATER	DESIGNED BY: LAC
	DRAWN BY: JCC

This document or any part thereof in detail or design is the property of Schiess & Associates and shall not be copied in any form without the written authorization of Schiess & Associates.

<b>Estimated O&amp;M Costs After Upgrade Project is Complete</b>		
<u>Item no.</u>	<u>Item</u>	<u>Est. Cost/yr</u>
1	Salaries & benefits	<del>\$150,000</del> <b>\$200,000</b>
2	Power & fuel	\$93,000
3	Administrative supplies	\$22,000
4	Repairs & maintenance	\$21,500
5	Professional services	\$20,000
6	Water quality testing	\$7,000
7	Special contract services	\$15,000
8	Transportation expenses	\$7,500
9	Insurance	\$4,000
10	Training	\$3,000
11	Equipment rental	\$2,000
12	Advertising	\$3,000
<u>11</u>	<u>Miscellaneous</u>	<u>\$10,000</u>
<b>Total</b>		<b>\$358,000</b>

**Table 8-2. Estimated O&M Costs after Projects 1-10 are Completed**

Operation and maintenance requirements will exceed present requirements with the maintenance of storage tanks and booster pumps. We expect the annual maintenance cost of the storage tanks included in the project plan to be approximately \$1500 per year (annualized) for each tank for cleaning, leak testing, and inspection. Other costs such as painting will vary depending on the type of tanks selected. Pumping costs should remain the same or diminish if Fallsbrook becomes metered. Pumping costs of \$1000 to \$2000 will also be saved since water will no longer be wasted to control pressure and prevent freeze-up of waste lines.

## 8.6 Financing Plan

It is expected that the most likely funding source for Falls Water Company will be the state revolving fund (SRF). The State has developed a revolving loan fund that can be utilized to issue loans to Idaho municipalities and other eligible water systems for the construction and design of both water and wastewater facilities. The loan funds are available at a current interest rate of approximately 3.5% for a 20-year period. In addition to the interest and principal payments, a borrower must collect over a five-year period, a reserve account amounting to one year annual payment for the loan. Any loan funding for either water and/or sewer must meet all DEQ loan requirements. In order to receive funds, a borrower must have a need and establish a priority sufficiently high on the state's priority list in order to be eligible to receive a loan from this fund.

It is expected that the IPUC (IPUC, please comment) must approve any project to be financed with long term debt and higher customer rates. Falls Water should develop a strategy with the IPUC and DEQ to finance growth and to get the system back to par. According to our discussions with the IPUC and Falls Water Company, the available conventional mechanisms to fund the various areas of need are shown in the **Table 8-3**. (IPUC, please comment.)

<b>Funding Mechanisms</b>			
<b>Areas of Need</b>	<b>New Customer Hook-up Fees or Developer Funds</b>	<b>Surcharges Need Technical Plan and Finance Plan</b>	<b>General Rate Increases Granted afterwards Can't include one time expenses</b>
Wells	X	X	
Transmission Lines	X		X
Treatment	X		X
Storage			X
Emergency Power	X		X
Meter/Valve/Hydrant Replacement (Maintenance)			X
Distribution Line Replacement (Maintenance)		X	X
Studies		X	X

**Table 8-3. Internal Funding Mechanisms for Falls Water Company**

Using the general outline of **Table 8-3**, we reviewed Projects 2 – 11 of **Table 8-1** and estimated what portion of the projects will ultimately be funded by developers and what portion will likely be funded with general rate increases. The result of this work is given on **Table 8-4**.

<b>Priority Project No.</b>	<b>Project Name</b>	<b>Estimated Cost</b>	<b>Estimated Developer Portion</b>	<b>Estimated Falls Water Portion</b>
2	Iona Road Well (Future Falls Water Well #10, Storage Tank & Booster Station)	\$1,487,300	\$400,000	\$1,087,300
3	Cloverdale Well (Falls Water Company Well #9, Storage Tank & Booster Station)	\$1,018,600	\$360,000	\$658,600
4	Water Meters for Fallsbrook and other Unmetered Services, and Replace Many Old Meters with New	\$803,900	\$0	\$803,900
5	Greenwillow Lane and Crimson Drive Waterline Monte Vista Ave. Waterline Upsize First Street Waterline Connector	\$726,100	\$0	\$726,100
6	Central Well House Storage Tank & Booster Station	\$2,182,500	\$0	\$2,182,500
7	General Water System Improvements	\$447,800	\$0	\$447,800
8	Iona Road Waterline Connector	\$336,300	\$250,000	\$86,300
9	Booster Pump Station and Storage Tank at Well #5	\$733,900	\$0	\$733,900
10	Replace 50 Year Old Pipes on West Side of	\$522,300	\$0	\$522,300
11	Ammon Road Waterline Connectors	\$219,500	\$0	\$219,500
<b>Total Cost of Capital Improvement Projects</b>		<b>\$8,478,200</b>	<b>\$1,010,000</b>	<b>\$7,468,200</b>

**Table 8-4. Summary of Funding Sources for Projects 2-11**

The results of this table show that developers will fund portions of projects 2, 3, and 8 totaling approximately \$1,010,000 and general rate increases will fund the remainder for a total cost of \$7,468,200.

## 8.7 Rate Analysis

To conduct the rate analysis, we used the simple and understandable method of the Equivalent Domestic User (EDU) that was published in CFR Appendix B of the Federal Register dated 9/27/78. Using the average residential use of metered customers as a basis, we calculated each church, commercial and multi-family equivalency. This gave 120 equivalent users for this group. The results of this calculation are given in **Appendix B.3**. Adding to these 1541 metered customers and 619 flat rate residential customers (each one EDU) gives a total of 2284 EDU's. It is important to note that this rate does not take into account the steady addition of new services (new EDU's) that will occur after 2005. For the years 2004 and 2005, 300 EDU's services above the existing 2284 EDU's were added to the calculation. These are used in the simple rate calculation in **Table 8-5**. The table shows the calculations for monthly rate to each homeowner and utilizes the general rate increases that will occur as a result of these projects. The total expected cost to be paid as general rate increase for **Table 8-4** of \$7,468,200 was used in the calculation. Projects 12 – 14 are not included because the need for them will be purely development driven. However, with that said, the booster stations and storage tanks eventually built as portions of Projects 13 and 14 may result in additional rate increases not shown on **Table 8-5**.

<b>Total probable project capital cost (Projects 2-10)</b>	<b>\$7,468,200</b>
Estimated grant amount	\$0
SRF Loan amount administered by DEQ	\$7,468,200
Estimated annual debt service (3.5% loan over 20 years)	\$525,500
Existing estimated annual debt service with project no. 1	\$17,600
Existing other annual debt service	\$18,900
Estimated annual O&M costs	<u>\$358,000</u>
Total estimated annual costs	\$920,000
Estimated number of EDU's served at beginning of loan	2584
Estimated monthly O&M costs per EDU	\$11.55
Estimated monthly loan payments per EDU	\$18.12
Estimated monthly debt reserve per EDU required by DEQ	\$1.81
Estimated monthly capital improvements reserve per EDU	\$0.00
New monthly rate of each EDU after project completion	<b>\$31.48</b>

**Table 8-5. Funding Plan and Rate Analysis**

For this analysis, it was assumed that there would be no grant to assist with the costs of the project and that the state SRF program administered by DEQ would provide Falls Water a loan. Falls Water will incur a loan with Project No. 1 that will have annual debt

payments of approximately \$17,600. In addition, Falls Water Company currently has \$18,900 per year of existing debt. With these included, the expected average monthly rate to each customer (1 EDU) under the scenario of obtaining an SRF loan for all of Projects 2-11 is expected to be at or near \$31.48.

### 8.8 Project Schedule and Planning

The project schedule selected by the company and endorsed by DEQ and the IPUC is as follows. The Lincoln Road and John Adams Parkway waterline construction project is underway and will be completed in 2004. It is most desirable to complete planned improvements all at the same time without phasing the work. If the work is phased, whether by choice or as required by the IPUC, then only the first phase of Projects 2-11 are included in this schedule. The second phase would require an additional year, the third phase another year after that. The start-up times for each phase must conform to DEQ's schedule for authorizing loans. We recommend that well construction be bid separate from well houses since the production capability and thus the well pump sizes and etc. are unknown.

<u>Item</u>	<u>Completion Month / Year</u>
Begin Public Hearings	August 2004
Apply For Funding	November 2004 to May 2005
Finish Public Hearings	December 2004 to February 2005
Obtain PUC Approval	March 2005
Begin Design Work	March 2005
Secure Funding	July 2005
DEQ Approval of Design Plans & Specifications	July 2005
Bid	August 2005
Begin Construction	September 2005
Finish Construction	September 2006
Project Closeout	December 2006

### 8.9 Certification of Operators

In accordance with the State Water and Wastewater Operators Board, Falls Water is currently classified as a Level I system. The current operator is Tony Wise, who is certified at Level II. The back-up operator is Kelly Howell. We expect that Level II certification will be required with the recommended upgrade project identified in this chapter. The calculation for this is contained in **Appendix B.3**.

### 8.10 Hook-up Fees

The present hook-up fee for a single-family residence and a 3/4-inch meter is \$500. The hook-up fee for this meter and larger meters is given in **Appendix B.2**. This appears low to financially sustain supply.

We calculated justifiable and necessary hook-up fees for Falls Water Company to construct new water supply sources with a new well, storage tank, and booster pump station such as Priority Project No. 2. We estimate, when including costs for the meter, installation, inspection of meter box, and an administrative fee for setting up billing for a new customer that the hook-up fee should be \$1974. For just a new well and wellhouse in lieu of a tank and booster station with the other costs mentioned, the hook-up fee should be \$1225.

Existing customers as well as new customers benefit from having storage. So it seems more fair to use the \$1225 hook-up fee associated with just a well and wellhouse. The price for larger meters should also be adjusted upwards in proportion to the  $\frac{3}{4}$ -inch meter fee. The calculation is shown in **Appendix B.2**.