CITY OF DRIGGS

WATER SYSTEM FACILITY PLAN UPDATE 2013

December 2013

FINAL DRAFT

AQUA ENGINEERING

EXECUTIVE SUMMARY

CITY OF DRIGGS WATER SYSTEM FACILITY PLAN UPDATE 2013
EXECUTIVE SUMMARY

The City of Driggs recognizes the need to provide a water system facilities plan and capital facilities within the City to protect the health, safety, and property of the City and its citizens. This water system facility plan will update the previous water system facility plan; project future growth; analyze the existing and future water systems; provide capital facility projects required to meet increasing demands on the system; and review financing of capital facility projects.

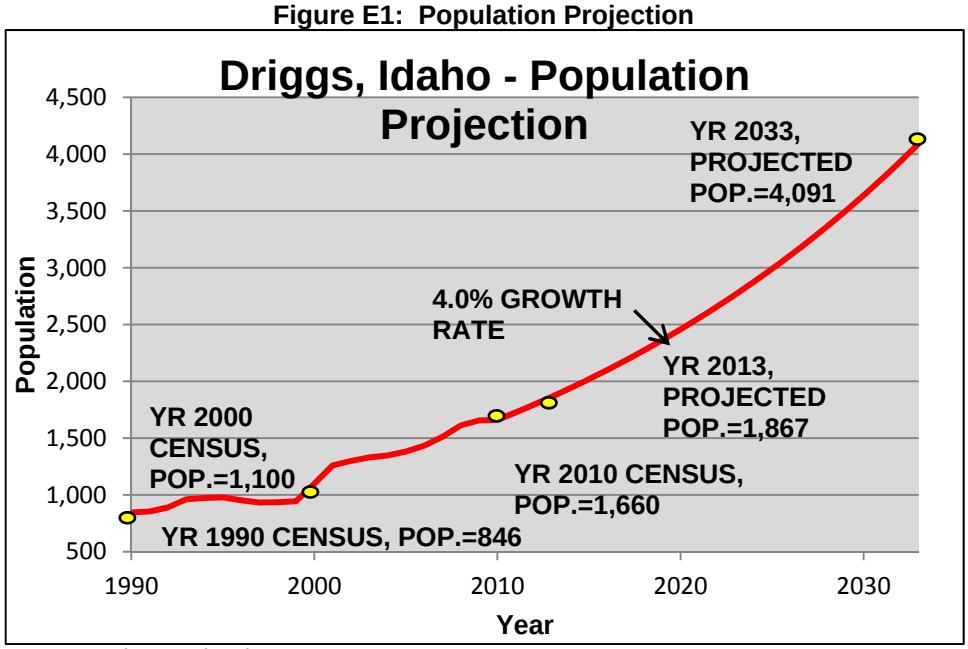
EXISTING CONDITIONS

The City has an existing water system which consists of eight (8) water sources (7 wells and 1 spring); two (2) water storage tanks; SCADA/telemetry controls; and a distribution system consisting of main lines ranging from 2-inches in diameter to 14-inches. The existing water system has its deficiencies. The most pressing deficiency is the non operational SCADA/ telemetry controls. The City has identified existing deficiencies and capital facility projects have been identified to fix these deficiencies.

DEMOGRAPHICS

The first step before analyzing the water system is to establish the City's demographics and project these demographics into the future. For the plan, the 20-year planning period was used. Based on demographic data from the US Census Bureau and previous studies completed by the City, a 4.0% growth rate was used for the plan. See Figure E1 for population projections which are consistent with recent projections used by the City.

Figure E1: Population Projection



Source: Figure 6 is Chapter 3

Using these population projections, the City of Driggs Future Zoning Map, and conversations with the City, the projected future connections and Equivalent Residential Units (ERUs) were determined, see Table E1. ERUs will be the primary units used in this report for the water system analysis. One ERU represents a single family dwelling with known demand characteristics or requirements. Other types of uses such as commercial or industrial uses are typically factored based upon comparison of their demand versus the residential single family unit.

Table E1: Projected Future ERUs

	Year	2013 (Current Year)		2018		2023		2028		2033	
	Projected Pop.	1,867		2,272		2,764		3,363		4,091	
Service Conn. Type	Growth Rate (%)	Conn	ERUs	Conn	ERUs	Conn	ERUs	Conn	ERUs	Conn	ERUs
Residential	4.00%	901	901	1,096	1,096	1,334	1,334	1,623	1,623	1,974	1,974
Comm./Ind.	4.00%	202	525	246	640	299	777	364	946	443	1,152
	Totals	**1,103**	**1,426**	**1,342**	**1,736**	**1,633**	**2,111**	**1,987**	**2,569**	**2,417**	**3,126**
Increase From 2013		N/A	N/A	239	310	530	685	884	1,143	1,314	1,700

Source: Table 12 in Chapter 3

The information established in the demographics chapter of the plan was used to determine future requirements; establish future capital facility projects; and analyze financial impacts to the water fund.

WATER SYSTEM CONSERVATION

The City currently has water conservation practices in the form of a water allowance incorporated into its water rates; water conservation tips in its annual water quality report; and replacing existing water services and water mains which have been leaking. The City can also consider raising high water usage rates; preparing a leak detection study; and placing watering time restrictions.

WATER SYSTEM ANALYSIS

The water system was analyzed with the different water analysis scenarios as required by Idaho Code. Analysis of the existing and future water system identified existing and future deficiencies in the water system including but limited to: SCADA/telemetry controls, shallow buried pipelines, dead end mains (low pressures and fire flows), low pressures during high demands, inadequate storage capacity in the 20-year planning period, and inadequately sized mains. To fix these existing and future deficiencies a capital improvement project list was completed.

CAPITAL IMPROVEMENT PROJECTS

Based on the water system analysis and input from the City existing and future deficiencies were identified and prioritized. The priority of the projects was weighted based on the urgency to fix the specific deficiency within the water system. Table E2 summarizes the future water capital improvement projects based on priority and lists the project need.

Table E2: Future Culinary Water Projects

Project Name and Description	Type *	Estimated Cost	Project Need	Construction Year	Construction Year Price [1]
Water System Telemetry/SCADA Upgrades	T	$318,500.00	This project is required so the City's water system telemetry can be operational again. Note: The Spring upgrades have been completed ($23,000.00) listed in the cost estimate.	2013-2017	$338,477.90
1 MG Tank Altitude Valve Replacement Project	D	$104,750.00	This project replaces an existing altitude valve and allows the spring to flow correctly into the tank.	2013	$104,750.00
5th Street Water Loop Pipeline Project	D	$269,987.50	This project provides system redundancy and a fire loop. This project also allows the 1.0 MG tank to flow into the lower pressure zone during high demand.	2014	$278,087.13
0.3 MG Tank Altitude Valve and Orifice Replacement Project	D	$104,750.00	This project replaces and existing altitude valve and orifice.	2014	$107,892.50
0.3 MG Tank Security Fence Project	ST	$36,625.00	This project is required so the City protect the tank and tank well source from potential contaminants.	2014	$37,723.75
12-inch Transmission Water Pipeline Replacement Project	D	$622,612.50	This project will replace the existing 12-inch waterline between the 0.3 MG Tank and High School Well to match current City standards as the existing line is shallow.	2014	$641,290.88
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2014-2018	$381,463.29
Tank Well Pump House and Chlorine Treatment Project	S	$307,500.00	This project updates the existing Tank Well to current City Standards; provides chlorine treatment at the well site; and provides a point of connection for the trailer mounted generator. It also re-equips the well so it can pump up to the 1.0 MG Tank.	2014	$316,725.00

Table E2: Future Culinary Water Projects					
Project Name and Description	**Type ***	**Estimated Cost**	**Project Need**	**Construction Year**	**Construction Year Price [1]**
1.0 MG Tank Overflow Line Meter Project	ST	$14,375.00	This project is required so the City can measure any overflow from the Tank.	2017	$16,179.19
Depot Street Alley 2-inch Waterline Replacement Project	D	$56,468.75	This project replaces an existing undersized 2-inch waterline.	2017	$63,556.08
Teton Creek Resort Booster Pump and Waterline Loop Project	D	$220,980.00	This project will increase pressures for the residents in the area during high demands.	2017	$248,714.94
3rd Street and 4th Street 2-inch Waterline Replacement Project	D	$138,000.00	This project replaces an existing undersized 2-inch waterline.	2018	$159,979.82
Subtotal		**2,543,336.88**			**$2,694,840.46**
1.5 MG Water Tank Project	ST	$1,610,625.00	This project is required to provide enough storage capacity to meet future demands.	2019	$1,923,170.48
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2019-2023	$442,220.50
High School Well Generator Project	S	$180,750.00	This project would provide an additional emergency water source.	2020	$222,299.70
Teton Creek Well Manual Transfer Switch Project	S	$5,625.00	This project would provide a point of connection for the trailer mounted generator.	2020	$6,918.04
Trailer Mount Generator Purchase	S	$51,750.00	This purchase will allow the City to power the wells that do not have permanent generators.	2020	$63,645.97
Lions Park Well Pump House and Chlorine Treatment Project	S	$170,000.00	This project updates the existing Lions Park Well to current City Standards; provides chlorine treatment at the well site; ; and provides a point of connection for the trailer mounted generator	2021	$215,350.91
Dalley Well Pump House and Chlorine Treatment Project	S	$170,000.00	This project updates the existing Dalley Well to current City Standards; provides chlorine treatment at the well site; and provides a point of connection for the trailer mounted generator.	2021	$215,350.91
5th Street 6-inch Waterline Replacement Project	D	$343,955.00	This project upgrades and existing 6-inch line to a 10-inch line to feed the City's commercial area.	2022	$448,783.26

Table E2: Future Culinary Water Projects					
Project Name and Description	**Type ***	**Estimated Cost**	**Project Need**	**Construction Year**	**Construction Year Price [1]**
Creekside Meadows Water Loop Water Project	D	$108,250.00	This project will provide redundancy and a fire loop for the Creekside Subdivision.	2023	$145,478.95
Valley Centre Well Chlorine Treatment Project	S	$21,812.50	This project provides chlorine treatment at the well site and provides a point of connection for the trailer mounted generator	2023	$29,314.18
Ski Hill Road and Miller Ranch Water Loop Pipeline Project	D	$237,875.00	This project provides system redundancy and a fire loop.	2023	$319,684.11
Subtotal		**3,249,430.63**			**$4,032,217.01**
Little Avenue 6-inch Waterline Replacement Project	D	$440,530.00	This project upgrades and existing 6-inch line to a 10-inch line to feed the City's commercial area.	2024	$609,796.55
Highway 33 6-inch Waterline Replacement Project (over 10 Years)	D	$756,953.75	This project upgrades an existing 6-inch line to a 10-inch line for the City's commercial area. This project will be constructed in phases.	2024-2028	$1,112,583.58
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2024-2028	$512,654.76
Subtotal		**$1,546,271.88**			**$2,235,034.89**
Highway 33 6-inch Waterline Replacement Project (over 10 Years)	D	$756,953.75	This project upgrades an existing 6-inch line to an 10-inch line for the City's commercial area. This project will be constructed in phases.	2029-2033	$1,289,789.30
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2029-2033	$594,307.37
Rodeo Drive Water Loop Pipeline Project	D	$160,750.00	This project provides system redundancy and a fire loop.	2033	$290,332.38
Subtotal		**$1,266,491.88**			**$2,174,429.05**
20-year Project Total		**$8,605,531.25**			**$11,136,521.42**
Water Pipeline Hydroelectric Project	D	$90,000.00	This project provides an alternative energy source for the City.	Only if Feasible	N/A

* D=Distribution ST=Storage S=Source

[1] The construction year price for projects which are split over 5 years is the total construction year price from each year's adjusted construction year price for the project.

Source: Table 24 in Chapter 7

The capital improvement projects were analyzed and compared with a no action alternative. All of the projects except the Water Pipeline Hydroelectric Project were found to be required to fix existing and future deficiencies. A separate cost benefit analysis was completed for the Water Pipeline Hydroelectric Project and the project was found to not be cost beneficial. The project could be completed with grant or an alternate source of funding to help the City incorporate an environmental sustainable project into its water system.

FINANCING AND COST EVALUATION

This plan discussed various funding alternatives for the capital improvement projects such as water rates, connection fees, grants, and revenue bonds. To properly analyze the system a cost evaluation was completed which included a water rate analysis. The water rate analysis of the City of Driggs's Water Rates used expenditures and revenues projected in the 20-year planning period. Table E3 and Table E4 summarizes two (2) water rate structures. Both structures require increases in Water Rates to maintain a positive fund balance.

Table E5 summarizes the projects in the water rate study which will require revenue bonds or other funding alternatives in order to maintain a positive fund balance and keep the water rates low.

Table E3: Existing Water Rate Structure - Summary of Increase in Water Rates

Year	Monthly Base Water Rate, $/10,000 gallons water allowance (Summer) 05/01 - 10/31	Monthly Base Water Rate, $/20,000 gallons water allowance (Winter) 11/01 - 4/30	Monthly Water Consumption Fee, $ for every 1,000 gallons (above allowance)
2013	$ 27.00	$ 27.00	$ 1.00
2014	$ 28.50	$ 28.50	$ 1.50
2015	$ 30.00	$ 30.00	$ 2.00
2016	$ 31.50	$ 31.50	$ 2.00
2017	$ 33.00	$ 33.00	$ 2.00
2018	$ 34.50	$ 34.50	$ 2.00
2019	$ 36.00	$ 36.00	$ 2.00
2020	$ 37.00	$ 37.00	$ 2.00

[1] The monthly water consumption fee raises $0.25 each year until 2021.

Source: Table 25 in Chapter 7

Table E4: Tiered Rate Structure - Summary of Increase in Water Rates

Year	1st Tier - Monthly Base Water Rate, $ under 7,000 gallons (Summer) 05/01 - 10/31	2nd Tier – Monthly Base Water Rate, $ between 7,000 gallons and 13,000 gallons (Summer) 05/01 – 10/31	1st Tier - Monthly Base Water Rate, $ under 17,000 gallons (Winter) 11/01 - 4/30	2nd Tier – Monthly Base Water Rate, $ between 17,000 gallons and 23,000 gallons (Winter) 11/01 – 4/30	Monthly Water Consumption Fee, $ for every 1,000 gallons (above 2nd Tier)
2013	$ 18.90	$ 8.10	$ 18.90	$ 8.10	$ 1.00
2014	$ 19.47	$ 8.59	$ 19.47	$ 8.59	$ 1.06
2015	$ 20.05	$ 9.10	$ 20.05	$ 9.10	$ 1.12
2016	$ 20.65	$ 9.65	$ 20.65	$ 9.65	$ 1.19
2017	$ 21.27	$ 10.23	$ 21.27	$ 10.23	$ 1.26
2018	$ 21.91	$ 10.84	$ 21.91	$ 10.84	$ 1.34
2019	$ 22.57	$ 11.49	$ 22.57	$ 11.49	$ 1.42
2020	$ 23.24	$ 12.18	$ 23.24	$ 12.18	$ 1.50
2021	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 1.59

Note: The sum of the 1st and 2nd Tiers in year 2013 equals the current base rate of $27.00/ month.
Source: Table 27 in Chapter 7

Table E5: Summary of Required Revenue Bonds

Bond Issue	Par Amount	Proceeds	Net Debt Service[1]
Series 2014 Revenue Bonds (12-inch Transmission Waterline Replacement Project)	$ 674,116.69	$ 641,290.88	$ 871,188.65
Series 2019 Revenue Bonds (1.5 MG Water Tank Project)	$ 2,012,082.22	$ 1,953,021.79	$ 2,612,255.77
Series 2024 Revenue Bonds (Little Avenue 6-inch Waterline Replacement Project)	$ 641,992.48	$ 609,796.55	$ 819,178.83

[1] Includes principal and interest.
Source: Table 26 in Chapter 7

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CHAPTER 1

Introduction

CHAPTER 1 - INTRODUCTION

1.1 Background

Driggs, Idaho is located in Teton Valley at an elevation of 6,200 feet. Teton Valley is located between the Teton Mountains to the east and Big Hole Mountains to the west, see Figure 1 for a location map of the City. The City has a population of 1,660 according to the 2010 U.S. Census.

The City has had an operating water system for the last 100 years beginning with the conveyance of water from the City's spring in 1912. There have been numerous upgrades to the water system since including: re-development of the City's spring; construction of potable water storage tanks; distribution and transmission line upgrades and replacements; and additional water sources (wells).

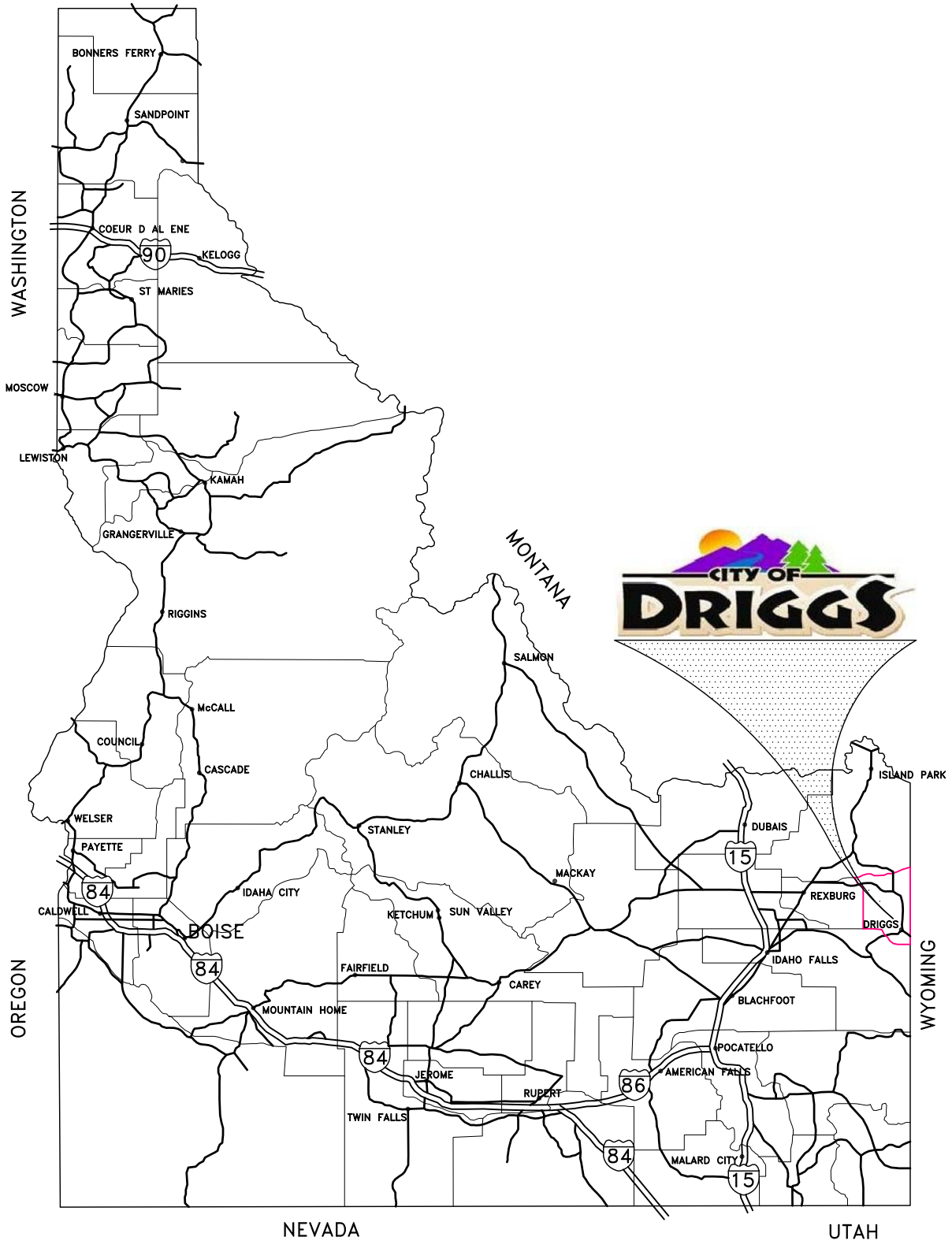
1.2 Purpose and Scope

The purpose of this Water System Facility Plan document is to update the City's existing Culinary Water Facility Plan completed by Sunrise Engineering in 2002 and provide a plan for improvements to the City's water system necessary to meet growth based demands for the next 20 years (Year 2033). This update will include an inventory and analysis of existing water sources, storage, distribution pipeline infrastructure, and transmission pipeline infrastructure. After analysis of the existing water system capital facility projects will be discussed to improve the water system to meet future demands. These projects with different alternatives, including a no action alternative, will be analyzed and a recommended alternative will be chosen. Analysis of these projects will include preparation of preliminary designs; preparation of cost estimates; a water rate analysis; and funding options.

1.3 Water System Facility Plan Overview

The Water System Facility Plan (WSFP) consists of the following information:

- Introduction – An introduction to the City's water system.
- Demographics – A description of the current and projected population and its distribution. A description of planning information and growth projections.
- Water Conservation – A discussion of the City's current and anticipated water conservation measures.
- Water System Analysis
    - Existing Conditions – A detailed description of the City's existing culinary water system including demographics; current (Year 2013) demands; source information and current source requirements based on demands; storage information and current storage requirements based on demands ; a water model of the present water system; and a list of existing system deficiencies.



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City of Driggs, Idaho
WATER SYSTEM FACILITY PLAN UPDATE 2013
LOCATION MAP
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- Future (2033) Conditions – A detailed description of the City's future culinary water system including future demands; future source requirements based on demands; future storage requirements based on demands; a list of future water system deficiencies; and a water model of the future water system using projects required to correct existing and future water system deficiencies.
- Development and initial screening of alternatives including general environmental impacts.
- Final screening of principal alternatives and facility plan adoption.
- Selected alternative description and implementation arrangements.

1.4 Project Responsibility

The Public Works Department of the City of Driggs has identified a portion of the existing deficiencies in its system. The City anticipates the Water System Facility Plan can identify additional deficiencies and projects to fix these deficiencies. The following are the City's financial resources, technical qualifications, adequate facilities to carry out projects according to project schedules, past project performance record, and procedures for acquiring land.

1.4.1 City's Financial Resources

The City has invested in its water system and continues to bring the existing system up to current design standards. The City has $4,320,992.00 of total capital assets in its water fund according to the FY 2012 basic financial statements, see appendix Q. The 2012-2013 adopted budget has an estimated revenue of $580,584.00 with expenses of $580,584.00. The total governmental fund balance as of September 30, 2012 was $2,008,699.00 and the water fund balance (Cash and Investments) as of September 30, 2012 is $475,638.00. The City's long term debt associated with its water fund is listed in Table 1.

Table 1: Existing Water Fund Long Term Debt

Water Fund	Project	Date of Issue	Interest Rate	Final Maturity Date	Original Bond, Note Issue	Principal Outstanding at September 30, 2012	Amount Attributable to Water Fund Yearly
Water/ Sewer Revenue Bond[1]	Water Line Replacement	November 1997	5.00%	2027	$ 500,000.00	$ 336,846.00	$16,265.00
SBA #2 Note [2]	Purchase of the Brolim's Building [1]	August 2004	6.35%	2016	$ 318,046.00	$ 115,551.00	$13,554.00
RDA Note	Driggs Spring Water Project	November 2004	4.50%	2035	$ 500,000.00	$ 434,243.00	$30,700.00
DEQ Revenue Bond	Transmission Line and 1.0 MG Water Tank	October 2005	3.70%	2026	$ 600,000.00	$ 436,933.00	$42,911.00
				Totals	**$1,918,046.00**	**$1,323,573.00**	**$103,430.00**

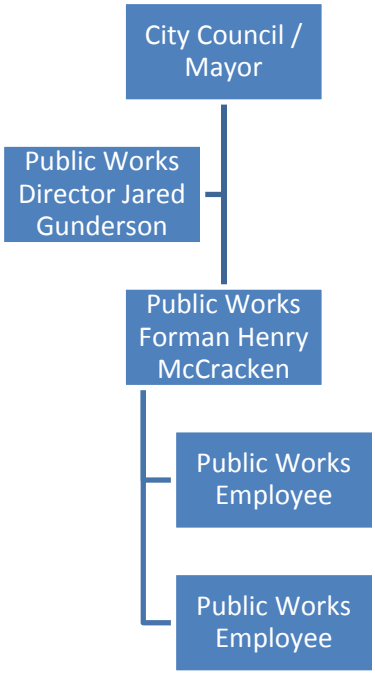
Source: This information was obtained from City of Driggs, Idaho, Basic Financial Statements and Supplementary Information with Independent Auditor's Report dated September 30, 2011 by Rudd & Company, PLLC.
[1] This note is split evenly between the water and sewer fund.
[2] This note is split evenly between the general fund, water fund, and sewer fund.

The City has been able to maintain a healthy fund balance and has continued to pay off long term debt.

1.4.2 City's Technical Qualifications, Experience, and Organization

The Public Works Department consists of four (4) employees who report to the City Council and Mayor. Figure 2 displays the organization chart of the Public Works Department for the City of Driggs.

Figure 2: City of Driggs Public Works Organization Chart



The following are the qualifications of the City's Public Works Department employees:

- Public Works Director, Jared Gunderson, has 18 years experience in the water works field. He has a level III water distribution license in the State of Idaho and a level IV water distribution license in Utah. Jared worked 2 year for the City of Woods Cross, Utah; 8 years for the City of Hyrum, Utah; 1 year for the City of Logan, Utah; and 7 Years for the City of Driggs, Idaho.

- Public Works Forman, Henry McCracken, has 12 years experience in the water works field. He has a level I water distribution license in the State of Idaho. Henry has worked 12 years for the City of Driggs.

1.4.3 Adequate Facilities to Carry Out Projects According to Project Schedules

The City has an existing Public Works Building consisting of offices, laboratory, shop area, and secure outdoor storage area. The City owns enough equipment to complete repairs and maintenance on the existing water system. The outdoor secure storage by the Public Works building allows contractors a secure location to store their equipment when working on a water project. The City also allows contractors to connect to fire hydrants for construction water or fill up water trucks at the Public Works Building. These facilities assist the City and construction companies working on water projects for the City to complete projects on schedule.

1.4.4 City's Performance Record for Completion of Projects and Contracts

The City has a recent track record for completing projects to fix deficiencies in the water system. Table 2 is a list of recent water projects completed in the last 8 years:

Table 2: Performance Record for Completion of Water Projects

Year	Project
2005/2006	New 12-inch HDPE water line from the City Spring (Alta, WY) to the existing 0.3 MG concrete culinary water storage tank. Included in the project was a new 1.0 MG concrete culinary water storage tank.
2010/2011	Replaced 6-inch steel wrapped water main line and all service lines on Main Street (From 300 South to Wallace Ave) with a 10-inch DIP water main line.
2011	Replaced water line and all services on Howard Ave (from Main St. to 1st Ave) with an 8-inch DIP water line.
2012	Lowered all the water services on Harper Ave (from Main St. to 1st Ave) to a depth of 6-feet to avoid freezing.
2013	Lowering of the existing water services on Little Avenue (from Main Street to 1st St.) and on Buxton Ave (from Main St. to Front St.) and installation of an 8-inch DIP water main line.
2013	The City purchased the land where the existing 0.3 MG tank and tank well are located on.

1.4.5 City's Procedures Required by Law for Acquiring, Maintaining, Safeguarding and Disposal of Property

The City has established property acquisition procedures under its Urban Renewal Plan which are bound by the Idaho State Urban Renewal Law; however, acquisition by the City for water system improvements would fall under Title 50, Chapter 14 Conveyance of Property of the Idaho Statutes. The acquisition of property by the City is acquired by any means authorized by law including, but not limited to, the Idaho Statutes - Municipal Corporations - Conveyance of Property Law, the Local Economic Development Law, and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Any acquisition of property required for the projects indentified in this Water System Facility Plan shall follow the applicable Federal, State, and County laws with regards to property acquisition and shall only include property required to install, operate, and maintain the improvements.

The City is also authorized to sell, lease, exchange, subdivide, transfer, assign, pledge, encumber by mortgage or deed of trust, or otherwise dispose of any interest in real property under the reuse provisions set forth in Idaho Statutes Title 50, Chapter 14,Section 50-1405 thru 1408, and as otherwise allowed by law.

CHAPTER 1

Introduction

CHAPTER 2 - EXISTING CONDITIONS

2.1 City Boundary and Planning Areas

The Driggs City boundary encompass approximately 1,762 acres and consists mostly of single and multi-family residential with commercial and some light industrial, see Figure 3.

2.2 Existing Environmental Conditions

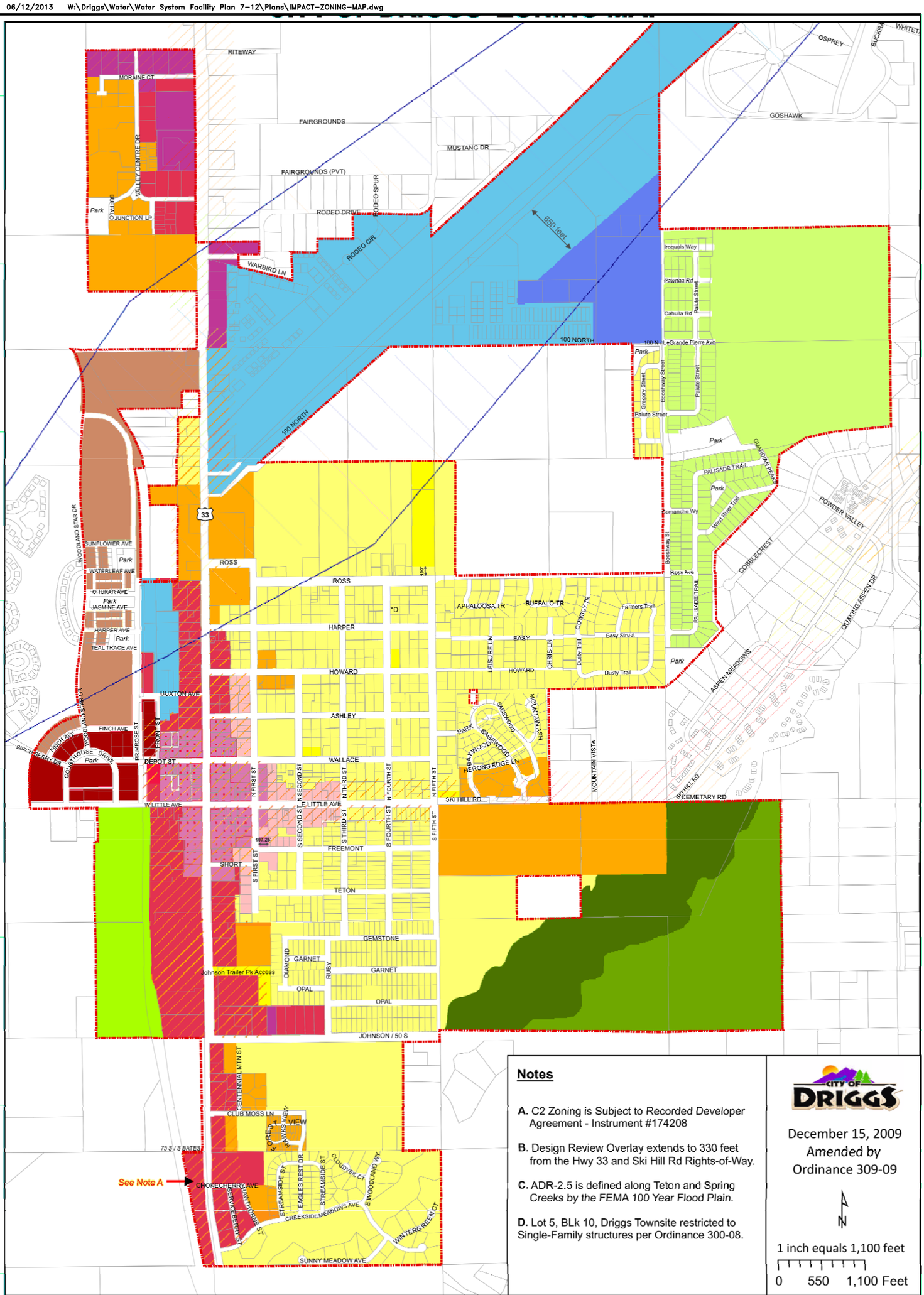
The City of Driggs and most of Teton Valley is built upon Quaternary basin-filled alluvium (Qd). The alluvium contains boulder to silty distal alluvial fan deposits of Pleistocene to Pliocene age, and alluvial valley-fill and terrace deposits of Pinedale age. Alluvial deposits, by reviewing well logs, are anywhere from 500 feet thick closer to the center of town to 200 feet thick east of town by the 0.3 MG Tank. The Cache Creek Thrust fault runs north / south on the east end of the City according to the Geologic Map of the Driggs Quadrangle, Bonneville and Teton Counties, Idaho, and Teton County, Wyoming by the USGS.

Teton Creek runs southwest along the southern portion of the City limits. Because of the close proximity of the creek to the City there is a potential for flooding during late spring/ early summer snowmelt. The majority of the City is located within an un-shaded zone X or areas determined to be outside the 500-year floodplain. Areas of the City located directly adjacent to Teton Creek do fall within different floodplain zones. The majority of the City's water infrastructure is located within an un-shaded zone X. The portions of the water system that are located in floodplains are susceptible to minimal damage due to flooding as the water structures are buried or have been designed to drain after a flood event has transpired.

Driggs receives, on average, 16.01 inches of precipitation and 65.2 inches of snowfall a year. Given Driggs higher elevation, approximately 6,200 feet, average temperatures during the entire year tend to stay cooler. Depth of bury of existing pipes has been a concern for the City as many existing pipes were not installed to the proper depth. The frost depth for the City of Driggs is 60 inches. The City standard for pipe burial is a minimum of 6-feet of cover over water pipes. In lieu of removing and replacing water pipes that do not have 6-feet of cover over the top, this plan will investigate other alternatives such as installing foam board around existing water pipes to rectify these existing conditions.

2.3 Existing Facilities

The City has eight (8) sources including seven (7) wells and one (1) spring, two (2) culinary water storage tanks, and a distribution system consisting of 2-inch to 14-inch water lines, see Figure 4 for a map of the existing culinary water system.



Notes

A. C2 Zoning is Subject to Recorded Developer Agreement - Instrument #174208

B. Design Review Overlay extends to 330 feet from the Hwy 33 and Ski Hill Rd Rights-of-Way.

C. ADR-2.5 is defined along Teton and Spring Creeks by the FEMA 100 Year Flood Plain.

D. Lot 5, BLk 10, Driggs Townsite restricted to Single-Family structures per Ordinance 300-08.

CITY OF DRIGGS

December 15, 2009
Amended by
Ordinance 309-09

N

1 inch equals 1,100 feet

0 550 1,100 Feet

- City Limits
- Design Review Overlay
- CBD Parking Overlay
- Airport Overlay
- ADR-2.5 (2.5 Acre Avg Density Res)
- ADR-1.0 (1.0 Acre Avg Density Res)
- ADR-0.5 (0.5 Acre Avg Density Res)
- A-0.5 Agricultural (0.5 Acre Min. Lot Size)
- R-1 Single & Two-Family Residential
- R-2 Combined Residential
- R-3 Multiple-Family Residential
- MUR Mixed Use Residential
- C-1 Neighborhood Commercial
- C-2 Downtown Commercial
- C-3 Service & Hwy Commercial
- MUC Mixed Use Commercial
- CBD Central Business District
- MUE Mixed Use Employment
- M-1 Light Industrial

Data Sources: Teton County, ID; and City of Driggs
Disclaimer: Data contains spatial inaccuracies and is for zoning reference only. The City of Driggs shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Source: City of Driggs
FIGURE 3, PAGE 8

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE
0 1/2 1

FIGURE 3

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

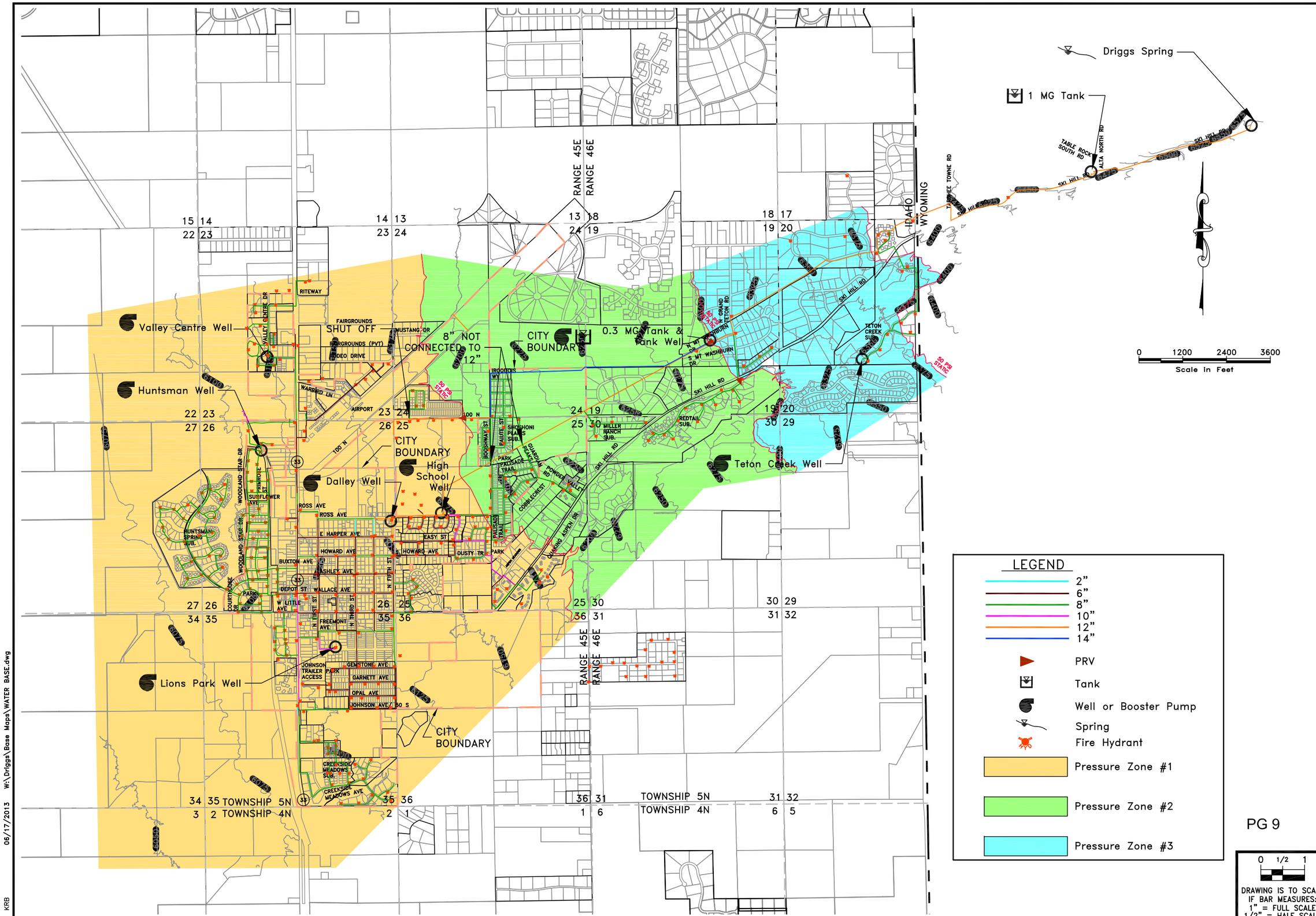
DRIGGS, IDAHO

WATER SYSTEM FACILITY PLAN UPDATE 2013

ZONING MAP

NO.	DATE	DESIGN	DRAWN	CHECKED
0	06/03/2013	RJR	JBM	RJR

REVISIONS



NO.	DATE	DESIGN	DRAWN	CHECKED
0	06/03/2013	RJR	JBM	RJR

REVISIONS

DRIGGS, IDAHO

WATER SYSTEM FACILITY PLAN UPDATE 2013

EXISTING WATER INFRASTRUCTURE PLAN

AQUA ENGINEERING

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PHONE (801) 299-1327 FAX (801) 299-0153

PG 9

0 1/2 1

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE

FIGURE

4

06/17/2013 W:\Driggs\Base Maps\WATER BASE.dwg

KRB

2.3.1 Sources

The City of Driggs currently has eight (8) sources which provide water to the City. The following table is a list of the City's culinary water sources, see Appendix T for individual well logs within the sanitary survey.

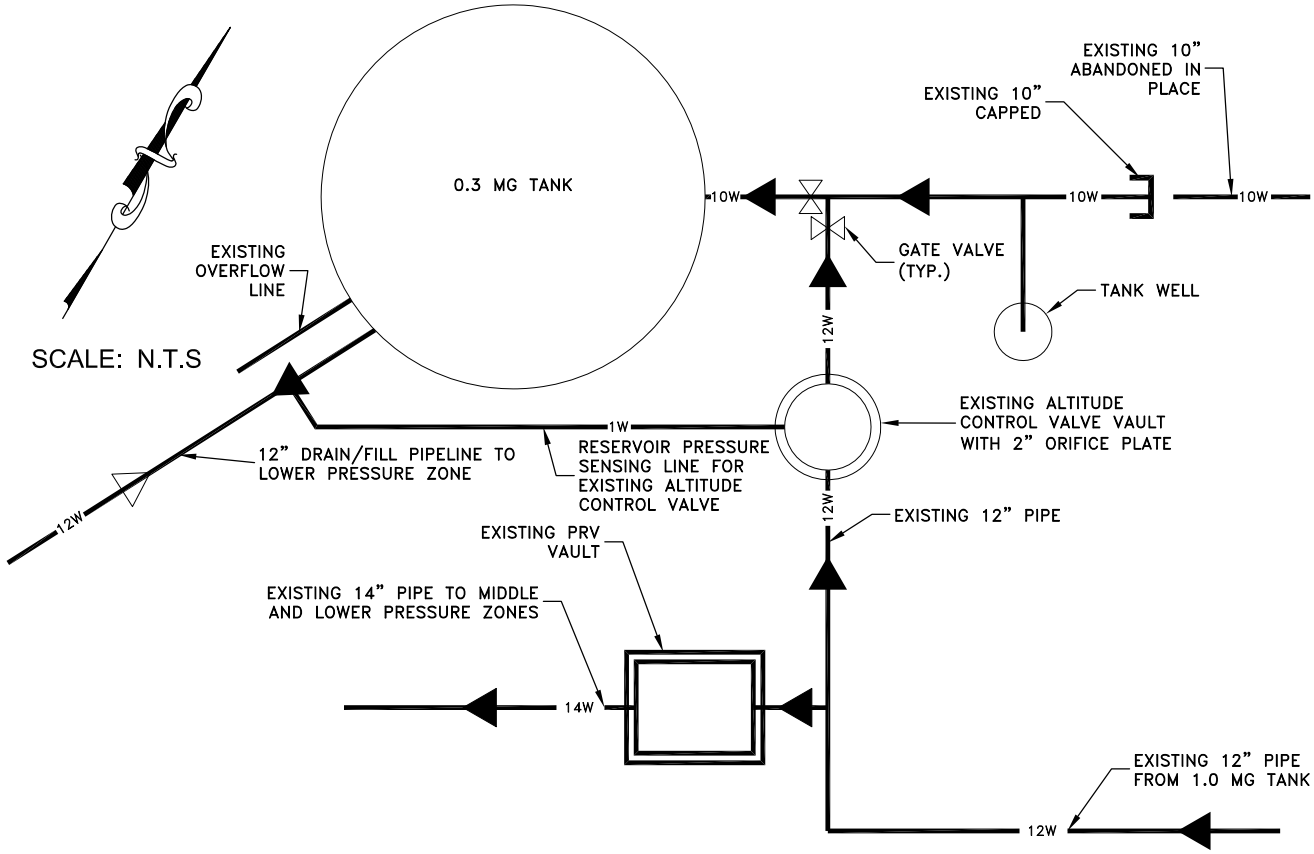
Table 3: Existing Culinary Water Sources

Source	Location	Type	Casing, (inches)/ Depth (feet)	Pump Setting (feet below ground surface)	Equipped Capacity (gpm)	Water Right No.
Spring[1]	NE ¼ SW ¼ of Section 21, T44N, R118W W.B.L.&M.	Spring	N/A	N/A	1,122 gpm	11330 and 7265 E[4]
Teton Creek Well	NE ¼ SW ¼ of Section 20, T5N, R46E I.B.L.&M.	Well	12 / 134 & 10 / 97, Total Depth=300 feet	Unknown	510 gpm	22-07530
Tank Well	NW ¼ SE ¼ of Section 19, T5N, R46E I.B.L.&M.	Well	14 / 166 & 10 / 89, Total Depth=255 ft	180 feet	500 gpm	22-07529
High School Well	SW ¼ NW ¼ of Section 25, T5N, R45E I.B.L.&M.	Well	14 / 130 & 10 / 60, Total Depth=190 ft	126 feet	1,100 to 1,350 gpm	22-07790
Dalley Well[2]	NE ¼ SE ¼ of Section 26, T5N, R45E I.B.L.&M.	Well	Unknown	150 feet	400 gpm	22-2132
Valley Centre Well	NE ¼ SW ¼ of Section 23, T5N, R45E I.B.L.&M.	Well	16 / 240, Total Depth=240 ft	60 feet	500 gpm	22-7814
Huntsman Well[3]	NE ¼ NW ¼ of Section 26, T5N, R45E I.B.L.&M.	Well	10 / 244 & 10 / 43, Total Depth=275 ft	225 feet	500 gpm	22-13589
Lions Park Well	NW ¼ NE ¼ of Section 35, T5N, R45E I.B.L.&M.	Well	16 / 362,12 / 204, & 10 / 155, Total Depth=505 ft	Unknown	560 gpm	22-07698
				Total	**5,192 to 5,442 gpm**	**N/A**

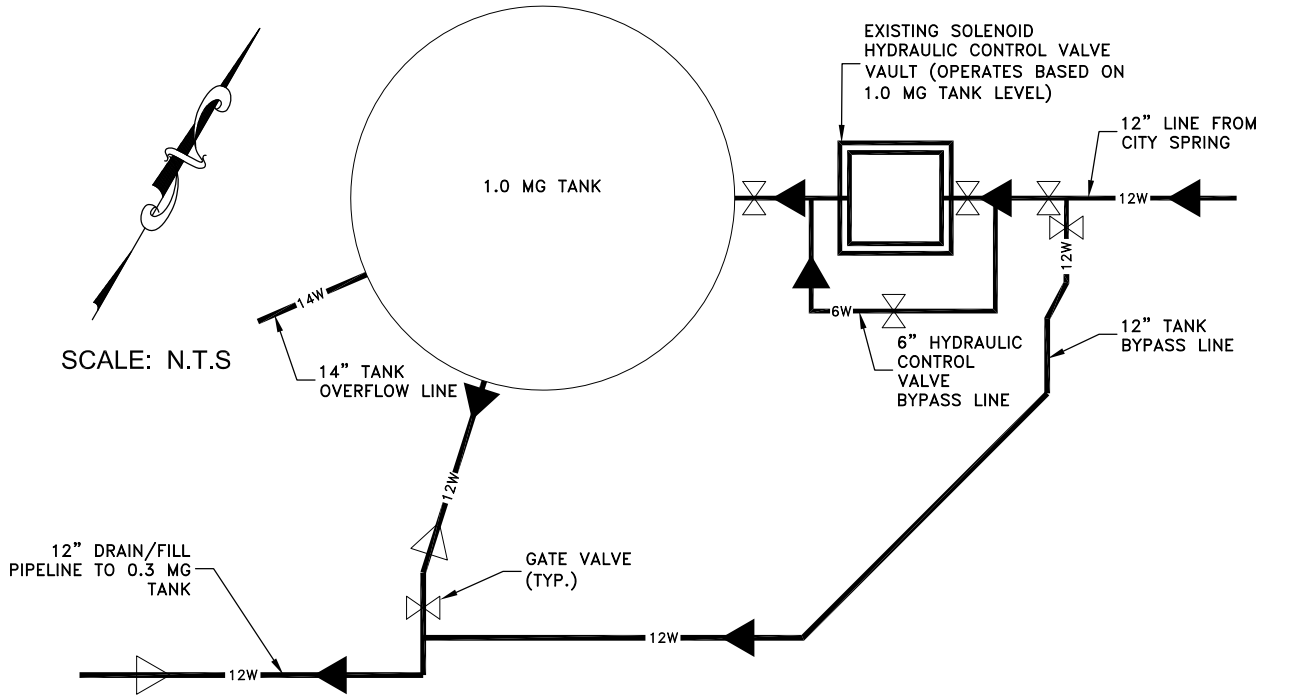
[1] The City's water right is for 2.5 cfs or 1,122 gpm; however the spring flow into the City line varies based on time of year and snowmelt.
[2] The Dalley Well was constructed before April 13, 1949 and a well log could not be located. It is believed that the Dalley Well taps the same aquifer as the High School Well.
[3] The Huntsman Well is capable of pumping up to 950 gpm.
[4] The Spring water rights are located in Wyoming.

2.3.2 Storage

The City of Driggs currently has two (2) storage tanks which provide drinking water and fire suppression storage for the City. Each storage tank is supplied by the sources shown in Table 4. The existing tanks are currently configured as shown in Figure 5.



EXISTING 0.3 MG TANK PIPING SCHEMATIC



EXISTING 1.0 MG TANK PIPING SCHEMATIC

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PHONE (801) 299-1327 FAX (801) 299-0153

CITY OF DRIGGS
WATER SYSTEM FACILITY PLAN UPDATE 2013
Existing - 0.3 MG AND 1.0 MG Tank Piping Schematic
Figure 5, Page 11

RJR 11/21/2013 W:\Driggs\Water\Water System Facility Plan 7-12\Water System Facility Plan\Drawings\EXISTING RESERVOIR PIPING SCHEMATIC.dwg

Table 4: Existing Culinary Water Storage

Tank	Diameter / Dimensions (feet)	Depth (feet)	Primary Supply Source(s)	Equipped Capacity (Million Gallons)
1 MG Buried Concrete Tank (Circ.)	110.0	16.0	Teton Creek Well and City Spring	1.0
0.3 MG Buried Concrete Tank (Circ.)	60.0	14.0	City Spring, Teton Creek, Tank, High School, Dalley, Valley Centre, Huntsman, Lions Park Well	0.3
Total	**N/A**	**N/A**	**N/A**	**1.3**

2.3.3 Distribution

As mentioned previously, existing locations of the sources, tanks, and distribution system layout are shown in Figure 4. The majority of the City's current distribution system within the City boundary meets the City's required level of service as detailed later in the report. The distribution system as shown in Figure 4 consists of main lines ranging from 2-inches to 14-inches.

2.3.3.1 Pressure Reducing Valves

The City currently has three (3) pressure reducing valves (PRV). One PRV is off of the 14-inch line adjacent to the 0.3 MG Tank; another PRV is off the (14-inch) line downstream from the PRV next to the 0.3 MG Tank; and the remaining PRV is located just upstream of the Redtail subdivision by Ski Hill Road as shown on Figure 4. These PRVs help maintain static pressure below 100 psi in the water system.

2.3.3.2 Telemetry

The City uses remote telemetry to control and monitor a portion of its existing water wells. Currently, only the Tank, Lions Park, High School, and Dalley Well are set to run off the well level in the 0.3 MG Tank. The remaining wells run off pressure in the system. The spring flows into a diversion box and into the distribution system. The spring total flow and flow into the distribution system are monitored by two (2) flow meters. The spring flow that is not used in the distribution system backs up in the diversion box and flows into an overflow which flows into Teton Creek. The City has recently installed a level transducer in the 1.0 MG tank to run a solenoid hydraulic control valve on the spring line. This valve will be normally open and will close when the tank is full.

The current telemetry/controls for the water system are currently not operational and are operated by the City manually. The City has received cost estimates to upgrade its existing telemetry and controls. These improvements will be discussed in greater detail later in the plan.

2.3.4 Treatment

The City currently has chlorine equipment and treatment at the Spring, Huntsman Well, High School Well, and Teton Creek Well. The existing chlorine treatment at the well sites does not meet the State's required 30 minute contact time (58.01.08 Idaho Rules for Public Drinking Water Systems – Section 300 Filtration and Disinfection). Even though the chlorine treatment does not meet the required contact time for the well sites it does aid in maintaining a chlorine residual level throughout the system. It would be beneficial to install chlorine treatment at the remaining four (4) well sites. A well house would be required at each of these well sites except for the Valley Centre Well to house the chlorination equipment.

2.3.5 Reliability and Emergency Operation

The existing water system will become more automated and reliable with telemetry and control upgrades. During emergency operation, the City currently has two (2) sources, Huntsman Well and City Spring, which will operate during power outages or emergency conditions. The City Spring is gravity feed; therefore, power generation is not required. Huntsman Well has a backup generator with enough fuel supply to run for 24 hours. The City anticipates constructing an additional backup generator for at least an additional water source. Analysis of the water system during these emergency operation conditions will be conducted in the water system analysis chapter of this plan.

2.4 Drinking Water Quality

2.4.1 Sampling

The City currently samples each well and the City Spring as often as every quarter depending on the analyte sampled. The City samples the High School Well for Synthetic Organic Chemicals (SOC) quarterly, refer to appendix P for a copy of the City's sampling schedule.

The City has not had a positive bacteria sample since November 16, 1999 according to the Idaho Department of Environmental Quality (IDEQ). The City during its September 12, 2012 SOC sampling detected a high level of Phthalate in the High School Well which exceeded the Maximum Contamination Level by 7.5 times, see appendix P for a copy of the letter.

Phthalate is a plasticizer for polyvinylchloride (PVC) and other polymers including rubber, cellulose and styrene. Some people who drink water containing phthalate well in excess of the MCL for many years may develop liver problems, experience reproductive difficulties and may have an increased risk of cancer according to the EPA's website. Since this is the first detection of this contaminant in the well, monitoring has been increased per the State's requirements. Sampling was increased quarterly for the High School Well. If after two (2) quarterly samples are completed IDEQ can determine if the water system is reliably and consistently below the MCL, the State will permit the water system to be monitored annually.

If phthalate in the High School Well continues to be an issue the well can be taken offline or granular activated carbon (GAC) can be used for treatment. The water treatment works by passing the well water through activated carbon filters for absorption of organic compounds from the contaminated water. One company that makes such a filter for municipal water system flows is Carbtrol located in Bridgeport, Connecticut. The company Brita uses the same GAC in their filters albeit on a smaller residential customer scale. Besides chemical reduction GAC filters reduces taste, chlorine, and odor in water. GAC does not remove bacteria and if the media is not replaced every 6 months or per manufacturer's recommendations the media is a perfect breeding ground for bacteria.

The City also violated sampling requirements at the Teton Creek Well by not sampling the well in 2011. The Teton Creek Well was constructed by a developer. The violation occurred because the City was unaware the developer had turned ownership over to the City. Once the City was made aware of its ownership, it has continuously sampled the well as required by the State.

2.4.2 Sanitary Survey

The City's last sanitary survey was completed by the Idaho State Department of Environmental Quality (IDEQ) on June 28, 2010, see appendix Q for a copy. The inspection of the water system identified eleven (11) deficiencies with the system. A summary of these deficiencies for each source and storage tank and the State recommendations are listed below. The City has installed improvements to fix a few of the listed deficiencies. Improvements are noted in italics.

1. City Spring – Conduct GWUDI Evaluation because the infiltration gallery was reconstructed in 2003-04. Recommend replacing sonic type flow meter with more accurate meter. *The City recently replaced (March 2013) the sonic type flow meter with a magnetic meter and replaced the existing Hydro-Ranger with a weir pressure transducer to monitor total flow of the spring.*
2. Teton Creek Well – *Backflow device was placed on non-sampling taps during inspection; therefore, correcting the deficiency.*
3. Tank Well – Upon system upgrades casing is required to be extended to meet current IDAPA requirements. A chain-link fence is recommended around well site to secure the area from potential vandalism and to define the well lot within the residential area. A sampling hydrant is recommended instead of using the existing fire hydrant as a source sampling location.
4. Dalley Well – The State recommends abandoning the well because it is a low producer and there is no well log for the well so construction of the well is unknown. The casing needs to be extended upon system modifications to meet current IDAPA requirements. A sampling hydrant is recommended instead of using the existing fire hydrant as a source sampling location.
5. High School Well – *Cross connection identified and fixed by City during inspection.*

6. Valley Centre Well – Recommend checking the operational condition of the check valve.
7. Lions Well – Current vent unacceptable. A sampling hydrant is recommended instead of using the existing fire hydrant as a source sampling location.
8. 1 MG Tank – Recommend fencing the lot and applying for Source Water Protection Grant to fund the construction of the security fence. The tank lot shows that herbicides have been applied to the lot that present a potential contamination. Recommend discontinuing the sprinkler system on top of the tank to protect integrity and life of the tank. Required to install a cement plate under the overflow drain and direct water away from the tank to lessen the erosion around the tank.
9. Pumping for Wells – Provide auxiliary power for pumps and treatment at well sites.

Overall the State described the City of Driggs's public water system in "good order".

2.4.3 Cross Connection Program

The State requires a cross connection program for public water systems to prevent any containment from entering the water system. The City of Driggs has a cross connection control program which is part of its City Code (Title 7, Chapter 3, Article A) see appendix R for additional information.

2.5 Water Source Flow

The City meters each culinary water source flow and has provided this data for the last four (4) years. Flow from the Spring has been inaccurate with the City's previously installed sonic type flow meter and Hydro-Ranger. The City recently installed a 12-inch magnetic flow meter on the discharge pipe to the City distribution system to measure the flow to the City's water system. They also installed a weir pressure transducer to measure total flow from the spring. The City anticipates replacing meters in a portion of the City's wells with magnetic meters to provide more accurate flow measurements. Table 5 shows the flow from each source from year 2009 thru 2012.

Table 5: Source Flows (Years 2009 thru 2012)

Source	Flows (gallons)			
	Year			
	2009	2010	2011	2012
City Spring Total	**1,236,617,600**	**643,766,000**	**725,732,000**	**982,892,000**
City Spring in Line	195,945,000	249,848,000	349,862,000	266,505,000
Teton Creek Well	970,451	2,316,404	1,656,992	1,804,860
Tank Well	12,980,700	3,934,500	102,825,000	15,189,000
High School Well	156,551,700	132,762,000	70,647,000	137,026,000
Dalley Well	0	0	6,966,000	8,100
Valley Centre Well	49,065,600	2,701,100	53,180,700	64,709,800
Huntsman Well	N/A	N/A	N/A	500
Lions Park Well	34,661,000	26,197,000	30,958,000	84,792,000
Total to City Water System	**450,174,451**	**417,759,004**	**616,095,692**	**570,035,260**

Source: City of Driggs Public Works

2.6 Metered Water Consumption

The City auto reads and touch reads the City's current water user water meters and are in the process of installing transmitters on all the water meters. The City provided commercial and residential water metered consumption for each month for 2012 and total metered consumption for the years 2010, 2011, and 2012 for different meter sizes. Total metered water consumption for years 2010 thru 2012 is shown in Table 6.

Table 6: Water Consumption (Years 2010 thru 2012)

Year	Total Water Consumption (Gallons)
2010	198,455,985
2011	189,380,667
2012	221,431,279

Source: City of Driggs water bills.

Total residential and commercial water consumption for year 2012 is presented in Table 7 below along with the maximum consumption in a month time period for the year which occurred in July 2012.

Table 7: Residential and Commercial Water Consumption (Year 2012)

Year	Total Water Consumption in 2012 (Gallons)	Maximum Monthly (July) Water Consumption in 2012 (Gallons)
Residential	128,261,265	37,349,721
Commercial	89,305,014	16,302,900
Total	**217,566,279**	**53,652,621**

Source: City of Driggs water bills.

The remaining 3,865,000 gallons of water consumption not attributable to commercial and residential is agriculture irrigation, City, and County use. Refer to appendix C for additional information. As these well and spring meters are replaced more accurate flow measurements will be obtained. There is also approximately 10 MG to 15 MG of unmetered flow attributed to Fire Department training; National Guard training; residents filling up water tanks; and construction water yearly. The Public Works Director is working will the Fire Department, National Guard, Contractors, and Residents to obtain accurate flow measurements of unmetered water. There is probably somewhere around 30 MG (Assumed 15% of metered water consumption) in infiltration and leakage throughout the existing water system yearly; however, because of the inaccuracy of the spring and some of the well water meters this flow is not known.

Metered consumption will be used in this plan instead of flows reported from the water sources as meter reads from the spring and a portion of the wells has not been accurate. The flows from the sources should be analyzed every 5 years to determine if projected demands are accurate once updates to the water system have been constructed.

2.7 User Charges and Budget

2.7.1 Water Rates and Fees

The City of Driggs adopted Resolution #221-07 on February 20, 2007 which established water rates. The monthly rates within City limits were updated on January 1, 2013 by Resolution #281-12, Table 8 lists the current water rates and fees. Connections outside the corporate limits of the City are charged 1.5 times the in-City rates.

Table 8: Current Water Rates

Line Size	Water Gallon Allowance (Summer) 05/01 – 10/31	Water Gallon Allowance (Winter) 11/01 – 04/30	Monthly Base Water Rate ($)	ERUs based on Line Size
0.75-inch (Residential)	10,000	20,000	$ 27.00	1.0
0.75-inch (Commercial)	10,000	20,000	$ 27.00	1.0
1.0-inch (Residential)	10,000	20,000	$ 27.00	1.0
1.0-inch (Commercial)	10,000	20,000	$ 27.00	1.0
1.5-inch	25,000	35,000	$ 67.50	2.5
2.0-inch	45,000	55,000	$ 121.50	4.5
3.0-inch	65,000	75,000	$ 175.50	6.5
4.0-inch	80,000	90,000	$ 215.99	8.0
6.0-inch	120,000	130,000	$ 323.99	12.0

Note: 10,000 extra Water gallons are allowed in the winter to help users prevent frozen pipes.
Source: City of Driggs Resolution No. 281-12.

In addition to the water rates listed above, the City charges an excess monthly water consumption fee of $1.00 per 1,000 gallons in excess of base allowance. Extra water taps are billed and served at the same rate and allowance as similarly sized water connections. Extra taps will not be billed during months in which no water flow is measured through respective meters. Fire hyrant water is billed at 1.5 times the 0.75-inch water base rate for every 10,000 gallons purchased. In addtion to water rates the City charges the following fees:

- Monthly Inactive Fee - $18.00 (When water is off at the meter)

- New User Deposit – New users shall pay the equivalent of two months service for respective water services.

- Water Service Turn-on Fee – An account that has been turned-off either by request or by failure to pay is still billed the monthly inactive water fee. To have the water meter turned on the account will be charged a fee of $65 plus the account holder will need to pay any outstanding balance in full.

- Connection Fees
    - New Account Hookup Fee – All new residences or commercial buildings within the City of Driggs, or which 300 feet of a readily accessible existing sewer line, shall be required to connect to the City's utility system except "accessory buildings" without plumbing. Accessory buildings may hook into City's services for a one-time fee of 1/3 of the existing cost of a residential hookup, plus acutal costs associated with the hookup. Any hookup to pre-existing water must either require full payment of hookup fees, or demonstrate that full fees have been previously paid, or pay 2/3 water hook-up fees existing at the time the conversion is requested. All hookup fees must be paid in full prior to approval of a building permit or commencement of service, whichever comes first. If a new structure is not within 300 feet of an existing line, a building permit will not be issued until the owner either negotiates with the City to extend water and/or sewer lines, or purchases a septic permit from the District 7 Health Department.

    - Water Connection Fee – New water users must also purchase an appropriately sized water meter and pay their plumber to install that meter. The size of the water line and meter are determined by the total Water Supply Fixture Units (WSFU) as detailed in the International Plumbing Code (IPC). A minimum water hookup fee of $ 1,785 ir required and larger connections are based on
    - Table **9**. Water users outside the City limits of Driggs are charged 1.5 times the in-city rates.

Table 9: Current Water Connection Fees

Connection Line Size	Water Hookup Fee
1.0-inch	$ 1,785
1.5-inch	$ 4,095
2.0-inch	$ 7,350
2.5-inch	$ 9,240
3.0-inch	$ 16,590
3.5-inch	$ 22,995
4.0-inch	$ 29,505
6.0-inch	$ 66,465
8.0-inch	$ 117,600
10.0-inch	$ 184,695

Source: City of Driggs Resolution No. 281-12.

- Extension of Water Service
  - Fire Hyrant Damage Fee, each occurance - $ 3,000
  - Refundable Road Damage Deposite Fee Required - $ 2,000

- Bulk Usage Fees
  - $150 initial fee
  - $1.00 for every 1,000 gallons used

The City could consider various measures to decrease the peak hour demand and maximum day demand, which includes such measures as conservation letters in the water bills, public education, and an increase in overage charges to promote water conservation. The City currently includes water conservation tips in its Annual Drinking Water Quality Report which is available on the City website and at the City offices, see appendix B for a copy of the latest report.

2.7.2 Water Budget

The City establishes a yearly budget for the Water Fund. The last two (2) years the City has had a net loss with its water fund, $53,667.00 in Fiscal Year (FY) 2010-11 and $135,723 in FY 2011-12. According to the City of Driggs September 30, 2012 Basic Financial Statements, the Water Fund has total capital assets of $4,320,992.00. The City also has a total of $1,043,410.83 principal and interest payments for long term debt (Revenue Bonds and Loans) attributable to the Water Fund, refer to appendix S for additional information.

2.8 Existing System Deficiencies

Known deficiencies in the City's existing water system consist of shallow buried water mains, shallow buried water services, and low pressure in the subdivisions of Miller Ranch and Creekside Meadows. Leakage problems also exist in the City due to older water lines and freezing of pipelines in winter due to shallow burial. Shallow buried water mains, 6-inches in diameter or smaller, are being replaced to City standards. The City also anticipates replacing older water lines on a scheduled basis as discussed later in the plan. The Creekside Meadows subdivision is located on the lower end of the water distribution system at the southwest corner of the City limits. Portions of the water system in this area are not looped which may cause the problems. The Miller Ranch subdivision is located downstream of 0.3 MG tank approximately 4,000 feet and is located on an 8-inch dead end main. Low pressure in the Miller subdivision is also due to the existing private booster pump station for the 15 single family residential services located within the subdivision not being sized adequately for fire flows. Looping the water line or providing service off of a higher pressure zone in the future may fix pressure problems. Low pressures also occur during peak hour demands between the 0.3 MG Tank and 1.0 MG Tank. Appendix E provides

water and sewer work requests by residents and an email between the Public Works Director and Teton County Fire Chief regarding the pressures/ flow in the Miller Ranch and Creek Side Meadows subdivisions. These known existing system deficiencies will be analyzed in the existing (Year 2013) water model and future (Year 2033) water model.

CHAPTER 3

Demographics

CHAPTER 3 - DEMOGRAPHICS

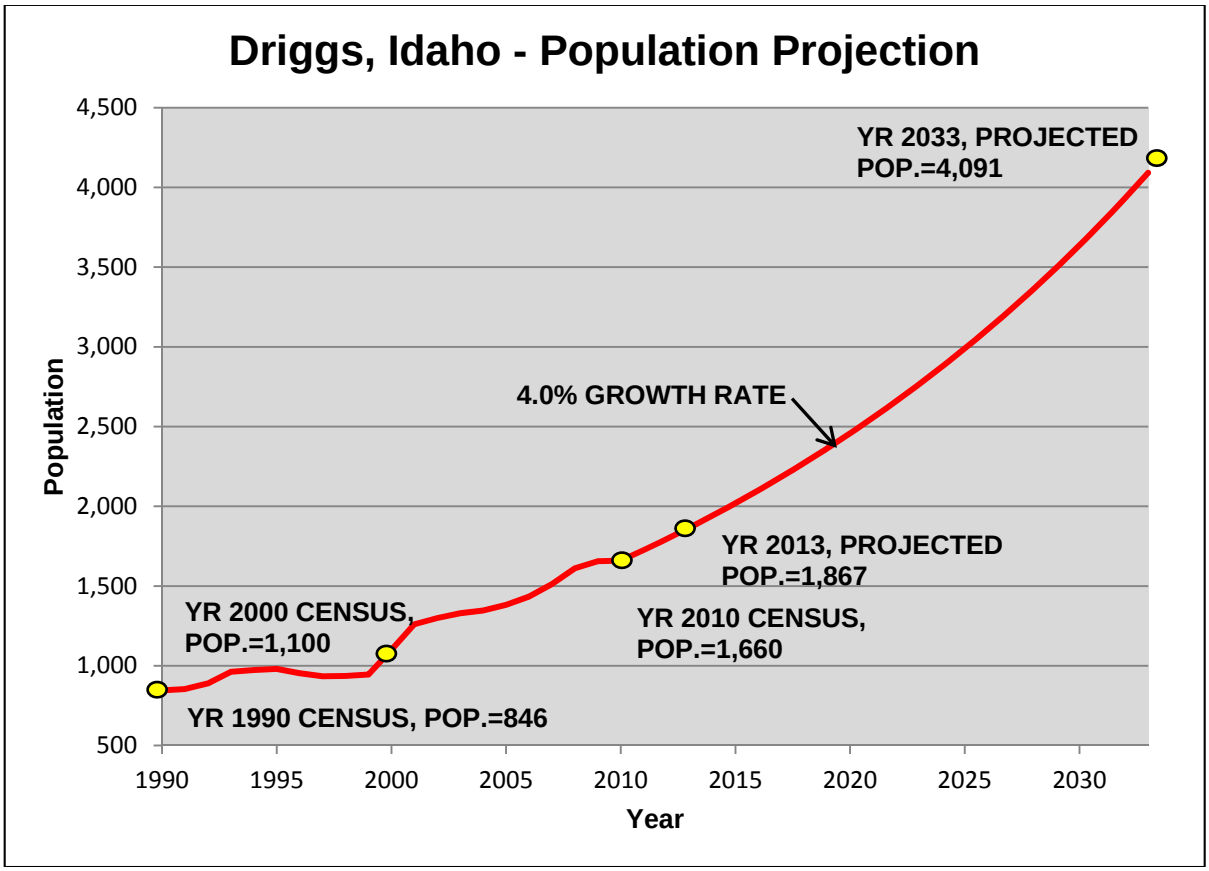
3.1 Population

Like much of Idaho, Driggs experienced significant growth up until 2008 when the real estate markets plummeted. Growth and development went from over 6% to nearly 0.25% during the economic downturn.

The 2010 U.S. Census recorded the city population at 1,660. Based upon a 4.0% growth rate the current (Year 2013) population should be approximately 1,867. This report will use the 2010 Census population of 1,660 for all future projections.

In 2010, AQUA Engineering prepared a Facility Plan Addendum for the "Teton Valley Regional Water Reclamation Facility Upgrade" derived a 2.0% and 4.0% growth rate based on more recent estimates from City planners and current building activity in the area. The Teton Valley Regional Water Reclamation Facility was designed using the 4.0% growth rate; therefore, the 4.0% growth rate will be used for this plan. A plan period of 20 years has been used to determine future municipal culinary water infrastructure needs. The following graph (Figure 6) tracks the projected population growth over this period. This graph illustrates that a 4% growth rate matches up well with census data from 1990 through 2010.

Figure 6: Projected Population Projection



3.2 Planning Area

As mentioned previously, Driggs city limits encompass approximately 1,762 acres. A large majority of this land is currently undeveloped consisting of agricultural land, vacant (non-agriculture) land, roads, and airport land. Current Zoning within the City of Driggs consists mostly of single family/ two-family residential, commercial, and light industrial. Refer to Figure 3 for the current City of Driggs Zoning Map.

The City of Driggs has established an area of impact zoning map. A copy of this map is shown in Figure 7.

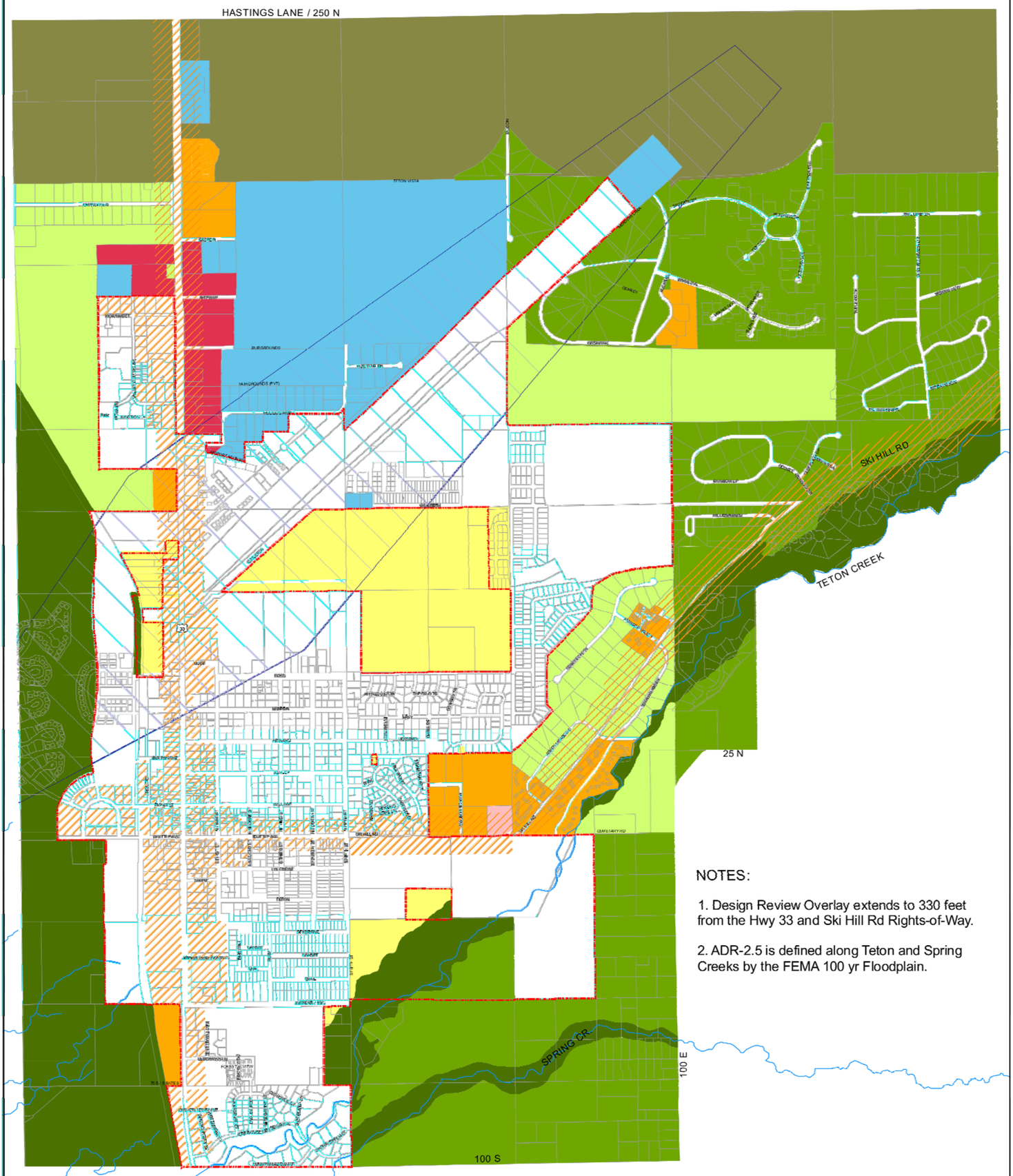
3.3 Land Use

Land use within the City is defined by the City's Existing Zoning Map, see Figure 3. As mentioned previously, the City consists of mainly single and multi-family residential with commercial centered around downtown. Light industrial exists within the City and is concentrated along highway 33 and the Driggs Airport.

3.4 Planning Conversions

The Equivalent Dwelling Unit (EDU) is the recognized standard planning unit when planning for future utility infrastructure requirements as specified in the Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08). The City of Driggs has used the Equivalent Residential Unit (ERU) as its planning unit in the past and will continue to use it in the future. One ERU is equal to one EDU. One ERU represents a single family dwelling with known utility requirements, typically culinary water and wastewater requirements. Other types of uses such as commercial or industrial uses are typically factored based upon comparison of their demand versus the residential single family unit. In order to determine the actual demand an ERU represents, it is necessary to correlate the number of physical units and metered service connections on the system.

Residential and commercial connections were determined from metered data provided by the City. The fiscal year (FY) 2012 residential connections are 866 with 194 commercial connections. Residential ERUs are equal to the amount of connections. For the City of Driggs, 1 ERU compromises 2.1 persons on average (Population, 1,795, divided by 866 connections/ERUs). Yearly consumption per connection was calculated using metered residential and commercial consumption data provided by the City for 2012. Refer to Table 7 for a summary of this metered consumption data. To determine the commercial ERUs the commercial yearly water consumption per connection (460,335 gpy/conn) was divided by the residential yearly water consumption (148,108 gpy/conn) to yield an equivalent of 3.1 ERUs per 1 commercial connection. This yields 866 residential ERUs and 603 commercial ERUs for a total of 1,469 ERUs as shown in Table 10. Total yearly demand per ERU can be calculated by taking the residential and commercial totals divided by their respective ERUs.



NOTES:

1. Design Review Overlay extends to 330 feet from the Hwy 33 and Ski Hill Rd Rights-of-Way.

2. ADR-2.5 is defined along Teton and Spring Creeks by the FEMA 100 yr Floodplain.

- City Limits
- Design Review Overlay
- airportvicinityoverlay_123003
- A-2.5 Agriculture, 2.5 acre min. lot size
- ADR-2.5 (2.5 Acre Avg Density Residential)
- ADR-1.0 (1.0 Acre Avg Density Residential)
- ADR-0.5 (0.5 Acre Avg Density Residential)
- R-1 Single & Two-Family Residential
- R-3 Multiple-Family Residential
- C-1 Neighborhood Commercial
- C-2 Downtown Commercial
- C-3 Service & Highway Commercial
- M-1 Light Industrial

CITY OF DRIGGS

December 15, 2009
Amended by Ordinance 309-09
(Valley Centre Annexation)

0 0.1 0.2 0.4 Miles N

Data Sources: Teton County, ID; and City of Driggs
Disclaimer: Data contains spatial inaccuracies and is for zoning reference only. The City of Driggs shall not be held liable for improper or incorrect use of the data described and/or contained herein.

Source: City of Driggs

FIGURE 7, PAGE 23

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE, 1/2" = HALF SCALE

0 1/2 1

FIGURE 7

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

DRIGGS, IDAHO

WATER SYSTEM FACILITY PLAN UPDATE 2013

AREA OF IMPACT ZONING MAP

NO.	DATE	DESIGN	DRAWN	CHECKED
0	06/03/2013	RJR	JBM	RJR

REVISIONS

To figure out the total average day demand shown later in the plan the total demand (residential, commercial, industrial, City, County, agricultural, etc.) will be divided by the total ERUs.

Table 10: Year 2012 Service Connections, ERUs, and Demands

Yearly Water Demand				
Land Use	**Connections**	**Demand per Connection (gpy/conn)**	**Equivalent Residential Unit (ERUs)**	**Demand per ERU (gpy/ERU)**
Residential	866	148,108	866	148,108
Commercial/ Industrial	194	460,335	603	148,108
Totals	**1,060**	**205,251**	**1,469**	**148,108**

Multi-family residential metered water usage can also be compared with single family residential metered water usage to determine multi-family residential ERU per unit. Multi-family residential water usage for 2012 was 38,639,000 gallons or 105,860 gpd. Dividing this amount by 56 multi-family connections means the water usage is 1,890 gpd per connection. Dividing this amount by the single residential gpd per connection (293 gpd per connection) yields 6.45 ERUs per multi-family connection. There are a total of 396 multi-family residential units over these 56 multi-family residential connections or 7.07 units per connection. Therefore, there are 0.9 ERUs per unit for multi-family residential. Table 11 summarizes the ERUs per connection and ERUs per unit for various land uses.

Table 11: ERUs per Connection and Unit

Land Use	ERUs per Connection	ERUs per Unit
Single Family Residential	1.0	1.0
Multi-Family Residential	6.45	0.9
Commercial/ Industrial	3.1	N/A

3.5 Growth Projections

The City currently has a total of 214.71 acres that is surrounded by the City limits but is not part of the City, see Figure 3. If these areas are annexed into the City they will likely be zoned for mixed use residential, single/ multi-family residential, and light industrial. Existing subdivisions located outside the City limits could also be annexed into the City in the future. Portions of these subdivisions are already being served by the City or have constructed wells for the development which have been handed over to the City for the City's water system.

The process used for projecting future population growth and converting it to ERU was developed using the average growth rate of 4.0% for all residential units as well as commercial/industrial uses to project future units and ERUs.

The City of Driggs at the end of FY 2012 had 866 actual residential metered connections on the culinary water system (Driggs City). This being the case, the average household consists of 2.1 persons (1,795 Population / 866 Connections). This value has been used to estimate future residential and commercial/industrial ERUs and includes extra taps and irrigation connections. If a large regional employer or large regional attraction were to locate in Driggs the commercial ERU may need to be adjusted and required infrastructure re-evaluated. Table 12 shows the connection and ERU projections.

Table 12: Projected Future ERUs

	Year	**2013 (Current Year)**		**2018**		**2023**		**2028**		**2033**	
	Projected Pop.	**1,867**		**2,272**		**2,764**		**3,363**		**4,091**	
Service Conn. Type	**Growth Rate (%)**	**Conn**	**ERUs**	**Conn**	**ERUs**	**Conn**	**ERUs**	**Conn**	**ERUs**	**Conn**	**ERUs**
Residential	4.00%	901	901	1,096	1,096	1,334	1,334	1,623	1,623	1,974	1,974
Comm./Ind.	4.00%	202	525	246	640	299	777	364	946	443	1,152
	Totals	**1,103**	**1,426**	**1,342**	**1,736**	**1,633**	**2,111**	**1,987**	**2,569**	**2,417**	**3,126**
Increase From 2013		N/A	N/A	239	310	530	685	884	1,143	1,314	1,700

3.6 Distribution of Growth

Predicting growth in a City is difficult due to a myriad of factors that influence it; however, there are some indicators that provide clues. In general, consideration for distribution of growth is based on proximity to infrastructure, historic growth patterns, and proposed future development.

The City does not anticipate land use to change in the future to differ to what is shown on the current zoning map. After discussion with City Staff, the City expects primary growth to occur in the center of town. The City also expects commercial development to occur downtown along Highway 33 and E Little Ave/ Ski Hill Road. It is anticipated that residential growth will continue to be primarily single family residential. Most of the growth within the current City limits will be residential and commercial infill projects. New developments will either occur in the northern undeveloped parts of the City or outside the City limits requiring either connection to the City water system while maintaining county governance or connection to the City water system while being annexed into the City of Driggs.

CHAPTER 4

Water Conservation

CHAPTER 4 - WATER CONSERVATION

4.1.1 Tiered Water Rates

The City's current water rates charge a base rate based on line size with a higher water allowance in winter to help prevent frozen lines as shown in Table 8. The City charges an excess water usage fee of $1.00 per 1,000 gallons over the water allowance to help conserve water. The City could consider charging more for over usage to promote additional conservation. A water rate analysis will be completed in chapter 7 to determine if a tiered water rate structure is feasible.

4.1.2 Telemetry and Controls Updates

The City's current telemetry and controls are briefly summarized in section 2.3.3.2 and require upgrading and automation. The proposed improvements will be discussed later in the plan but with upgrades to the telemetry and controls the City will be able to conserve more water. These improvements will also provide a more accurate depiction of the City's water system which will be instrumental in future demand predictions and water system planning.

4.1.3 Watering Restrictions

The City currently has a water allowance built into its water rates. During drought years, the City could implement watering restrictions for irrigation of lawns, gardens, etc. to certain days or during certain hours of the day to help conserve water. The City does provide water conservation tips in its Annual Drinking Water Quality Report. Refer to Appendix B for additional information. One of the water conservation tips in the report is to apply water for irrigation during the cooler parts of the day or at night to reduce evaporation. If the City feels that residents are not utilizing water effectively it could propose water restrictions.

4.1.4 Leak Detection Study

The City currently has a large discrepancy between its source metered data and individual water user metered data. This could indicate inaccuracies in the source water meters or water user water meters; leaks in existing pipelines; or illegal connections and use of City water.

The City has started upgrading its water meters so they have transmitters on all the water system user water meters. The City has been installing 100 transmitters a year and anticipates installing all remaining transmitters in two (2) years. The City is also installing new water meters for its sources as each well is updated to current City standards. These improvements to the existing water meters will provide more accurate flow measurements.

The City knows parts of the system have been leaking and have replaced water pipelines in an effort to help prevent leaks. The majority of these leaks are due to shallow pipelines that have burst during the winter. The City will continue to replace water pipelines to current City standards.

In the mean time, it would serve the City well to complete a leak detection study to determine the extent of the leaks in the City's water system. The leak detection study would help determine where and what the discrepancy is between the water user water consumption data and source metered data. It will also help determine the priority of water pipeline replacement projects and help the City conserve additional water.

4.1.5 Replacement of Service Water Meters, Service Lines, and Older Water Mains

As mentioned in the previous section, the City is adding transmitters to existing water meters. This will save the City time allowing its employees to devote time to other parts of the water system. The City will also be replacing existing shallow buried service water meters and service lines as required as it replaces existing shallow water mains. The replacement of service water meters, service lines, and water mains will help the City conserve water by helping prevent future leaks in the water system.

4.1.6 Excess Water Use in Winter

The City allows for a higher water allowance in winter as shown in Table 8 to allow customers enough water to run their water to prevent services from freezing up. Services are freezing up due to the service lines not being buried deep enough. The City continues to replace water mains and services as required to the proper depth. As the lines are replaced, customers are not required to run their water to prevent freezing. This helps the City conserve water and reduce the demand on the water system. The City has monthly data from sources and meters which might not reflect intermittent residential services which are used as vacation homes in the summer and winter seasons. Until the telemetry system is up and running correctly for the new Wastewater Treatment Facility/ wastewater system and the water system the quantity of water run to keep lines from freezing is hard to quantify accurately. Once real time data is available from the SCADA systems these flows will be easier to quantify.

The City should also consider separating the users who need to run water in the winter from those who do not so these users are reminded to run their water to prevent their services from freezing. This would cut down on maintenance from City staff due to leaks and would make the metered data is easier to quantify.

4.1.7 Separate Irrigation Water System

The City could separate irrigation from the potable water system to help further conserve its culinary water use. However, the initial upfront costs to build the system would not be cost beneficial as the City would need to build irrigation storage and a distribution system. The City would also have to obtain additional water rights or change a portion of its existing culinary water rights into irrigation water rights. Driggs high elevation and shorter growing season also does not warrant a separate irrigation system as its irrigation water use is lower compared to other municipalities at lower elevations with longer growing seasons and similar demographics.

CHAPTER 5

Water System Analysis

CHAPTER 5 - WATER SYSTEM ANALYSIS

5.1 Present Capacity Evaluations

The capacity requirements for the present and future (Year 2033) conditions are based on the population projection and the growth projections established in Sections 3.1 and 3.5.

5.1.1 Evaluation Parameters

The evaluation parameters used to analyze the capacity of the City's supply and distribution system for the present and future (Year 2033) conditions are listed below.

1. According to Idaho State Code (IDAPA 58.01.08), the water system, including the water source and treatment facilities, shall be designed to provide either peak hour demand or maximum day demand plus equalization storage at the design year. The Average Day Demand, Maximum Day Demand, and Peak Hour Demand were calculated for the City of Driggs Water System by using metered data from 2012, refer to appendix C for calculations.

    - Average Day Demand = 413 gpd/ERU or 0.29 gpm/ERU
    - Max Day Demand = 1,532 gpd/ERU or 1.06 gpm/ERU
    - Peak Hour Demand Peaking Factor = 1.6
    - Peak Hour Demand = 102.11 gph/ERU or 1.70 gpm/ERU
    - Fire Flow = Minimum 1,500 gpm for 2 hours throughout system based on one- and two-family dwellings having a fire flow calculation area that does not exceed 8,200 square feet based on typical residential construction type. (IFC 2009 – B105.1) Per a phone conversation between AQUA Engineering and Earl Jiles, Teton County Fire Marshall, on March 4, 2013 he indicated 1,000 gpm for 2 hours should be the minimum fire flow provided throughout the system for the water model and that buildings that require more fire flow will be reviewed on an individual basis.
      Note: The numbers shown above include irrigation demands for residential and commercial/industrial as the City does not have a separate irrigation system for residential and commercial users.

    Idaho State requires a minimum capacity of 800 gallons per day for the maximum day demand rate exclusive of irrigation and fire flow requirements. (IDAPA 58.01.08.552.01.a.ii) As shown above, the maximum day demand used for the City of Driggs is greater than 800 gallons per day.

2. Distribution System – Summary of Requirements (IDAPA 58.01.08.552.01.b)
    - Maintain minimum pressure of 20 psi throughout distribution system during maximum day demand conditions, including fire flow.

- Maintain a minimum of 40 psi throughout distribution system during peak hour demand conditions.
- Static pressure within the distribution system shall be maintained below 100 psi and should ordinarily keep static pressure below 80 psi. Pressures above 100 psi shall be controlled by pressure reducing devices installed in the distribution main.
- During a power outage, the water system shall be able to meet the operating pressure requirements of 20 psi for a minimum of eight (8) hours at average day demand plus fire flow where provided. A minimum of eight (8) hours of fuel storage shall be located on site unless an equivalent plan is authorized by the Department. (IDAPA 58.01.08.501.07)

3. Sources
   - Idaho Code (IDAPA 58.01.08.501.03) requires water source and treatment facilities to be capable of providing peak hour demand (102.11 gph/ERU or 1.70 gpm/ERU) or max day demand (1,532 gpd/ERU or 1.06 gpm/ERU) plus equalization storage. Equalization Storage is defined as "Storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand." (IDAPA 58.01.08.003.16.d) The system's maximum pumping capacity is 5,442 gpm or 3.70 gpm/ERU as shown in Table 3. This pumping capacity is greater than the peak hour demand, 1.70 gpm/ERU. Therefore, equalization storage is currently not required. The City's maximum pumping capacity is high because two (2) recently constructed sources, Huntsman and Teton Creek Well, were constructed for subdivisions which have yet to be fully built out. For this reason, the peak hour demand will be used to determine future source requirements as summarized in the Table 13.

Table 13: Source Requirement

Source Requirement	gpm/ERU
Peak Hour Demand	1.70

4. Storage Facilities
   - Idaho Code (IDAPA 58.01.08.544.01) states, "Storage facilities shall have capacity, as determined from engineering studies that consider peak flows, fire flow capacity, and analysis of the need for various components of finished storage as defined under the term "Components of Finished Water Storage" in Section 003. The requirement for storage may be reduced when the source and treatment facilities have sufficient capacity with standby power to supply peak demands of the system."
   - Typical fire flow demands range from 1,500 gpm for 2 hours to 4,000 gpm for 4 hours depending on building size, construction, etc. While the water system will be modeled

using a minimum of 1,500 gpm for 2 hours, a fire flow demand in the middle of this fire flow demand range should be used to size water storage. Therefore, 3,000 gpm for 3 hours plus the Average Daily Demand will be used to determine storage capacity requirements. This storage requirement is summarized in the Table 14.

Table 14: Storage Requirement

Item	Requirement
Avg. Daily Demand	413 gpd/ERU
plus Fire Storage	3,000 gpm for 3 hours (540,000 gallons)

5.1.2 Present Source and Storage Demands and Surpluses

5.1.2.1 Present Source Demands and Surpluses

The City currently (year 2013) has an equipped capacity of 5,192 to 5,442 gpm from its well sources, as shown in Table 3. As established in the growth projections section 3.5 of this plan, the current ERUs for the City are 1,426. Using the parameters stated in Table 13, the following table shows the existing source requirements and current surplus capacity.

Table 15: Present Culinary Water Source Requirements and Surplus Source Capacity

Current ERU	Peak Daily Use (gpm/ERU)	Current ERUs, Demand (gpm)	Current Equipped Source Capacity (gpm)	ERU Capacity	Current Surplus Capacity (gpm)	ERU Surplus
1,426	1.70	2,424	5,442	3,201	3,018	1,775

5.1.2.1 Present Storage Demands and Surpluses

The City currently has a capacity of 1.3 million gallons (MG) from its tanks available for storage, as shown in Table 4. Table 16 shows the existing storage requirements and present surplus storage capacity in volume and ERUs.

Table 16: Current Culinary Water Storage Requirements and Surplus Stroage Capacity

Current ERU	Average Daily Use (gpd/ERU)	Fire Storage, 3,000 gpm for 3 hours (gallons)	Current ERUs, Average Daily Demand (gallons)	Total Storage w/ Fire Demand (gallons)	Current Storage Capacity (gallons)	ERU Capacity	Current Surplus Capacity (gallons)	ERU Surplus
1,426	413	540,000	588,938	1,128,938	1,300,000	1,840	171,062	414

5.1.3 Present Distribution Demands

The distribution system was modeled using WaterGEMs Version 8i to identify any deficiencies in the system. Parameters for the model are outlined in section 3.7.1.2. A water system schematic is provided along with a detailed result for each model simulation in Appendix F, H, I, and J. Input information, well

pump and spring flow data, was obtained from Barry Cazier with PumpTech and the City of Driggs. Refer to Appendix T for additional well information.

The City Spring was modeled as a reservoir as there is not a correct way to model a spring with WaterGEMs as WaterGEMs is made for pressure pipes. The problem with modeling the spring as a reservoir is actual spring flow cannot be modeled; therefore, a flow control valve was inserted below the spring to control the flow to the 1 MG tank. The flow in the flow control valve was set at 500 gpm which is approximately half of the water right of the spring. The flow from the spring into the distribution system varies depending on the time of year. In an effort to simplify the model, not all secondary piping in subdivisions and developments has been shown in the schematic.

5.1.3.1 Max Day Demand Plus Fire Flow Scenario

The existing water system was modeled with the current (Year 2013) maximum day demand plus a fire flow of 1,500 gpm with fire flows of 3,000 gpm for commercial areas. The water system is required to maintain a 20 psi residual during this scenario. The majority of the water system is able to meet this requirement except for a portion of the Shoshoni Plains subdivision; a few homes located off Rodeo Drive just north of the Airport; a 2-inch dead end downtown on 4th Street and Harper; a few dead ends up at the Valley Centre Subdivision and the Vodka Plant; the Huntsman Spring Fitness Center Grill & Bar; the Airport; dead ends at the southwest end of town such as the Creekside Meadows subdivision; a dead end main at Powder Valley Road adjacent to Ski Hill Road; and all the services upstream of the Shoshoni Plains subdivision outside the City boundary.

The water main downtown on 4th Street and Harper Avenue mentioned above will be replaced in the near future from a 2-inch line to an 8-inch line. The dead end mains, Powder Valley Road and Rodeo Drive, can be looped to provide additional fire flow. Shoshoni Plains and areas upstream of Shoshoni Plains will be looped or connected to a higher pressure zone in the future to increase fire flows. Commercial nodes along Highway 33 north of the intersection Ross Avenue and Highway 33 do not meet 3,000 gpm for 3 hours at 20 psi. Fire flow that is available is 2,819 gpm just north of the intersection of Ross Avenue and Highway 33 to 1,173 gpm at the Vodka Plant. A fire loop should be provided connecting this dead end line with the rest of the system once the area around the airport is developed. The airport has already installed a 12-inch waterline underneath the runway for this future line. The available fire flow at the Huntsman Spring Fitness Center Grill & Bar is 2,810 gpm which is just below 3,000 gpm. Once the rest of the subdivision is built out this waterline will be looped and the available fire flows should increase. Refer to Appendix H for additional information. These problem areas will be addressed with applicable projects and analyzed in the future water model.

5.1.3.2 Peak Hour Demand Scenario

The existing system was modeled with the current (Year 2013) peak hour demand while maintaining a minimum 40 psi throughout the water system. See appendix I for additional information. A steady state model was run and there were a few areas of the City which did not meet the minimum 40 psi requirement. When the majority of the wells are pumping portions of the Shoshoni Plains Subdivision are just below the 40 psi requirement.

The other area of the water system that does not meet the 40 psi requirement is the services between the 0.3 MG Tank and 1.0 MG Tank outside the City boundary. During the peak hour demand condition the demand of the lower zone of the water system causes the pressure on this upper zone to be as low as 5 psi or lower depending on the node. This condition exists with the Teton Creek Well running and the Spring flowing. One solution to this problem would be to provide a water tank at a higher elevation than the 1 MG Tank; however, the construction of the water tank at a higher elevation is not cost effective as the City would then have to pump water from the spring up to a new tank. The new tank would also need to be constructed in Wyoming which would require additional permitting and coordination. A cheaper solution would be to disconnect the 12-inch line between the 1 MG and 0.3 MG tank at the tank and connect these two (2) portions of the system at a lower pressure zone. This project would keep the water from the upper pressure zones from going to atmosphere at the 0.3 MG tank. This would require installation of a line in 5th street between the elementary school and the high school and installation of an automated control valve where the 0.3 MG tank altitude valve is currently located. This control valve would only fill the 0.3 MG tank during low demand conditions. This disconnection during high system demands at the 0.3 MG tank and connection at a lower pressure zone would boost pressures in the Red Tail subdivision and upper pressure zones above the 0.3 MG tank.

5.1.3.3 Static Pressure below 100 psi Scenario

The highest static pressures in the water system exist in the Huntsman Springs subdivision located on the west side of town; at the southwest corner of the City's water distribution system (Creekside Meadows Subdivision); and at the lower end of the Shoshoni Plains subdivision which is fed from the 14-inch water main. The maximum static pressure in these developments is approximately 90 to 97 psi.

5.1.3.4 Average Day Demand Plus Fire Flow and 8-hour Power Outage Scenario

The last scenario is to model the water system during an 8-hour power outage with an average day demand and a fire flow event while maintaining 20 psi throughout the system. Residential fires, 2,000 gpm for two (2) hours, were modeled at different locations throughout the water system. A 3,000 gpm for three (3) hours commercial fire flow at hour four (4) in the 8-hour power outage was

shown on the model output in Appendix J as it represented the worst case scenario of all the different fire flow events. Similar to the Peak Hour Demand Scenario, the services between the 0.3 MG Tank and 1.0 MG Tank outside the City boundary do not meet the minimum 20 psi requirement.

The only well which has backup power is the Huntsman Well located on a lower pressure zone providing water to the 0.3 MG Tank. The City Spring is unaffected by power outages and will continue to flow into the water system. The City Spring supplemented with the Huntsman Well provide enough flow for the lower pressure zones below the 0.3 MG tank with just average daily demand excluding fire flow. Demand from the lower pressure zones causes the services between the 0.3 MG tank and 1.0 MG tank to not meet the minimum 20 psi pressure requirement during average day demand excluding fire flow. As mentioned in the Peak Hour Demand scenario, section 5.1.3.2, the solution to boost pressures in upper pressure zones would be to disconnect the line during high demands between the 1.0 MG tank and the 0.3 MG tank and connect at a lower pressure zone.

The main deficiency in the system is presented during the addition of a fire flow event associated with an 8-hour power outage. If there is a residential fire, the majority of the water system can maintain 20 psi except for a few dead end mains in the system and the services between the 0.3 MG Tank and 1.0 MG Tank. However, if there is a commercial fire downtown only a few nodes in the Huntsman Springs subdivision and the services (Shoshoni Plains subdivision and lower portion of Redtail subdivision) feeding off the upper pressure zones are able to meet the 20 psi minimum requirement. Refer to Appendix J for additional information.

5.1.4 Year 2033 Source and Storage Demands and Surpluses

The capacity requirements for the future (Year 2033) condition are based on the population projection and the growth projections established in Sections 3.1 and 3.5. The future source and storage capacity requirements can be determined as illustrated in Table 17 and Table 18.

Table 17: Future Culinary Water Source Requirements

Total Future ERUs	Peak Daily Use (gpm/ERU)	Total Future, Demand (gallons/minute)	Current Equipped Source Capacity (gallons/minute)	Current ERU Capacity	Surplus/ (Deficit) Source Capacity (gallons/minute)	Surplus/ (Deficit) ERU
6-year Planning Period (Year 2018)						
1,736	1.70	2,951	5,442	3,201	2,491	1,465
20-year Planning Period (Year 2033)						
3,126	1.70	5,314	5,442	3,201	128	75

Table 18: Future Culinary Water Storage Requirements

Total Future ERUs	Annual Average Daily Use(gpd/ERU)	Fire Storage, 3,000 gpm for 3 hours gallons (gallons)	Future ERUs, Daily Use Demand (gallons)	Total Future Storage Demand (gallons)	Current Storage (gallons)	Current ERU Capacity	Surplus/ (Deficit) Storage Capacity (gallons)	Surplus/ (Deficit) ERU
6-year Planning Period (Year 2018)								
1,736	413	540,000	716,698	1,256,698	1,300,000	1,840	43,302	105
20-year Planning Period (Year 2033)								
3,126	413	540,000	1,291,038	1,831,038	1,300,000	1,840	(531,038)	(1,286)

The future water source requirement shown in Table 17 shows the demand is less than the existing well capacity in the 20-year planning period (year 2033). This means the City does not need to construct a well in the 20-year planning period. The City should consider constructing a well capable of pumping between 500 to 1,000 gpm in year 2035.

Even though the City currently has adequate source capacity as shown in Table 17, the location of the sources are of concern. The majority of the City's sources supply the 0.3 MG storage tank and the City's lower pressure zones. This configuration is beneficial to the majority of the City's water system as most of the City's water demands are in the lower pressure zones. During a power outage or significant fire flow event the 1.0 MG tank is unable to be refilled adequately as the 1.0 MG tank is supplied by only two (2) sources, the City Spring and Teton Creek Well. If the spring source is offline the 1.0 MG tank cannot be filled fast enough to keep up with demand in the lower pressure zones during maximum day demands. There are six (6) options to fix this problem. Below is a list of options:

- Connect and re-equip the lower pressure zone wells to the upper pressure zone to provide additional supply to the upper pressure zone.
- Provide a booster pump from the lower pressure zone up to the 1.0 MG tank to boost pressure and provide additional supply to the 1.0 MG tank.
- Construct additional water sources in the upper pressure zone to supply the 1.0 MG tank and re-equip the tank well to supply culinary water to the 1.0 MG tank.
- Construct a tank at a higher elevation than the City Spring in Wyoming and boost the City Spring water to this higher tank to provide higher pressures in the existing upper pressure zone.
- Construct a separate tank in Idaho adjacent to the State Line which would be the sole water storage supply of the upper pressure zones (pressure zones above the existing 0.3 MG tank). Separate this new tank and the upper pressure zones from the lower pressure zone.
- Provide a hydraulic control valve to disconnect the waterline between the 1.0 MG tank and the 0.3 MG tank during high demands so this line is not draining to atmosphere at the 0.3 MG tank and reconnect these waterlines from these storages at a lower pressure zone.

The cheapest solution to boost pressure is a combination of options such as installing an additional source in the upper pressure zone and disconnecting the 1.0 MG storage tank during high demands from the 0.3 MG tank and making a connection at a lower pressure zone.

The future water storage requirement shown in Table 18 shows a storage deficit of 531,038 gallons in the 20-year planning period (year 2033). The City should construct a water storage tank capable of storing at least 1.0 MG in year 2019 as the City, based on population projections, will require additional storage prior to year 2020. This new tank along with the existing 0.3 MG and 1.0 MG tank should meet the City's water storage requirements until 2041.

5.1.5 Year 2033 Distribution Demands

The future distribution system was also modeled using WaterGEMs Version 8i to identify any deficiencies in the system. Future (Year 2033) demands for the model were calculated as shown in Appendix G. Parameters for the model are outlined in section 5.1.1. The future water model incorporated future projects for the 20-year planning period listed in Table 24. A water system schematic is provided along with a detailed result for each model simulation in Appendix K, L, M, and N. The same input information as mentioned in section 5.1.3 was used for the future model. In an effort to simplify the model, not all secondary piping in subdivisions and developments has been shown in the schematic.

5.1.5.1 Max Day Demand Plus Fire Flow Scenario

The future water system was modeled with the future (Year 2033) maximum day demand plus a fire flow of 1,500 gpm for residential and a fire flow of 3,000 gpm for commercial areas. The water system is required to maintain a 20 psi residual during this scenario. The majority of the water system is able to meet this requirement except for a few dead ends upstream of the intersection of Powder Valley Road and Highway 33; the Airport; the water main out to the Vodka Plant from the Valley Centre subdivision; two (2) dead ends in the Creekside Meadows subdivision, and a 6-inch dead end located at 223 South. Looping the existing dead end main at Power Valley Road would require approximately 2,640 feet of 8-inch water main northeast up Ski Hill Road and connecting to an existing 8-inch water main at the Redtail Subdivision. The lowest fire flow available on the five (5) dead end mains that do not meet the residential fire flow of 1,500 gpm for 2 hours is 1,112 gpm with a residual of 20 psi. This limits typical constructed residential buildings to 3,600 square feet per the International Fire Code in these areas and other residential areas of the water system that do not meet the residential fire flow requirement of 1,500 gpm for 2 hours. The airport available flows range from 1,623 to 2,080 gpm while maintaining a 20 psi residual. The available fire flow at the Vodka Plant is 1,450 gpm.

There are a few dead ends in residential areas throughout the City that do not quite meet 1,500 gpm with 20 psi residual. The available fire flow in these areas range from 1,121 psi to 1,472 psi with a 20 psi residual. As previously mentioned this limits typical construction residential buildings to 3,600 square feet. Refer to Appendix L for additional information. With the future projects identified in Table 24 incorporated into the future water model the majority of the water system within the City boundary meets the fire flows of 1,500 gpm (residential), 3,000 gpm (commercial) while maintaining a 20 psi residual.

5.1.5.2 Peak Hour Demand Scenario

The future culinary water system was modeled with the future (Year 2033) peak hour demand while maintaining a minimum 40 psi throughout the water system. See appendix L for additional information. A steady state model was run and there was only one area of the City which did not meet the minimum 40 psi requirement. The only area that did not meet the minimum 40 psi requirement is homes located on Creek Resort Circle off Ski Hill Road which is located in the highest pressure zone. These existing homes are located on a loop and pressures are approximately 35 psi during the peak hour demand.

The easiest and cheapest solution to fix this pressure deficiency is to disconnect the loop from the 12-inch waterline from the 1.0 MG Tank; construct a new 12-inch waterline adjacent to the loop; and provide a booster pump station to serve this loop. This will increase the pressures during a peak hour demand scenario above the 40 psi minimum requirement. Any existing fire hydrants would need to be reconnected to the new 12-inch waterline.

5.1.5.3 Static Pressure below 100 psi Scenario

As with the existing water model, the highest static pressure in the water system exists in the Huntsman Springs subdivision located on the west side of town; at the southwest corner of the City's water distribution system (Creekside Meadows Subdivision); and the southwest corner of the Shoshoni Plains subdivision. The maximum static pressure in these developments is approximately 90 to 97 psi.

5.1.5.4 Average Day Demand Plus Fire Flow and 8-hour Power Outage Scenario

The last scenario modeled the water system during an 8-hour power outage using an average day demand with a fire flow event while maintaining 20 psi throughout the system. All nodes met the minimum 20 psi requirement during this scenario. The High School and Teton Creek wells require generators to help the Huntsman Well which already has backup generators during the power outage. As wells are brought up to City standards a manual transfer switch will be installed to allow hookup of a trailer mounted generator. The City plans to purchase a trailer mounted generator in

the future to power wells during a power outage. The City currently owns a trailer mounted generator but uses this generator to power the City's sanitary sewer lift stations during emergencies. Refer to Appendix N for additional information.

5.1.6 Water Quality and Treatment Evaluation

The City's water quality is in excellent condition as discussed in section 2.4. The City has had some violations with water quality and is always looking to provide better quality water to its water users. The City provides chlorine treatment at the Spring, Huntsman Well, High School Well, and Teton Creek Well as mentioned previously. The City does not have to provide chlorine treatment at the well sites as these sources are not under the influence of surface water. The chlorine treatment does however provide a residual within the water system. The City plans to provide chlorine treatment at the remaining well sites as the wells are updated to match existing City standards.

CHAPTER 6

Development and Initial Screening of Alternatives

CHAPTER 6 - DEVELOPMENT AND INITIAL SCREENING OF ALTERNATIVES

6.1 Existing Deficiencies in Water System

Existing Deficiencies in the water system have been discussed in previous sections. Existing deficiencies consist and can be fixed with the following projects:

- Deficiencies in the existing telemetry/SCADA system
  Fix: Upgrade the entire telemetry/SCADA system.
- Undersized and shallow buried water mains
  Fix: Complete projects that install larger water mains to current City standards.
- Shallow buried water service lines
  Fix: Replace shallow buried water service lines as required and during projects that replace shallow buried water mains.
- Dead end mains
  Fix: Loop water lines to provide for water system redundancy and increased fire flow.
- Existing wells not up to current City standards and do not provide Chlorine Treatment
  Fix: Install pump houses and chlorine treatment to upgrade existing wells to current City standards.
- Low pressure in upper pressure zones during high water demands
  Fix: Disconnect the 1.0 MG Tank from the 0.3 MG Tank at the 0.3 MG Tank site and connect the two (2) tank lines at a lower pressure zone.
- Inadequate storage capacity in the 20-year planning period
  Fix: Complete a storage tank project to provide additional capacity for the water system.
- Environmental sustainability
  Fix: Use potential energy in the water system to generate hydroelectric power.

6.2 Alternatives Considered

6.2.1 General Environmental Impacts

The environmental impacts for each alternative are provided for general information only. It is not intended to represent an environmental assessment but to summarize potential environmental impacts related to each project. The majority of these projects are either constructed underground or will be constructed in existing, disturbed right-of-ways. There are three (3) potential items that may require mitigation efforts to protect the environment and the City's drinking water. These items include the following:

- Protection of Nesting Birds: During construction the contractor will need to watch for bird activity on the sites and nearby to possibly provide mitigation measures to make sure that the mating and nesting activities of the birds will not be disturbed.

Solution: The contractor will check each area prior to construction for signs of nesting and then will continue to watch the bird activity on and around areas of construction activity. If activity is found in areas of construction activity or near the perimeter of construction activity measures will be taken to protect and shield the nesting birds from the construction activity. This may occur in many different forms ranging from actions as simple as placing a screen between the area of bird activity, to more complex actions such as adjusting the construction activities. A biologist may be called in to help put together a plan of action if bird activity around the areas of construction activity becomes vigorous.

- Construction Pollution: Measures must be taken to control runoff, erosion, fugitive dust during construction.

  Solution: The contractor for the project will be required to put into place standard construction practices to control runoff, erosion, and minimize fugitive dust. These issues will be detailed in the project plans and specifications. The practices would include but are not limited to: the placement of silt fencing around areas of disturbance; site grading such as temporary cut off ditches to control run-off; street sweeping; construction site entrances; and watering of disturbed areas of site to control dust.

- Source Protection: Measures must be taken to control Potential Contamination Sources (PCSs) for existing and future well source and water tank sites.

  Solution: The City will establish a source protection plan for future water sources which will require mitigation of PCSs. PCSs are also considered for water storage tanks. This may include but is not limited to: removal of PCSs from the site; letters of agreement between the City and property owners to monitor PCSs; and security at sites (i.e. security fence and locks) to eliminate potential contamination.

6.2.2 Design Criteria

The design criteria for the proposed projects consist of the City of Driggs Public Works Standards and Technical Specifications which can be obtained from the City. Other design criteria are specified in Idaho State Code, Federal Law, and general engineering practice. More specific standards and design parameters are pipe conforming to the American Society for Testing and Materials (ASTM) and American Water Works Association (AWWA) standards; water system testing; fire protection capacity; conformity with Federal and State water pollution control standards; economic service practicability; and conformity with Federal and State drinking water standards. Each one of these parameters was reviewed for general conformity when analyzing the alternatives.

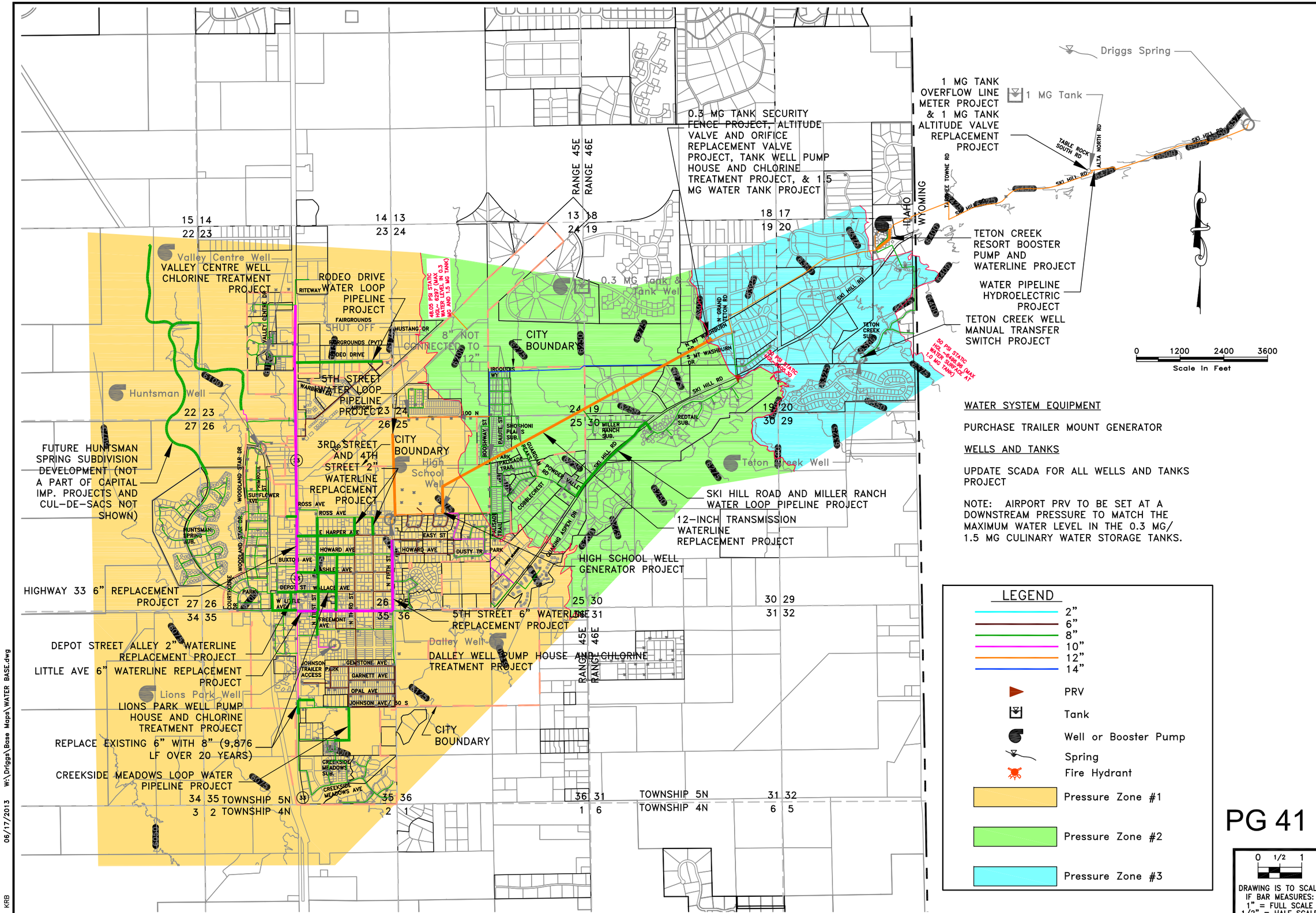
6.2.3 Distribution Projects

6.2.3.1 General

These projects fix existing and future distribution deficiencies identified in the water system analysis chapter. The majority of the distribution deficiencies exist because of inadequately sized and buried water mains and dead end mains. These problems, as shown in the water system analysis chapter, create low pressures during different demand scenarios and freezing of pipes in the winter. Table 19 is a list of the projects required to fix existing and future distribution deficiencies. Figure 8 displays the location of these future water distribution projects. Appendix D has a list of specific costs associated with the projects. The City should not have to increase staff to provide maintenance for these projects.

Table 19: Future Culinary Water Distribution Projects

Project Name	Description	Estimated Cost
1 MG Tank Altitude Valve Project	Replaces an existing altitude control valve with a solenoid hydraulic control valve.	$104,750.00
12-inch Transmission Water Pipeline Replacement Project	Install 9,132 LF of Waterline.	$ 622,612.50
0.3 MG Tank Altitude Valve and Orifice Replacement Project	Remove existing altitude control valve and orifice with a solenoid hydraulic control valve.	$104,750.00
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	Install 9,876 LF of Waterline over 20 years and replace existing water services.	$ 1,395,152.50
Depot Street Alley 2-inch Waterline Replacement Project	Install 350 LF of 8-inch Waterline and replace existing water services.	$ 56,468.75
3rd Street and 4th Street 2-inch Waterline Replacement Project	Install 1,040 LF of 8-inch Waterline and replace existing water services.	$ 138,000.00
Teton Creek Resort Booster Pump and Waterline Loop Project	Install 50 gpm booster pump and install 700 LF of 12-inch Waterline. Connect existing fire hydrants to new waterline.	$220,980.00
5th Street Water Loop Pipeline Project	Install 2,700 LF of 12-inch Water Pipe.	$ 269,987.50
5th Street 6-inch Waterline Replacement Project	Install 1,952 LF of 10-inch Water Pipe.	$ 343,955.00
Creekside Meadows Water Loop Pipeline	Install 1,300 LF of 8-inch Water Pipe.	$ 108,250.00
Little Avenue 6-inch Waterline Replacement Project	Install 2,632 LF of 10-inch Water Pipe.	$ 440,530.00
Highway 33 6-inch Waterline Replacement Project (Constructed over 10 years)	Install 10,268 LF of 10-inch Water Pipe.	$ 1,513,907.50
Ski Hill Road and miller Ranch Water Loop Pipeline Project	Install 2,900 LF of 8-inch Pipeline.	$ 237,875.00
Rodeo Drive Water Loop Pipeline Project	Install 2,100 LF of 8-inch Water Pipe	$ 160,750.00
	Total	**$ 5,717,968.75**



WATER SYSTEM EQUIPMENT

PURCHASE TRAILER MOUNT GENERATOR

WELLS AND TANKS

UPDATE SCADA FOR ALL WELLS AND TANKS PROJECT

NOTE: AIRPORT PRV TO BE SET AT A DOWNSTREAM PRESSURE TO MATCH THE MAXIMUM WATER LEVEL IN THE 0.3 MG/ 1.5 MG CULINARY WATER STORAGE TANKS.

NO.	DATE	DESIGN	DRAWN	CHECKED
0	06/03/2013	RJR	JBM	RJR

REVISIONS

DRIGGS, IDAHO

WATER SYSTEM FACILITY PLAN UPDATE 2013

FUTURE WATER INFRASTRUCTURE PLAN

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

0 1/2 1

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE

FIGURE 8

06/17/2013 W:\Driggs\Base Maps\WATER BASE.dwg KRB

The City could consider installing blue board around existing shallow buried water main and service line pipes. Similar cities allow installation of blue board around water pipelines when minimum cover cannot be obtained. One such City is the City of Chicago, Illinois which installs two (2) layers of 2-inch thick rigid insulation board above and on both sides of the pipe to 6-inches below and above the pipe. The insulation and pipe is bedded in fine sand and the joints of the rigid insulation are sealed with mastic. Material costs for the rigid insulation is approximately $10 per linear foot with installation costs ranging from $15 to $25 a linear foot depending on if the trench includes pavement restoration. Pavement restoration prices are dependent on oil prices but $3 per square foot has been used for cost estimates in this plan. This equates to $12 per linear foot for a 4 foot wide trench. The total installation cost would be $25 to $35 a linear foot which is cheaper than installing a new waterline. The City could consider installing rigid insulation for lines that are shallow buried but are not required to be upsized to save on the future distribution capital improvement project costs.

6.2.3.1 No Action Alternative

Under the No Action Alternative, existing low pressures under different demand scenarios and freezing of pipelines in the winter will continue to occur. The City would have to continue to fix leaking pipes and monitor low pressure areas of the system which create potential water quality issues; serious disruption of service; or loss of fire protection. The City of Driggs closest town is Victor, Idaho which is approximately 8.5 miles away which makes physical consolidation of water systems impracticable. If the no action alternative is chosen for the distribution projects then the water system has the potential for water quality and safety problems.

6.2.4 Source Projects

6.2.4.1 General

These projects fix existing and future source deficiencies identified in the water system analysis chapter. The source deficiencies exist because existing sources were constructed prior to current City standards being established. These problems, as shown in the water system analysis chapter, create additional maintenance for City staff and potential water quality issues. Table 20 is a list of the projects required to fix existing and future source deficiencies. Figure 8 displays the location of these future water source projects. Appendix D has a list of specific costs associated with the projects. The City should not have to increase staff to provide maintenance for these projects.

Table 20: Future Culinary Water Source Projects

Project Name	Description	Estimated Cost
Tank Well Pump House and Chlorine Treatment Project	Re-route the tank well piping to discharge above existing PRV. Re-equip well and construct pump house with chlorine treatment.	$ 307,500.00
High School Well Generator Project	Construct 270 SF Generator Building Structure with Generator, Fuel Tank (24 hour fuel storage), Electrical, and SCADA.	$ 180,750.00
Teton Creek Well Manual Transfer Switch Project	Install Manual Transfer Switch at Teton Creek Well.	$ 5,625.00
Trailer Mount Generator Purchase	Purchase Trailer Mount Generator.	$ 51,750.00
Lions Park Well Pump House and Chlorine Treatment Project	Construct 226 SF Pump House Structure and install Piping and Chlorine Treatment Equipment.	$ 170,000.00
Dalley Well Pump House and Chlorine Treatment Project	Construct 226 SF Pump House Structure and install Piping and Chlorine Treatment Equipment.	$ 170,000.00
Valley Centre Well Chlorine Treatment Project	Provide chlorine treatment at Valley Centre Well.	$ 21,812.50
	Total	**$ 907,437.50**

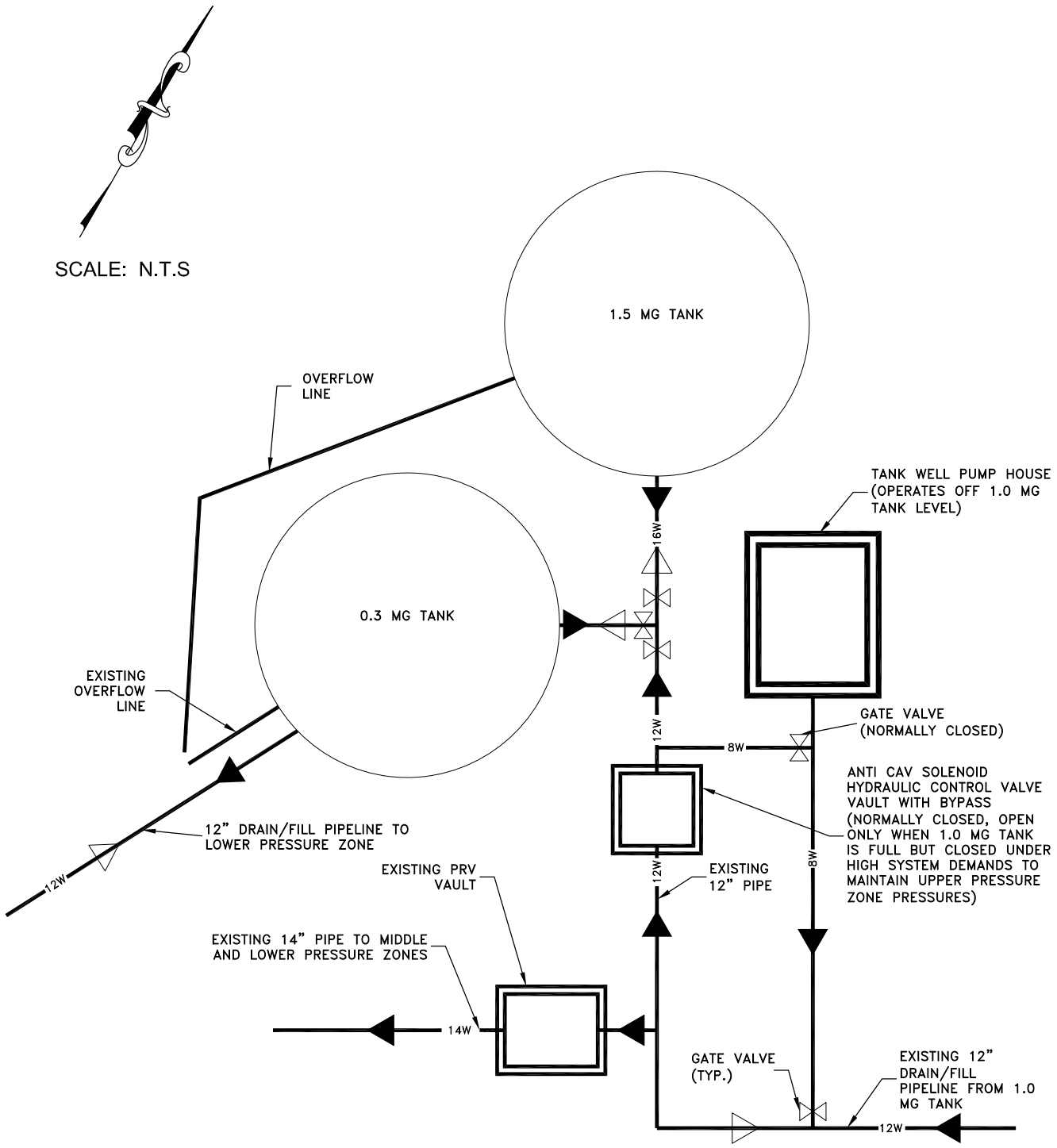
6.2.4.1 No Action Alternative

Under the No Action Alternative, existing equipment will not be compatible with City standards. The City would have to continue to maintain the out of date equipment. If the no action alternative is chosen for the upgrade of existing water sources then the City will have to continue to devote additional time to maintain the water system and there is a potential for failure.

6.2.5 Storage Projects

6.2.5.1 General

These projects fix existing and future storage deficiencies identified in the water system analysis chapter. The majority of the storage deficiencies exist because existing storage were constructed prior to current City and State standards being established and because of inadequate storage capacity in the 20-year planning period. These problems, as shown in the water system analysis chapter, create additional maintenance for City staff; potential water quality issues; and inadequate capacity for the future. Table 21 is a list of the projects required to fix existing and future storage deficiencies. Figure 8 displays the location of these future water storage projects and Figure 9 displays the piping schematic along with the operation of the 0.3 MG and 1.5 M culinary water storage tanks. The operation of the 1.0 MG culinary water storage tank is shown in Figure 5. Appendix D has a list of specific costs associated with the projects. The City should not have to increase staff to provide maintenance for these projects.



NOTE: 1.0 MG TANK PIPING SCHEMATIC IS THE SAME AS THE EXISTING PIPING SCHEMATIC.

YEAR 2033 - 0.3 MG AND 1.5 MG TANK PIPING SCHEMATIC

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CITY OF DRIGGS
WATER SYSTEM FACILITY PLAN UPDATE 2013
Year 2033 - 0.3 MG & 1.5 MG Tank Piping Schematic
Figure 9, Page 44

RJR 11/21/2013 W:\Driggs\Water\Water System Facility Plan 7-12\Water System Facility Plan\Drawings\EXISTING RESERVOIR PIPING SCHEMATIC.dwg

Table 21: Future Culinary Water Storage Projects

Project Name	Description	Estimated Cost
1.0 MG Tank Overflow Line Meter Project	Install Water Meter on Overflow Line.	$ 14,375.00
0.3 MG Tank Security Fence Project	Install 1,032 LF of 6 foot high chain link security fence.	$ 36,625.00
1.5 MG Water Tank Project	Demolish existing 0.3 MG tank and replace with 1.5 MG Water Tank.	$1,610,625.00
	Total	**$1,661,625.00**

6.2.5.2 No Action Alternative

Under the No Action Alternative, existing storage sites would not be protected from PCSs and the City would be unable to measure any possible overflow from the 1.0 MG Tank. There would also be a shortage of storage capacity in the 20-year planning period. The City would have to continue monitor each tank site and would not have enough capacity to provide for all its water users in the 20-year planning period. If the no action alternative is chosen for the protection and monitoring of the City's water storage then there is a greater potential for contamination. There is not additional water storage in the immediate vicinity of the City of Driggs which would provide enough capacity for future development. Therefore, additional water storage is required.

6.2.6 Telemetry Projects

6.2.6.1 General

These projects fix existing and future telemetry deficiencies identified in the water system analysis chapter. The telemetry deficiencies exist because the current telemetry system has failed. The failed telemetry system causes the City to manually operate and monitor the system. This requires the City to devote additional manpower until the system is upgraded. This could also lead to potential problems in the system as the controls are not operational to detect issues. Table 22 is a list of the projects required to fix existing and future telemetry deficiencies. Figure 8 displays the location of these future telemetry projects. Appendix D has a list of specific costs associated with the projects. The City has incorporated $60,000 in its FY 2013 budget to make the telemetry/ SCADA system operational. The $60,000 will pay for equipment and installation for the following water system facilities:

- 0.3 MG Tank and Tank Well
- High School Well
- Huntsman Spring Well
- Lions Park Well
- Teton Creek Resort Well
- Valley Centre Well

The City should not have to increase staff to provide maintenance for these projects.

Table 22: Future Culinary Water Telemetry Projects

Project Name	Description	Estimated Cost
Water System Telemetry/SCADA Upgrades	Upgrades to the entire water system telemetry/SCADA system	$ 318,500.00
	Total	**$ 318,500.00**

Note: Costs include new water meters at most wells and chlorination treatment equipment at wells that currently do not have chlorine treatment.

6.2.6.2 No Action Alternative

Under the No Action Alternative existing controls within the water system would need to be manually operated and monitored by City staff. If the no action alternative is chosen for the telemetry projects then the water system has the potential for failure.

6.2.7 Environmental Sustainability Projects

6.2.7.1 General

This project provides environmental sustainability projects. This project is not required to maintain the water system but, if cost effective, will provide environmental sustainability for the water system in the future. A cost benefit analysis has been completed for this project and is included in section 7.1.2.4.2. Table 23 is a list of the project required to maintain environmental sustainability. The project location is shown in Figure 8. Appendix D has a list of specific costs associated with the project. The City should not have to increase staff to provide maintenance for this project.

Table 23: Future Culinary Environmental Sustainability Project

Project Name	Description	Estimated Cost
Water Pipeline Hydroelectric Project	Install Hydroelectric Generator on Existing Distribution System	$90,000.00
	Total	**$90,000.00**

6.2.7.2 No Action Alternative

Under the No Action Alternative the water system would continue to operate at its current operational configuration. The project improvements only make viable sense if the project is cost effective.

CHAPTER 7

Final Screening of Principal Alternatives and Facility Plan Adoption

CHAPTER 7 - FINAL SCREENING OF PRINCIPAL ALTERNATIVES AND FACILITY PLAN ADOPTION

7.1 Water System Projects

7.1.1 Financing

To properly analyze the different alternatives it is useful to discuss financing options available to a water utility. Financing of a water system facilities can come from various sources. These different sources are listed below.

7.1.1.1 General Fund

A general fund is funded primarily from local property tax levy. General funds are typically used for a City that does not have an established water system utility. Under this scenario, water utility expenses would be paid by the general fund. The City may also transfer funds from the general fund to pay for all or a portion of the City's water utility expenses. This funding alternative results in taxable properties within the City paying for water system facilities in proportion to its equalized property value, regardless of the use of the service.

7.1.1.2 Taxation

Taxation works in a similar manner to a general fund as properties are charged on the basis of equalized property value, regardless of the use of the service. An example of this would be the creation of a utility district and imposition of a special water tax on properties within that district. Funds raised would be used to pay for management, facilities, or activities within the district.

7.1.1.3 Special Assessment

A special assessment means an assessment levied against a property to pay all or a portion of the costs of making improvements that benefit the property. This means water system improvements may be assessed to properties with a localized area where the improvement is necessary. The special assessment may be used to pay for all capital costs. The assessment to each property located within this area must be determined based on reasonable attempts to make the amount of assessment proportionate to the relative amount of benefit to each property. Special assessments may only be used to pay for capital improvements and may be paid in installments at the City's discretion. Special assessments are levied only in the area where the capital improvements benefit the properties.

7.1.1.4 General Obligation Bonds

Another method to fund water system facility improvements is by general obligation (GO) bonds. GO bonds are secured by the general authority of the City to levy and collect taxes. GO bonds give municipalities a tool to raise funds for a project that will not provide direct sources of revenue.

GO bonds and interest may be paid from any of the City's revenues, i.e. property taxes, impact fees, and service charges.

7.1.1.5 Revenue Bonds

A water utility may also issue revenue bonds secured by service charges and any other revenues because the utility has its own dedicated source or revenues that is separate from the City's general fund. Revenue bonds do not count against the limit on general obligation borrowing, so their use has the effect of increasing the total amount of bonds that a City can issue. In order to issue revenue bonds, a City must demonstrate to potential bondholders that the utility will be able to generate sufficient revenues to repay the bonds and maintain adequate reserves. Revenue bonds and interest may be paid from any of the City's revenues, i.e. property taxes, impact fees, and service charges.

7.1.1.6 Service Charges

Another means of funding for a water utility is by service charges. Service charges are charges billed to properties for services rendered by the water utility. Service charges must be calculated so the amount of the charge to each property is in proportion to each property's use of the service. The City of Driggs currently determines this proportion based on the water service line size.

7.1.1.7 Connection Fees

Connection fees are one way a City can collect revenues from new development to pay for capital improvements associated with new growth. Just like service charges connection fees must be calculated so the amount of the fee to each property is in proportion to each property's use of the service. The City of Driggs currently determines the proportion based on the water service line size.

7.1.1.8 State Funding

The State of Idaho has other funding alternatives such as public water system planning grants, public water system construction loans, and source water protection grants available through the Idaho Department of Environmental Quality (IDEQ). This water system facility plan is funded through the IDEQ public water system planning grant. Each type of funding has its own requirements. Additional information on these various State funding alternatives can be found on the IDEQ's website, http://www.deq.idaho.gov.

7.1.1.9 Developers

Developers are charged connection fees based on the number and size of the service lines added to the system. If a development, improves existing water utilities to serve this future development then a connection fee credit may be accessed to the developer.

7.1.1.10 Summary

Each funding alternative has its advantages and disadvantages. Water system improvements may use funding from any one of the alternatives listed above. This plan will evaluate the feasibility of the required water system improvement projects assuming service charges as the primary means of funding for the projects. It is assumed connection fees will be utilized for funding future capital improvement projects.

7.1.2 Cost Evaluation

The distribution, source, storage and telemetry water projects have been grouped together because these projects are required to operate and maintain the City's water system at City, State, and Federal standards. The environmental sustainability project will be analyzed separately because this project is not required to operate and maintain the City's water system and is only viable if proven cost effective. The projects will be analyzed based on present worth analysis; capital costs and financing plan; operations and maintenance costs; and cost escalating factors for energy use. Ultimately, these project costs will be analyzed to determine if financing and user fees can pay for the projects in the 20-year planning period.

7.1.2.1 Present Worth Analysis and Project Need

A present worth analysis is the total project costs over time discounted to current values as a lump sum. The projects have been prioritized based on estimated project year and an estimated construction cost using 2013 construction costs (present worth value) has been provided for each project. All projects include a 15% contingency and 10% for engineering and construction management. The project need has also been included in the Table 24 to provide justification.

Table 24: Future Culinary Water Projects

Project Name and Description	Type *	Estimated Cost	Project Need	Construction Year	Construction Year Price [1]
Water System Telemetry/SCADA Upgrades	T	$318,500.00	This project is required so the City's water system telemetry can be operational again. Note: The Spring upgrades have been completed ($23,000.00) listed in the cost estimate.	2013-2017	$338,477.90
1 MG Tank Altitude Valve Replacement Project	D	$104,750.00	This project replaces an existing altitude valve and allows the spring to flow correctly into the tank.	2013	$104,750.00

Table 24: Future Culinary Water Projects

Project Name and Description	Type *	Estimated Cost	Project Need	Construction Year	Construction Year Price [1]
5th Street Water Loop Pipeline Project	D	$269,987.50	This project provides system redundancy and a fire loop. This project also allows the 1.0 MG tank to flow into the lower pressure zone during high demand.	2014	$278,087.13
0.3 MG Tank Altitude Valve and Orifice Replacement Project	D	$104,750.00	This project replaces and existing altitude valve and orifice.	2014	$107,892.50
0.3 MG Tank Security Fence Project	ST	$36,625.00	This project is required so the City protect the tank and tank well source from potential contaminants.	2014	$37,723.75
12-inch Transmission Water Pipeline Replacement Project	D	$622,612.50	This project will replace the existing 12-inch waterline between the 0.3 MG Tank and High School Well to match current City standards as the existing line is shallow.	2014	$641,290.88
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2014-2018	$381,463.29
Tank Well Pump House and Chlorine Treatment Project	S	$307,500.00	This project updates the existing Tank Well to current City Standards; provides chlorine treatment at the well site; and provides a point of connection for the trailer mounted generator. It also re-equips the well so it can pump up to the 1.0 MG Tank.	2014	$316,725.00
1.0 MG Tank Overflow Line Meter Project	ST	$14,375.00	This project is required so the City can measure any overflow from the Tank.	2017	$16,179.19
Depot Street Alley 2-inch Waterline Replacement Project	D	$56,468.75	This project replaces an existing undersized 2-inch waterline.	2017	$63,556.08
Teton Creek Resort Booster Pump and Waterline Loop Project	D	$220,980.00	This project will increase pressures for the residents in the area during high demands.	2017	$248,714.94
3rd Street and 4th Street 2-inch Waterline Replacement Project	D	$138,000.00	This project replaces an existing undersized 2-inch waterline.	2018	$159,979.82
Subtotal		**2,543,336.88**			**$2,694,840.46**

Table 24: Future Culinary Water Projects

Project Name and Description	Type *	Estimated Cost	Project Need	Construction Year	Construction Year Price [1]
1.5 MG Water Tank Project	ST	$1,610,625.00	This project is required to provide enough storage capacity to meet future demands.	2019	$1,923,170.48
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2019-2023	$442,220.50
High School Well Generator Project	S	$180,750.00	This project would provide an additional emergency water source.	2020	$222,299.70
Teton Creek Well Manual Transfer Switch Project	S	$5,625.00	This project would provide a point of connection for the trailer mounted generator.	2020	$6,918.04
Trailer Mount Generator Purchase	S	$51,750.00	This purchase will allow the City to power the wells that do not have permanent generators.	2020	$63,645.97
Lions Park Well Pump House and Chlorine Treatment Project	S	$170,000.00	This project updates the existing Lions Park Well to current City Standards; provides chlorine treatment at the well site; ; and provides a point of connection for the trailer mounted generator	2021	$215,350.91
Dalley Well Pump House and Chlorine Treatment Project	S	$170,000.00	This project updates the existing Dalley Well to current City Standards; provides chlorine treatment at the well site; and provides a point of connection for the trailer mounted generator.	2021	$215,350.91
5th Street 6-inch Waterline Replacement Project	D	$343,955.00	This project upgrades and existing 6-inch line to a 10-inch line to feed the City's commercial area.	2022	$448,783.26
Creekside Meadows Water Loop Water Project	D	$108,250.00	This project will provide redundancy and a fire loop for the Creekside Subdivision.	2023	$145,478.95
Valley Centre Well Chlorine Treatment Project	S	$21,812.50	This project provides chlorine treatment at the well site and provides a point of connection for the trailer mounted generator	2023	$29,314.18
Ski Hill Road and Miller Ranch Water Loop Pipeline Project	D	$237,875.00	This project provides system redundancy and a fire loop.	2023	$319,684.11
Subtotal		**3,249,430.63**			**$4,032,217.01**
Little Avenue 6-inch Waterline Replacement Project	D	$440,530.00	This project upgrades and existing 6-inch line to a 10-inch line to feed the City's commercial area.	2024	$609,796.55

Table 24: Future Culinary Water Projects

Project Name and Description	Type *	Estimated Cost	Project Need	Construction Year	Construction Year Price [1]
Highway 33 6-inch Waterline Replacement Project (over 10 Years)	D	$756,953.75	This project upgrades an existing 6-inch line to a 10-inch line for the City's commercial area. This project will be constructed in phases.	2024-2028	$1,112,583.58
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2024-2028	$512,654.76
Subtotal		**$1,546,271.88**			**$2,235,034.89**
Highway 33 6-inch Waterline Replacement Project (over 10 Years)	D	$756,953.75	This project upgrades an existing 6-inch line to an 10-inch line for the City's commercial area. This project will be constructed in phases.	2029-2033	$1,289,789.30
Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project	D	$348,788.13	This project replaces 6-inch waterline with 8-inch waterline for fire flows to comply with current standards.	2029-2033	$594,307.37
Rodeo Drive Water Loop Pipeline Project	D	$160,750.00	This project provides system redundancy and a fire loop.	2033	$290,332.38
Subtotal		**$1,266,491.88**			**$2,174,429.05**
20-year Project Total		**$8,605,531.25**			**$11,136,521.42**
Water Pipeline Hydroelectric Project	D	$90,000.00	This project provides an alternative energy source for the City.	Only if Feasible	N/A

* D=Distribution ST=Storage S=Source
[1] The construction year price for projects which are split over 5 years is the total construction year price from each year's adjusted construction year price for the project.

7.1.2.1 Operation and Maintenance Costs

The City's budget for operation and maintenance costs for fiscal year (FY) 2012/2013 is approximately $285,000. This does not include capital improvements, professional services, or long term debt. Including capital improvements, professional services and long term debt yields a total expense cost of $580,584.00 for FY 2012/2013. The operation and maintenance cost of $285,000 will be used in future cost analysis with an estimated increase of 3% yearly in these costs.

7.1.2.2 Capital Costs and Financing Plan

Capital costs are shown in Table 24 but to determine a financing plan a rate study will be completed. The rate study will include operation and maintenance costs, professional services, existing long term debt, and future long term debt.

7.1.2.3 Cost Escalation Factors for Energy Use

Cost escalation factors for energy use are hard to project. The City spent $25,267.77 in power for its well sites in year 2009 and has seen its energy consumption rate decline to $22,431.91 in FY 2011. This decline will most likely not continue. Therefore, these energy costs are included in the operation and maintenance cost total and will be estimated to increase 3% yearly.

7.1.2.4 Comparison of Costs of Alternatives

7.1.2.4.1 Rate Study for Water Projects

There are many methods for financing water facilities including connection fees, monthly usage fees, grants, and loans.

The City of Driggs currently charges a water rate of $27.00 a month per each user up to a 1.0-inch water service line, which is typically the largest residential service line. The City charges a higher water rate for lines larger than 1.0-inches as shown in Table 8. The City currently (Year 2013) has 1,060 metered connections. Water rates are used to operate and maintain the current water system. Typical expenditure items for the water system include, but are not limited to; administration, operational costs, maintenance costs, and project construction costs to upgrade the existing system.

As of September 30, 2012, the City had a water fund balance (Cash and Investments) of $475,638.00 per the City of Driggs, Idaho Basic Financial Statements and Supplementary Information with Independent Auditor's Report dated September 30, 2012 by Rudd & Company. These financial statements also show actual operating revenues of $509,344 and operating expenses of $420,266 for a net positive operating revenue of $89,078. The non-operating expenses and revenues totaled up to a net non-operating expense of $51,512. This leaves a net positive revenue of $37,566. There is little difference in operating revenues and operating expenses meaning the City should act to create a balanced water fund budget with additional income to construct future capital improvement projects. This can be accomplished by the following methods.

1. Increase revenues by increasing the water rates initially to help pay for current bond debt principal expenses and future capital improvement projects.
2. Decrease operating expenses by making the necessary cuts to match or be below the current operating revenues.
3. Obtain a revenue bond or use other funding to pay for future capital improvement projects.

A combination of method 1 and method 3 is used to determine the water rate required to maintain a balanced fund budget, meet operating expenses, and pay for capital project costs. This included a one (1) 20 year revenue bond called the 2014 City of Driggs Water Improvement Projects combining the 12-inch Transmission Waterline Replacement Project, 5th Street Water Loop Pipeline Project, 0.3 MG Tank Altitude Valve and Orifice Replacement Project, 0.3 MG Tank Altitude Valve and Orifice Replacement Project, and the 0.3 MG Tank Security Fence Project. It also includes 20 year revenue bonds for the 1.5 MG Water Tank Project and Little Avenue 6-inch Waterline Replacement Project. The water enterprise fund should stand on its own without tapping the general fund. This rate analysis includes funding in the form of three (3) bonds to keep the water rate lower. If this funding was eliminated then the water rate would need to increase even more.

In this study two (2) different water rate structures will be analyzed to see what changes would be made to be made to fund the proposed capital facility projects. The two (2) rate structures are listed below.

1. Existing Rate Structure – Typical Single Family Residential (1 ERC), Charge Monthly Base Rate with 10,000 gallon water allowance in summer and 20,000 gallon water allowance in winter. Charge a monthly consumption fee for every 1,000 gallons above monthly allowance.
2. Tiered Rate Structure – Typical Single Family Residential (1 ERC), Charge Monthly Base Rate under 7,000 gallons (summer) and under 17,000 gallons (winter). Charge a Monthly Rate from 7,000 to 13,000 gallons (summer) and 17,000 to 23,000 gallons (winter). Charge a monthly consumption fee for every 1,000 gallons above 13,000 gallons (summer) and 23,000 gallons (winter). 13,000 gallons per month equates to the average daily demand of 413 gpd/ERC.

7.1.2.4.1.1 Existing Rate Structure

Items that were adjusted in the rate analysis, see appendix U for a detailed spreadsheet and Table 25 for a summary of the rate increases.

- Revenues
    - Base Water Rate per Metered Connection– Raised rate to maintain balanced fund budget.
    - Monthly Consumption Fee above Water Allowance – Raised rate to maintain balanced fund budget and to promote water conservation.

- Operating Revenues – Included revenues from rates.
- Non-Operating Revenues – Excluded from analysis as these revenues represent a small amount of the budget.
- Outside Funding – Excluded from analysis but grants or other funding may be available for future capital projects.

- Expenses
  - Operating Expense – Increased yearly at 3.0%.
  - Future Capital Improvement Project Expense – The construction costs are adjusted for inflation. Refer to Appendix U for additional information.
  - Current Bond Debt Interest and Principal Expense – These expenses are existing. Refer to Table 1 for the City's existing water revenue bonds and loans.
  - Future Bond Interest and Principal Expense – Three (3) future revenue bonds were used in the analysis for the cost of the portions of the projects attributable to existing users. This included a three (3) 20-year revenue bonds at 2.7% for the 2014 Water Improvement Projects, 1.5 MG Water Tank Project, and Little Avenue 6-inch Waterline Replacement Project. Interest rates are from OMB Circular A-94 Appendix U.
  - Depreciation – Depreciation was determined from previous water budgets.

Table 25: Existing Rate Structure Summary of Increase in Water Rates

Year	Monthly Base Water Rate, $/10,000 gallons water allowance (Summer) 05/01 - 10/31	Monthly Base Water Rate, $/20,000 gallons water allowance (Winter) 11/01 - 4/30	Monthly Water Consumption Fee, $ for every 1,000 gallons (above allowance)
2013	$ 27.00	$ 27.00	$ 1.00
2014	$ 28.50	$ 28.50	$ 1.50
2015	$ 30.00	$ 30.00	$ 2.00
2016	$ 31.50	$ 31.50	$ 2.00
2017	$ 33.00	$ 33.00	$ 2.00
2018	$ 34.50	$ 34.50	$ 2.00
2019	$ 36.00	$ 36.00	$ 2.00
2020	$ 37.00	$ 37.00	$ 2.00

[1] The monthly water consumption fee raises $0.25 each year until 2021.

As shown in the table, by raising the monthly base rate by $10.00 per metered connection over 7 years and raising the monthly water consumption fee by $1.00 within 2 years for every 1,000 gallons (above allowance) the City will begin to retain sufficient revenue to operate, maintain, and cover its proportionate share of future improvements to the system.

The base rate would be maintained at $37.00 within the 20-year planning period in year 2020 to continue to maintain a positive water fund balance. The water fund balance increases to $2.7 million in year 2033, see Appendix U. The high initial rate increase is because there are a large number of projects at the beginning of the 20-year planning period but not as many projects at the end of the 20-year planning period. A couple of capital improvement projects that the City could develop at the end of the 20-year planning period are a new source and replacement of 6-inch diameter water main lines that are not up to City Standards.

This projected user fee is only possible if the 2014 City of Driggs Water Improvement Projects, 1.5 MG Water Tank Project, and Little Avenue 6-inch Waterline Replacement Project are bonded. Table 26 summarizes the debt service from the bonding of these projects. The City will need to periodically review the rates and adjust accordingly.

Table 26: Summary of Required Revenue Bonds

Bond Issue	Par Amount	Proceeds	Net Debt Service[1]
Series 2014 Revenue Bonds (2014 City of Driggs Water Improvement Projects)	$ 1,429,353.64	$ 1,381,719.25	$ 1,853,963.00
Series 2019 Revenue Bonds (1.5 MG Water Tank Project)	$ 1,923,170.48	$ 1,923,170.48	$ 2,572,633.98
Series 2024 Revenue Bonds (Little Avenue 6-inch Waterline Replacement Project)	$ 641,992.48	$ 609,796.55	$ 819,178.83
Totals	**$ 3,994,516.60**	**$3,914,686.28**	**$ 5,245,775.81**

[1] Includes principal and interest.

The City could also consider raising the monthly water consumption fee for every 1,000 gallons above the water allowance to help further promote water conservation and lower the increased base rate.

7.1.2.4.1.2 Tiered Rate Structure

Items that were adjusted in the rate analysis, see appendix U for a detailed spreadsheet and Table 27 for a summary of the rate increases.

- Revenues
  - Base Water Rate per Metered Connection (1st Tier) – Raised rate at 3% until year 2021 to maintain balanced fund budget.
  - Base Water Rate per Metered Connection (2nd Tier) – Raised rate at 6% until year 2021 to maintain balanced fund budget.

- Monthly Consumption Fee above 2nd Tier – Raised rate at 6% until year 2021 to maintain balanced fund budget and to promote water conservation.
- Operating Revenues – Included revenues from rates.
- Non-Operating Revenues – Excluded from analysis as these revenues represent a small amount of the budget.
- Outside Funding – Excluded from analysis but grants or other funding may be available for future capital projects.

- Expenses
  - Operating Expense – Increased yearly at 3.0%.
  - Future Capital Improvement Project Expense – The construction costs are adjusted for inflation. Refer to Appendix U for additional information.
  - Current Bond Debt Interest and Principal Expense – These expenses are existing. Refer to Table 1 for the City's existing water revenue bonds and loans.
  - Future Bond Interest and Principal Expense – Three (3) future revenue bonds were used in the analysis for the cost of the portions of the projects attributable to existing users. This included a three (3) 20-year revenue bonds at 2.7% for the 2014 Water Improvement Projects, 1.5 MG Water Tank Project, and Little Avenue 6-inch Waterline Replacement Project. Interest rates are from OMB Circular A-94 Appendix U.
  - Depreciation – Depreciation was determined from previous water budgets.

Table 27: Tiered Rate Structure - Summary of Increase in Water Rates

Year	1st Tier - Monthly Base Water Rate, $ under 7,000 gallons (Summer) 05/01 - 10/31	2nd Tier – Monthly Base Water Rate, $ between 7,000 gallons and 13,000 gallons (Summer) 05/01 – 10/31	1st Tier - Monthly Base Water Rate, $ under 17,000 gallons (Winter) 11/01 - 4/30	2nd Tier – Monthly Base Water Rate, $ between 17,000 gallons and 23,000 gallons (Winter) 11/01 – 4/30	Monthly Water Consumption Fee, $ for every 1,000 gallons (above 2nd Tier)
2013	$ 18.90	$ 8.10	$ 18.90	$ 8.10	$ 1.00
2014	$ 19.47	$ 8.59	$ 19.47	$ 8.59	$ 1.06
2015	$ 20.05	$ 9.10	$ 20.05	$ 9.10	$ 1.12
2016	$ 20.65	$ 9.65	$ 20.65	$ 9.65	$ 1.19
2017	$ 21.27	$ 10.23	$ 21.27	$ 10.23	$ 1.26
2018	$ 21.91	$ 10.84	$ 21.91	$ 10.84	$ 1.34
2019	$ 22.57	$ 11.49	$ 22.57	$ 11.49	$ 1.42
2020	$ 23.24	$ 12.18	$ 23.24	$ 12.18	$ 1.50
2021	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 1.59

Note: The sum of the 1st and 2nd Tiers in year 2013 equals the current base rate of $27.00/ month.

As shown in the table, by raising the monthly base rate in Tier 1 by 3% yearly until year 2021; raising the monthly base rate in Tier 2 by 6% yearly until year 2021; and raising the monthly water consumption fee by 6% yearly until year 2021 for every 1,000 gallons (above Tier 2) the City will begin to retain sufficient revenue to operate, maintain, and cover its proportionate share of future improvements to the system. The base rates in Tier 1 and Tier 2 would be maintained within the 20-year planning period in year 2022 to continue to maintain a positive water fund balance. The water fund balance increases to $3.09 million in year 2033, see Appendix U. This is because there are not many projects at the end of the 20-year planning period. A couple of capital improvement projects that the City could develop at that time is a new source which would cost somewhere around half of the $2.1 million and replacement of water lines that are not up to City Standards.

This projected user fee is only possible if the 2014 City of Driggs Water Improvement Projects, 1.5 MG Water Tank Project, and Little Avenue 6-inch Waterline Replacement Project are bonded. Table 26 summarizes the debt service from the bonding of these projects. The City will need to periodically review the rates and adjust accordingly.

7.1.2.4.1.3 Rate Analysis Summary

These are only two (2) possible rate structures to accomplish the goal but they represent the deficiencies well. The City could consider different rate structures or eliminating projects or portions of projects to lower the projected rate increase. This rate study shows that with the raising of the City's water rates the City will be able to pay for future water capital improvement projects with the water fund.

7.1.2.4.2 Cost Benefit Analysis – Environmental Sustainability Project

To determine if the water pipeline hydroelectric project is worth the construction costs a quick cost benefit analysis should be performed. The hydroelectric project would be located just upstream of the 1.0 MG Tank. The estimated cost of this project is $90,000. In order for this project to be viable the money from the energy generation should at least cover the operation and maintenance costs and pay back the initial investment of construction the project within the usable lifetime of the project.

The spring is estimated to flow anywhere from 150 gpm to 900 gpm on average into the City line. The City would need a total flow of at least 1,000 gpm for this project to be viable as turbine manufacturing companies only make a reaction turbine capable of running at 1,000 gpm at this locations total dynamic head (TDH). A reaction turbine is a turbine which converts moving fluid, in this case water, to mechanical power by the impulse or reaction of

the fluid with a series of paddles/ blades arrayed about the circumference of a cylinder. 1,000 gpm equates to an average daily flow of 1.44 MG. The City would need to take the entire spring flow and divert its non-water right duty back into Teton Creek at the 1.0 MG tank site. This point of division back into Teton Creek change would need to be approved by the State of Wyoming. For the TDH, 54.5 feet, and flow, 1,000 gpm, at this location a turbine capable of generating 4 kW-hr could be installed. Using a 67% capacity factor, the kW-hr generated annually is 23,477 kW-hr. Fall River Electric, Power Company for the City of Driggs, will buy back at its general service rate if there is a surplus at the meter. At the time of the report the general service rate is $0.04700 kW-hr. This means the hydroelectric project would generate $1,103.42 annually. Operation and maintenance costs for this project can be anticipated to be anywhere from $250 to $500 annually with turbine replacement every 10 to 15 years at a cost of around $10,000 to $15,000. This means the project would pay for operation and maintenance costs but would not pay for the initial capital costs and costs to replace the turbine.

Unless the rate was higher such as $0.08 to $0.10 kW-hr or if this project could be funded with grant funding this simple cost benefit analysis shows that the project is not financially cost effective.

There is another option for hydroelectric power generation given the City's hydraulic conditions which consists of using a positive displacement rotary lobe pump as a turbine (PAT) equipped with a regenerative variable frequency drive (VFD). A positive displacement rotary lobe pump displaces a known quantity of liquid with each revolution of the pumping elements. This is completed by trapping liquid between the pumping elements, in this case lobes, and a stationary casing. This system converts 50 to 70 percent of the reduced pressure energy to electricity. While this system would probably cost less than a traditional reaction turbine it is also more difficult to analyze given the variable spring flow. If the City were to receive funding or decide to move forward with this project it could consider looking at this option.

7.1.3 Environmental Impacts

As mentioned in section 6.2.1, the majority of these projects are constructed in areas that are already disturbed. The following are potential environmental impacts:

- Protection of Nesting Birds
- Construction Pollution
- Source Protection

The solutions to these potential environmental impacts are listed in section 6.2.1. An environmental review will be completed for any future projects which are to be constructed within wetlands; any other environmentally sensitive areas; or receive funding which requires an environmental review.

7.1.4 Water Supply System Impacts

The water supply system impacts of the water improvement projects listed in Table 24 benefit the system as a whole and allow the system to meet existing and future demands.

7.1.5 Comparison of Alternatives

There are only two alternatives. The no action alternative and the construction of the water projects listed in Table 24. Since the water projects listed in Table 24 are all critical to the water system maintaining the City's existing and future demands, these projects should be constructed. The only project that is not financially feasible without grant or alternative funding is the water pipeline hydroelectric project.

7.1.6 Public Input Evaluation

The public will have a key role and provide valuable input into this plan. The public has already provided valuable input into existing deficiencies in the existing water distribution system via their direct contact with the City of Driggs. These existing deficiencies have been incorporated into this plan.

The City held a budget work session on March 26, 2013 and provided a public online survey to obtain the public's opinion on their most important items pertaining to the FY 2014 budget. In the May 14, 2013 City Council meeting, the FY 2014 budget public online survey listed the replacement of shallow waterlines as the public's number one priority with respect to the budget. Refer to Appendix O for additional information on public participation on water system related items for 2013.

7.1.7 Cost Effectiveness Analysis

A rate study was completed in section 7.1.2.4.1 to show how the water system projects will be paid for in the next 20-years. A separate cost benefit analysis was also completed for the waterline hydroelectric project as this is the only project which is not critical for the water system to keep up with existing and future demands. The results of these analyses shown that the City has the financial capability of paying for the water projects by increasing its rates and bonding for a portion of its future projects. It also shows that the waterline hydroelectric project is not financially viable without the assistance of grants. These analyses were conducted in accordance with 40 CFR 35.2030 (b.)(3.) by projecting future revenues and expenses in the 20-year planning period to determine if the projects could be paid for without funding outside the water fund.

CHAPTER 8

Selected Alternative Description and Implementation Arrangements

CHAPTER 8 - SELECTED ALTERNATIVE DESCRIPTION AND IMPLEMENTATION ARRANGEMENTS

8.1 Water System Facility Projects

8.1.1 Description

The projects have been previously described in section 6.2, Table 19 through Table 23. The majority of the cost associated with the water system facility projects involves replacing existing undersized water pipelines with larger 8-inch diameter pipes. The rest of the projects involve updating existing wells; updating telemetry/controls; providing additional water storage; and water pipeline looping.

8.1.2 Preliminary Design Information

Preliminary design information for each project is listed in Table 19 through Table 23. Additional information can be found in each project cost estimate in Appendix D. The design of each project will be designed in accordance with the City of Driggs Public Works Standards and Technical Specifications, Idaho State Code, Federal Law, and general engineering practice. More specific standards and design parameters are pipe conforming to the American Society for Testing and Materials (ASTM) and American Water Works Association (AWWA) standards; water system testing; design conformity with Federal and State water pollution control standards; and design conformity with Federal and State drinking water standards.

8.1.3 Total Project Cost Estimates

The total construction year cost of all the water system facility projects is $11,136,521.42 as shown in Table 24. A breakdown of each project cost estimate is included in Appendix D.

8.1.4 Financing

Projects are anticipated to be funded through the water fund with supplemental funding through revenue bonds. A rate study was completed and it was determined that water rates would need to increase to maintain a healthy positive fund balance. Additional funding could be procured via grants or other funding alternatives but for this analysis of the water system these funding options were not incorporated into the analysis.

8.1.5 Environmental Impacts

General environmental impacts for these projects were determined in section 6.2.1, the majority of these projects are constructed in areas that are already disturbed. The following are potential environmental impacts:

- Protection of Nesting Birds
- Construction Pollution
- Source Protection

The solutions to these potential environmental impacts are listed in section 6.2.1. An environmental review will be completed for any future projects which are to be constructed within wetlands; any other environmentally sensitive areas; or receive funding which requires an environmental review.

8.1.6 Implementation

The majority of the projects are constructed within existing City of Driggs right-of-way or City property. The City will obtain and/or purchase additional easements, lands, or right-of-ways for the projects listed in this report prior to or during the design of each project.

8.1.7 Conclusions and Recommendations

It is recommended that the City constructs the capital improvement listed within this report and reviews its water rates for a potential increase in the near future. It is also recommended that a leak study be completed and this plan should be updated every 5 years once the telemetry/ controls have been updated. The leak study and telemetry upgrades should provide better source flows to determine where the discrepancy lies between measured source flows and water user metered flows. The update to this plan every 5 years will also aid in determining future water system deficiencies and future projects to fix future deficiencies.

APPENDIX A

References

REFERENCES

1. City of Driggs Water System Facility Plan. Sunrise Engineering, dated 2002.
2. City of Driggs Water Improvement Project 2003 – O&M Manual. Sunrise Engineering, dated 2003.
3. U.S. Census Bureau. http://www.census.gov
4. Idaho Administrative Code, Idaho Rules for Public Drinking Water Systems (IDAPA 58.01.08), Idaho Department of Environmental Quality
5. City of Driggs – Public Works Standards and Technical Specifications. 2010.
6. City of Driggs Zoning Map. City of Driggs, Idaho dated December 15, 2009.
7. City of Driggs Area of Impact Zoning Map. City of Driggs, Idaho dated December 15, 2009.
8. City of Driggs 2013 Adopted Water Budget. City of Driggs
9. 2012 Annual Drinking Water Quality Report – The Water We Drink. City of Driggs.
10. City of Driggs Water Consumption Reports. City of Driggs 2010 through 2012.
11. City of Driggs Code – Chapter 3, Article A, Cross Connection Control. City of Driggs
12. May 4, 2013 Phone Conversation Between Earl Jiles (Teton County Fire Marshall) and Robert Rousselle (AQUA Engineering) regarding fire flow requirements
13. Form 5-A Outline and Checklist for Engineering Report/Facility Plan. Idaho Department of Environmental Quality – Drinking Water State Revolving Fund.
14. Documentation for Low Pressure, Capacity, and Leakage Problems for the City of Driggs Water System. Jared Gunderson (City of Driggs) and Bret Campbell (Teton County Fire Chief)
15. Sanitary Survey Results for the City of Driggs Public Water System (PWS) #7410004. State of Idaho Department of Environmental Quality dated June 28, 2010.
16. City of Driggs, Idaho Basic Financial Statements and Supplementary Information with Independent Auditor's Report. Rudd & Company dated September 30, 2012.
17. City of Driggs – Resolution No. 281-12 Water, Sewer, General and Land Use Application Fees. Adopted January 1, 2013.
18. Google Earth. http://www.google.com/earth/index

APPENDIX B

City of Driggs Annual Water Quality Report

2012
Annual Drinking Water Quality Report
The Water We Drink
City of Driggs

We’re very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water sources are a spring source and 7 wells, Well #1 Targhee Ranch , Well #2 High School, Well #3 Lions Park, Well#4 Dalley, Well # 5 Valley Center, Well #6 Teton Creek, Well #7 Huntsman Springs and Teton Creek Spring**.**

I'm pleased to report that our drinking water meets federal and state requirements.

This report shows our water quality and what it means to you our customer.
If you have any questions about this report or concerning your water utility, please contact Jared Gunderson Public Works Director at 208-354-2362. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on First and Third Tuesdays of every month at 7:15 p.m.

City of Driggs routinely monitors for constituents in our drinking water in accordance with the Federal and Idaho State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2012**.** All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) **-** laboratory analysis indicates that the constituent is not present.

ND/Low - High **-** For water systems that have multiple sources of water, the Idaho Department of Environmental Quality given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

Parts per million (ppm) or Milligrams per liter (mg/l) **-** one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) **-** one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) **-** one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) **-** one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) **-** Picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) **-** measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) **-** million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) **-** nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Date- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates "May" seem out of date.

Waivers (W) - Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples; these waivers are also tied to Drinking Water Source Protection Plans.

TEST RESULTS							
Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
Microbiological Contaminants							
1. Total Coliform Bacteria	N	ND	N/A	0	Presence of coliform bacteria in 5% of monthly samples	Monthly	Naturally present in the environment
2. Fecal coliform and *E.coli*	N	ND	N/A	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	Monthly	Human and animal fecal waste
3.a. Turbidity for Ground Water	N	ND	NTU	N/A	5		Soil runoff
3.b. Turbidity for Surface Water	N		NTU	N/A	0.5 in at least 95% of the samples and must never exceed 5.0		Soil Runoff (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)

Radioactive Contaminants							
4. Alpha emitters	N	1.34	pCi/1	0	15	2009	Erosion of natural deposits
5. Beta/photon emitters*	N	2.72	pCi/L	0	4	2009	Decay of natural and man-made deposits.
6. Combined radium	N	1.06	pCi/1	0	5	2010	Erosion of natural deposits
*__Beta/photon emitters:__ The MCL for beta/photon emitters is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta/photon emitters.							
Inorganic Contaminants							
7. Antimony	N	ND	ppb	6	6	2011	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
8. Arsenic	N	ND	ppb	N/A	50	2010	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
9. Asbestos	N	W	MFL	7	7		Decay of asbestos cement water mains; erosion of natural deposits
10. Barium	N	.02	ppb	2000	2000	2011	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
11. Beryllium	N	ND	ppb	4	4	2011	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	N	ND	ppb	5	5	2011	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
13. Chromium	N	ND	ppb	100	100	2011	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper a. 90% results b. # of sites that exceed the **AL**	N	.08	ppb	1.3	AL=1.3	2010	Corrosion of household plumbing systems; erosion of natural deposits
15. Cyanide	N	ND	ppb	200	200	2011	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	0	ppb	4	4	2011	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead a. 90% results b. # of sites that exceed the **AL**	N	2	ppb	0	AL=15	2010	Corrosion of household plumbing systems, erosion of natural deposits
18. Mercury (inorganic)	N	ND	ppb	2	2	2011	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
19. Nitrate (as Nitrogen)	N	ND	ppb	10000	10000	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

20. Nitrite (as Nitrogen)	N	ND	ppb	10000	10000	2012	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium	N	ND	ppb	50	50	2011	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
22. Sodium	N		ppm	None set by EPA	None set by EPA		Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
23. Sulfate	N		ppm	500*	500		Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
24. Thallium	N	ND	ppb	1	2	2011	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
25. TDS (Total Dissolved Solids	N		ppm	1000**	1000**		Erosion of natural deposits
*If the sulfate level of a public water system is greater than 500 ppm, the supplier must satisfactorily demonstrate that: a) no better water is available, and b) the water shall not be available for human consumption from commercial establishments. In no case shall water having a level above 1000 ppm be used.							

Radiological sampling results

Alpha Activity	<0.001
Radium 226	.21
Radium228	.12
Beta/photon activity	<2.0

Nitrate Sampling results in mg/l

Spring	ND
Dalley Well	ND
High School Well	ND
Tank Well	ND
Teton Creek Well	ND
Lions Park Well	ND
Valley Center Well	ND
Huntsman Springs Well	ND

Arsenic	ND
Total Trihalomethanes	3.44
Total Haloacetic	ND
Highest Chlorine residual level detected	.36

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.
All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

Water Conservation Tips

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day or at night to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in the water distribution system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Please call our office if you have questions at (208)354-2362.

We at City of Driggs Public Works Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.

APPENDIX C

City of Driggs Water Consumption and Source Flows

AQUA ENGINEERING
533 W 2600 S Suite 275 Bountiful, UT 84010
Phone (801) 299-1327 Fax (801) 299-0153

CITY OF DRIGGS

Fire Hydrant Test Data

Test Completed 8/8/2013 by Henry McCraken and Robert Rousselle

Equipment: Plant PRO Pitot Gauge (See picture below)

Note: Test involved opening one (1) fire hydrant at a time and testing flow and pressure.

Test No.	Location	Pressure (psi)	Flow (gpm)
1	Northeast corner fo Gemstone Avenue and 5th Street [1]	52.5	1,216
2	Southeast Corner of Creekside Meadows Subdivision at dead end cul-de-sac (Creekside Meadows Avenue) [1]	37.5	1,028
3	Northwest Corner of Hunstman Spring Subdivision (northeast corner of Leopard Lily Court and Birch Berry Drive) [1]	19.5	741
4	Hydrant just west outside Vodka Plant (north end of water system off Highway 33[1]	34.0	979
5	Southwest Corner of Apaloosa Trail and Ross Avenue (south of High School)[1]	47.5	1,157
6	Southeast Corner of Boosh Way Street and Palisade Trail [2]	57.0	1,267
7	Northeast Corner of Boosh Way Street and 1000 N [2]	67.5	1,379
8	Fire Hydrant by 0.3 MG Tank upstream of 0.3 MG Tank and PRV[3]	42.0	1,088
9	Fire Hydrant Located at the southwest corner of Creek Resort Circle[3]	32.0	950

[1] Fed from 12-inch waterline below 0.3 MG Tank.

[2] Fed from 14-inch waterline which branches off before 0.3 MG Tank.

[3] Between 0.3 MG Tank and 1.0 MG Tank.

Report Criteria:
Usage from Quantity

Rate: 1: Special Consideration

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	3
Totals:				0		.00				

Rate: 100: disconnected water-no charge

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	10
Totals:				0		.00				

Rate: 101: Water - Residential - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	10,333,008	0.00135000	13,949.56	573	99	573	561
2	20,001	999,999,999	999,999,999	61,017,948	0.00100000	61,017.95	474	474		
Totals:				71,350,956		74,967.51				

Rate: 102: Water - Residential - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	520,000	0.00135000	702.00	35	14	35	52
2	20,001	999,999,999	999,999,999	2,879,000	0.00100000	2,879.00	21	21		
Totals:				3,399,000		3,581.00				

Rate: 105: Water - Inactive

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	10,721,012	0.00000000	.00	25	25	25	72
Totals:				10,721,012		.00				

Rate: 106: Water Airport-2 services

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	1
Totals:				0		.00				

Rate: 111: Water - Residential - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	1,618,003	0.00202500	3,276.46	106	36	106	102
2	20,001	999,999,999	999,999,999	11,676,000	0.00150000	17,514.00	70	70		
Totals:				13,294,003		20,790.46				

Rate: 112: Water - INACTIVE - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	12,000	0.00000000	.00	3	3	3	15
Totals:				12,000		.00				

Rate: 121: Water - Commercial - 3/4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	1,685,013	0.00135000	2,274.77	95	20	95	99
2	20,001	999,999,999	999,999,999	23,082,000	0.00100000	23,082.00	75	75		
Totals:				24,767,013		25,356.77				

Rate: 122: Water - Commercial - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	343,001	0.00135000	463.05	19	2	19	23
2	20,001	999,999,999	999,999,999	3,661,000	0.00100000	3,661.00	17	17		
Totals:				4,004,001		4,124.05				

Rate: 123: Water - Commercial - 1.5"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	35,000	35,000	595,000	0.00192850	1,147.46	17	0	17	16
2	35,001	999,999,999	999,999,999	7,978,000	0.00100000	7,978.00	17	17		
Totals:				8,573,000		9,125.46				

Rate: 124: Water - Commercial - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	55,000	55,000	1,100,000	0.00220900	2,429.90	20	0	20	20
2	55,001	999,999,999	999,999,999	10,995,000	0.00100000	10,995.00	20	20		
Totals:				12,095,000		13,424.90				

Rate: 125: Water - Commercial - 3"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	75,000	75,000	75,000	0.00234000	175.50	1	0	1	1
2	75,001	999,999,999	999,999,999	4,185,000	0.00100000	4,185.00	1	1		
Totals:				4,260,000		4,360.50				

Rate: 126: Water - Commercial - 4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	90,000	90,000	180,000	0.00239989	431.98	2	0	2	2
2	90,001	999,999,999	999,999,999	1,545,000	0.00100000	1,545.00	2	2		
Totals:				1,725,000		1,976.98				

Rate: 127: Water - Commercial - 6"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	130,000	130,000	260,000	0.00249220	647.97	2	0	2	2
2	130,001	999,999,999	999,999,999	17,142,000	0.00100000	17,142.00	2	2		
Totals:				17,402,000		17,789.97				

Rate: 133: Water - COMMERCIAL - 2" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	55,000	55,000	165,000	0.00331360	546.74	3	0	3	2
2	55,001	999,999,999	999,999,999	5,227,000	0.00150000	7,840.50	3	3		
Totals:				5,392,000		8,387.24				

Rate: 135: Water-Commercial-3"-OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	75,000	75,000	150,000	0.00351000	526.50	2	0	2	1
2	75,001	999,999,999	999,999,999	3,454,000	0.00150000	5,181.00	2	2		
	Totals:			3,604,000		5,707.50				

Rate: 137: Water - Commercial - 6" - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	130,000	130,000	130,000	0.00373830	485.98	1	0	1	1
2	130,001	999,999,999	999,999,999	2,520,000	0.00150000	3,780.00	1	1		
	Totals:			2,650,000		4,265.98				

Rate: 138: Water-Commercial-1"OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	9,000	0.00202500	18.23	1	1	1	2
2	20,001	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			9,000		18.23				

Rate: 139: Water - Residential 1.5"OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	35,000	35,000	175,000	0.00289280	506.24	5	0	5	5
2	35,001	999,999,999	999,999,999	2,555,000	0.00150000	3,832.50	5	5		
	Totals:			2,730,000		4,338.74				

Rate: 200: Irrigation - 1.5

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,636,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,024,9	25,000	0	67.50000000	.00	0	0		
3	1,000,025,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			1,636,000		.00				

Rate: 201: X-tra Tap

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	4,262,000	0.00000000	.00	12	12	12	19
2	1,000,000,0	1,000,009,9	10,000	0	27.00000000	.00	0	0		
3	1,000,010,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			4,262,000		.00				

Rate: 202: Irrigation - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2,198,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,044,9	45,000	0	121.50000000	.00	0	0		
3	1,000,045,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			2,198,000		.00				

Rate: 203: Irrigation - 2" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	3,695,000	0.00000000	.00	4	4	4	5
2	1,000,000,0	1,000,044,9	45,000	0	182.25000000	.00	0	0		
3	1,000,045,0	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			3,695,000		.00				

Rate: 204: Irrigation - X-tap OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	677,000	0.00000000	.00	5	5	5	2
2	1,000,000,0	1,000,009,9	10,000	0	40.50000000	.00	0	0		
3	1,000,010,0	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			677,000		.00				

Rate: 301: Sewer - Residential - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	62,797,300	0.00000000	.00	499	499	499	552
	Totals:			62,797,300		.00				

Rate: 302: Sewer - Residential - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,931,000	0.00000000	.00	24	24	24	53
	Totals:			1,931,000		.00				

Rate: 305: Sewer - Inactive

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	965,800	0.00000000	.00	33	33	33	84
	Totals:			965,800		.00				

Rate: 306: Sewer - Airport 2 services

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	1
Totals:				0		.00				

Rate: 311: Sewer - Residential - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	5,701,000	0.00000000	.00	61	61	61	159
Totals:				5,701,000		.00				

Rate: 312: Sewer - Res Non-Active - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	142,500	0.00000000	.00	5	5	5	8
Totals:				142,500		.00				

Rate: 313: Sewer - 1" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	0	0.00472500	.00	0	0	0	5
Totals:				0		.00				

Rate: 316: Sewer Comm 3/4" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	10,000	0.00472500	47.25	1	0	1	1
2	10,001	999,999,999	999,999,999	60,000	0.00288000	172.80	1	1		
Totals:				70,000		220.05				

Rate: 317: Sewer 2" Commercial OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	40,000	0.00472500	189.00	2	0	2	2
2	20,001	999,999,999	999,999,999	2,560,500	0.00288000	7,374.24	2	2		
Totals:				2,600,500		7,563.24				

Rate: 321: Sewer - Commercial - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	854,000	0.00315000	2,690.10	87	4	87	97
2	10,001	999,999,999	999,999,999	20,323,000	0.00192000	39,020.16	83	83		
Totals:				21,177,000		41,710.26				

Rate: 322: Sewer - Commercial - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	160,000	0.00315000	504.00	16	0	16	22
2	10,001	999,999,999	999,999,999	2,837,000	0.00192000	5,447.04	16	16		
Totals:				2,997,000		5,951.04				

Rate: 323: Sewer - Commercial - 1.5"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	15,000	15,000	225,000	0.00315000	708.75	15	0	15	14
2	15,001	999,999,999	999,999,999	5,554,500	0.00192000	10,664.64	15	15		
Totals:				5,779,500		11,373.39				

Rate: 324: Sewer - Commercial - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	420,000	0.00315000	1,323.00	21	0	21	21
2	20,001	999,999,999	999,999,999	10,895,000	0.00192000	20,918.40	21	21		
Totals:				11,315,000		22,241.40				

Rate: 325: Sewer - Commercial - 3"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	30,000	30,000	30,000	0.00315000	94.50	1	0	1	1
2	30,001	999,999,999	999,999,999	1,040,000	0.00192000	1,996.80	1	1		
Totals:				1,070,000		2,091.30				

Rate: 326: Sewer - Commercial - 4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	40,000	40,000	40,000	0.00315000	126.00	1	0	1	1
2	40,001	999,999,999	999,999,999	431,000	0.00192000	827.52	1	1		
Totals:				471,000		953.52				

Rate: 327: Sewer - Commercial - 6"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	60,000	60,000	120,000	0.00315000	378.00	2	0	2	2
2	60,001	999,999,999	999,999,999	15,369,000	0.00192000	29,508.48	2	2		
Totals:				15,489,000		29,886.48				

Rate: 328: Sewer - Commercial 3" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	30,000	30,000	114,000	0.00472500	538.65	4	1	4	5
2	30,001	999,999,999	999,999,999	2,059,000	0.00288000	5,929.92	3	3		
Totals:				2,173,000		6,468.57				

Rate: 331: Sewer-Commercial 6" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	60,000	60,000	180,000	0.00472500	850.50	3	0	3	2
2	60,001	999,999,999	999,999,999	2,106,260	0.00288000	6,066.03	3	3		
Totals:				2,286,260		6,916.53				

Rate: 1501: Reconnect

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	10
Totals:				0		.00				
Grand Totals:				335,421,845		333,591.06				

Report Criteria:
Usage from Quantity

Report Criteria:
Usage from Quantity

Rate: 1: Special Consideration

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	3
Totals:				0		.00				

Rate: 100: disconnected water-no charge

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	223,000	0.00000000	.00	3	3	3	10
Totals:				223,000		.00				

Rate: 101: Water - Residential - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	10,323,003	0.00135000	13,936.05	569	104	569	584
2	20,001	999,999,999	999,999,999	68,388,054	0.00100000	68,388.05	465	465		
Totals:				78,711,057		82,324.11				

Rate: 102: Water - Residential - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	701,004	0.00135000	946.36	47	19	47	61
2	20,001	999,999,999	999,999,999	1,895,000	0.00100000	1,895.00	28	28		
Totals:				2,596,004		2,841.36				

Rate: 105: Water - Inactive

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2,269,100	0.00000000	.00	28	28	28	66
Totals:				2,269,100		.00				

Rate: 106: Water Airport-2 services

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	12,000	0.00000000	.00	1	1	1	1
Totals:				12,000		.00				

Rate: 111: Water - Residential - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	1,558,006	0.00202500	3,154.96	97	31	97	96
2	20,001	999,999,999	999,999,999	10,192,000	0.00150000	15,288.00	66	66		
Totals:				11,750,006		18,442.96				

Rate: 112: Water - INACTIVE - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	115,000	0.00000000	.00	1	1	1	11
Totals:				115,000		.00				

Rate: 121: Water - Commercial - 3/4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	1,929,500	0.00135000	2,604.83	107	20	107	103
2	20,001	999,999,999	999,999,999	19,648,000	0.00100000	19,648.00	87	87		
Totals:				21,577,500		22,252.83				

Rate: 122: Water - Commercial - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	353,000	0.00135000	476.55	20	4	20	23
2	20,001	999,999,999	999,999,999	4,078,000	0.00100000	4,078.00	16	16		
Totals:				4,431,000		4,554.55				

Rate: 123: Water - Commercial - 1.5"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	35,000	35,000	595,000	0.00192850	1,147.46	17	0	17	16
2	35,001	999,999,999	999,999,999	6,520,000	0.00100000	6,520.00	17	17		
Totals:				7,115,000		7,667.46				

Rate: 124: Water - Commercial - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	55,000	55,000	1,009,000	0.00220900	2,228.88	19	1	19	20
2	55,001	999,999,999	999,999,999	8,135,000	0.00100000	8,135.00	18	18		
Totals:				9,144,000		10,363.88				

Rate: 125: Water - Commercial - 3"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	75,000	75,000	75,000	0.00234000	175.50	1	0	1	1
2	75,001	999,999,999	999,999,999	5,412,000	0.00100000	5,412.00	1	1		
Totals:				5,487,000		5,587.50				

Rate: 126: Water - Commercial - 4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	90,000	90,000	180,000	0.00239989	431.98	2	0	2	2
2	90,001	999,999,999	999,999,999	1,380,000	0.00100000	1,380.00	2	2		
Totals:				1,560,000		1,811.98				

Rate: 127: Water - Commercial - 6"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	130,000	130,000	260,000	0.00249220	647.97	2	0	2	2
2	130,001	999,999,999	999,999,999	17,678,000	0.00100000	17,678.00	2	2		
Totals:				17,938,000		18,325.97				

Rate: 133: Water - COMMERCIAL - 2" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	55,000	55,000	110,000	0.00331360	364.50	2	0	2	2
2	55,001	999,999,999	999,999,999	5,670,000	0.00150000	8,505.00	2	2		
Totals:				5,780,000		8,869.50				

Rate: 135: Water-Commercial-3"-OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	75,000	75,000	150,000	0.00351000	526.50	2	0	2	2
2	75,001	999,999,999	999,999,999	5,262,000	0.00150000	7,893.00	2	2		
Totals:				5,412,000		8,419.50				

Rate: 137: Water - Commercial - 6" - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	130,000	130,000	130,000	0.00373830	485.98	1	0	1	2
2	130,001	999,999,999	999,999,999	3,045,000	0.00150000	4,567.50	1	1		
Totals:				3,175,000		5,053.48				

Rate: 138: Water-Commercial-1"OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	2,000	0.00202500	4.05	1	1	1	2
2	20,001	999,999,999	999,999,999	0	0.00150000	.00	0	0		
Totals:				2,000		4.05				

Rate: 139: Water - Residential 1.5"OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	35,000	35,000	175,000	0.00289280	506.24	5	0	5	5
2	35,001	999,999,999	999,999,999	2,040,000	0.00150000	3,060.00	5	5		
Totals:				2,215,000		3,566.24				

Rate: 200: Irrigation - 1.5

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,822,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,024,9	25,000	0	67.50000000	.00	0	0		
3	1,000,025,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			1,822,000		.00				

Rate: 201: X-tra Tap

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	4,572,000	0.00000000	.00	10	10	10	19
2	1,000,000,0	1,000,009,9	10,000	0	27.00000000	.00	0	0		
3	1,000,010,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			4,572,000		.00				

Rate: 202: Irrigation - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,620,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,044,9	45,000	0	121.50000000	.00	0	0		
3	1,000,045,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			1,620,000		.00				

Rate: 203: Irrigation - 2" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2,661,000	0.00000000	.00	3	3	3	5
2	1,000,000,0	1,000,044,9	45,000	0	182.25000000	.00	0	0		
3	1,000,045,0	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			2,661,000		.00				

Rate: 204: Irrigation - X-tap OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	597,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,009,9	10,000	0	40.50000000	.00	0	0		
3	1,000,010,0	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			597,000		.00				

Rate: 301: Sewer - Residential - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	62,592,500	0.00000000	.00	509	509	509	580
	Totals:			62,592,500		.00				

Rate: 302: Sewer - Residential - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,862,000	0.00000000	.00	24	24	24	55
	Totals:			1,862,000		.00				

Rate: 305: Sewer - Inactive

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,300,600	0.00000000	.00	41	41	41	77
	Totals:			1,300,600		.00				

Rate: 306: Sewer - Airport 2 services

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	1
Totals:				0		.00				

Rate: 311: Sewer - Residential - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	5,434,500	0.00000000	.00	58	58	58	154
Totals:				5,434,500		.00				

Rate: 312: Sewer - Res Non-Active - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	307,500	0.00000000	.00	4	4	4	4
Totals:				307,500		.00				

Rate: 313: Sewer - 1" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	0	0.00472500	.00	0	0	0	5
Totals:				0		.00				

Rate: 316: Sewer Comm 3/4" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	10,000	0.00472500	47.25	1	0	1	2
2	10,001	999,999,999	999,999,999	110,000	0.00288000	316.80	1	1		
Totals:				120,000		364.05				

Rate: 317: Sewer 2" Commercial OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	20,000	0.00472500	94.50	1	0	1	2
2	20,001	999,999,999	999,999,999	450,000	0.00288000	1,296.00	1	1		
Totals:				470,000		1,390.50				

Rate: 321: Sewer - Commercial - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	934,000	0.00315000	2,942.10	97	11	97	102
2	10,001	999,999,999	999,999,999	14,201,000	0.00192000	27,265.92	86	86		
Totals:				15,135,000		30,208.02				

Rate: 322: Sewer - Commercial - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	176,000	0.00315000	554.40	18	2	18	23
2	10,001	999,999,999	999,999,999	1,979,500	0.00192000	3,800.64	16	16		
Totals:				2,155,500		4,355.04				

Rate: 323: Sewer - Commercial - 1.5"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	15,000	15,000	225,000	0.00315000	708.75	15	0	15	14
2	15,001	999,999,999	999,999,999	4,299,000	0.00192000	8,254.08	15	15		
Totals:				4,524,000		8,962.83				

Rate: 324: Sewer - Commercial - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	440,000	0.00315000	1,386.00	22	0	22	21
2	20,001	999,999,999	999,999,999	8,156,500	0.00192000	15,660.48	22	22		
Totals:				8,596,500		17,046.48				

Rate: 325: Sewer - Commercial - 3"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	30,000	30,000	30,000	0.00315000	94.50	1	0	1	1
2	30,001	999,999,999	999,999,999	790,000	0.00192000	1,516.80	1	1		
Totals:				820,000		1,611.30				

Rate: 326: Sewer - Commercial - 4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	40,000	40,000	40,000	0.00315000	126.00	1	0	1	1
2	40,001	999,999,999	999,999,999	308,000	0.00192000	591.36	1	1		
Totals:				348,000		717.36				

Rate: 327: Sewer - Commercial - 6"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	60,000	60,000	120,000	0.00315000	378.00	2	0	2	2
2	60,001	999,999,999	999,999,999	16,200,000	0.00192000	31,104.00	2	2		
Totals:				16,320,000		31,482.00				

Rate: 328: Sewer - Commercial 3" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	30,000	30,000	144,000	0.00472500	680.40	5	1	5	5
2	30,001	999,999,999	999,999,999	3,209,045	0.00288000	9,242.05	4	4		
Totals:				3,353,045		9,922.45				

Rate: 331: Sewer-Commercial 6" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	60,000	60,000	180,000	0.00472500	850.50	3	0	3	2
2	60,001	999,999,999	999,999,999	2,373,760	0.00288000	6,836.43	3	3		
Totals:				2,553,760		7,686.93				

Rate: 501: RENT CITY HALL

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1	0.00000000	.00	1	1	1	1
Totals:				1		.00				

Rate: 601: RENT INDUSTRIAL BLDG

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2	0.00000000	.00	2	2	2	2
Totals:				2		.00				

Rate: 701: UTIL CITY HALL

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1	0.00000000	.00	1	1	1	2
Totals:				1		.00				

Rate: 801: UTIL INDUSTRIAL BLDG

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	3
Totals:				0		.00				

Rate: 1501: Reconnect

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	10
Totals:				0		.00				
Grand Totals:				316,677,576		313,832.31				

Report Criteria:
Usage from Quantity

Report Criteria:
Usage from Quantity

Rate: 1: Special Consideration

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	3
Totals:				0		.00				

Rate: 100: disconnected water-no charge

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	137,000	0.00000000	.00	2	2	2	8
Totals:				137,000		.00				

Rate: 101: Water - Residential - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	9,728,664	0.00135000	13,133.70	533	78	533	563
2	20,001	999,999,999	999,999,999	87,416,392	0.00100000	87,416.39	455	455		
Totals:				97,145,056		100,550.09				

Rate: 102: Water - Residential - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	823,014	0.00135000	1,111.07	49	16	49	56
2	20,001	999,999,999	999,999,999	4,906,000	0.00100000	4,906.00	33	33		
Totals:				5,729,014		6,017.07				

Rate: 105: Water - Inactive

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,269,000	0.00000000	.00	28	28	28	60
Totals:				1,269,000		.00				

Rate: 106: Water Airport-2 services

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	69,000	0.00000000	.00	1	1	1	1
Totals:				69,000		.00				

Rate: 111: Water - Residential - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	1,658,195	0.00202500	3,357.84	103	32	103	104
2	20,001	999,999,999	999,999,999	13,852,000	0.00150000	20,778.00	71	71		
Totals:				15,510,195		24,135.84				

Rate: 112: Water - INACTIVE - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,133,000	0.00000000	.00	9	9	9	11
Totals:				1,133,000		.00				

Rate: 121: Water - Commercial - 3/4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	1,758,010	0.00135000	2,373.31	99	21	99	106
2	20,001	999,999,999	999,999,999	20,773,004	0.00100000	20,773.00	78	78		
Totals:				22,531,014		23,146.32				

Rate: 122: Water - Commercial - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	348,000	0.00135000	469.80	19	4	19	22
2	20,001	999,999,999	999,999,999	4,380,000	0.00100000	4,380.00	15	15		
Totals:				4,728,000		4,849.80				

Rate: 123: Water - Commercial - 1.5"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	35,000	35,000	560,000	0.00192850	1,079.96	16	0	16	16
2	35,001	999,999,999	999,999,999	8,362,000	0.00100000	8,362.00	16	16		
Totals:				8,922,000		9,441.96				

Rate: 124: Water - Commercial - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	55,000	55,000	906,000	0.00220900	2,001.35	18	2	18	22
2	55,001	999,999,999	999,999,999	8,956,000	0.00100000	8,956.00	16	16		
Totals:				9,862,000		10,957.35				

Rate: 125: Water - Commercial - 3"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	75,000	75,000	75,000	0.00234000	175.50	1	0	1	1
2	75,001	999,999,999	999,999,999	6,857,000	0.00100000	6,857.00	1	1		
Totals:				6,932,000		7,032.50				

Rate: 126: Water - Commercial - 4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	90,000	90,000	180,000	0.00239989	431.98	2	0	2	2
2	90,001	999,999,999	999,999,999	1,437,000	0.00100000	1,437.00	2	2		
Totals:				1,617,000		1,868.98				

Rate: 127: Water - Commercial - 6"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	130,000	130,000	260,000	0.00249220	647.97	2	0	2	2
2	130,001	999,999,999	999,999,999	16,124,000	0.00100000	16,124.00	2	2		
Totals:				16,384,000		16,771.97				

Rate: 133: Water - COMMERCIAL - 2" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	55,000	55,000	110,000	0.00331360	364.50	2	0	2	2
2	55,001	999,999,999	999,999,999	5,064,000	0.00150000	7,596.00	2	2		
Totals:				5,174,000		7,960.50				

Rate: 135: Water-Commercial-3"-OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	75,000	75,000	75,000	0.00351000	263.25	1	0	1	2
2	75,001	999,999,999	999,999,999	1,520,000	0.00150000	2,280.00	1	1		
	Totals:			1,595,000		2,543.25				

Rate: 137: Water - Commercial - 6" - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	130,000	130,000	130,000	0.00373830	485.98	1	0	1	2
2	130,001	999,999,999	999,999,999	4,000,000	0.00150000	6,000.00	1	1		
	Totals:			4,130,000		6,485.98				

Rate: 138: Water-Commercial-1"OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	3,000	0.00202500	6.08	2	2	2	3
2	20,001	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			3,000		6.08				

Rate: 139: Water - Residential 1.5"OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	35,000	35,000	140,000	0.00289280	404.99	4	0	4	4
2	35,001	999,999,999	999,999,999	1,956,000	0.00150000	2,934.00	4	4		
	Totals:			2,096,000		3,338.99				

Rate: 200: Irrigation - 1.5

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2,469,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,024,9	25,000	0	67.50000000	.00	0	0		
3	1,000,025,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			2,469,000		.00				

Rate: 201: X-tra Tap

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	5,604,000	0.00000000	.00	10	10	10	20
2	1,000,000,0	1,000,009,9	10,000	0	27.00000000	.00	0	0		
3	1,000,010,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			5,604,000		.00				

Rate: 202: Irrigation - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2,217,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,044,9	45,000	0	121.50000000	.00	0	0		
3	1,000,045,0	999,999,999	999,999,999	0	0.00100000	.00	0	0		
	Totals:			2,217,000		.00				

Rate: 203: Irrigation - 2" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	5,271,000	0.00000000	.00	4	4	4	7
2	1,000,000,0	1,000,044,9	45,000	0	182.25000000	.00	0	0		
3	1,000,045,0	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			5,271,000		.00				

Rate: 204: Irrigation - X-tap OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	904,000	0.00000000	.00	2	2	2	2
2	1,000,000,0	1,000,009,9	10,000	0	40.50000000	.00	0	0		
3	1,000,010,0	999,999,999	999,999,999	0	0.00150000	.00	0	0		
	Totals:			904,000		.00				

Rate: 301: Sewer - Residential - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	59,990,600	0.00000000	.00	466	466	466	555
	Totals:			59,990,600		.00				

Rate: 302: Sewer - Residential - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1,878,000	0.00000000	.00	21	21	21	53
	Totals:			1,878,000		.00				

Rate: 305: Sewer - Inactive

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2,814,500	0.00000000	.00	44	44	44	70
	Totals:			2,814,500		.00				

Rate: 306: Sewer - Airport 2 services

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	1
Totals:				0		.00				

Rate: 311: Sewer - Residential - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	5,346,000	0.00000000	.00	61	61	61	165
Totals:				5,346,000		.00				

Rate: 312: Sewer - Res Non-Active - OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	132,000	0.00000000	.00	2	2	2	3
Totals:				132,000		.00				

Rate: 313: Sewer - 1" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	0	0.00472500	.00	0	0	0	5
Totals:				0		.00				

Rate: 316: Sewer Comm 3/4" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	10,000	0.00472500	47.25	1	0	1	2
2	10,001	999,999,999	999,999,999	110,000	0.00288000	316.80	1	1		
Totals:				120,000		364.05				

Rate: 317: Sewer 2" Commercial OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	20,000	0.00472500	94.50	1	0	1	2
2	20,001	999,999,999	999,999,999	442,000	0.00288000	1,272.96	1	1		
Totals:				462,000		1,367.46				

Rate: 321: Sewer - Commercial - .75"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	884,000	0.00315000	2,784.60	91	7	91	103
2	10,001	999,999,999	999,999,999	12,922,500	0.00192000	24,811.20	84	84		
Totals:				13,806,500		27,595.80				

Rate: 322: Sewer - Commercial - 1"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	10,000	10,000	160,000	0.00315000	504.00	16	0	16	22
2	10,001	999,999,999	999,999,999	1,941,500	0.00192000	3,727.68	16	16		
Totals:				2,101,500		4,231.68				

Rate: 323: Sewer - Commercial - 1.5"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	15,000	15,000	225,000	0.00315000	708.75	15	0	15	14
2	15,001	999,999,999	999,999,999	4,139,000	0.00192000	7,946.88	15	15		
Totals:				4,364,000		8,655.63				

Rate: 324: Sewer - Commercial - 2"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	20,000	20,000	386,000	0.00315000	1,215.90	20	1	20	23
2	20,001	999,999,999	999,999,999	6,598,000	0.00192000	12,668.16	19	19		
Totals:				6,984,000		13,884.06				

Rate: 325: Sewer - Commercial - 3"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	30,000	30,000	30,000	0.00315000	94.50	1	0	1	1
2	30,001	999,999,999	999,999,999	750,000	0.00192000	1,440.00	1	1		
Totals:				780,000		1,534.50				

Rate: 326: Sewer - Commercial - 4"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	40,000	40,000	40,000	0.00315000	126.00	1	0	1	1
2	40,001	999,999,999	999,999,999	308,000	0.00192000	591.36	1	1		
Totals:				348,000		717.36				

Rate: 327: Sewer - Commercial - 6"

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	60,000	60,000	120,000	0.00315000	378.00	2	0	2	2
2	60,001	999,999,999	999,999,999	14,994,000	0.00192000	28,788.48	2	2		
Totals:				15,114,000		29,166.48				

Rate: 328: Sewer - Commercial 3" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	30,000	30,000	114,000	0.00472500	538.65	4	1	4	5
2	30,001	999,999,999	999,999,999	3,084,000	0.00288000	8,881.92	3	3		
Totals:				3,198,000		9,420.57				

Rate: 331: Sewer-Commercial 6" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	60,000	60,000	120,000	0.00472500	567.00	2	0	2	2
2	60,001	999,999,999	999,999,999	1,898,760	0.00288000	5,468.43	2	2		
Totals:				2,018,760		6,035.43				

Rate: 339: Sewer - Residential - 1.5" OC

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	15,000	15,000	0	0.00472500	.00	0	0	0	8
2	15,001	999,999,999	999,999,999	0	0.00288000	.00	0	0		
Totals:				0		.00				

Rate: 501: RENT CITY HALL

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	1	0.00000000	.00	1	1	1	1
Totals:				1		.00				

Rate: 601: RENT INDUSTRIAL BLDG

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2	0.00000000	.00	2	2	2	5
Totals:				2		.00				

Rate: 701: UTIL CITY HALL

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	6	0.00000000	.00	2	2	2	2
Totals:				6		.00				

Rate: 801: UTIL INDUSTRIAL BLDG

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	2	0.00000000	.00	2	2	2	5
Totals:				2		.00				

Rate: 1501: Reconnect

Level	From	To	Quantity	Consumption per Level	Rate	Calculated Amount	Customers within this Level	Customers Ending within this Level	Total Customers with Usage	Active Customers using Rate
1	1	999,999,999	999,999,999	0	0.00000000	.00	0	0	0	10
Totals:				0		.00				

Grand Totals:	340,889,150	328,079.70

Report Criteria:
Usage from Quantity

Water Flows 2009

Month	January	February	March	April	May	June	July	August	September	October	November	December
Well 1 Tank	2723700	2697600	0	0	0	0	3842500	2830600	886200	100	0	0
Well 2 Dalley	0	0	0	0	0	0	0	0	0	0	0	0
Well 3 Lions	7193000	11472000	3534000	1114000	0	2432000	1117000	1473000	2279000	644000	1513000	1890000
Well 4 High School	425000	3835700	3878000	4424000	11235000	24396000	36054000	31543000	27064000	3645000	2527000	7525000
Well 5 Valley Center	3959900	5783800	5249000	5876000	8346700	8346700	11272300	215000	1900	0	1700	12600
Well 6 Teton Creek	0	0	0	0	0	0	0	0	934911	0	35540	0
Spring Total	30700000	32300000	30600000	54000000	77000000	79900000	91300000	660500000	49200000	47400000	36900000	46817600
Spring in Line				12857000	11893000	14893000	20776000	19251000	23726000	23978000	24671000	43900000
Well Totals	14301600	23789100	12661000	11414000	19581700	35174700	52285800	36061600	31166011	4289100	4077240	9427600
Month Totals	**14301600**	**23789100**	**12661000**	**24271000**	**31474700**	**50067700**	**73061800**	**55312600**	**54892011**	**28267100**	**28748240**	**53327600**

Year Total	**450174451**
WELL YEAR TOTAL	**254229451**

	Total for 2009
Well 1 Tank	12980700
Well 2 Dalley	0
Well 3 Lions	34661000
Well 4 High School	156551700
Well 5 Valley Center	49065600
Well 6 Teton Creek	970451

Note: **Spring Total:** refers to the total produced by the Spring
Spring in Line: refers to total into culinary system.

	Type error added a 9, I corrected

Water Flows 2010

Month	January	February	March	April	May	June	July	August	September	October	November	December
Well 1 Tank	0	0	0	0	0	0	1502100	2430800	0	0	1200	400
Well 2 Dalley	0	0	0	0	0	0	0	0	0	0	0	0
Well 3 Lions	1560000	1797000	1902000	2007000	1848000	2081000	2632000	1850000	2306000	2548000	0	5666000
Well 4 High School	6626000	6865000	7371000	4641000	5584000	12113000	36995000	28221000	13472000	7877000	502000	2495000
Well 5 Valley Center	0	0	1500	2200	1500	0	8100	151200	2096600	438700	1300	0
Well 6 Teton Creek	0	0	0	0	0	185000	0	0	520932	920994	689478	0
Spring Total	51455000	50811000	36000000	51200000	53800000	86900000	75000000	61300000	47800000	48300000	41100000	40100000
Spring in Line	33100000	33600000		23994000		73800000	12860000	24160000	28684000	0	19650000	0
Well Totals	8186000	8662000	9274500	6650200	7433500	14379000	41137200	32653000	18395532	11784694	1193978	8161400
Month Totals	**41286000**	**42262000**	**9274500**	**30644200**	**7433500**	**88179000**	**53997200**	**56813000**	**47079532**	**11784694**	**20843978**	**8161400**

Year Total	**417759004**
WELL YEAR TOTAL	**167911004**

	Total for 2010
Well 1 Tank	3934500
Well 2 Dalley	0
Well 3 Lions	26197000
Well 4 High School	132762000
Well 5 Valley Center	2701100
Well 6 Teton Creek	2316404

Note: **Spring Total:** refers to the total produced by the Spring
Spring in Line: refers to total into culinary system.

	Blank meter was not reading

Water Flows 2011

Month	January	February	March	April	May	June	July	August	September	October	November	December
Well 1 Tank	0	0	17642000	2000	15702000	19690000	754000	1070000	19028000	14843000	14088000	6000
Well 2 Dalley	0	3003000	2999000	0	3000	8000	0	0	953000	0	0	0
Well 3 Lions	2580000	0	19800	2997000	0	0	10305000	8598000	200	0	3070000	3388000
Well 4 High School	5343000	2614000	2945000	423000	2981000	3045000	26741000	19559000	3088000	2888000	845000	175000
Well 5 Valley Center	34400	335900	9767500	700	429000	12346000	13200	2319000	25291000	2644000	0	0
Well 6 Teton Creek	0	228986	2100	10813	2500	333300	548411	0	125000	0	405882	0
Spring Total	33500000	32300000	35000000	46400000	40120000	21340000	176830000	99250000	48500000	78490000	42700000	71302000
Spring in Line	5805000	0	0	22553000	35350000	9354000	87100000	69800000	22006000	43100000	23094000	31700000
Well Totals	7957400	6181886	33375400	3433513	19117500	35422300	38361611	31546000	48485200	20375000	18408882	3569000
Month Totals	13762400	6181886	33375400	25986513	54467500	44776300	125461611	101346000	70491200	63475000	41502882	35269000

Year Total	616095692
WELL YEAR TOTAL	266233692

	Total for 2011
Well 1 Tank	102825000
Well 2 Dalley	6966000
Well 3 Lions	30958000
Well 4 High School	70647000
Well 5 Valley Center	53180700
Well 6 Teton Creek	1656992

Note: **Spring Total:** refers to the total produced by the Spring
Spring in Line: refers to total into culinary system.

	Type error missed a 3 I corrected

Water Flows 2012

Month	January	February	March	April	May	June	July	August	September	October	November	December
Well 1 Tank	14000	3000	0	0	9244000	3334000	4000	192000	2342000	56000	0	0
Well 2 Dalley	0	0	0	0	0	0	0	3300	0	0	0	4800
Well 3 Lions	5908000	3694000	3290000	3131000	3809000	3662000	38420000	4521000	4254000	4646000	4838000	4619000
Well 4 High School	2411000	1079000	753000	756000	9233000	17970000	10395000	24290000	23477000	14268000	16190000	16204000
Well 5 Valley Center	0	0	0	0	0	714600	27084900	27296300	9614000	0	0	0
Well 6 Teton Creek	0	0	1602160	0	0	0	43864	158836	0	0	0	0
Well 7 Huntsman	0	0	0	0	0	0		0	0	0	500	0
Spring Total	50692000	34900000	38400000	49500000	62700000	74800000	61200000	55600000	40400000	46400000	46400000	421900000
Spring in Line	35100000	32183000	11244000	24500000	31808000	54420000	33197000	26114000	6494000	2855000	4892000	3698000
Well Totals	8333000	4776000	5645160	3887000	22286000	25680600	75947764	56461436	39687000	18970000	21028500	20827800
Month Totals	**43433000**	**36959000**	**16889160**	**28387000**	**54094000**	**80100600**	**109144764**	**82575436**	**46181000**	**21825000**	**25920000**	**24525800**

Year Total	**570034760**
WELL YEAR TOTAL	**303530260**

	Total for 2012
Well 1 Tank	15189000
Well 2 Dalley	8100
Well 3 Lions	84792000
Well 4 High School	137026000
Well 5 Valley Center	64709800
Well 6 Teton Creek	1804860

Note: **Spring Total:** refers to the total produced by the Spring
Spring in Line: refers to total into culinary system.

Water Flows 2013

Month	January	February	March	April	May	June	July	August	September	October	November	December
Well 1 Tank	3,228,000.00	0.00	9,085,000.00	4,044,000.00	5,851,000	13,862,000						
Well 2 Dalley	0.00	0.00	0.00	0.00	0	0						
Well 3 Lions	5,138,000.00	4,663,000.00	5,981,000.00	4,922,000.00	5,410,000	6,352,000						
Well 4 High School	12,494,000.00	3,389,000.00	1,159,000.00	0.00	885,000	3,706,000						
Well 5 Valley Center	0.00	1,377,500.00	10,000.00	0.00	0	0						
Well 6 Teton Creek	0.00	0.00	423,000.00	146,869.00	56,902	3,301						
Well 7 Huntsman	0.00	530.00	6,710,000.00	8,928,000.00	10,757,000	11,108,000						
Spring Total	76,000,000.00	31,200,000.00	15,753,000.00	21,786,000.00	28,413,000	30,855,000						
Spring in Line	1,642,000.00	7,945,000.00	7,325,000.00	10,090,000.00	22,330,000	13,709,000						
Well Totals	**20,860,000**	**9,429,500**	**16,658,000**	**18,040,869**	**22,959,902**	**35,031,301**	-	-	-	-	-	-
System Usage Totals	**22,502,000**	**17,374,500**	**23,983,000**	**28,130,869**	**45,289,902**	**48,740,301**	-	-				
System Total	**186,020,572**											
Well Total	**122,979,572**											

Well Production	Total for 2013	Ytd.Power Cost	Power Cost/th.gal
Well 1 Tank	36,070,000	1,990.82	$ 0.06
Well 2 Dalley	0	920.50	$ -
Well 3 Lions	32,466,000	416.65	$ 0.01
Well 4 High School	21,633,000	4,826.59	$ 0.22
Well 5 Valley Center	1,387,500	2,252.15	$ 1.62
Well 6 Teton Creek	630,072	1,017.44	$ 1.61
Well 7 Huntsman	37,503,530	11,424.15	$ 0.30

Note: **Spring Total:** refers to the total produced by the Spring
Spring in Line: refers to total into culinary system.

Power Cost	January	February	March	April	May	June	July	August	September	October	November	December	ytd. Power Cost
Well 1 Tank	38.20	307.47	193.36	688.72	305.31	457.76							1,990.82
Well 2 Dalley	271.28	268.56	267.21	37.80	37.80	37.85							920.50
Well 3 Lions	39.48	89.18	39.05	169.98	39.41	39.55							416.65
Well 4 High School	1,582.13	1,354.23	705.06	556.35	62.70	566.12							4,826.59
Well 5 Valley Center	95.30	531.40	1,373.90	93.30	89.10	69.15							2,252.15
Well 6 Teton Creek	79.75	85.60	144.93	445.08	127.25	134.83							1,017.44
Well 7 Huntsman Springs													
Total	2,106.14	2,636.44	2,723.51	1,991.23	661.57	1,305.26	0.00	0.00	0.00	0.00	0.00	0.00	11,424.15
Power Cost per 1000 gallons	$ 0.10	$ 0.28	$ 0.16	$ 0.11	$ 0.03	$ 0.04							

Metered Usage (mg/mo)	January	February	March	April	May	June	July	August	September	October	November	December	ytd. usage
Residential	2.49	1.85	1.60	16.98	10.11	22.85							55.88
Commercial	2.53	1.88	1.80	10.56	11.21	9.58							37.56
Irrigation	0.00	0.00	0.00	0.00	0.00	0.00							0.00
Total	5.02	3.73	3.40	27.54	21.32	32.43	0.00	0.00	0.00	0.00	0.00	0.00	93.44
Production	22.50	17.37	23.98	28.13	45.29	48.74							
Discrepancy (prod-metered)			(April = winter average)	13.08	23.97	16.31							
			percentage	57%	53%	33%							

APPENDIX D

Cost Estimates

Aqua Engineering
533 West 2600 South, Ste. 275
Bountiful, Utah 84010

Memo

To: Jared Gunderson

From: Scott Rogers

CC: City Staff

Date: October 8, 2010

Re: Water System Telemetry/SCADA Upgrade

The following is a list of the items that are included in the water system upgrades.

Item	Cost
Spring Flow Meter	**$7,000**
Spring – RTU Build up / Programming, Installation, HMI Programming, Intrusion Alarm.	**$16,000**
Million Gallon Tank – New Level Meter Installed	**$1,500**
Million Gallon Tank – RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$16,000**
Teton Creek Well– New Flow Meter Installed	**$7,000**
Teton Creek Well – RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$16,000**
Tank Well, 300,000 gallon tank, and PRV Station – RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$18,000**
300,000 gallon Tank, Tank Well Pressure and Level Meters Installed, Building, Chlorination	**$32,000**
High School Well - RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$16,000**

High School Well - Pressure and Level Meters Installed	**$5,000**
Dalley Well – RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$16,000**
Dalley Well – Pressure and Level Meters Installed, Building, Chlorination	**$30,000**
Lion's Well – RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$16,000**
Lion's Well – Pressure and Level Meters Installed, Building, Chlorination	**$30,000**
Valley Center Well – RTU Build up / Programming, Installation, HMI Programming, intrusion alarms.	**$16,000**
Valley Center Well – Pressure and Flow Meters Installed, Building, Chlorination	**$32,000**
PRV Station at 100 North – Pressure Transmitters	**$2,000**
PRV Station at 100 North – RTU Build up / Programming, Installation, HMI Programming.	**$14,000**
PRV Station at Redtail – Pressure Transmitters	**$2,000**
PRV Station at Redtail – RTU Build up / Programming, Installation, HMI Programming.	**$14,000**
~~**Falcon Way PRV – RTU Build up / Programming, Installation, HMI Programming.**~~	~~**$14,000**~~
~~**Falcon Station at Redtail – Pressure Transmitters**~~	~~**$2,000**~~
Repeater Stations - 2	**$15,000**
Engineering Design, Bidding, Specification, Procurement	**$20,000**
Total	**$341,500**

CLIENT: City of Driggs
PROJECT: 1 MG Tank Altitude Valve Replacement Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	* Furnish and Install Solenoid Hydraulic Control Valve and Bypass Piping Replacing Existing Altitude Control Valve including Mobilization, Site Work, Flush and Pressure Test, Fittings, Piping, Gate Valves, Electrical, Controls, and Appurtenances	LS	1	$ 74,250.00	$ 74,250.00
				Construction Subtotal	**$ 74,250.00**
				Engineering and Construction Management	$ 6,000.00
				Electrical/ Control Design, Programming, Startup, and Construction Management	$ 7,500.00
				Electrical/ Control Equipment Purchase	$ 17,000.00
				PROJECT TOTAL	**$ 104,750.00**

* This cost is based on actual bid price for project.

CLIENT: City of Driggs
PROJECT: 5th Street Water Loop Pipeline Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 26-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 15,000.00	$ 15,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	700	$ 2.50	$ 1,750.00
3	Furnish and Install 12-inch DIP Water Main	LF	2,700	$ 60.00	$ 162,000.00
4	Connect to 12-inch Water Main in Street	EA	2	$ 3,500.00	$ 7,000.00
5	Furnish and Install 12-inch FL Tee and 3 - 12-inch FL x MJ Gate Valves at intersections	EA	2	$ 4,250.00	$ 8,500.00
6	Furnish and Install 12-inch Isolation Gate Valve	EA	1	$ 1,200.00	$ 1,200.00
7	Pavement Restoration	SF	2,680	$ 3.00	$ 8,040.00
8	Revegetation	LS	1	$ 5,000.00	$ 5,000.00
9	Flush & Pressure Test	LS	1	$ 5,000.00	$ 5,000.00
10	Traffic Control	LS	1	$ 2,500.00	$ 2,500.00
				Construction Subtotal	**$ 215,990.00**
				Construction Contingency (15%)	$ 32,398.50
				Engineering and Construction Management (10%)	$ 21,599.00
				PROJECT TOTAL	**$ 269,987.50**

CLIENT: City of Driggs
PROJECT: 0.3 MG Tank Altitude Valve and Orifice Replacement Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	* Furnish and Install Solenoid Hydraulic Control Valve and Bypass Piping Replacing Existing Altitude Control Valve and Orifice including Mobilization, Site Work, Flush and Pressure Test, Fittings, Piping, Gate Valves, Electrical, Controls, and Appurtenances	LS	1	$ 74,250.00	$ 74,250.00
				Construction Subtotal	**$ 74,250.00**
				Engineering and Construction Management	$ 6,000.00
				Electrical/ Control Design, Programming, Startup, and Construction Management	$ 7,500.00
				Electrical/ Control Equipment Purchase	$ 17,000.00
				PROJECT TOTAL	**$ 104,750.00**

* This cost is based on actual bid price for the 1 MG Tank Altitude Valve Replacement project. This cost is based on powering the control valve with solar power.

CLIENT: City of Driggs
PROJECT: 0.3 MG Tank Security Fence Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 27-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 1,500.00	$ 1,500.00
2	Furnish and Install 6 foot high chainlink security fence	LF	1,032	$ 25.00	$ 25,800.00
3	Furnish and Install 14 foot wide access gate	LS	1	$ 2,000.00	$ 2,000.00
				Construction Subtotal	**$ 29,300.00**
				Construction Contingency (15%)	$ 4,395.00
				Engineering and Construction Management (10%)	$ 2,930.00
				PROJECT TOTAL	**$ 36,625.00**

CLIENT: City of Driggs
PROJECT: 12-inch Transmission Water Pipeline Replacement Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 9-May-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 25,000.00	$ 25,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	1,000	$ 2.50	$ 2,500.00
3	Furnish and Install 12-inch HDPE Water Main	LF	9,132	$ 45.00	$ 410,940.00
4	Provide new Piping and connections from Tank to PRV	LS	1	$ 15,000.00	$ 15,000.00
5	Furnish and Install 12-inch FL Tee and 3 - 12-inch FL x MJ Gate Valves at intersections	EA	3	$ 4,250.00	$ 12,750.00
6	Furnish and Install 12-inch Isolation Gate Valve	EA	2	$ 1,200.00	$ 2,400.00
8	Pavement Restoration	SF	4,000	$ 3.00	$ 12,000.00
9	Revegetation	LS	1	$ 5,000.00	$ 5,000.00
10	Flush & Pressure Test	LS	1	$ 10,000.00	$ 10,000.00
11	Traffic Control	LS	1	$ 2,500.00	$ 2,500.00
				Construction Subtotal	**$ 498,090.00**
				Construction Contingency (15%)	$ 74,713.50
				Engineering and Construction Management (10%)	$ 49,809.00
				PROJECT TOTAL	**$ 622,612.50**

CLIENT: City of Driggs

PROJECT: Replace Existing 6-inch with 8-inch (9,876 LF over 20 years) Project

WORKSHT: Engineers Opinion of Probable Cost

DATE: 28-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 50,000.00	$ 50,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	9,876	$ 2.50	$ 24,690.00
3	Locate and Abandon Existing Water Lines	LS	1	$ 10,000.00	$ 10,000.00
4	Furnish and Install 8-inch DIP Water Main	LF	9,876	$ 45.00	$ 444,420.00
5	Connect to Water Main in Street	EA	40	$ 3,000.00	$ 120,000.00
6	Furnish and Install 8-inch FL Tee and 3- 8-inch FL x MJ Gate Valves at Intersection with Reducers as Required	EA	20	$ 4,000.00	$ 80,000.00
7	Furnish and Install Water Services using Standard Trenching Methods	EA	159	$ 1,500.00	$ 238,500.00
8	Pavement Restoration	SF	39,504	$ 3.00	$ 118,512.00
9	Flush & Pressure Test	LS	1	$ 10,000.00	$ 10,000.00
10	Traffic Control	LS	1	$ 20,000.00	$ 20,000.00
				Construction Subtotal	**$ 1,116,122.00**
				Construction Contingency (15%)	$ 167,418.30
				Engineering and Construction Management (10%)	$ 111,612.20
				PROJECT TOTAL	**$ 1,395,152.50**

CLIENT: City of Driggs
PROJECT: Tank Well Pump House and Chlorine Treatment Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 7,000.00	$ 7,000.00
2	Site Work including Finish Grading and Modification of Existing Site Piping	LS	1	$ 10,000.00	$ 10,000.00
3	Pump House Structure (226 SF)	LS	1	$ 50,000.00	$ 50,000.00
4	Pump House Piping, Mechanical, and HVAC Pump House Piping, Mechanical, and HVAC including New Meter,Hydraulic Pump Control Vavle, and Re-route of Well Piping	LS	1	$ 60,000.00	$ 60,000.00
5	Furnish and Install Chlorine Treatment Equipment*	LS	1	$ -	$ -
6	Pump House Electrical and SCADA	LS	1	$ 50,000.00	$ 50,000.00
7	Re-equip well with larger pump	LS	1	$ 55,000.00	$ 55,000.00
8	Brush, Bail, and Video Well	LS	1	$ 10,000.00	$ 10,000.00
9	Manual Transfer Switch	LS	1	$ 4,000.00	$ 4,000.00
				Construction Subtotal	**$ 246,000.00**
				Construction Contingency (15%)	$ 36,900.00
				Engineering and Construction Management (10%)	$ 24,600.00
				PROJECT TOTAL	**$ 307,500.00**

* Chlorine equipment costs are included in the Water System Telemetry/ SCADA Upgrades cost estimate.

CLIENT: City of Driggs
PROJECT: 1 MG Tank Overflow Line Meter Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 27-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 1,000.00	$ 1,000.00
2	Furnish and Install Insertion Type Paddlewheel Meter into Existing Overflow Line including 4-foot Dia. Doghouse Manhole	LS	1	$ 5,500.00	$ 5,500.00
3	Furnish and Install Electrical Controls, Electrical Panel, Electrical Service and SCADA	LS	1	$ 5,000.00	$ 5,000.00
				Construction Subtotal	**$ 11,500.00**
				Construction Contingency (15%)	$ 1,725.00
				Engineering and Construction Management (10%)	$ 1,150.00
				PROJECT TOTAL	**$ 14,375.00**

CLIENT: City of Driggs
PROJECT: Depot Street Alley 2-inch Waterline Replacment Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 28-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 2,500.00	$ 2,500.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	350	$ 2.50	$ 875.00
3	Locate and Abandon Existing 2-inch Water Lines	LS	1	$ 1,000.00	$ 1,000.00
4	Furnish and Install 8-inch DIP Water Main	LF	350	$ 45.00	$ 15,750.00
5	Connect to 8-inch Water Main in Street	EA	2	$ 3,000.00	$ 6,000.00
6	Furnish and Install 6-inch FL x 8-inch FL Tee and 2 - 8-inch FL x MJ and 1 - 6-inch FL x MJ Gate Valves at intersection	EA	1	$ 3,750.00	$ 3,750.00
7	Furnish and Install 8-inch FL Tee and 3- 8-inch FL x MJ Gate Valves at intersection	EA	1	$ 4,000.00	$ 4,000.00
8	Furnish and Install Water Services using Standard Trenching Methods	EA	3	$ 1,500.00	$ 4,500.00
9	Pavement Restoration	SF	1,600	$ 3.00	$ 4,800.00
10	Flush & Pressure Test	LS	1	$ 1,500.00	$ 1,500.00
11	Traffic Control	LS	1	$ 500.00	$ 500.00
				Construction Subtotal	**$ 45,175.00**
				Construction Contingency (15%)	$ 6,776.25
				Engineering and Construction Management (10%)	$ 4,517.50
				PROJECT TOTAL	**$ 56,468.75**

CLIENT: City of Driggs
PROJECT: Teton Creek Resort Booster Pump Station and Waterline Loop Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 9,000.00	$ 9,000.00
2	Booster Pump Station including Pumps, Valves, Piping, Fittings, Vault Structure, and Appurtenances	LS	1	$ 50,000.00	$ 50,000.00
3	Furnish and Install 12-inch Waterline	LF	700	$ 45.00	$ 31,500.00
4	Furnish and Install 12-inch FL x 12-inch FL Tee, 3 - 12-inch FL x MJ Gate Valves	EA	2	$ 5,000.00	$ 10,000.00
5	Site Work	LS	1	$ 7,500.00	$ 7,500.00
6	Connection to existing water lines	EA	2	$ 4,000.00	$ 8,000.00
7	Pipe Testing and Disinfection	LS	1	$ 2,000.00	$ 2,000.00
8	Electrical and SCADA/ Telemetry	LF	1	$ 30,000.00	$ 30,000.00
9	Connect Existing Fire Hydrant Assemblies to New 12-inch Waterline	EA	4	$ 6,500.00	$ 26,000.00
				Construction Subtotal	**$ 174,000.00**
				Construction Contingency (15%)	$ 26,100.00
				Engineering and Construction Management (12%)	$ 20,880.00
				PROJECT TOTAL	**$ 220,980.00**

CLIENT: City of Driggs
PROJECT: 3rd Street and 4th Street 2-inch Waterline Replacment Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 26-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 5,000.00	$ 5,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	1,040	$ 2.50	$ 2,600.00
3	Locate and Abandon Existing 2-inch Water Lines	LS	2	$ 1,000.00	$ 2,000.00
4	Furnish and Install 8-inch DIP Water Main	LF	1,040	$ 45.00	$ 46,800.00
5	Connect to 8-inch Water Main in Street	EA	2	$ 3,000.00	$ 6,000.00
6	Furnish and Install 6-inch FL x 8-inch FL Tee and 1 - 8-inch FL x MJ and 2-6-inch FL x MJ Gate Valves at intersection	EA	1	$ 3,750.00	$ 3,750.00
7	Furnish and Install 8-inch FL Tee and 3- 8-inch FL x MJ Gate Valves at intersection with 8-inch MJ x 12-inch MJ Reducer	EA	1	$ 4,250.00	$ 4,250.00
8	Furnish and Install 8-inch FL x 6-inch FL Cross and 2 - 8-inch FL x MJ and 2 - 6-inch FL x MJ Gate Valves at intersection	EA	1	$ 4,500.00	$ 4,500.00
9	Furnish and Install Water Services using Standard Trenching Methods	EA	11	$ 1,500.00	$ 16,500.00
10	Pavement Restoration	SF	5,000	$ 3.00	$ 15,000.00
11	Flush & Pressure Test	LS	1	$ 2,500.00	$ 2,500.00
12	Traffic Control	LS	1	$ 1,500.00	$ 1,500.00
				Construction Subtotal	**$ 110,400.00**
				Construction Contingency (15%)	$ 16,560.00
				Engineering and Construction Management (10%)	$ 11,040.00
				PROJECT TOTAL	**$ 138,000.00**

CLIENT: City of Driggs
PROJECT: 1.5 MG Water Tank Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 62,500.00	$ 62,500.00
2	Piping, fittings, valves, and appurtenances to conect 1.5 MG Tank to 0.3 MG Tank	LS	1	$ 30,000.00	$ 30,000.00
3	Site Clearing and Grubbing Including Installation of Erosion and Sediment Control Measures	LS	1	$ 3,500.00	$ 3,500.00
4	Earthwork/ Fine Grading	CY	4,000	$ 7.00	$ 28,000.00
5	Connect 12" Tanks Supply Line to 12" Water Main Line	LS	1	$ 3,500.00	$ 3,500.00
6	Construct 1.5 MG Buried Tank including Tank Piping, Vents, Access Hatch, Etc.	LS	1	$ 1,125,000.00	$ 1,125,000.00
7	Revegetation	LS	1	$ 2,000.00	$ 2,000.00
8	Disinfection and Testing	LS	1	$ 4,000.00	$ 4,000.00
9	Electrical and SCADA	LS	1	$ 30,000.00	$ 30,000.00
				Construction Subtotal	**$ 1,288,500.00**
				Construction Contingency (15%)	$ 193,275.00
				Engineering and Construction Management (10%)	$ 128,850.00
				PROJECT TOTAL	**$ 1,610,625.00**

CLIENT: City of Driggs
PROJECT: High School Well Generator Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 7,000.00	$ 7,000.00
2	Site Work including Finish Grading	LS	1	$ 15,000.00	$ 15,000.00
3	Generator Building Structure (270 SF)	LS	1	$ 50,000.00	$ 50,000.00
4	Generator Building Electrical and SCADA	LS	1	$ 15,000.00	$ 15,000.00
5	Furnish and Install Diesel Powered Emergency Generator	LS	1	$ 50,000.00	$ 50,000.00
6	Furnish and Install 24-Hour Dual Walled Diesel Fuel Tank	LS	1	$ 5,000.00	$ 5,000.00
7	Furnish and Install Battery Charger (Starter)	LS	1	$ 600.00	$ 600.00
8	Pressure Switch	LS	1	$ 2,000.00	$ 2,000.00
				Construction Subtotal	**$ 144,600.00**
				Construction Contingency (15%)	$ 21,690.00
				Engineering and Construction Management (10%)	$ 14,460.00
				PROJECT TOTAL	**$ 180,750.00**

CLIENT: City of Driggs
PROJECT: Teton Creek Well Manual Transfer Switch Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 500.00	$ 500.00
2	Manual Transfer Switch	LS	1	$ 4,000.00	$ 4,000.00
				Construction Subtotal	**$ 4,500.00**
				Construction Contingency (15%)	$ 675.00
				Engineering and Construction Management (10%)	$ 450.00
				PROJECT TOTAL	**$ 5,625.00**

CLIENT: City of Driggs
EQUIPMENT: Trailer Mount Generator Purchase
WORKSHT: Engineers Opinion of Probable Cost
DATE: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	100 kW Trailer Mount Diesel Generator	LS	1	$ 45,000.00	$ 45,000.00
				Contingency (15%)	$ 6,750.00
				PROJECT TOTAL	**$ 51,750.00**

Note: A 100 kW generator is able to power a 75 horsepower well pump (largest pump currently in the water system that does not have a permanent generator) assuming the generator is operating at 80% capacity. The City should revisit and determine the sizing required for the generator prior to ordering.

CLIENT: City of Driggs
PROJECT: Lions Park Well Pump House and Chlorine Treatment Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 7,000.00	$ 7,000.00
2	Site Work including Finish Grading and Modification of Existing Site Piping	LS	1	$ 10,000.00	$ 10,000.00
3	Pump House Structure (226 SF)	LS	1	$ 50,000.00	$ 50,000.00
4	Pump House Piping, Mechanical, and HVAC including New Meter and Hydraulic Pump Control Vavle	LS	1	$ 30,000.00	$ 30,000.00
5	* Furnish and Install Chlorine Treatment Equipment	LS	1		$ -
6	Pump House Electrical and SCADA	LS	1	$ 35,000.00	$ 35,000.00
7	Manual Transfer Switch	LS	1	$ 4,000.00	$ 4,000.00
				Construction Subtotal	**$ 136,000.00**
				Construction Contingency (15%)	$ 20,400.00
				Engineering and Construction Management (10%)	$ 13,600.00
				PROJECT TOTAL	**$ 170,000.00**

* Chlorine treatment equipment costs are included in the Water System Telemetry/ SCADA Upgrades cost estimate.

CLIENT: City of Driggs
PROJECT: Dalley Well Pump House and Chlorine Treatment Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 7,000.00	$ 7,000.00
2	Site Work including Finish Grading and Modification of Existing Site Piping	LS	1	$ 10,000.00	$ 10,000.00
3	Pump House Structure (226 SF)	LS	1	$ 50,000.00	$ 50,000.00
4	Pump House Piping, Mechanical, and HVAC including new Meter and Hydraulic Pump Control Vavle	LS	1	$ 30,000.00	$ 30,000.00
5	* Furnish and Install Chlorine Treatment Equipment	LS	1	$ -	$ -
6	Pump House Electrical and SCADA	LS	1	$ 35,000.00	$ 35,000.00
7	Manual Transfer Switch	LS	1	$ 4,000.00	$ 4,000.00
				Construction Subtotal	**$ 136,000.00**
				Construction Contingency (15%)	$ 20,400.00
				Engineering and Construction Management (10%)	$ 13,600.00
				PROJECT TOTAL	**$ 170,000.00**

* Chlorine treatment equipment costs are included in the Water System Telemetry/ SCADA Upgrades cost estimate.

CLIENT: City of Driggs

PROJECT: 5th Street 6-inch Waterline Replacement Project

WORKSHT: Engineers Opinion of Probable Cost

DATE: 28-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 20,000.00	$ 20,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	1,952	$ 2.50	$ 4,880.00
3	Locate and Abandon Existing Water Lines	LS	1	$ 10,000.00	$ 10,000.00
4	Furnish and Install 10-inch DIP Water Main	LF	1,952	$ 55.00	$ 107,360.00
5	Connect to Water Main in Street	EA	10	$ 3,000.00	$ 30,000.00
6	Furnish and Install 8-inch FL Tee and 3- 8-inch FL x MJ Gate Valves at Intersection with Reducers as Required	EA	6	$ 4,000.00	$ 24,000.00
7	Furnish and Install Water Services using Standard Trenching Methods	EA	32	$ 1,500.00	$ 48,000.00
8	Pavement Restoration	SF	7,808	$ 3.00	$ 23,424.00
9	Flush & Pressure Test	LS	1	$ 2,500.00	$ 2,500.00
10	Traffic Control	LS	1	$ 5,000.00	$ 5,000.00
				Construction Subtotal	**$ 275,164.00**
				Construction Contingency (15%)	$ 41,274.60
				Engineering and Construction Management (10%)	$ 27,516.40
				PROJECT TOTAL	**$ 343,955.00**

CLIENT: City of Driggs
PROJECT: Creekside Meadows Water Loop Pipeline Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 9-May-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 5,000.00	$ 5,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	200	$ 2.50	$ 500.00
3	Furnish and Install 8-inch DIP Water Main	LF	1,300	$ 45.00	$ 58,500.00
4	Connect to 8-inch Water Main in Street	EA	2	$ 3,000.00	$ 6,000.00
5	Furnish and Install 8-inch FL Tee and 3 - 8-inch FL x MJ Gate Valves at intersections	EA	2	$ 4,000.00	$ 8,000.00
6	Furnish and Install 8-inch Isolation Gate Valve	EA	1	$ 1,200.00	$ 1,200.00
7	Pavement Restoration	SF	800	$ 3.00	$ 2,400.00
8	Revegetation	LS	1	$ 1,500.00	$ 1,500.00
9	Flush & Pressure Test	LS	1	$ 2,000.00	$ 2,000.00
10	Traffic Control	LS	1	$ 1,500.00	$ 1,500.00
				Construction Subtotal	**$ 86,600.00**
				Construction Contingency (15%)	$ 12,990.00
				Engineering and Construction Management (10%)	$ 8,660.00
				Easement Acquisition	$ 15,669.00
				PROJECT TOTAL	**$ 108,250.00**

CLIENT: City of Driggs
PROJECT: Valley Centre Well Chlorine Treatment Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 1,000.00	$ 1,000.00
2	Digital Dosing Pump	EA	1	$ 3,750.00	$ 3,750.00
3	55 Gallon Sodium Hypochlorite Drum and Spare 55 Gallon Sodium Hypochlorite Drum with Spill Containment Trays	EA	2	$ 500.00	$ 1,000.00
4	Connect 12" Tanks Supply Line to 12" Water Main Line	LS	1	$ 3,500.00	$ 3,500.00
5	Crop Stop and Chemical Injection Quill	EA	1	$ 800.00	$ 800.00
6	Pump Repair Kit	EA	1	$ 400.00	$ 400.00
7	Safety/ Spill Kit	EA	1	$ 500.00	$ 500.00
8	Site Piping and Electrical	LS	1	$ 2,500.00	$ 2,500.00
9	Manual Transfer Switch	LS	1	$ 4,000.00	$ 4,000.00
				Construction Subtotal	**$ 17,450.00**
				Construction Contingency (15%)	$ 2,617.50
				Engineering and Construction Management (10%)	$ 1,745.00
				PROJECT TOTAL	**$ 21,812.50**

CLIENT: City of Driggs
PROJECT: Ski Hill Road and Miller Ranch Water Loop Pipeline Project
WORKSHT: Engineers Opinion of Probable Cost
REVISED: 20-Nov-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 10,000.00	$ 10,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	200	$ 2.50	$ 500.00
3	Furnish and Install 8-inch DIP Water Main	LF	2,900	$ 45.00	$ 130,500.00
4	Connect to 8-inch Water Main in Street	EA	2	$ 3,000.00	$ 6,000.00
5	Furnish and Install 8-inch FL Tee and 3 - 8-inch FL x MJ Gate Valves at intersections	EA	2	$ 4,000.00	$ 8,000.00
6	Furnish and Install 8-inch Isolation Gate Valve	EA	2	$ 1,200.00	$ 2,400.00
7	Pavement Restoration	SF	800	$ 3.00	$ 2,400.00
8	Jack and Bore under Ski Hill Road	LS	1	$ 20,000.00	$ 20,000.00
9	Revegetation	LS	1	$ 1,500.00	$ 1,500.00
10	Flush & Pressure Test	LS	1	$ 2,000.00	$ 2,000.00
11	Traffic Control	LS	1	$ 5,000.00	$ 5,000.00
12	Disconnect Miller Ranch Subdivision from 12-inch Waterline Draining 0.3 MG Tank	LS	1	$ 2,000.00	$ 2,000.00
				Construction Subtotal	**$ 190,300.00**
				Construction Contingency (15%)	$ 28,545.00
				Engineering and Construction Management (10%)	$ 19,030.00
				PROJECT TOTAL	**$ 237,875.00**

CLIENT: City of Driggs

PROJECT: Little Avenue 6-inch Waterline Replacement Project

WORKSHT: Engineers Opinion of Probable Cost

DATE: 23-Aug-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 20,000.00	$ 20,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	2,632	$ 2.50	$ 6,580.00
3	Locate and Abandon Existing Water Lines	LS	1	$ 10,000.00	$ 10,000.00
4	Furnish and Install 10-inch DIP Water Main	LF	2,632	$ 55.00	$ 144,760.00
5	Connect to Water Main in Street	EA	10	$ 3,000.00	$ 30,000.00
6	Furnish and Install 8-inch FL Tee and 3- 8-inch FL x MJ Gate Valves at Intersection with Reducers as Required	EA	5	$ 4,000.00	$ 20,000.00
7	Furnish and Install Water Services using Standard Trenching Methods	EA	43	$ 1,500.00	$ 64,500.00
8	Pavement Restoration	SF	10,528	$ 3.00	$ 31,584.00
9	Flush & Pressure Test	LS	1	$ 5,000.00	$ 5,000.00
10	Traffic Control	LS	1	$ 20,000.00	$ 20,000.00
				Construction Subtotal	**$ 352,424.00**
				Construction Contingency (15%)	$ 52,863.60
				Engineering and Construction Management (10%)	$ 35,242.40
				PROJECT TOTAL	**$ 440,530.00**

CLIENT: City of Driggs

PROJECT: Highway 33 6-inch Waterline Replacement Project (Constructed over 10 years 2018 to 2028)

WORKSHT: Engineers Opinion of Probable Cost

DATE: 23-Aug-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 60,000.00	$ 60,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	10,268	$ 2.50	$ 25,670.00
3	Locate and Abandon Existing Water Lines	LS	1	$ 10,000.00	$ 10,000.00
4	Furnish and Install 10-inch DIP Water Main	LF	10,268	$ 55.00	$ 564,740.00
5	Connect to Water Main in Street	EA	24	$ 3,000.00	$ 72,000.00
6	Furnish and Install 8-inch FL Tee and 3- 8-inch FL x MJ Gate Valves at Intersection with Reducers as Required	EA	12	$ 4,000.00	$ 48,000.00
7	Furnish and Install Water Services using Standard Trenching Methods	EA	165	$ 1,500.00	$ 247,500.00
8	Pavement Restoration	SF	41,072	$ 3.00	$ 123,216.00
9	Flush & Pressure Test	LS	1	$ 10,000.00	$ 10,000.00
10	Traffic Control	LS	1	$ 50,000.00	$ 50,000.00
				Construction Subtotal	**$ 1,211,126.00**
				Construction Contingency (15%)	$ 181,668.90
				Engineering and Construction Management (10%)	$ 121,112.60
				PROJECT TOTAL	**$ 1,513,907.50**

CLIENT: City of Driggs
PROJECT: Rodeo Drive Water Loop Pipeline Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 9-May-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 10,000.00	$ 10,000.00
2	Saw Cut and Remove Asphalt (Full Depth - Both Sides)	LF	200	$ 2.50	$ 500.00
3	Furnish and Install 8-inch DIP Water Main	LF	2,100	$ 45.00	$ 94,500.00
4	Connect to 6-inch and 8-inch Water Main in Street	EA	2	$ 3,000.00	$ 6,000.00
5	Furnish and Install 8-inch FL Tee and 3 - 8-inch FL x MJ Gate Valves at intersections	EA	2	$ 4,000.00	$ 8,000.00
6	Furnish and Install 8-inch Isolation Gate Valve	EA	1	$ 1,200.00	$ 1,200.00
7	Pavement Restoration	SF	800	$ 3.00	$ 2,400.00
8	Revegetation	LS	1	$ 1,500.00	$ 1,500.00
9	Flush & Pressure Test	LS	1	$ 2,000.00	$ 2,000.00
10	Traffic Control	LS	1	$ 2,500.00	$ 2,500.00
				Construction Subtotal	**$ 128,600.00**
				Construction Contingency (15%)	$ 19,290.00
				Engineering and Construction Management (10%)	$ 12,860.00
				PROJECT TOTAL	**$ 160,750.00**

CLIENT: City of Driggs
PROJECT: Water Pipeline Hydroelectric Project
WORKSHT: Engineers Opinion of Probable Cost
DATE: 27-Mar-13

Item	Description	Unit	Qty	Unit Price	Total Cost
1	Mobilization	LS	1	$ 4,000.00	$ 4,000.00
2	Furnish and Install Vault to House Hydroelectric Equipment	LS	1	$ 12,500.00	$ 12,500.00
3	Equipment Package including Tubine Generator and Electrical/Controls Package	LS	1	$ 35,000.00	$ 35,000.00
4	Furnish and Install Piping to Vault and Bypass	LS	1	$ 6,000.00	$ 6,000.00
5	Connect to 12-inch Water Main and provide valving	EA	2	$ 3,500.00	$ 7,000.00
6	Furnish and Install Electrical Service and Electrical Meter to Vault including integrating into SCADA	LS	1	$ 5,000.00	$ 5,000.00
7	Flush & Pressure Test	LS	1	$ 2,500.00	$ 2,500.00
				Construction Subtotal	**$ 72,000.00**
				Construction Contingency (15%)	$ 10,800.00
				Engineering and Construction Management (10%)	$ 7,200.00
				PROJECT TOTAL	**$ 90,000.00**

APPENDIX E

Mailing List and Correspondance

TYPICAL SHALLOW
PIPE DEPTH

WATER & SEWER WORK REQUEST

DATE: February 6, 2007

REQUESTED BY: Louis

CUSTOMER NAME: Frank Russo

TELEPHONE: 354-9314

CUSTOMER ADDRESS: 230 Falcon Drive

ACCOUNT NO.: 9.0775.01

METER ID:

MXU NO.:

CURRENT READ:

REASON REQUESTED
Frozen or broke water pipes?

ACTION REQUIRED

NOTES

Imgtunk Empty

F -

WATER & SEWER WORK REQUEST

DATE: February 6, 2007

REQUESTED BY: Louis

CUSTOMER NAME: Jackie Graue

TELEPHONE: 354-2995
Cell: 351-1491

CUSTOMER ADDRESS: #8 Teton Trail, ~~Rendezvous Town Homes~~, ~~Creekside~~
Teton Creek Resort.

ACCOUNT NO.: 9.0871.01

METER ID:

MXU NO.:

CURRENT READ:

REASON REQUESTED
Frozen or broke water pipes, can smell chlorine outside?
also 9.7 + 11 no water

ACTION REQUIRED

NOTES
Img Tank empty

WATER & SEWER WORK REQUEST

DATE: 02/06/07 REQUESTED BY: Sara

CUSTOMER NAME: Kathleen Wagner TELEPHONE: 208 313 5872

CUSTOMER ADDRESS: 214 State Line

ACCOUNT NO.:

METER ID:

MXU NO.:

CURRENT READ:

REASON REQUESTED

water frozen?

ACTION REQUIRED

NOTES

1 mg Tank Empty

Freeze ups	Leaks
2011	
20 E Short	340 E Ross
70 N 2nd	718 Valley Center #3
81 N Main	215 N 3rd
260 E Ashley	1853 Creek Resort Cir
346 Ashley	225 S Main
253 Main	1939 Creek Resort Circle
445 S Main	185 N 4 th
270 N Main	355 E Little
235 N Main	
364 Forestview	
365 Fremont	

Freeze ups

2001

420 Ruby
71 S 1st E
50 S 3rd
365 Freemont
510 Howard
40 Wallace
1st Little
35 1st
135 Front
65 Wallace
235 N 2nd
65 Ashley
260 N 3rd
70 E Little
65 W Depot
55 S Main
45 S Main
86 W Depot
315 Ross
425 N 5th
310 Wallace
150 N 1st
160 N 3rd
80 Short
295 W 2nd E
50N 2nd
75 W Depot
385 Wallace
55 Main
Main Johnson
75 Little

Jared D Gunderson Public Works Director
235 S 5th. - PO Box 48 Driggs, Idaho 83422
Ph: (208) 354-8228 Fax: (208) 354-3106
pwdriggs@ida.net

Water freeze records

2/8/07 80 S 2nd E
2/9/7 620 Easy
2/9/7 Windermere Real Estate
2/15/7 480 Creekside
2/9/7 Sotheby's
2/12/7 Sotheby's had to dig up Main line and service to repair ¾" service 6" main
2/22/7 755 Hawksview
2/22/7 135 N Main
2/6/7 230 Falcon Dr
2/6/7 #8 Teton Trail Teton Creek Resort
2/6/7 214 Stateline
2/6/7 11 Teton Creek
2/6/7 12 Teton Creek
2/6/7 910 Streamside
2/7/7 775 Woodland
2/5/7 265 Main
2/2/7 Peaked Sports
2/2/7 235 N Main
2/5/7 Grand ol Grill
1/22/7 270 Ross
1/22/7 280 E Ashley
1/22/7 285 E Little
1/22/7 Jackson Hole real estate Main Street
1/22/7 Teton Valley News
1/22/7 Key Bank
1/22/7 City office
1/28/7 Leak Main Street in front City Office
1/22/7 Chamber building
1/22/7 Joshua building
1/22/7 old courthouse
1/22/7 First American title
1/22/7 Targhee reality
1/22/7 290 E Ross (this address freezes every year)
1/22/7 45 N 2ndE
1/23/7 225 S Main (this address freezes every year)
1/24/7 295 Wallace

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1/26/7 174 Forest View
1/30/7 535 Howard
1/30/7 Basin Travel Stop Main
1/30/7 35 N 1st
1/31/7 715 Easy
1/31/7 2nd Fremont
1/31/7 815 Streamside
1/25/7 340 Wallace
1/16/7 915 Cottonwood
1/29/7 75 S 1st
1/26/7 195S 1st E
1/29/7 98 E Little
1/29/7 60 E Wallace
1/25/7 365 E Wallace
1/26/7 37 N 1st
1/16/7 757 HawksView
1/31/7 50 Depot
1/31/7 60 Depot
1/31/7 70 Depot
1/16/7 Stoneridge units 21 & 24
1/10/7835 Easy
1/29/7 Forest Service
1/25/8 135 N Main
2/15/8 Teton Valley News
2/15/8 Kenny Chambers Main Street
2/15/8 Teton property management Main Street
2/16/8 leak at Basin auto repaired
4/19/8 Leak at wardrobe
4/16/8 leak intersection of Depot Main Street
5/23/ 8 main leak at intersection of little and Main
3/1/9 Leak corner of Depot and Main
6/25/9 Leak Creamery on Main
8/20/9 Leak game on Main Street
1/15/10 Huntsman office
1/29/10 412 forestview

Alan Giesbrecht

To: Jared Gunderson
Subject: RE: City of Driggs water flows

From: "Bret Campbell" <bcampbell@tetoncountyfire.com>
Date: January 5, 2012 2:34:45 PM MST
To: <pwdriggs@pdt.net>
Subject: City of Driggs water flows

January 5, 2012

Hello Jared,

It has recently come to my attention that the water flows in the City of Driggs within the subdivisions of Miller Ranch and Creek Side Meadows are particularly low. As you can imagine, adequate water flows are of the greatest importance in providing fire protection to our citizens. I know you continually strive to maintain a quality municipal water system and we appreciate your assistance in these specific areas. If I can assist you in your endeavors in any way please let me know.

Best regards,

Bret Campbell
Fire Chief

Teton County Fire Protection District
PO Box 474
625 North Airport Road
Driggs, ID 83422

Phone: 208-354-2760
Fax: 208-354-2764

_____ Information from ESET NOD32 Antivirus, version of virus signature database 6771 (20120105) _____

The message was checked by ESET NOD32 Antivirus.

http://www.eset.com

Driggs Water System Facility Plan

@ 11:45 am on 3/4/2013 Robert call to Bret Campbell with Teton County (Fire Marshall) 1-208-354-2760

- Left message on fire flows

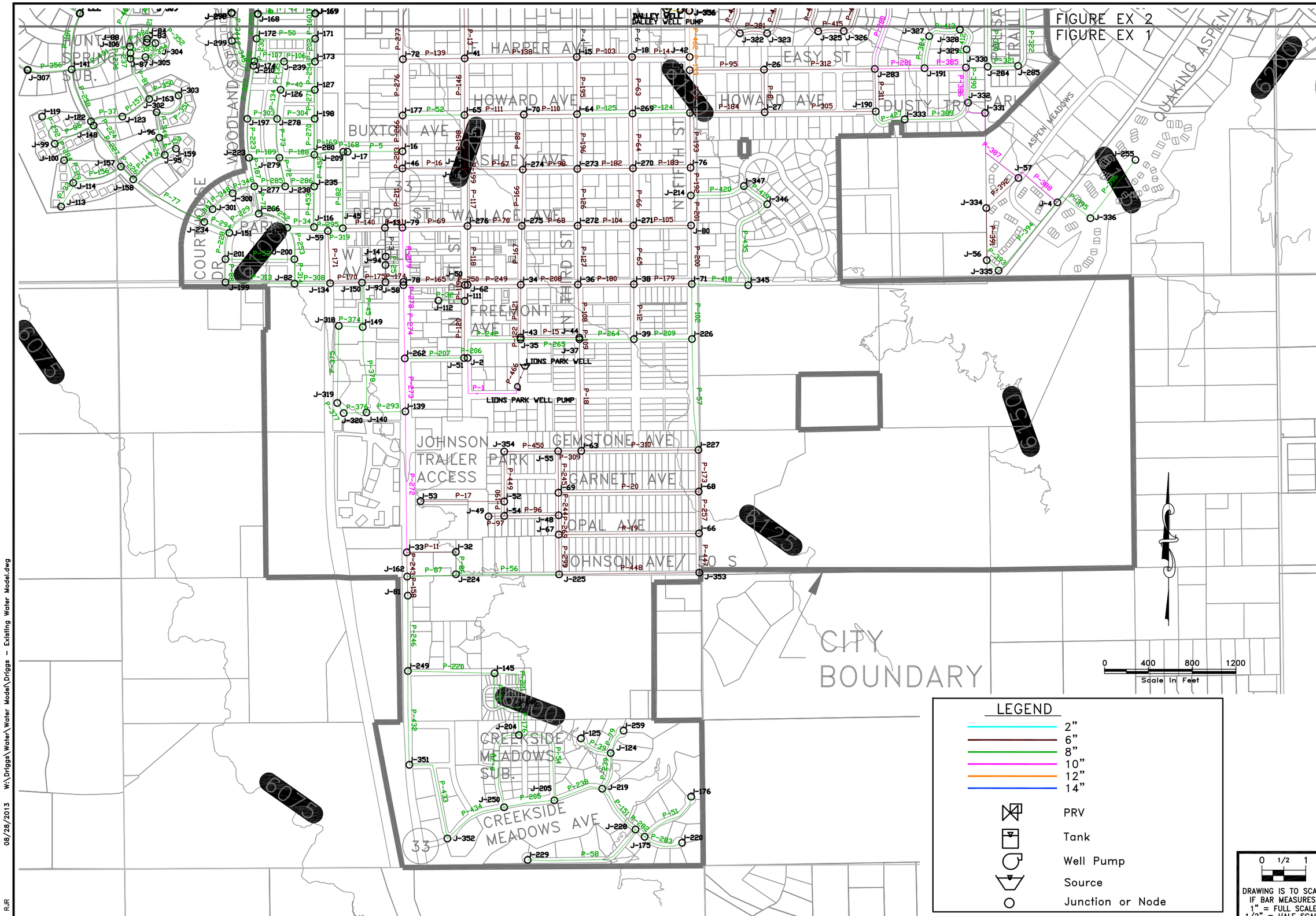
Earl Jiles - Fire Marshall with Teton County Fire

email: ejiles@tetoncountyfire.com on 3/4/2013 @ 11:45 am

- Talked to Earl Jiles who is the Fire Marshall with Teton County Fire.
- Earl said the water system should at least provide 1,000 gpm for 2 hours for the water system. Building that require more should be looked at on an individual basis. APPENDIX B105 of 2009 International Fire Code

APPENDIX F

Present Culinary Distribution System Mapping



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

REVISIONS

DRIGGS, IDAHO

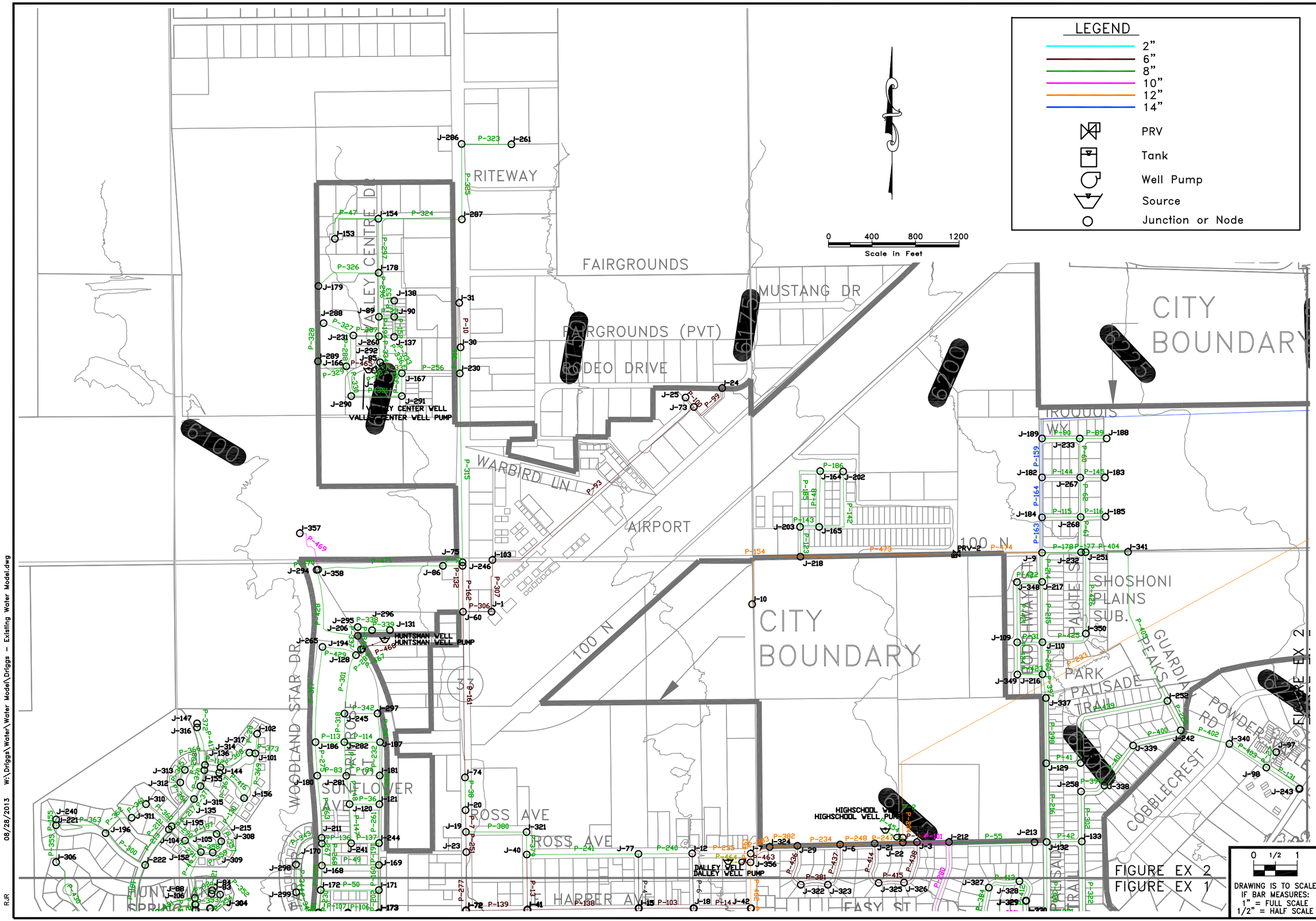
WATER SYSTEM FACILITY PLAN

EXISTING WATER MODEL PLAN

AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

FIGURE

EX 1



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

REVISIONS

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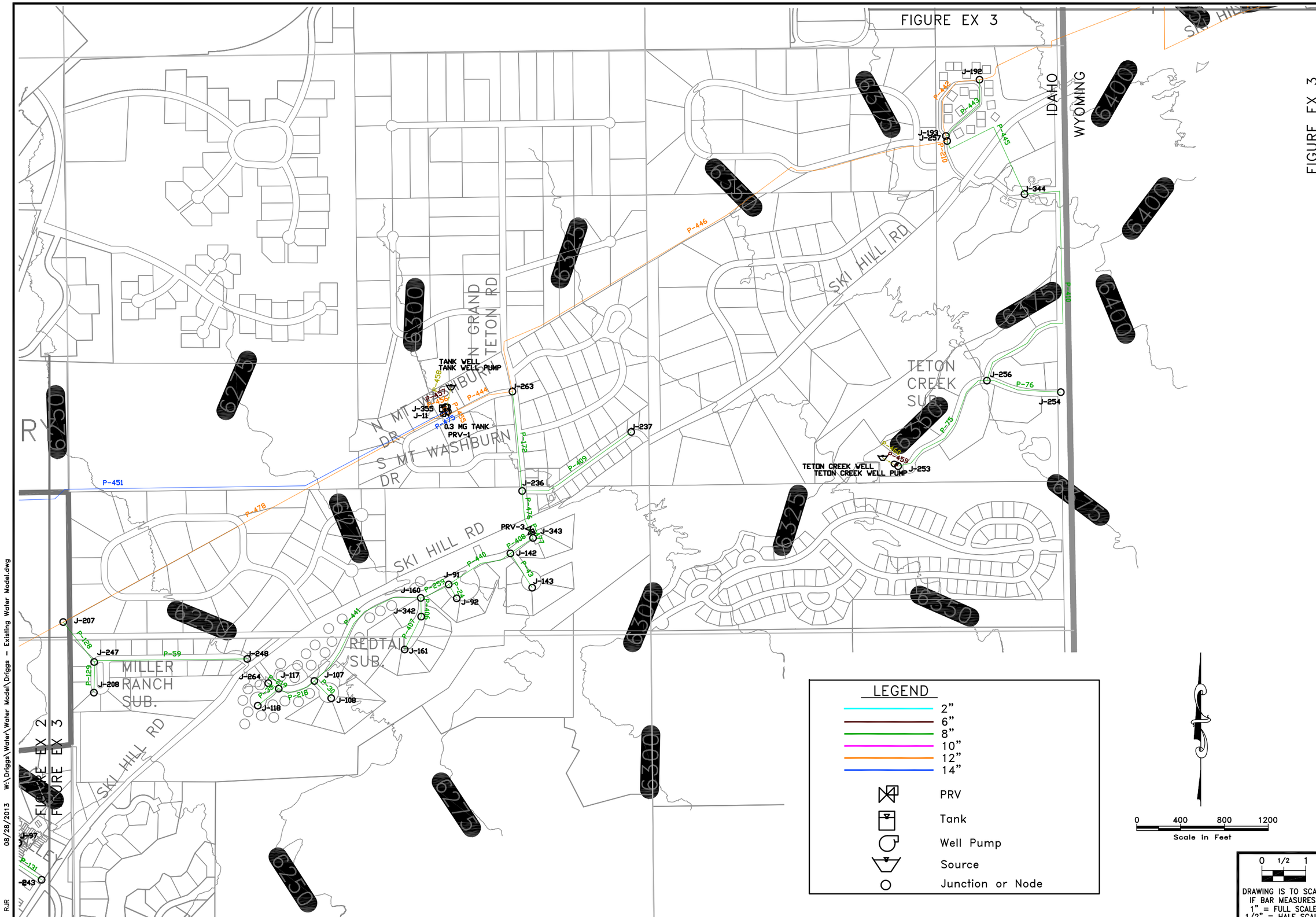
FIGURE

EX 2

08/28/2013 W:\Driggs\Water\Water Model\Driggs - Existing Water Model.dwg

RJR



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

REVISIONS

FIGURE EX 3

DRIGGS, IDAHO

WATER SYSTEM FACILITY PLAN

EXISTING WATER MODEL PLAN

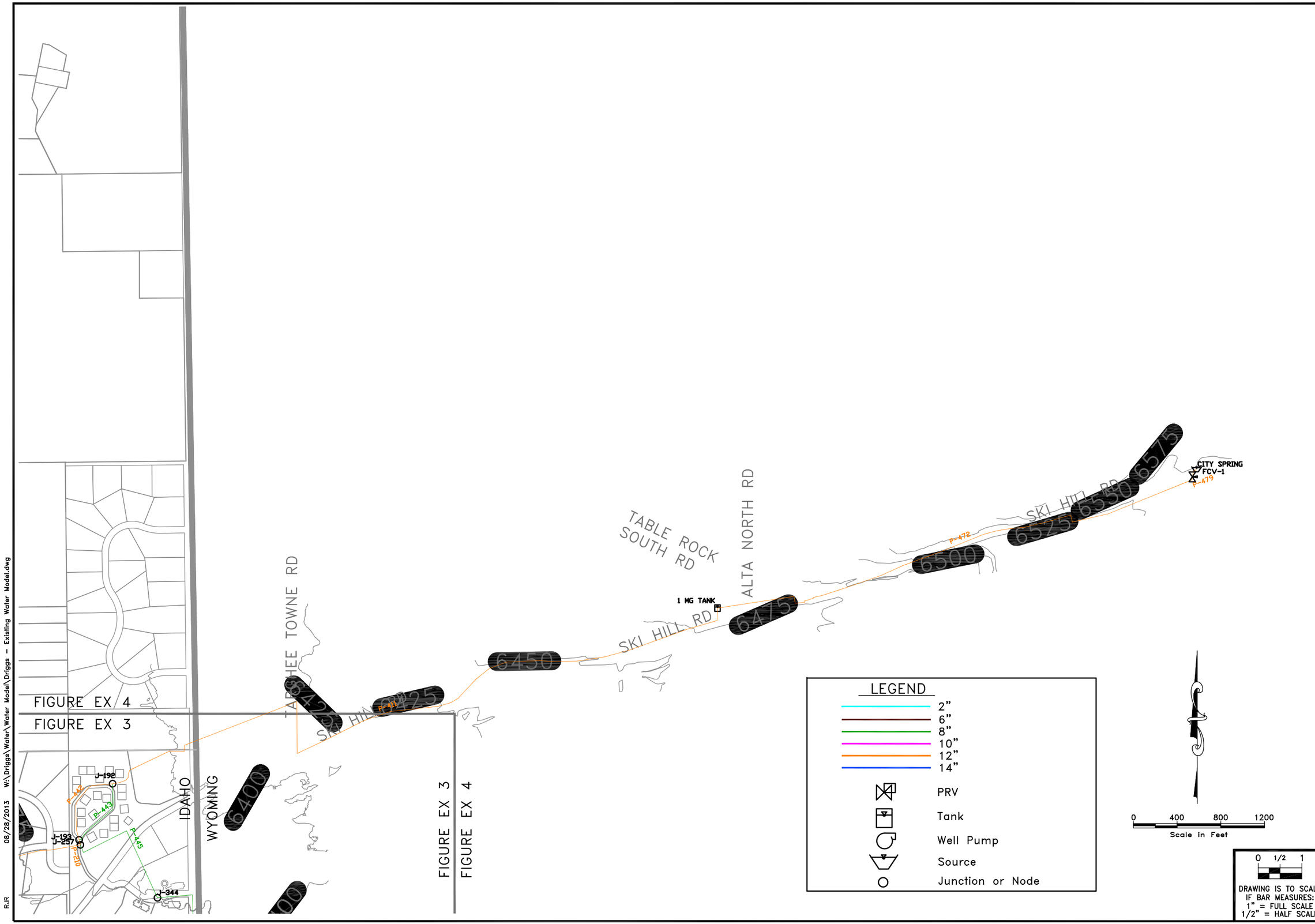
AQUA ENGINEERING
533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

FIGURE

EX 3

08/28/2013 W:\Driggs\Water\Water Model\Driggs - Existing Water Model.dwg

RJR



08/28/2013 W:\Driggs\Water\Water Model\Driggs - Existing Water Model.dwg

RJR

NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

REVISIONS

DRIGGS, IDAHO

WATER SYSTEM FACILITY PLAN

EXISTING WATER MODEL PLAN

AQUA ENGINEERING

533 W 2600 S, SUITE 275, BOUNTIFUL, UT 84010
PHONE (801) 299-1327 FAX (801) 299-0153

FIGURE

EX 4

APPENDIX G

Equivalent Dwelling Unit, Average Day Demand
Max Day Demand, and Peak Hour Demand
Calculations

Residential			
Year	2012	2011	2010
Meter Size (inch)	Consumption (Gallons)	Consumption (Gallons)	Consumption (Gallons)
0.75	97,145,056	78,711,057	71,350,956
1.00	5,729,014	2,596,004	3,399,000
1.5 OC	2,096,000	2,215,000	2,730,000
Residential OC	15,510,195	11,750,006	13,294,003
1.5 Irrigation	2,469,000	1,822,000	1,636,000
Xtra Tap	5,604,000	4,572,000	4,262,000
Xtra Tap OC	904,000	597,000	677,000
Totals	**129,457,265**	**102,263,067**	**97,348,959**

Source: Yearly Water Consumption Data for Different Meter Sizes provided by the City of Driggs.

Total Consumption	
Year	Consumption (Gallons)
2010	198,455,985
2011	189,380,667
2012	221,431,279

Note: Includes City and County Use.

Other Usage			
Year	2012	2011	2010
Meter Size (inch)	Consumption (Gallons)	Consumption (Gallons)	Consumption (Gallons)
Disconnected Water	137,000	223,000	0
Inactive	1,269,000	2,269,100	10,721,012
Inactive OC	1,133,000	115,000	12,000
Totals	**2,539,000**	**2,607,100**	**10,733,012**

Source: Yearly Water Consumption Data for Different Meter Sizes provided by the City of Driggs.

Population=	**1795**	
1 ERU=	**2.1**	**Persons**
1 Commercial Connection=	**3.1**	**ERUs**

Yearly Water Demand				
Land Use	Connections	Demand per Connection (gpy/conn)	Equivalent Dwelling Unit (ERUs)	Demand per ERU (gpy/ERU)
Residential	866	148,108	866	148,108
Commercial/ Industrial	194	460,335	603	148,108
Totals	**1,060**	**205,251**	**1,469**	**148,108**

Commercial/ Industrial			
Year	2012	2011	2010
Meter Size (inch)	Consumption (Gallons)	Consumption (Gallons)	Consumption (Gallons)
Airport	69,000	12,000	0
0.75	22,531,014	21,577,500	24,767,013
1	4,728,000	4,431,000	4,004,001
1.5	8,922,000	7,115,000	8,573,000
2	9,862,000	9,144,000	12,095,000
3	6,932,000	5,487,000	4,260,000
4	1,617,000	156,000	1,725,000
6	16,384,000	17,938,000	17,402,000
1 OC	3,000	2,000	9,000
2 OC	5,174,000	5,780,000	5,392,000
3 OC	1,595,000	5,412,000	3,604,000
6 OC	4,130,000	3,175,000	2,650,000
2 Irrigation	2,217,000	1,620,000	2,198,000
2 Irrigation OC	5,271,000	2,661,000	3,695,000
Totals	**89,435,014**	**84,510,500**	**90,374,014**

Source: Yearly Water Consumption Data for Different Meter Sizes provided by the City of Driggs.

Average Daily Demand		
Land Use	Demand (gpd/conn)	Demand (gpd/ERU)
Residential and Commercial	572	413
Totals	**572**	**413**

Average Daily Demand=	**0.29**	**gpm/ERU**
Average Daily Demand=	**421**	**gpm**
Average Daily Demand=	**1.18**	**gpm/Node**

Avg Max Daily Demand			
Land Use	Demand (gallon)	Demand (gpd/conn)	Demand (gpd/ERU)
Residential	37,349,721	1,391	1,391
Commercial	16,302,900	2,711	872
Totals	**53,652,621**	**139**	**1,178**

Nodes in Existing Model w/ Demand=	**356**

Max Day Demand Peaking Factor=	**1.3**	

Source: A Max Day Demand Peaking Factor of 1.3 was used in Driggs previous Water System Facility Plan and was carried forward to this study. This peaking factor also provides a maximum daily demand which is 1.1 times higher than the average maximum daily demand for residential.

Max Day Demand=	**1,532**	**gpd/ERU**
Max Day Demand=	**1.06**	**gpm/ERU**
Max Day Demand=	**1,562.46**	**gpm**
Max Day Demand=	**4.39**	**gpm/Node**

Peak Hour Demand Peaking Factor=	**1.6**	

Source: AWWA M32 recommends Peak Hour Demand Peaking Factors between 1.3 to 2.0. Since there are not many major commercial or industrial businesses a factor in the middle seemed appropriate.

Peak Hour Demand=	**102.11**	**gph/ERU**
Peak Hour Demand=	**1.70**	**gpm/ERU**
Peak Hour Demand=	**2500**	**gpm**
Peak Hour Demand=	**7.02**	**gpm/Node**

Fire Flow=	**1500**	**gpm for 2 hours**

2012 Monthly Flow							
	Residential			Commercial			
Month	Indoor	Outdoor (Irrigation)	Res. Subtotal	Indoor	Outdoor (Irrigation)	Comm. Subtotal	Totals
January	1,663,001	0	1,663,001	3,826,000	0	3,826,000	5,489,001
February	1,234,001	0	1,234,001	1,993,000	91,000	2,084,000	3,318,001
March	1,237,607	0	1,237,607	1,802,000	0	1,802,000	3,039,607
April	12,216,624	0	12,216,624	8,225,400	0	8,225,400	20,442,024
May	10,798,802	950,000	11,748,802	12,149,900	403,000	12,552,900	24,301,702
June	10,272,006	1,516,000	11,788,006	11,028,000	906,000	11,934,000	23,722,006
July	36,025,721	1,324,000	37,349,721	14,734,900	1,568,000	16,302,900	53,652,621
August	18,810,006	1,483,000	20,293,006	12,121,000	851,000	12,972,000	33,265,006
September	11,532,303	1,539,000	13,071,303	10,750,800	1,342,000	12,092,800	25,164,103
October	13,950,140	434,000	14,384,140	3,455,010	54,000	3,509,010	17,893,150
November	1,642,013	0	1,642,013	1,939,002	139,000	2,078,002	3,720,015
December	1,633,041	0	1,633,041	1,926,002	0	1,926,002	3,559,043
Totals	**121,015,265**	**7,246,000**	**128,261,265**	**83,951,014**	**5,354,000**	**89,305,014**	**217,566,279**
Max	**36,025,721**	**1,539,000**	**37,349,721**	**14,734,900**	**1,568,000**	**16,302,900**	**53,652,621**

Source: Monthly Water Consumption Data of Residential and Commercial Users for 2012 provided by the City of Driggs.

Nodes in Future Model w/ Demand=	**355**

Year	Future ERUs	Avg. Day Demand (gpm)	Max. Day Demand (gpm)	Peak Hour Demand (gpm)
2018	2,272	652	2,417	3,867
2033	4,091	1,173	4,351	6,962

2033 Future Demands per Node	
Avg. Day Demand (gpm/node)	3.30
Max. Day Demand (gpm/node)	12.26
Peak Hour Demand (gpm/node)	19.61

APPENDIX H

Present Peak Hour Demand

JUNCTION INFORMATION FOR PRESENT PEAK HOUR DEMAND

	Satisfies minimum 40 psi pressure requirement
	Does not satisfy minimum 40 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-1	6133.76	7.02	6345.24	91.5	
J-2	6112.00	7.02	6342.50	99.7	
J-3	6174.06	7.02	6338.85	71.3	
J-4	6171.86	7.02	6338.77	72.2	
J-5	6172.81	7.02	6338.83	71.8	
J-6	6166.00	7.02	6339.15	74.9	
J-7	6156.44	7.02	6339.63	79.3	
J-8	6152.00	7.02	6339.66	81.2	
J-9	6196.00	7.02	6296.08	43.3	
J-10	6162.74	7.02	6296.06	57.7	
J-11	6289.91	0.00	6297.09	3.1	
J-12	6149.08	7.02	6339.65	82.4	
J-13	6111.82	7.02	6340.50	98.9	
J-14	6111.64	7.02	6340.01	98.8	
J-15	6140.68	7.02	6339.99	86.2	
J-16	6117.12	7.02	6340.43	96.6	
J-17	6112.17	7.02	6340.52	98.8	
J-18	6146.54	7.02	6339.88	83.6	
J-19	6124.16	7.02	6340.37	93.5	
J-20	6124.06	7.02	6340.84	93.8	
J-21	6169.92	7.02	6338.97	73.1	
J-22	6172.88	7.02	6338.85	71.8	
J-23	6124.40	7.02	6340.34	93.4	
J-24	6170.19	7.02	6345.02	75.6	
J-25	6165.11	7.02	6345.02	77.8	
J-26	6160.53	7.02	6339.34	77.4	
J-27	6158.37	7.02	6339.34	78.3	
J-28	6150.00	7.02	6339.82	82.1	
J-29	6161.23	7.02	6339.34	77.1	
J-30	6136.18	7.02	6348.13	91.7	
J-31	6138.94	7.02	6348.13	90.5	
J-32	6100.03	7.02	6340.00	103.8	
J-33	6098.00	7.02	6340.19	104.8	
J-34	6121.91	7.02	6340.53	94.6	
J-35	6117.27	7.02	6340.88	96.7	
J-36	6126.45	7.02	6340.37	92.6	
J-37	6122.77	7.02	6340.49	94.2	
J-38	6132.10	7.02	6340.23	90.0	
J-39	6125.69	7.02	6340.28	92.8	
J-40	6132.00	7.02	6340.15	90.1	
J-41	6128.61	7.02	6340.18	91.5	
J-42	6152.95	7.02	6339.66	80.8	
J-43	6117.50	7.02	6340.83	96.6	
J-44	6123.12	7.02	6340.49	94.0	
J-45	6107.64	7.02	6340.48	100.7	
J-46	6116.06	7.02	6340.43	97.1	
J-47	6123.45	7.02	6340.32	93.8	
J-48	6110.19	7.02	6339.98	99.4	
J-49	6104.00	7.02	6339.97	102.1	
J-50	6116.21	7.02	6340.66	97.1	
J-51	6111.40	7.02	6342.30	99.9	
J-52	6106.01	7.02	6339.97	101.2	
J-53	6099.88	7.02	6339.96	103.9	
J-54	6104.66	7.02	6339.97	101.8	
J-55	6112.52	7.02	6340.02	98.4	
J-56	6160.00	7.02	6338.76	77.3	
J-57	6174.00	7.02	6338.77	71.3	
J-58	6110.59	7.02	6340.56	99.5	
J-59	6106.59	7.02	6340.47	101.2	

JUNCTION INFORMATION FOR PRESENT PEAK HOUR DEMAND

	Satisfies minimum 40 psi pressure requirement
	Does not satisfy minimum 40 psi pressure requirement

J-60	6130.32	7.02	6345.29	93.0	
J-61	6123.32	7.02	6340.32	93.9	
J-62	6116.46	7.02	6340.63	97.0	
J-63	6114.54	7.02	6340.09	97.6	
J-64	6136.68	7.02	6340.01	88.0	
J-65	6126.16	7.02	6340.25	92.6	
J-66	6123.70	7.02	6339.99	93.6	
J-67	6109.87	7.02	6339.98	99.6	
J-68	6126.00	7.02	6340.01	92.6	
J-69	6112.00	7.02	6340.00	98.6	
J-70	6132.21	7.02	6340.18	90.0	
J-71	6137.86	7.02	6340.15	87.5	
J-72	6124.00	7.02	6340.27	93.6	
J-73	6166.00	7.02	6345.02	77.5	
J-74	6124.10	7.02	6341.03	93.9	
J-75	6130.00	7.02	6347.18	94.0	
J-76	6146.00	7.02	6340.02	83.9	
J-77	6144.00	7.02	6339.80	84.7	
J-78	6110.29	7.02	6340.57	99.6	
J-79	6113.84	7.02	6340.51	98.1	
J-80	6142.00	7.02	6340.12	85.7	
J-81	6096.00	7.02	6339.63	105.4	
J-82	6103.58	7.02	6340.37	102.4	
J-83	6086.00	7.02	6336.61	108.4	
J-84	6086.00	7.02	6336.61	108.4	
J-85	6126.00	7.02	6348.67	96.3	
J-86	6127.25	7.02	6347.15	95.1	
J-87	6086.00	7.02	6336.63	108.4	
J-88	6086.00	7.02	6336.61	108.4	
J-89	6128.35	7.02	6348.50	95.2	
J-90	6129.87	7.02	6348.50	94.6	
J-91	6273.47	7.02	6307.34	14.7	
J-92	6271.21	7.02	6307.34	15.6	
J-93	6108.90	7.02	6340.51	100.2	
J-94	6110.69	7.02	6340.51	99.4	
J-95	6086.00	7.02	6337.17	108.7	
J-96	6086.00	7.02	6337.10	108.6	
J-97	6218.16	7.02	6295.84	33.6	
J-98	6215.16	7.02	6295.84	34.9	
J-99	6086.00	7.02	6336.94	108.6	
J-100	6084.23	7.02	6336.97	109.4	
J-101	6094.66	7.02	6336.46	104.6	
J-102	6094.33	7.02	6336.46	104.8	
J-103	6131.47	7.02	6345.18	92.5	
J-104	6089.99	7.02	6336.50	106.7	
J-105	6089.50	7.02	6336.50	106.9	
J-106	6086.00	7.02	6336.62	108.4	
J-107	6248.00	7.02	6307.25	25.6	
J-108	6247.38	7.02	6307.25	25.9	
J-109	6190.47	7.02	6296.00	45.7	
J-110	6194.40	7.02	6296.00	44.0	
J-111	6114.82	7.02	6340.97	97.8	
J-112	6113.35	7.02	6340.97	98.5	
J-113	6086.00	7.02	6337.01	108.6	
J-114	6086.00	7.02	6337.01	108.6	
J-115	6101.79	7.02	6340.40	103.2	
J-116	6105.90	7.02	6340.47	101.5	
J-117	6244.00	7.02	6307.24	27.4	
J-118	6242.61	7.02	6307.24	28.0	
J-119	6086.00	7.02	6336.94	108.6	

JUNCTION INFORMATION FOR PRESENT PEAK HOUR DEMAND

	Satisfies minimum 40 psi pressure requirement
	Does not satisfy minimum 40 psi pressure requirement

J-120	6110.81	7.02	6342.97	100.4	
J-121	6112.21	7.02	6342.97	99.8	
J-122	6086.00	7.02	6336.86	108.5	
J-123	6086.00	7.02	6336.84	108.5	
J-124	6101.98	7.02	6339.12	102.6	
J-125	6101.02	7.02	6339.11	103.0	
J-126	6107.43	7.02	6341.22	101.2	
J-127	6113.19	7.02	6341.22	98.7	
J-128	6115.27	7.02	6346.81	100.2	
J-129	6194.08	7.02	6295.89	44.1	
J-130	6198.00	7.02	6295.89	42.4	
J-131	6116.00	7.02	6347.65	100.2	
J-132	6189.15	7.02	6295.86	46.2	
J-133	6192.00	7.02	6295.86	44.9	
J-134	6104.46	7.02	6340.41	102.1	
J-135	6095.16	7.02	6336.47	104.4	
J-136	6095.40	7.02	6336.46	104.3	
J-137	6128.31	7.02	6348.50	95.3	
J-138	6130.36	7.02	6348.50	94.4	
J-139	6104.00	7.02	6340.49	102.3	
J-140	6100.00	7.02	6340.47	104.0	
J-141	6086.00	7.02	6336.62	108.4	
J-142	6282.33	7.02	6307.44	10.9	
J-143	6280.24	7.02	6307.44	11.8	
J-144	6096.00	7.02	6336.47	104.0	
J-145	6096.75	7.02	6339.24	104.9	
J-146	6097.80	7.02	6339.23	104.5	
J-147	6086.05	7.02	6336.46	108.3	
J-148	6086.00	7.02	6336.90	108.6	
J-149	6104.00	7.02	6340.47	102.3	
J-150	6107.05	7.02	6340.46	101.0	
J-151	6098.14	7.02	6340.24	104.7	
J-152	6088.80	7.02	6336.51	107.2	
J-153	6126.00	7.02	6348.45	96.2	
J-154	6130.59	7.02	6348.45	94.3	
J-155	6095.75	7.02	6336.47	104.1	
J-156	6097.38	7.02	6336.47	103.4	
J-157	6086.00	7.02	6337.13	108.7	
J-158	6086.00	7.02	6337.36	108.8	
J-159	6086.00	7.02	6337.17	108.7	
J-160	6268.43	7.02	6307.31	16.8	
J-161	6259.64	7.02	6307.31	20.6	
J-162	6096.14	7.02	6339.96	105.5	
J-163	6086.00	7.02	6336.83	108.5	
J-164	6169.93	7.02	6296.05	54.6	
J-165	6169.71	7.02	6296.05	54.7	
J-166	6120.00	7.02	6348.51	98.9	
J-167	6127.02	7.02	6348.51	95.8	
J-168	6104.00	7.02	6342.13	103.0	
J-169	6110.00	7.02	6342.15	100.4	
J-170	6106.00	7.02	6342.37	102.3	
J-171	6111.26	7.02	6341.81	99.7	
J-172	6104.00	7.02	6341.82	102.9	
J-173	6111.45	7.02	6341.47	99.5	
J-174	6104.00	7.02	6341.59	102.8	
J-175	6101.73	7.02	6339.10	102.7	
J-176	6105.82	7.02	6339.10	100.9	
J-177	6119.63	7.02	6340.28	95.5	
J-178	6130.00	7.02	6348.47	94.5	
J-179	6123.39	7.02	6348.47	97.4	

JUNCTION INFORMATION FOR PRESENT PEAK HOUR DEMAND

	Satisfies minimum 40 psi pressure requirement
	Does not satisfy minimum 40 psi pressure requirement

J-180	6108.00	7.02	6343.32	101.8	
J-181	6113.84	7.02	6343.32	99.3	
J-182	6204.53	7.02	6296.12	39.6	
J-183	6212.90	7.02	6296.11	36.0	
J-184	6203.34	7.02	6296.10	40.1	
J-185	6211.23	7.02	6296.09	36.7	
J-186	6109.79	7.02	6343.82	101.3	
J-187	6116.17	7.02	6343.75	98.5	
J-188	6214.48	7.02	6296.13	35.3	
J-189	6209.23	7.02	6296.16	37.6	
J-190	6168.98	7.02	6338.87	73.5	
J-191	6177.11	7.02	6338.83	70.0	
J-192	6390.48	7.02	6405.40	6.5	
J-193	6384.55	7.02	6396.94	5.4	
J-194	6118.22	7.02	6347.72	99.3	
J-195	6090.44	7.02	6336.50	106.5	
J-196	6089.48	7.02	6336.52	106.9	
J-197	6104.00	7.02	6341.00	102.5	
J-198	6111.18	7.02	6340.99	99.4	
J-199	6096.33	7.02	6340.31	105.6	
J-200	6102.25	7.02	6340.37	103.0	
J-201	6096.93	7.02	6340.30	105.3	
J-202	6171.61	7.02	6296.05	53.8	
J-203	6168.23	7.02	6296.05	55.3	
J-204	6095.43	7.02	6339.21	105.5	
J-205	6095.01	7.02	6339.18	105.6	
J-206	6118.11	7.02	6347.66	99.3	
J-207	6229.44	7.02	6314.43	36.8	
J-208	6232.00	7.02	6314.42	35.7	
J-209	6111.90	7.02	6340.53	98.9	
J-210	6104.00	7.02	6341.59	102.8	
J-211	6106.00	7.02	6342.38	102.3	
J-212	6178.84	7.02	6338.85	69.2	
J-213	6188.00	7.02	6338.85	65.3	
J-214	6144.47	7.02	6340.08	84.6	
J-215	6092.26	7.02	6336.50	105.7	
J-216	6198.72	7.02	6295.98	42.1	
J-217	6194.30	7.02	6296.03	44.0	
J-218	6168.00	7.02	6296.06	55.4	
J-219	6098.38	7.02	6339.12	104.2	
J-220	6104.00	7.02	6339.10	101.7	
J-221	6087.86	7.02	6336.53	107.6	
J-222	6087.12	7.02	6336.53	107.9	
J-223	6102.00	7.02	6340.68	103.3	
J-224	6098.51	7.02	6339.98	104.5	
J-225	6104.56	7.02	6339.98	101.9	
J-226	6132.00	7.02	6340.17	90.1	
J-227	6127.79	7.02	6340.09	91.9	
J-228	6100.56	7.02	6339.10	103.2	
J-229	6091.45	7.02	6339.10	107.1	
J-230	6136.06	7.02	6348.13	91.8	
J-231	6122.77	7.02	6348.52	97.7	
J-232	6202.00	7.02	6296.05	40.7	
J-233	6211.27	7.02	6296.13	36.7	
J-234	6096.00	7.02	6339.95	105.5	
J-235	6106.00	7.02	6340.57	101.5	
J-236	6296.68	7.02	6307.60	4.7	
J-237	6298.00	7.02	6307.60	4.2	
J-238	6103.40	7.02	6340.57	102.6	
J-239	6107.22	7.02	6341.45	101.3	

JUNCTION INFORMATION FOR PRESENT PEAK HOUR DEMAND

	Satisfies minimum 40 psi pressure requirement
	Does not satisfy minimum 40 psi pressure requirement

J-240	6088.25	7.02	6336.53	107.4	
J-241	6107.33	7.02	6342.54	101.8	
J-242	6212.00	7.02	6295.86	36.3	
J-243	6210.38	7.02	6295.84	37.0	
J-244	6109.85	7.02	6342.52	100.7	
J-245	6113.14	7.02	6344.23	100.0	
J-246	6130.00	7.02	6347.11	93.9	
J-247	6234.00	7.02	6314.42	34.8	
J-248	6249.81	7.02	6314.42	28.0	
J-249	6094.33	7.02	6339.35	106.0	
J-250	6091.22	7.02	6339.20	107.3	
J-251	6202.00	7.02	6296.04	40.7	
J-252	6212.00	7.02	6295.89	36.3	
J-253	6357.22	7.02	6422.87	28.4	
J-254	6385.97	7.02	6415.96	13.0	
J-255	6178.14	7.02	6338.76	69.5	
J-256	6376.37	7.02	6415.96	17.1	
J-257	6384.37	7.02	6396.32	5.2	
J-258	6196.33	7.02	6295.86	43.1	
J-259	6104.00	7.02	6339.11	101.7	
J-260	6127.20	7.02	6348.54	95.8	
J-261	6144.00	7.02	6348.43	88.4	
J-262	6106.00	7.02	6340.68	101.5	
J-263	6301.05	7.02	6307.90	3.0	
J-264	6248.16	7.02	6307.24	25.6	
J-265	6116.00	7.02	6345.98	99.5	
J-266	6100.00	7.02	6340.39	104.0	
J-267	6209.22	7.02	6296.11	37.6	
J-268	6207.42	7.02	6296.09	38.4	
J-269	6142.74	7.02	6339.93	85.3	
J-270	6140.00	7.02	6340.05	86.6	
J-271	6136.29	7.02	6340.15	88.2	
J-272	6131.11	7.02	6340.24	90.5	
J-273	6134.10	7.02	6340.12	89.1	
J-274	6128.75	7.02	6340.23	91.5	
J-275	6125.03	7.02	6340.35	93.2	
J-276	6120.00	7.02	6340.43	95.4	
J-277	6100.89	7.02	6340.46	103.7	
J-278	6107.25	7.02	6340.99	101.1	
J-279	6104.57	7.02	6340.68	102.2	
J-280	6108.54	7.02	6340.66	100.4	
J-281	6110.85	7.02	6343.32	100.6	
J-282	6111.61	7.02	6343.79	100.5	
J-283	6172.48	7.02	6338.85	72.0	
J-284	6182.55	7.02	6295.86	49.0	
J-285	6184.42	7.02	6295.86	48.2	
J-286	6140.50	7.02	6348.43	90.0	
J-287	6140.83	7.02	6348.44	89.8	
J-288	6121.00	7.02	6348.52	98.4	
J-289	6118.22	7.02	6348.52	99.6	
J-290	6122.00	7.02	6348.51	98.0	
J-291	6127.02	7.02	6348.51	95.8	
J-292	6125.65	7.02	6348.65	96.5	
J-293	6126.00	7.02	6348.61	96.3	
J-294	6116.78	7.02	6347.38	99.8	
J-295	6116.00	7.02	6347.65	100.2	
J-296	6116.00	7.02	6347.65	100.2	
J-297	6118.00	7.02	6343.96	97.8	
J-298	6104.00	7.02	6342.04	103.0	
J-299	6104.00	7.02	6341.84	102.9	

JUNCTION INFORMATION FOR PRESENT PEAK HOUR DEMAND

	Satisfies minimum 40 psi pressure requirement
	Does not satisfy minimum 40 psi pressure requirement

J-300	6098.82	7.02	6340.27	104.5	
J-301	6096.47	7.02	6340.06	105.4	
J-302	6086.00	7.02	6337.02	108.6	
J-303	6086.00	7.02	6336.91	108.6	
J-304	6086.00	7.02	6336.61	108.4	
J-305	6086.00	7.02	6336.62	108.4	
J-306	6085.95	7.02	6336.54	108.4	
J-307	6086.00	7.02	6336.58	108.4	
J-308	6091.28	7.02	6336.50	106.1	
J-309	6089.35	7.02	6336.51	106.9	
J-310	6092.40	7.02	6336.51	105.6	
J-311	6092.70	7.02	6336.51	105.5	
J-312	6094.92	7.02	6336.47	104.5	
J-313	6095.06	7.02	6336.47	104.4	
J-314	6095.83	7.02	6336.46	104.1	
J-315	6095.77	7.02	6336.47	104.1	
J-316	6093.34	7.02	6336.46	105.2	
J-317	6095.05	7.02	6336.46	104.4	
J-318	6102.22	7.02	6340.47	103.1	
J-319	6096.70	7.02	6340.47	105.5	
J-320	6097.61	7.02	6340.47	105.1	
J-321	6131.25	7.02	6340.20	90.4	
J-322	6160.00	7.02	6339.24	77.6	
J-323	6162.27	7.02	6339.20	76.5	
J-324	6158.57	7.02	6339.51	78.3	
J-325	6168.04	7.02	6338.90	73.9	
J-326	6171.41	7.02	6338.88	72.5	
J-327	6179.31	7.02	6338.83	69.0	
J-328	6181.92	7.02	6338.83	67.9	
J-329	6182.71	7.02	6338.83	67.5	
J-330	6182.00	7.02	6338.81	67.8	
J-331	6174.00	7.02	6338.79	71.3	
J-332	6175.25	7.02	6338.84	70.8	
J-333	6172.35	7.02	6338.86	72.0	
J-334	6170.20	7.02	6338.76	72.9	
J-335	6163.27	7.02	6338.76	75.9	
J-336	6170.29	7.02	6338.76	72.9	
J-337	6198.51	7.02	6295.95	42.2	
J-338	6199.24	7.02	6295.86	41.8	
J-339	6205.70	7.02	6295.86	39.0	
J-340	6214.52	7.02	6295.85	35.2	
J-341	6205.04	7.02	6296.00	39.4	
J-342	6264.50	7.02	6307.31	18.5	
J-343	6286.00	7.02	6307.49	9.3	
J-344	6375.05	7.02	6402.60	11.9	
J-345	6141.11	7.02	6340.12	86.1	
J-346	6151.37	7.02	6340.09	81.7	
J-347	6150.00	7.02	6340.09	82.2	
J-348	6190.00	7.02	6296.02	45.9	
J-349	6195.26	7.02	6295.99	43.6	
J-350	6199.08	7.02	6296.01	41.9	
J-351	6088.43	7.02	6339.28	108.5	
J-352	6086.36	7.02	6339.23	109.4	
J-353	6118.91	7.02	6339.98	95.6	
J-354	6106.75	7.02	6339.98	100.9	
J-355	6289.91	0.00	6296.46	2.8	
J-356	6155.21	7.02	6339.66	79.8	
J-357	6118.00	7.02	6347.38	99.2	
J-358	6116.03	7.02	6347.38	100.1	

PIPE INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-1	827	LIONS PARK WELL PUMP	J-2	10	Ductile Iron	120	826.78	3.38	4.16
P-2	53	HIGHSCHOOL WELL PUMP	J-5	8	Ductile Iron	120	950.45	6.07	1.02
P-3	262	J-13	J-14	2	Ductile Iron	120	7.02	0.72	0.49
P-4	498	J-77	J-15	2	Ductile Iron	120	-2.96	0.30	0.19
P-5	501	J-16	J-17	8	Ductile Iron	120	-75.47	0.48	0.09
P-6	503	J-12	J-18	2	Ductile Iron	120	-3.28	0.33	0.23
P-7	200	J-19	J-20	6	Ductile Iron	120	-143.20	1.62	0.47
P-8	388	J-26	J-27	6	Ductile Iron	120	-7.48	0.08	0.00
P-9	389	J-8	J-28	6	Ductile Iron	120	-55.26	0.63	0.16
P-10	408	J-30	J-31	6	Ductile Iron	120	7.02	0.08	0.00
P-11	448	J-32	J-33	6	Ductile Iron	120	-57.54	0.65	0.19
P-12	501	J-38	J-39	6	Ductile Iron	120	-27.15	0.31	0.05
P-13	507	J-40	J-41	6	Ductile Iron	120	-20.71	0.23	0.03
P-14	526	J-42	J-18	6	Ductile Iron	120	-55.57	0.63	0.21
P-15	536	J-43	J-44	6	Ductile Iron	120	70.73	0.80	0.34
P-16	565	J-46	J-47	6	Ductile Iron	120	37.27	0.42	0.11
P-17	764	J-52	J-53	6	Ductile Iron	120	7.02	0.08	0.01
P-18	1,019	J-37	J-63	6	Ductile Iron	120	54.45	0.62	0.40
P-19	1,280	J-66	J-67	6	Ductile Iron	120	5.38	0.06	0.01
P-20	1,280	J-68	J-69	6	Ductile Iron	120	9.15	0.10	0.02
P-21	33	J-83	J-84	8	Ductile Iron	120	-7.02	0.04	0.00
P-22	80	VALLEY CENTER WELL PUMP	J-85	8	Ductile Iron	120	314.45	2.01	0.20
P-23	141	J-89	J-90	8	Ductile Iron	120	21.06	0.13	0.00
P-24	146	J-91	J-92	8	Ductile Iron	120	7.02	0.04	0.00
P-25	156	J-93	J-94	8	Ductile Iron	120	7.02	0.04	0.00
P-26	166	J-95	J-96	8	Ductile Iron	120	119.29	0.76	0.07
P-27	169	J-97	J-98	8	Ductile Iron	120	-7.02	0.04	0.00
P-28	180	J-101	J-102	8	Ductile Iron	120	7.02	0.04	0.00
P-29	228	J-114	J-100	8	Ductile Iron	120	77.44	0.49	0.04
P-30	220	J-107	J-108	8	Ductile Iron	120	7.02	0.04	0.00
P-31	232	J-109	J-110	8	Ductile Iron	120	-11.89	0.08	0.00
P-32	240	J-111	J-112	8	Ductile Iron	120	7.02	0.04	0.00
P-33	250	J-113	J-114	8	Ductile Iron	120	-7.02	0.04	0.00
P-34	247	J-115	J-116	8	Ductile Iron	120	-98.12	0.63	0.07
P-35	246	J-117	J-118	8	Ductile Iron	120	7.02	0.04	0.00
P-36	274	J-120	J-121	8	Ductile Iron	120	4.00	0.03	0.00
P-37	293	J-122	J-123	8	Ductile Iron	120	46.07	0.29	0.02
P-38	300	J-74	J-20	8	Ductile Iron	120	150.22	0.96	0.19
P-39	319	J-124	J-125	8	Ductile Iron	120	7.02	0.04	0.00
P-40	313	J-126	J-127	8	Ductile Iron	120	-3.61	0.02	0.00
P-41	316	J-129	J-130	8	Ductile Iron	120	14.45	0.09	0.00
P-42	323	J-132	J-133	8	Ductile Iron	120	16.68	0.11	0.00
P-43	371	J-142	J-143	8	Ductile Iron	120	7.02	0.04	0.00
P-44	529	J-145	J-146	8	Ductile Iron	120	28.14	0.18	0.02
P-45	406	J-149	J-150	8	Ductile Iron	120	7.91	0.05	0.00
P-46	447	J-88	J-152	8	Ductile Iron	120	82.84	0.53	0.09
P-47	589	J-153	J-154	8	Ductile Iron	120	-7.02	0.04	0.00
P-48	513	J-164	J-165	8	Ductile Iron	120	-3.39	0.02	0.00
P-49	524	J-168	J-169	8	Ductile Iron	120	-25.85	0.17	0.01
P-50	534	J-171	J-172	8	Ductile Iron	120	-21.00	0.13	0.01
P-51	590	J-175	J-176	8	Ductile Iron	120	7.02	0.04	0.00
P-52	564	J-65	J-177	8	Ductile Iron	120	-39.50	0.25	0.03
P-53	629	J-200	J-201	8	Ductile Iron	120	56.09	0.36	0.06
P-54	847	J-204	J-205	8	Ductile Iron	120	31.05	0.20	0.03
P-55	786	J-212	J-213	8	Ductile Iron	120	7.02	0.04	0.00
P-56	942	J-224	J-225	8	Ductile Iron	120	3.68	0.02	0.00
P-57	1,015	J-226	J-227	8	Ductile Iron	120	47.17	0.30	0.08
P-58	1,106	J-228	J-229	8	Ductile Iron	120	7.02	0.04	0.00
P-59	1,401	J-247	J-248	8	Ductile Iron	120	7.02	0.04	0.00
P-60	359	J-267	J-233	8	Ductile Iron	120	-35.27	0.23	0.02
P-61	324	J-232	J-268	8	Ductile Iron	120	-57.68	0.37	0.04
P-62	362	J-268	J-267	8	Ductile Iron	120	-47.00	0.30	0.03
P-63	517	J-269	J-18	6	Ductile Iron	120	25.43	0.29	0.05
P-64	500	J-270	J-269	6	Ductile Iron	120	42.58	0.48	0.12
P-65	536	J-38	J-271	6	Ductile Iron	120	31.38	0.36	0.08
P-66	523	J-271	J-270	6	Ductile Iron	120	37.80	0.43	0.10
P-67	535	J-47	J-274	6	Ductile Iron	120	33.44	0.38	0.08
P-68	509	J-275	J-272	6	Ductile Iron	120	39.28	0.45	0.11
P-69	594	J-79	J-276	6	Ductile Iron	120	30.49	0.35	0.08
P-70	496	J-276	J-275	6	Ductile Iron	120	35.51	0.40	0.09
P-71	253	J-277	J-266	8	Ductile Iron	120	97.67	0.62	0.07
P-72	267	J-238	J-279	8	Ductile Iron	120	-121.14	0.77	0.11
P-73	358	J-279	J-278	8	Ductile Iron	120	-177.46	1.13	0.31
P-74	310	J-281	J-282	8	Ductile Iron	120	-240.33	1.53	0.47
P-75	1,207	J-253	J-256	8	Ductile Iron	120	492.98	3.15	6.90
P-76	691	J-256	J-254	8	Ductile Iron	120	7.02	0.04	0.00
P-77	763	J-234	J-158	8	Ductile Iron	120	372.06	2.37	2.59
P-78	808	J-204	J-250	8	Ductile Iron	120	11.87	0.08	0.00
P-79	242	J-124	J-259	8	Ductile Iron	120	7.02	0.04	0.00
P-80	501	J-70	J-274	6	Ductile Iron	120	-27.04	0.31	0.05
P-81	410	J-163	J-87	8	Ductile Iron	120	130.26	0.83	0.20
P-82	698	J-45	J-209	8	Ductile Iron	120	-42.00	0.27	0.04
P-83	266	J-180	J-281	8	Ductile Iron	120	-9.58	0.06	0.00
P-84	308	J-281	J-181	8	Ductile Iron	120	0.50	0.00	0.00
P-85	392	J-148	J-99	8	Ductile Iron	120	-56.38	0.36	0.04

PIPE INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-86	203	J-32	J-224	8	Ductile Iron	120	50.52	0.32	0.02
P-87	453	J-224	J-162	8	Ductile Iron	120	39.81	0.25	0.02
P-88	211	J-199	J-201	8	Ductile Iron	120	42.72	0.27	0.01
P-89	247	J-188	J-233	8	Ductile Iron	120	-7.02	0.04	0.00
P-90	347	J-233	J-189	8	Ductile Iron	120	-49.31	0.31	0.03
P-91	181	J-86	J-246	8	Ductile Iron	120	74.45	0.48	0.03
P-92	179	J-84	J-88	8	Ductile Iron	120	15.19	0.10	0.00
P-93	2,382	J-103	J-73	6	Ductile Iron	120	21.06	0.24	0.16
P-94	129	J-3	J-22	6	Ductile Iron	120	0.50	0.01	0.00
P-95	677	J-26	J-8	6	Ductile Iron	120	-60.45	0.69	0.32
P-96	496	J-48	J-54	6	Ductile Iron	120	12.90	0.15	0.01
P-97	144	J-54	J-49	6	Ductile Iron	120	7.02	0.08	0.00
P-98	497	J-274	J-273	6	Ductile Iron	120	39.64	0.45	0.11
P-99	448	J-24	J-73	6	Ductile Iron	120	-7.02	0.08	0.00
P-100	116	J-73	J-25	6	Ductile Iron	120	7.02	0.08	0.00
P-101	294	J-3	J-212	10	Ductile Iron	120	12.70	0.05	0.00
P-102	502	J-71	J-226	8	Ductile Iron	120	-31.15	0.20	0.02
P-103	505	J-18	J-15	6	Ductile Iron	120	-40.44	0.46	0.11
P-104	509	J-272	J-271	6	Ductile Iron	120	33.88	0.38	0.08
P-105	527	J-271	J-80	6	Ductile Iron	120	20.45	0.23	0.03
P-106	282	J-173	J-239	8	Ductile Iron	120	50.95	0.33	0.02
P-107	271	J-239	J-174	8	Ductile Iron	120	-136.51	0.87	0.14
P-108	484	J-36	J-44	6	Ductile Iron	120	-43.60	0.49	0.13
P-109	16	J-44	J-37	6	Ductile Iron	120	20.11	0.23	0.00
P-110	485	J-64	J-70	6	Ductile Iron	120	-51.30	0.58	0.17
P-111	542	J-70	J-65	6	Ductile Iron	120	-31.28	0.35	0.08
P-112	139	J-155	J-144	8	Ductile Iron	120	-1.65	0.01	0.00
P-113	265	J-186	J-282	8	Ductile Iron	120	57.03	0.36	0.03
P-114	328	J-282	J-187	8	Ductile Iron	120	64.03	0.41	0.04
P-115	355	J-184	J-268	8	Ductile Iron	120	24.72	0.16	0.01
P-116	229	J-268	J-185	8	Ductile Iron	120	7.02	0.04	0.00
P-117	509	J-61	J-276	6	Ductile Iron	120	-39.89	0.45	0.11
P-118	538	J-276	J-62	6	Ductile Iron	120	-51.94	0.59	0.19
P-119	147	J-50	J-111	6	Ductile Iron	120	-135.92	1.54	0.31
P-120	520	J-111	J-51	6	Ductile Iron	120	-149.96	1.70	1.33
P-121	482	J-34	J-43	6	Ductile Iron	120	-69.78	0.79	0.30
P-122	17	J-43	J-35	6	Ductile Iron	120	-147.52	1.67	0.04
P-123	274	J-218	J-203	8	Ductile Iron	120	28.08	0.18	0.01
P-124	524	J-28	J-269	8	Ductile Iron	120	-81.59	0.52	0.11
P-125	506	J-269	J-64	8	Ductile Iron	120	-71.46	0.46	0.08
P-126	518	J-273	J-272	6	Ductile Iron	120	-39.97	0.45	0.11
P-127	537	J-272	J-36	6	Ductile Iron	120	-41.59	0.47	0.13
P-128	461	J-207	J-247	8	Ductile Iron	120	21.06	0.13	0.01
P-129	282	J-247	J-208	8	Ductile Iron	120	7.02	0.04	0.00
P-130	428	J-156	J-215	8	Ductile Iron	120	-43.77	0.28	0.03
P-131	360	J-98	J-243	8	Ductile Iron	120	7.02	0.04	0.00
P-132	33	J-246	J-75	6	Ductile Iron	120	-131.93	1.50	0.07
P-133	121	J-42	J-8	12	Ductile Iron	120	12.21	0.03	0.00
P-134	267	J-278	J-126	8	Ductile Iron	120	-177.03	1.13	0.23
P-135	260	J-126	J-239	8	Ductile Iron	120	-180.44	1.15	0.23
P-136	269	J-170	J-241	8	Ductile Iron	120	-150.09	0.96	0.17
P-137	257	J-241	J-244	8	Ductile Iron	120	55.10	0.35	0.02
P-138	1,023	J-15	J-41	6	Ductile Iron	120	-36.57	0.41	0.19
P-139	564	J-41	J-72	6	Ductile Iron	120	-33.41	0.38	0.09
P-140	385	J-45	J-13	6	Ductile Iron	120	-14.08	0.16	0.01
P-141	160	J-13	J-79	6	Ductile Iron	120	-28.12	0.32	0.02
P-142	740	J-202	J-165	8	Ductile Iron	120	-3.41	0.02	0.00
P-143	176	J-165	J-203	8	Ductile Iron	120	-13.82	0.09	0.00
P-144	351	J-182	J-267	8	Ductile Iron	120	25.77	0.16	0.01
P-145	228	J-267	J-183	8	Ductile Iron	120	7.02	0.04	0.00
P-146	517	J-41	J-65	6	Ductile Iron	120	-30.88	0.35	0.07
P-147	360	J-241	J-120	8	Ductile Iron	120	-212.22	1.35	0.43
P-148	262	J-120	J-281	8	Ductile Iron	120	-223.24	1.42	0.35
P-149	368	J-158	J-95	8	Ductile Iron	120	133.33	0.85	0.19
P-150	117	J-95	J-159	8	Ductile Iron	120	7.02	0.04	0.00
P-151	484	J-219	J-228	8	Ductile Iron	120	35.10	0.22	0.02
P-152	185	J-137	J-90	8	Ductile Iron	120	-7.02	0.04	0.00
P-153	148	J-90	J-138	8	Ductile Iron	120	7.02	0.04	0.00
P-154	862	J-218	J-10	12	Ductile Iron	120	7.02	0.02	0.00
P-155	54	J-221	J-240	8	Ductile Iron	120	7.02	0.04	0.00
P-156	467	J-157	J-114	8	Ductile Iron	120	91.48	0.58	0.12
P-157	295	J-163	J-123	8	Ductile Iron	120	-39.05	0.25	0.02
P-158	174	J-81	J-162	6	Ductile Iron	120	-126.36	1.43	0.32
P-159	358	J-182	J-189	14	Ductile Iron	120	-238.51	0.50	0.03
P-160	231	J-171	J-169	8	Ductile Iron	120	-234.91	1.50	0.33
P-161	1,522	J-74	J-60	6	Ductile Iron	120	-157.24	1.78	4.26
P-162	421	J-60	J-246	6	Ductile Iron	120	-199.36	2.26	1.83
P-163	325	J-9	J-184	14	Ductile Iron	120	-173.99	0.36	0.02
P-164	367	J-184	J-182	14	Ductile Iron	120	-205.73	0.43	0.03
P-165	561	J-50	J-78	6	Ductile Iron	120	32.64	0.37	0.09
P-166	515	J-274	J-275	6	Ductile Iron	120	-40.26	0.46	0.12
P-167	537	J-275	J-34	6	Ductile Iron	120	-51.04	0.58	0.19
P-168	40	J-17	J-209	8	Ductile Iron	120	-82.49	0.53	0.01
P-169	267	J-209	J-280	8	Ductile Iron	120	-131.51	0.84	0.13
P-170	291	J-150	J-134	6	Ductile Iron	120	38.05	0.43	0.06

PIPE INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-171	477	J-134	J-59	6	Ductile Iron	120	-30.74	0.35	0.06
P-172	912	J-263	J-236	8	Ductile Iron	120	105.31	0.67	0.30
P-173	380	J-227	J-68	6	Ductile Iron	120	37.98	0.43	0.08
P-174	163	J-58	J-93	6	Ductile Iron	120	51.19	0.58	0.06
P-175	214	J-93	J-150	6	Ductile Iron	120	37.15	0.42	0.04
P-176	253	J-146	J-204	8	Ductile Iron	120	49.93	0.32	0.02
P-177	42	J-251	J-232	8	Ductile Iron	120	-96.37	0.62	0.01
P-178	359	J-232	J-9	8	Ductile Iron	120	-45.71	0.29	0.03
P-179	529	J-71	J-38	6	Ductile Iron	120	-32.74	0.37	0.08
P-180	511	J-38	J-36	6	Ductile Iron	120	-44.00	0.50	0.14
P-181	525	J-222	J-141	8	Ductile Iron	120	-72.25	0.46	0.09
P-182	508	J-273	J-270	6	Ductile Iron	120	31.56	0.36	0.07
P-183	526	J-270	J-76	6	Ductile Iron	120	19.76	0.22	0.03
P-184	682	J-28	J-27	6	Ductile Iron	120	74.27	0.84	0.48
P-185	707	J-203	J-164	8	Ductile Iron	120	7.24	0.05	0.00
P-186	211	J-164	J-202	8	Ductile Iron	120	3.61	0.02	0.00
P-187	266	J-223	J-277	8	Ductile Iron	120	174.45	1.11	0.22
P-188	321	J-280	J-279	8	Ductile Iron	120	-47.74	0.30	0.02
P-189	278	J-279	J-223	8	Ductile Iron	120	1.56	0.01	0.00
P-190	132	J-54	J-52	6	Ductile Iron	120	-1.14	0.01	0.00
P-191	201	J-169	J-244	8	Ductile Iron	120	-267.78	1.71	0.37
P-192	254	J-214	J-76	6	Ductile Iron	120	42.22	0.48	0.06
P-193	501	J-76	J-28	6	Ductile Iron	120	54.96	0.62	0.20
P-194	179	J-260	J-89	8	Ductile Iron	120	77.22	0.49	0.03
P-195	523	J-15	J-64	6	Ductile Iron	120	-13.85	0.16	0.02
P-196	499	J-64	J-273	6	Ductile Iron	120	-41.04	0.47	0.12
P-197	312	J-215	J-105	8	Ductile Iron	120	-23.80	0.15	0.01
P-198	492	J-65	J-47	6	Ductile Iron	120	-29.68	0.34	0.06
P-199	41	J-47	J-61	6	Ductile Iron	120	-32.87	0.37	0.01
P-200	535	J-71	J-80	6	Ductile Iron	120	18.56	0.21	0.03
P-201	273	J-80	J-214	6	Ductile Iron	120	31.99	0.36	0.04
P-202	209	J-173	J-171	8	Ductile Iron	120	-248.89	1.59	0.34
P-203	156	J-46	J-16	6	Ductile Iron	120	-10.32	0.12	0.00
P-204	44	J-5	J-22	12	Ductile Iron	120	-359.60	1.02	0.02
P-205	463	J-250	J-205	8	Ductile Iron	120	39.15	0.25	0.02
P-206	32	J-2	J-51	8	Ductile Iron	120	504.35	3.22	0.19
P-207	541	J-51	J-262	8	Ductile Iron	120	347.37	2.22	1.62
P-208	521	J-36	J-34	6	Ductile Iron	120	-49.01	0.56	0.17
P-209	530	J-226	J-39	8	Ductile Iron	120	-85.34	0.54	0.12
P-210	47	J-193	J-257	12	HDPE	150	2,828.25	8.02	0.63
P-211	540	J-79	J-46	6	Ductile Iron	120	33.98	0.39	0.09
P-212	39	J-195	J-104	8	Ductile Iron	120	-41.71	0.27	0.00
P-213	394	J-104	J-222	8	Ductile Iron	120	-44.75	0.29	0.03
P-214	268	J-9	J-217	8	Ductile Iron	120	79.13	0.51	0.05
P-215	554	J-217	J-110	8	Ductile Iron	120	36.35	0.23	0.03
P-216	723	J-129	J-132	8	Ductile Iron	120	34.84	0.22	0.03
P-217	324	J-135	J-195	8	Ductile Iron	120	-54.51	0.35	0.03
P-218	366	J-107	J-117	8	Ductile Iron	120	21.06	0.13	0.01
P-219	108	J-117	J-264	8	Ductile Iron	120	7.02	0.04	0.00
P-220	791	J-249	J-145	8	Ductile Iron	120	63.97	0.41	0.10
P-221	506	J-145	J-146	8	Ductile Iron	120	28.82	0.18	0.02
P-222	488	J-210	J-197	8	Ductile Iron	120	213.58	1.36	0.59
P-223	357	J-197	J-223	8	Ductile Iron	120	179.92	1.15	0.32
P-224	45	J-148	J-122	8	Ductile Iron	120	182.57	1.17	0.04
P-225	304	J-252	J-242	8	Ductile Iron	120	49.40	0.32	0.02
P-226	162	J-158	J-157	8	Ductile Iron	120	231.71	1.48	0.23
P-227	450	J-157	J-148	8	Ductile Iron	120	133.21	0.85	0.23
P-228	247	J-201	J-151	8	Ductile Iron	120	91.79	0.59	0.06
P-229	336	J-151	J-266	8	Ductile Iron	120	-123.65	0.79	0.15
P-230	208	J-172	J-174	8	Ductile Iron	120	201.48	1.29	0.23
P-231	41	J-174	J-210	8	Ductile Iron	120	57.95	0.37	0.00
P-232	307	J-181	J-187	8	Ductile Iron	120	-229.24	1.46	0.43
P-233	5,085	J-207	J-5	12	Ductile Iron	120	-1,303.03	3.70	24.41
P-234	392	J-6	J-29	12	Ductile Iron	120	-385.51	1.09	0.20
P-235	537	J-7	J-12	12	Ductile Iron	120	-99.21	0.28	0.02
P-236	53	J-87	J-106	8	Ductile Iron	120	79.97	0.51	0.01
P-237	59	J-106	J-88	8	Ductile Iron	120	74.67	0.48	0.01
P-238	462	J-205	J-219	8	Ductile Iron	120	63.18	0.40	0.06
P-239	345	J-219	J-124	8	Ductile Iron	120	21.06	0.13	0.01
P-240	494	J-12	J-77	8	Ductile Iron	120	-102.95	0.66	0.16
P-241	1,026	J-77	J-40	8	Ductile Iron	120	-107.01	0.68	0.35
P-242	648	J-35	J-2	8	Ductile Iron	120	-315.41	2.01	1.62
P-243	221	J-162	J-33	6	Ductile Iron	120	-93.57	1.06	0.24
P-244	206	J-48	J-69	6	Ductile Iron	120	-22.51	0.26	0.02
P-245	380	J-69	J-55	6	Ductile Iron	120	-20.38	0.23	0.02
P-246	689	J-81	J-249	8	Ductile Iron	120	119.34	0.76	0.28
P-247	260	J-22	J-21	12	Ductile Iron	120	-366.12	1.04	0.12
P-248	317	J-21	J-6	12	Ductile Iron	120	-407.40	1.16	0.18
P-249	485	J-34	J-62	6	Ductile Iron	120	-37.30	0.42	0.09
P-250	25	J-62	J-50	6	Ductile Iron	120	-96.25	1.09	0.03
P-251	185	J-23	J-19	6	Ductile Iron	120	-35.84	0.41	0.03
P-252	305	J-266	J-115	8	Ductile Iron	120	-32.99	0.21	0.01
P-253	303	J-115	J-200	8	Ductile Iron	120	58.11	0.37	0.03
P-254	258	J-127	J-173	8	Ductile Iron	120	-190.93	1.22	0.25
P-255	225	J-168	J-172	8	Ductile Iron	120	229.51	1.46	0.31

PIPE INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-256	532	J-230	J-167	8	Ductile Iron	120	-160.01	1.02	0.38
P-257	382	J-68	J-66	6	Ductile Iron	120	21.81	0.25	0.03
P-258	512	J-122	J-141	8	Ductile Iron	120	129.48	0.83	0.25
P-259	285	J-91	J-160	8	Ductile Iron	120	56.16	0.36	0.03
P-260	295	J-110	J-216	8	Ductile Iron	120	43.75	0.28	0.02
P-261	357	J-244	J-121	8	Ductile Iron	120	-219.70	1.40	0.46
P-262	263	J-121	J-181	8	Ductile Iron	120	-222.72	1.42	0.35
P-263	572	J-180	J-211	8	Ductile Iron	120	251.31	1.60	0.94
P-264	497	J-39	J-37	8	Ductile Iron	120	-119.50	0.76	0.21
P-265	537	J-37	J-35	8	Ductile Iron	120	-160.86	1.03	0.39
P-266	328	J-16	J-177	6	Ductile Iron	120	58.13	0.66	0.15
P-267	53	J-211	J-170	8	Ductile Iron	120	67.60	0.43	0.01
P-268	202	J-170	J-168	8	Ductile Iron	120	210.67	1.34	0.24
P-269	176	J-67	J-48	6	Ductile Iron	120	-2.58	0.03	0.00
P-270	327	J-280	J-198	8	Ductile Iron	120	-192.47	1.23	0.33
P-271	264	J-198	J-127	8	Ductile Iron	120	-180.30	1.15	0.23
P-272	1,286	J-33	J-139	10	Ductile Iron	120	-158.12	0.65	0.30
P-273	484	J-139	J-262	10	Ductile Iron	120	-208.16	0.85	0.19
P-274	669	J-262	J-78	10	Ductile Iron	120	132.19	0.54	0.11
P-275	309	J-186	J-180	8	Ductile Iron	120	248.75	1.59	0.50
P-276	513	J-177	J-72	6	Ductile Iron	120	11.61	0.13	0.01
P-277	537	J-72	J-23	6	Ductile Iron	120	-28.82	0.33	0.06
P-278	31	J-78	J-58	10	Ductile Iron	120	157.82	0.64	0.01
P-279	494	J-58	J-79	10	Ductile Iron	120	99.60	0.41	0.05
P-280	739	J-212	J-283	10	Ductile Iron	120	-1.34	0.01	0.00
P-281	454	J-283	J-191	10	Ductile Iron	120	70.54	0.29	0.02
P-282	106	J-228	J-175	8	Ductile Iron	120	21.06	0.13	0.00
P-283	373	J-175	J-220	8	Ductile Iron	120	7.02	0.04	0.00
P-284	174	J-99	J-100	8	Ductile Iron	120	-70.42	0.45	0.03
P-285	282	J-277	J-238	8	Ductile Iron	120	-114.94	0.73	0.11
P-286	265	J-238	J-235	8	Ductile Iron	120	-0.82	0.01	0.00
P-287	236	J-260	J-231	8	Ductile Iron	120	45.66	0.29	0.02
P-288	300	J-231	J-166	8	Ductile Iron	120	21.42	0.14	0.01
P-289	70	J-194	J-128	8	Ductile Iron	120	767.47	4.90	0.91
P-290	183	J-104	J-105	8	Ductile Iron	120	-3.97	0.03	0.00
P-291	182	J-105	J-152	8	Ductile Iron	120	-34.79	0.22	0.01
P-292	273	J-99	J-119	8	Ductile Iron	120	7.02	0.04	0.00
P-293	354	J-139	J-140	8	Ductile Iron	120	43.01	0.27	0.02
P-294	249	J-151	J-234	8	Ductile Iron	120	208.42	1.33	0.29
P-295	165	J-59	J-116	8	Ductile Iron	120	11.29	0.07	0.00
P-296	404	J-89	J-178	8	Ductile Iron	120	49.14	0.31	0.03
P-297	496	J-178	J-154	8	Ductile Iron	120	35.10	0.22	0.02
P-298	49	J-136	J-155	8	Ductile Iron	120	-13.07	0.08	0.00
P-299	364	J-225	J-67	6	Ductile Iron	120	-0.94	0.01	0.00
P-300	472	J-196	J-222	8	Ductile Iron	120	-20.47	0.13	0.01
P-301	556	J-128	J-245	8	Ductile Iron	120	440.62	2.81	2.58
P-302	460	J-133	J-258	8	Ductile Iron	120	6.76	0.04	0.00
P-303	272	J-197	J-278	8	Ductile Iron	120	26.64	0.17	0.01
P-304	342	J-278	J-198	8	Ductile Iron	120	19.19	0.12	0.00
P-305	1,014	J-27	J-190	6	Ductile Iron	120	59.77	0.68	0.47
P-306	269	J-60	J-1	6	Ductile Iron	120	35.10	0.40	0.05
P-307	490	J-1	J-103	6	Ductile Iron	120	28.08	0.32	0.06
P-308	325	J-82	J-134	8	Ductile Iron	120	-61.77	0.39	0.04
P-309	211	J-55	J-63	6	Ductile Iron	120	-49.60	0.56	0.07
P-310	1,069	J-63	J-227	6	Ductile Iron	120	-2.17	0.02	0.00
P-311	388	J-190	J-283	6	Ductile Iron	120	17.99	0.20	0.02
P-312	1,012	J-283	J-26	6	Ductile Iron	120	-60.91	0.69	0.49
P-313	630	J-199	J-82	8	Ductile Iron	120	-49.74	0.32	0.05
P-314	223	J-200	J-82	8	Ductile Iron	120	-5.00	0.03	0.00
P-315	1,735	J-75	J-230	8	Ductile Iron	120	-138.95	0.89	0.95
P-316	239	J-230	J-30	8	Ductile Iron	120	14.04	0.09	0.00
P-317	877	J-265	J-186	8	Ductile Iron	120	312.81	2.00	2.16
P-318	262	J-282	J-245	8	Ductile Iron	120	-254.34	1.62	0.44
P-319	159	J-59	J-45	8	Ductile Iron	120	-49.05	0.31	0.01
P-320	697	J-132	J-284	8	Ductile Iron	120	11.14	0.07	0.00
P-321	278	J-284	J-285	8	Ductile Iron	120	4.12	0.03	0.00
P-322	715	J-285	J-133	8	Ductile Iron	120	-2.90	0.02	0.00
P-323	458	J-286	J-261	8	Ductile Iron	120	7.02	0.04	0.00
P-324	767	J-154	J-287	8	Ductile Iron	120	21.06	0.13	0.01
P-325	693	J-287	J-286	8	Ductile Iron	120	14.04	0.09	0.01
P-326	600	J-178	J-179	8	Ductile Iron	120	7.02	0.04	0.00
P-327	297	J-288	J-231	8	Ductile Iron	120	-17.22	0.11	0.00
P-328	369	J-289	J-288	8	Ductile Iron	120	-10.20	0.07	0.00
P-329	292	J-166	J-289	8	Ductile Iron	120	-3.18	0.02	0.00
P-330	277	J-166	J-290	8	Ductile Iron	120	17.58	0.11	0.00
P-331	465	J-290	J-291	8	Ductile Iron	120	10.56	0.07	0.00
P-332	209	J-291	J-167	8	Ductile Iron	120	3.54	0.02	0.00
P-333	42	J-85	J-292	8	Ductile Iron	120	136.92	0.87	0.02
P-334	240	J-292	J-260	8	Ductile Iron	120	129.90	0.83	0.12
P-335	140	J-167	J-293	8	Ductile Iron	120	-163.49	1.04	0.10
P-336	77	J-293	J-85	8	Ductile Iron	120	-170.51	1.09	0.06
P-337	81	J-206	J-295	8	Ductile Iron	120	21.06	0.13	0.00
P-338	140	J-295	J-296	8	Ductile Iron	120	14.04	0.09	0.00
P-339	165	J-296	J-131	8	Ductile Iron	120	7.02	0.04	0.00
P-340	139	J-194	J-206	8	Ductile Iron	120	130.61	0.83	0.07

PIPE INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-341	265	J-187	J-297	8	Ductile Iron	120	-172.23	1.10	0.22
P-342	304	J-297	J-245	8	Ductile Iron	120	-179.25	1.14	0.27
P-343	392	J-298	J-211	8	Ductile Iron	120	-176.69	1.13	0.34
P-344	255	J-299	J-298	8	Ductile Iron	120	-169.67	1.08	0.20
P-345	345	J-210	J-299	8	Ductile Iron	120	-162.65	1.04	0.25
P-346	210	J-300	J-277	8	Ductile Iron	120	-184.70	1.18	0.19
P-347	139	J-234	J-301	8	Ductile Iron	120	-170.66	1.09	0.11
P-348	235	J-301	J-300	8	Ductile Iron	120	-177.68	1.13	0.20
P-349	234	J-96	J-302	8	Ductile Iron	120	112.27	0.72	0.09
P-350	296	J-303	J-163	8	Ductile Iron	120	98.23	0.63	0.09
P-351	326	J-302	J-303	8	Ductile Iron	120	105.25	0.67	0.11
P-352	87	J-304	J-84	8	Ductile Iron	120	29.23	0.19	0.00
P-353	136	J-87	J-305	8	Ductile Iron	120	43.27	0.28	0.01
P-354	170	J-305	J-304	8	Ductile Iron	120	36.25	0.23	0.01
P-355	340	J-306	J-221	8	Ductile Iron	120	34.45	0.22	0.01
P-356	406	J-141	J-307	8	Ductile Iron	120	48.49	0.31	0.03
P-357	81	J-308	J-215	8	Ductile Iron	120	26.99	0.17	0.00
P-358	109	J-152	J-309	8	Ductile Iron	120	41.03	0.26	0.01
P-359	143	J-309	J-308	8	Ductile Iron	120	34.01	0.22	0.01
P-360	311	J-195	J-310	8	Ductile Iron	120	-19.83	0.13	0.00
P-361	182	J-310	J-311	8	Ductile Iron	120	-26.85	0.17	0.00
P-362	298	J-311	J-196	8	Ductile Iron	120	-33.87	0.22	0.01
P-363	483	J-221	J-196	8	Ductile Iron	120	20.41	0.13	0.01
P-364	209	J-135	J-312	8	Ductile Iron	120	22.03	0.14	0.00
P-365	123	J-312	J-313	8	Ductile Iron	120	15.01	0.10	0.00
P-366	196	J-313	J-136	8	Ductile Iron	120	7.99	0.05	0.00
P-367	50	J-144	J-314	8	Ductile Iron	120	10.53	0.07	0.00
P-368	312	J-314	J-317	8	Ductile Iron	120	3.51	0.02	0.00
P-369	431	J-101	J-156	8	Ductile Iron	120	-17.55	0.11	0.00
P-370	151	J-155	J-315	8	Ductile Iron	120	-18.44	0.12	0.00
P-371	132	J-315	J-135	8	Ductile Iron	120	-25.46	0.16	0.00
P-372	37	J-147	J-316	8	Ductile Iron	120	-7.02	0.04	0.00
P-373	55	J-317	J-101	8	Ductile Iron	120	-3.51	0.02	0.00
P-374	219	J-318	J-149	8	Ductile Iron	120	0.59	0.00	0.00
P-375	705	J-319	J-318	8	Ductile Iron	120	7.61	0.05	0.00
P-376	209	J-140	J-320	8	Ductile Iron	120	21.65	0.14	0.00
P-377	112	J-320	J-319	8	Ductile Iron	120	14.63	0.09	0.00
P-378	782	J-149	J-140	8	Ductile Iron	120	-14.34	0.09	0.01
P-379	206	J-40	J-321	8	Ductile Iron	120	-93.32	0.60	0.05
P-380	557	J-321	J-19	8	Ductile Iron	120	-100.34	0.64	0.17
P-381	253	J-322	J-323	6	Ductile Iron	120	35.93	0.41	0.05
P-382	256	J-29	J-324	12	Ductile Iron	120	-435.48	1.24	0.16
P-383	184	J-324	J-7	12	Ductile Iron	120	-442.50	1.26	0.12
P-384	296	J-327	J-191	8	Ductile Iron	120	-0.34	0.00	0.00
P-385	378	J-191	J-330	10	Ductile Iron	120	63.18	0.26	0.02
P-386	584	J-330	J-331	10	Ductile Iron	120	56.16	0.23	0.02
P-387	740	J-331	J-57	10	Ductile Iron	120	49.14	0.20	0.02
P-388	482	J-57	J-4	10	Ductile Iron	120	31.28	0.13	0.01
P-389	652	J-333	J-332	8	Ductile Iron	120	27.74	0.18	0.02
P-390	486	J-332	J-329	8	Ductile Iron	120	20.72	0.13	0.01
P-391	477	J-56	J-334	6	Ductile Iron	120	-3.82	0.04	0.00
P-392	402	J-334	J-57	6	Ductile Iron	120	-10.84	0.12	0.01
P-393	143	J-56	J-335	8	Ductile Iron	120	-3.20	0.02	0.00
P-394	823	J-335	J-4	8	Ductile Iron	120	-10.22	0.07	0.00
P-395	398	J-4	J-336	8	Ductile Iron	120	14.04	0.09	0.00
P-396	673	J-336	J-255	8	Ductile Iron	120	7.02	0.04	0.00
P-397	220	J-216	J-337	8	Ductile Iron	120	63.32	0.40	0.03
P-398	599	J-337	J-129	8	Ductile Iron	120	56.30	0.36	0.06
P-399	232	J-338	J-258	8	Ductile Iron	120	0.26	0.00	0.00
P-400	472	J-242	J-339	8	Ductile Iron	120	14.30	0.09	0.00
P-401	453	J-339	J-338	8	Ductile Iron	120	7.28	0.05	0.00
P-402	463	J-242	J-340	8	Ductile Iron	120	28.08	0.18	0.01
P-403	403	J-340	J-98	8	Ductile Iron	120	21.06	0.13	0.01
P-404	392	J-251	J-341	8	Ductile Iron	120	56.02	0.36	0.04
P-405	1,443	J-341	J-252	8	Ductile Iron	120	49.00	0.31	0.11
P-406	171	J-160	J-342	8	Ductile Iron	120	14.04	0.09	0.00
P-407	336	J-342	J-161	8	Ductile Iron	120	7.02	0.04	0.00
P-408	251	J-343	J-142	8	Ductile Iron	120	84.24	0.54	0.05
P-409	1,166	J-236	J-237	8	Ductile Iron	120	7.02	0.04	0.00
P-410	2,466	J-256	J-344	8	Ductile Iron	120	478.94	3.06	13.36
P-411	6,640	1 MG TANK	J-192	12	HDPE	150	2,842.29	8.06	89.36
P-412	251	J-329	J-328	8	Ductile Iron	120	13.70	0.09	0.00
P-413	305	J-328	J-327	8	Ductile Iron	120	6.68	0.04	0.00
P-414	400	J-21	J-325	6	Ductile Iron	120	34.26	0.39	0.07
P-415	236	J-325	J-326	6	Ductile Iron	120	27.24	0.31	0.03
P-416	338	J-144	J-156	8	Ductile Iron	120	-19.20	0.12	0.00
P-417	355	J-136	J-316	8	Ductile Iron	120	14.04	0.09	0.00
P-418	518	J-71	J-345	8	Ductile Iron	120	38.31	0.24	0.03
P-419	271	J-346	J-347	8	Ductile Iron	120	24.27	0.15	0.01
P-420	506	J-347	J-214	8	Ductile Iron	120	17.25	0.11	0.01
P-421	553	J-109	J-348	8	Ductile Iron	120	-28.74	0.18	0.02
P-422	232	J-348	J-217	8	Ductile Iron	120	-35.76	0.23	0.01
P-423	233	J-216	J-349	8	Ductile Iron	120	-26.59	0.17	0.01
P-424	296	J-349	J-109	8	Ductile Iron	120	-33.61	0.21	0.01
P-425	443	J-110	J-350	8	Ductile Iron	120	-26.31	0.17	0.01

PIPE INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-426	748	J-350	J-251	8	Ductile Iron	120	-33.33	0.21	0.03
P-427	357	J-333	J-190	8	Ductile Iron	120	-34.76	0.22	0.01
P-428	872	J-206	J-294	8	Ductile Iron	120	102.53	0.65	0.27
P-429	325	J-128	J-265	8	Ductile Iron	120	319.83	2.04	0.83
P-430	681	J-306	J-307	8	Ductile Iron	120	-41.47	0.26	0.04
P-431	570	J-106	J-141	8	Ductile Iron	120	-1.72	0.01	0.00
P-432	857	J-249	J-351	8	Ductile Iron	120	48.35	0.31	0.07
P-433	898	J-351	J-352	8	Ductile Iron	120	41.33	0.26	0.05
P-434	611	J-352	J-250	8	Ductile Iron	120	34.31	0.22	0.02
P-435	892	J-346	J-345	8	Ductile Iron	120	-31.29	0.20	0.03
P-436	399	J-29	J-322	6	Ductile Iron	120	42.95	0.49	0.10
P-437	415	J-6	J-323	6	Ductile Iron	120	-28.91	0.33	0.05
P-438	426	J-3	J-326	6	Ductile Iron	120	-20.22	0.23	0.03
P-439	1,210	J-130	J-252	8	Ductile Iron	120	7.43	0.05	0.00
P-440	642	J-142	J-91	8	Ductile Iron	120	70.20	0.45	0.10
P-441	1,333	J-107	J-160	8	Ductile Iron	120	-35.10	0.22	0.06
P-442	748	J-192	J-193	12	Ductile Iron	120	2,069.96	5.87	8.46
P-443	655	J-192	J-193	8	Ductile Iron	120	765.31	4.88	8.46
P-444	652	J-263	J-11	12	HDPE	150	3,180.83	9.02	10.81
P-445	1,192	J-257	J-344	8	Ductile Iron	120	-471.92	3.01	6.28
P-446	5,002	J-257	J-263	12	HDPE	150	3,293.15	9.34	88.42
P-447	358	J-66	J-353	6	Ductile Iron	120	9.42	0.11	0.01
P-448	1,280	J-353	J-225	6	Ductile Iron	120	2.40	0.03	0.00
P-449	456	J-52	J-354	6	Ductile Iron	120	-15.18	0.17	0.02
P-450	492	J-354	J-55	6	Ductile Iron	120	-22.20	0.25	0.04
P-451	6,442	PRV-1	J-189	14	Ductile Iron	120	294.85	0.61	0.93
P-452	290	J-280	J-235	8	Ductile Iron	120	101.68	0.65	0.09
P-453	371	J-235	J-116	8	Ductile Iron	120	93.85	0.60	0.10
P-454	127	HIGHSCHOOL WELL	HIGHSCHOOL WELL PUMP	8	Ductile Iron	120	950.45	6.07	2.44
P-455	46	J-11	J-355	12	HDPE	150	2,885.98	8.19	0.63
P-456	31	J-355	0.3 MG TANK	12	HDPE	150	3,293.02	9.34	0.56
P-457	13	TANK WELL PUMP	J-355	6	Ductile Iron	120	407.03	4.62	0.22
P-458	180	TANK WELL	TANK WELL PUMP	4	Ductile Iron	120	407.03	10.39	21.07
P-459	38	TETON CREEK WELL PUMP	J-253	6	Ductile Iron	120	500.00	5.67	0.90
P-460	122	TETON CREEK WELL	TETON CREEK WELL PUMP	4	Ductile Iron	120	500.00	12.77	20.90
P-461	79	J-7	J-356	12	Ductile Iron	120	-350.32	0.99	0.03
P-462	423	J-356	J-42	12	Ductile Iron	120	-36.34	0.10	0.00
P-463	77	DALLEY WELL PUMP	J-356	6	Ductile Iron	120	321.00	3.64	0.81
P-464	128	DALLEY WELL	DALLEY WELL PUMP	4	Ductile Iron	120	321.00	8.20	9.70
P-465	59	VALLEY CENTER WELL	VALLEY CENTER WELL PUMP	6	Ductile Iron	120	314.45	3.57	0.59
P-466	201	LIONS PARK WELL	LIONS PARK WELL PUMP	6	Ductile Iron	120	826.78	9.38	12.15
P-467	9	HUNTSMAN WELL PUMP	J-194	8	Ductile Iron	120	905.10	5.78	0.15
P-468	225	HUNTSMAN WELL	HUNTSMAN WELL PUMP	6	Ductile Iron	120	905.10	10.27	16.10
P-469	445	J-357	J-358	10	Ductile Iron	120	-7.02	0.03	0.00
P-470	15	J-294	J-358	8	Ductile Iron	120	95.51	0.61	0.00
P-471	1,149	J-358	J-86	8	Ductile Iron	120	81.47	0.52	0.23
P-472	4,724	FCV-1	1 MG TANK	12	HDPE	150	500.00	1.42	2.54
P-473	1,436	PRV-2	J-218	12	Ductile Iron	120	42.12	0.12	0.01
P-474	784	J-9	PRV-2	12	Ductile Iron	120	42.13	0.12	0.01
P-475	19	J-11	PRV-1	14	Ductile Iron	120	294.84	0.61	0.00
P-476	371	J-236	PRV-3	8	Ductile Iron	120	91.27	0.58	0.09
P-477	75	PRV-3	J-343	8	Ductile Iron	120	91.26	0.58	0.02
P-478	4,019	0.3 MG TANK	J-207	12	Ductile Iron	120	-1,274.95	3.62	18.53
P-479	67	CITY SPRING	FCV-1	12	HDPE	150	500.00	1.42	0.04

PRV INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Elevation (ft)	Diameter (Valve) (in)	Hydraulic Grade Setting (Initial) (ft)	Pressure Setting (Initial) (psi)	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)
PRV-1	6289.80	8	6405.32	50	294.84	6297.09	6297.09
PRV-2	6186.00	8	6301.52	50	42.12	6296.07	6296.07
PRV-3	6289.80	6	6405.32	50	91.27	6307.51	6307.51

FCV INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Elevation (ft)	Diameter (Valve) (in)	Flow Setting (Initial) (gpm)	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
FCV-1	6538.57	12	500	500	6539.30	6497.30	42

WELL PUMP INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Elevation (ft)	Status (Initial)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Flow (Design) (gpm)	Pump Head (ft)	Head (Design) (ft)	Downstream Pipe	Flow (Target) (gpm)	Is Variable Speed Pump?	VSP Type
HIGHSCHOOL WELL PUMP	6172.46	On	6087.02	6339.85	950.45	825	252.83	285	P-2	0	FALSE	Pattern Based
TANK WELL PUMP	6296.91	On	6146.84	6296.67	407.03	500	149.83	114	P-457	0	FALSE	Pattern Based
TETON CREEK WELL PUMP	6357.22	On	6216.32	6423.76	500.00	500	207.45	265	P-459	500	TRUE	Fixed Flow
DALLEY WELL PUMP	6154.33	On	6079.76	6340.47	321.00	400	260.71	208	P-463	0	FALSE	Pattern Based
VALLEY CENTER WELL PUMP	6125.02	On	6084.43	6348.87	314.45	500	264.44	220	P-22	500	TRUE	Fixed Flow
LIONS PARK WELL PUMP	6114.58	On	6062.43	6346.65	826.78	560	284.22	410	P-1	0	FALSE	Pattern Based
HUNTSMAN WELL PUMP	6118.29	On	6040.19	6347.87	905.10	950	307.69	283	P-467	0	FALSE	Pattern Based

TANK INFORMATION FOR PRESENT PEAK HOUR DEMAND

Label	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)	Elevation (ft)
0.3 MG TANK	6282.00	6282.00	6295.90	6299.00	58	-4567.97	6295.90	6302.89
1 MG TANK	6480.86	6480.86	6494.76	6496.86	108	2342.29	6494.76	6484.17

APPENDIX I

Present Fire Flow with Maximum Day Demand

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-1	3,004.39	1,684.64	20.1	J-355	
J-2	1,504.39	4,179.46	20.0	J-355	
J-3	1,504.39	3,759.01	20.0	J-355	
J-4	1,504.39	1,964.72	20.0	J-355	
J-5	1,504.39	4,751.88	20.0	J-355	
J-6	3,004.39	4,682.00	20.0	J-355	
J-7	3,004.39	4,720.63	20.0	J-355	
J-8	1,504.39	4,608.35	20.0	J-355	
J-9	1,504.39	2,301.78	20.0	J-355	
J-10	3,004.39	2,168.56	20.0	J-355	
J-11	1,500.00	0.00	3.2	J-355	This junction is by the 0.3 MG Tank and does not need to meet fire flow.
J-12	1,504.39	4,563.32	20.0	J-355	
J-13	3,004.39	3,616.66	20.0	J-355	
J-14	3,004.39	183.19	20.1	J-355	
J-15	1,504.39	3,406.79	20.0	J-355	
J-16	3,004.39	4,046.32	20.0	J-355	
J-17	3,004.39	4,095.15	20.0	J-355	
J-18	1,504.39	3,571.90	20.0	J-355	
J-19	3,004.39	3,503.44	20.0	J-355	
J-20	3,004.39	2,819.40	20.0	J-355	
J-21	1,504.39	4,701.61	20.0	J-355	
J-22	1,504.39	4,735.78	20.0	J-355	
J-23	3,004.39	3,127.94	20.0	J-355	
J-24	1,504.39	600.12	20.1	J-355	
J-25	1,504.39	638.77	20.1	J-355	
J-26	1,504.39	3,101.32	20.0	J-355	
J-27	1,504.39	3,093.82	20.0	J-355	
J-28	1,504.39	4,106.92	20.0	J-355	
J-29	1,504.39	4,698.41	20.0	J-355	
J-30	3,008.78	1,731.89	20.0	J-355	
J-31	3,004.39	1,377.88	20.0	J-355	
J-32	3,004.39	3,262.19	20.0	J-355	
J-33	3,004.39	3,669.61	20.0	J-355	
J-34	1,504.39	3,839.39	20.0	J-355	
J-35	1,504.39	4,039.60	20.0	J-355	
J-36	1,504.39	3,756.08	20.0	J-355	
J-37	1,504.39	3,986.15	20.0	J-355	
J-38	1,504.39	3,643.81	20.0	J-355	
J-39	1,504.39	3,810.85	20.0	J-355	
J-40	3,004.39	3,784.79	20.0	J-355	
J-41	1,504.39	3,804.12	20.0	J-355	
J-42	1,504.39	4,635.99	20.0	J-355	
J-43	1,504.39	3,986.89	20.0	J-355	
J-44	1,504.39	3,930.73	20.0	J-355	
J-45	3,004.39	4,076.09	20.0	J-355	
J-46	3,004.39	3,855.75	20.0	J-355	
J-47	3,004.39	3,890.03	20.0	J-355	
J-48	1,504.39	2,932.14	20.0	J-355	
J-49	1,504.39	1,954.08	20.0	J-355	
J-50	1,504.39	3,835.98	20.0	J-355	
J-51	1,504.39	4,189.76	20.0	J-355	
J-52	1,504.39	2,215.32	20.0	J-355	
J-53	1,504.39	1,354.87	20.0	J-355	
J-54	1,504.39	2,267.87	20.0	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-55	1,504.39	2,892.49	20.0	J-355	
J-56	1,504.39	1,827.36	20.0	J-355	
J-57	1,504.39	2,044.57	20.0	J-355	
J-58	3,004.39	4,289.30	20.0	J-355	
J-59	3,004.39	4,102.98	20.0	J-355	
J-60	3,004.39	2,186.39	20.0	J-24	
J-61	3,004.39	3,715.68	20.0	J-355	
J-62	1,504.39	3,839.78	20.0	J-355	
J-63	1,504.39	2,986.47	20.0	J-355	
J-64	1,504.39	4,071.69	20.0	J-355	
J-65	3,004.39	4,018.26	20.0	J-355	
J-66	1,504.39	2,561.01	20.0	J-355	
J-67	1,504.39	2,973.66	20.0	J-355	
J-68	1,504.39	2,800.21	20.0	J-355	
J-69	1,504.39	2,867.37	20.0	J-355	
J-70	3,004.39	3,559.01	20.0	J-355	
J-71	1,504.39	3,649.29	20.0	J-355	
J-72	3,004.39	3,463.76	20.0	J-355	
J-73	1,504.39	647.02	20.1	J-355	
J-74	3,004.39	2,666.41	20.0	J-355	
J-75	3,004.39	2,437.78	20.0	J-355	
J-76	1,504.39	3,466.33	20.0	J-355	
J-77	1,504.39	3,854.32	20.0	J-355	
J-78	3,004.39	4,291.93	20.0	J-355	
J-79	3,004.39	4,209.07	20.0	J-355	
J-80	1,504.39	3,300.70	20.0	J-355	
J-81	1,504.39	2,395.92	20.0	J-355	
J-82	3,004.39	3,993.56	20.0	J-355	
J-83	1,504.39	2,206.77	20.0	J-355	
J-84	1,504.39	2,227.09	20.0	J-355	
J-85	1,504.39	1,731.63	20.1	J-355	
J-86	3,004.39	2,582.53	20.0	J-355	
J-87	1,504.39	2,273.86	20.0	J-355	
J-88	1,504.39	2,260.68	20.0	J-355	
J-89	1,504.39	1,649.08	20.0	J-355	
J-90	1,504.39	1,610.78	20.0	J-355	
J-91	1,504.39	4.39	15.0	J-355	
J-92	1,504.39	4.39	16.0	J-355	
J-93	3,004.39	3,711.27	20.0	J-355	
J-94	3,004.39	3,361.79	20.0	J-355	
J-95	1,504.39	2,415.15	20.0	J-355	
J-96	1,504.39	2,378.87	20.0	J-355	
J-97	1,504.39	768.97	20.0	J-355	
J-98	1,504.39	843.64	20.0	J-355	
J-99	1,504.39	2,337.33	20.0	J-355	
J-100	1,504.39	2,344.34	20.0	J-355	
J-101	1,504.39	2,003.14	20.0	J-355	
J-102	1,504.39	1,926.37	20.0	J-355	
J-103	3,004.39	1,283.89	20.1	J-355	
J-104	1,504.39	2,166.75	20.0	J-355	
J-105	1,504.39	2,163.24	20.0	J-355	
J-106	1,504.39	2,270.50	20.0	J-355	
J-107	1,504.39	316.03	20.0	J-237	
J-108	1,504.39	317.01	20.0	J-237	
J-109	1,504.39	2,054.55	20.0	J-355	
J-110	1,504.39	2,025.10	20.0	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-111	1,504.39	3,436.32	20.0	J-355	
J-112	1,504.39	3,028.70	20.0	J-355	
J-113	1,504.39	2,182.12	20.0	J-355	
J-114	1,504.39	2,344.12	20.0	J-355	
J-115	3,004.39	4,099.83	20.0	J-355	
J-116	1,504.39	4,122.89	20.0	J-355	
J-117	1,504.39	355.17	20.0	J-237	
J-118	1,504.39	362.45	20.0	J-237	
J-119	1,504.39	2,163.94	20.0	J-355	
J-120	1,504.39	3,870.30	20.0	J-355	
J-121	1,504.39	3,852.36	20.0	J-355	
J-122	1,504.39	2,393.57	20.0	J-355	
J-123	1,504.39	2,335.57	20.0	J-355	
J-124	1,504.39	1,507.55	20.0	J-355	
J-125	1,504.39	1,451.97	20.0	J-355	
J-126	1,504.39	4,024.82	20.0	J-355	
J-127	1,504.39	3,965.33	20.0	J-355	
J-128	1,504.39	3,800.71	20.0	J-355	
J-129	1,504.39	1,633.13	20.0	J-355	
J-130	1,504.39	1,478.78	20.0	J-355	
J-131	1,504.39	2,963.31	20.0	J-355	
J-132	1,504.39	1,497.82	20.0	J-355	
J-133	1,504.39	1,437.33	20.0	J-355	
J-134	3,004.39	3,960.63	20.0	J-355	
J-135	1,504.39	2,061.15	20.0	J-355	
J-136	1,504.39	2,040.88	20.0	J-355	
J-137	1,504.39	1,578.51	20.0	J-355	
J-138	1,504.39	1,577.39	20.0	J-355	
J-139	3,004.39	4,177.16	20.0	J-355	
J-140	3,004.39	3,941.27	20.0	J-355	
J-141	1,504.39	2,271.25	20.0	J-355	
J-142	1,504.39	4.39	11.2	J-355	
J-143	1,504.39	4.39	12.1	J-355	
J-144	1,504.39	2,042.13	20.0	J-355	
J-145	1,504.39	1,812.20	20.0	J-355	
J-146	1,504.39	1,793.35	20.0	J-355	
J-147	1,504.39	1,922.68	20.0	J-355	
J-148	1,504.39	2,406.26	20.0	J-355	
J-149	3,004.39	3,848.22	20.0	J-355	
J-150	3,004.39	3,929.12	20.0	J-355	
J-151	3,004.39	4,029.13	20.0	J-355	
J-152	1,504.39	2,173.16	20.0	J-355	
J-153	1,504.39	1,388.22	20.0	J-355	
J-154	1,504.39	1,460.17	20.0	J-355	
J-155	1,504.39	2,048.36	20.0	J-355	
J-156	1,504.39	2,035.80	20.0	J-355	
J-157	1,504.39	2,480.80	20.0	J-355	
J-158	1,504.39	2,592.77	20.0	J-355	
J-159	1,504.39	2,327.00	20.0	J-355	
J-160	1,504.39	4.39	17.2	J-355	
J-161	1,504.39	102.25	20.0	J-355	
J-162	3,004.39	3,292.92	20.0	J-355	
J-163	1,504.39	2,352.38	20.0	J-355	
J-164	1,504.39	1,784.17	20.0	J-355	
J-165	1,504.39	1,822.34	20.0	J-355	
J-166	1,504.39	1,717.21	20.0	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-167	1,504.39	1,747.62	20.0	J-355	
J-168	1,504.39	3,997.46	20.0	J-355	
J-169	1,504.39	3,932.31	20.0	J-355	
J-170	1,504.39	3,992.49	20.0	J-355	
J-171	1,504.39	3,939.94	20.0	J-355	
J-172	1,504.39	4,010.98	20.0	J-355	
J-173	1,504.39	3,971.70	20.0	J-355	
J-174	1,504.39	4,067.89	20.0	J-355	
J-175	1,504.39	1,460.68	20.0	J-355	
J-176	1,504.39	1,348.60	20.0	J-355	
J-177	3,004.39	3,954.29	20.0	J-355	
J-178	1,504.39	1,553.64	20.0	J-355	
J-179	1,504.39	1,472.36	20.0	J-355	
J-180	1,504.39	3,891.43	20.0	J-355	
J-181	1,504.39	3,822.43	20.0	J-355	
J-182	1,504.39	2,165.54	20.0	J-355	
J-183	1,504.39	1,500.72	20.0	J-355	
J-184	1,504.39	2,152.10	20.0	J-355	
J-185	1,504.39	1,527.59	20.0	J-355	
J-186	1,504.39	3,846.43	20.0	J-355	
J-187	1,504.39	3,761.13	20.0	J-355	
J-188	1,504.39	1,407.93	20.0	J-355	
J-189	1,504.39	2,081.94	20.0	J-355	
J-190	1,504.39	2,766.99	20.0	J-355	
J-191	1,504.39	2,982.98	20.0	J-355	
J-192	1,504.39	4.39	6.8	J-355	
J-193	1,504.39	4.39	5.7	J-355	
J-194	1,504.39	3,754.76	20.0	J-355	
J-195	1,504.39	2,158.70	20.0	J-355	
J-196	1,504.39	2,147.75	20.0	J-355	
J-197	1,504.39	4,073.58	20.0	J-355	
J-198	1,504.39	4,019.35	20.0	J-355	
J-199	3,004.39	3,858.09	20.0	J-355	
J-200	3,004.39	4,015.05	20.0	J-355	
J-201	3,004.39	3,999.89	20.0	J-355	
J-202	1,504.39	1,716.85	20.0	J-355	
J-203	1,504.39	1,923.41	20.0	J-355	
J-204	1,504.39	1,787.55	20.0	J-355	
J-205	1,504.39	1,740.23	20.0	J-355	
J-206	1,504.39	3,600.78	20.0	J-355	
J-207	1,504.39	3,377.92	20.0	J-355	
J-208	1,504.39	1,217.49	20.0	J-355	
J-209	3,004.39	4,118.84	20.0	J-355	
J-210	1,504.39	4,057.28	20.0	J-355	
J-211	1,504.39	3,974.28	20.0	J-355	
J-212	1,504.39	3,518.71	20.0	J-355	
J-213	1,504.39	1,877.66	20.0	J-355	
J-214	1,504.39	3,384.64	20.0	J-355	
J-215	1,504.39	2,125.75	20.0	J-355	
J-216	1,504.39	1,848.61	20.0	J-355	
J-217	1,504.39	2,086.12	20.0	J-355	
J-218	3,004.39	2,253.59	20.0	J-355	
J-219	1,504.39	1,598.41	20.0	J-355	
J-220	1,504.39	1,388.61	20.0	J-355	
J-221	1,504.39	2,096.35	20.0	J-355	
J-222	1,504.39	2,193.93	20.0	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-223	1,504.39	4,121.24	20.0	J-355	
J-224	3,004.39	3,382.01	20.0	J-355	
J-225	1,504.39	3,138.31	20.0	J-355	
J-226	1,504.39	3,712.57	20.0	J-355	
J-227	1,504.39	3,178.81	20.0	J-355	
J-228	1,504.39	1,485.51	20.0	J-355	
J-229	1,504.39	1,346.09	20.0	J-355	
J-230	3,004.39	1,800.31	20.0	J-355	
J-231	1,504.39	1,707.88	20.0	J-355	
J-232	1,504.39	2,033.28	20.0	J-355	
J-233	1,504.39	1,789.66	20.0	J-355	
J-234	1,504.39	3,869.22	20.0	J-355	
J-235	1,504.39	4,104.47	20.0	J-355	
J-236	1,504.39	4.39	5.0	J-355	
J-237	1,504.39	4.39	4.4	J-355	
J-238	1,504.39	4,123.21	20.0	J-355	
J-239	1,504.39	4,014.64	20.0	J-355	
J-240	1,504.39	2,066.92	20.0	J-355	
J-241	1,504.39	3,925.50	20.0	J-355	
J-242	1,504.39	1,190.03	20.0	J-355	
J-243	1,504.39	833.71	20.0	J-355	
J-244	1,504.39	3,912.14	20.0	J-355	
J-245	1,504.39	3,796.38	20.0	J-355	
J-246	3,004.39	2,527.75	20.0	J-355	
J-247	1,504.39	1,406.75	20.0	J-355	
J-248	1,504.39	607.07	20.0	J-355	
J-249	1,504.39	1,978.45	20.0	J-355	
J-250	1,504.39	1,796.41	20.0	J-355	
J-251	1,504.39	1,996.12	20.0	J-355	
J-252	1,504.39	1,265.61	20.0	J-355	
J-253	1,504.39	182.47	20.0	J-355	
J-254	1,504.39	4.39	13.6	J-355	
J-255	1,504.39	1,428.16	20.0	J-355	
J-256	1,504.39	4.39	17.7	J-355	
J-257	1,504.39	4.39	5.5	J-355	
J-258	1,504.39	1,352.16	20.0	J-355	
J-259	1,504.39	1,453.15	20.0	J-355	
J-260	1,504.39	1,699.01	20.0	J-355	
J-261	3,004.39	1,173.06	20.0	J-355	
J-262	3,004.39	4,299.65	20.0	J-355	
J-263	1,504.39	4.39	3.1	J-355	
J-264	1,504.39	297.31	20.0	J-263	
J-265	1,504.39	3,574.17	20.0	J-355	
J-266	3,004.39	4,091.21	20.0	J-355	
J-267	1,504.39	1,915.46	20.0	J-355	
J-268	1,504.39	1,945.76	20.0	J-355	
J-269	1,504.39	4,158.61	20.0	J-355	
J-270	1,504.39	3,759.99	20.0	J-355	
J-271	1,504.39	3,661.52	20.0	J-355	
J-272	1,504.39	3,773.87	20.0	J-355	
J-273	1,504.39	3,843.95	20.0	J-355	
J-274	1,504.39	3,858.71	20.0	J-355	
J-275	1,504.39	3,851.45	20.0	J-355	
J-276	3,004.39	3,878.77	20.0	J-355	
J-277	1,504.39	4,150.94	20.0	J-355	
J-278	1,504.39	4,104.32	20.0	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-279	1,504.39	4,155.75	20.0	J-355	
J-280	1,504.39	4,156.34	20.0	J-355	
J-281	1,504.39	3,908.10	20.0	J-355	
J-282	1,504.39	3,881.56	20.0	J-355	
J-283	1,504.39	3,358.78	20.0	J-355	
J-284	1,504.39	1,458.52	20.0	J-355	
J-285	1,504.39	1,433.86	20.0	J-355	
J-286	3,004.39	1,230.07	20.1	J-355	
J-287	3,004.39	1,309.95	20.0	J-355	
J-288	1,504.39	1,689.94	20.0	J-355	
J-289	1,504.39	1,701.60	20.0	J-355	
J-290	1,504.39	1,710.39	20.0	J-355	
J-291	1,504.39	1,715.67	20.0	J-355	
J-292	1,504.39	1,728.57	20.0	J-355	
J-293	1,504.39	1,736.81	20.0	J-355	
J-294	1,504.39	3,022.19	20.0	J-355	
J-295	1,504.39	3,456.43	20.0	J-355	
J-296	1,504.39	3,208.87	20.0	J-355	
J-297	1,504.39	3,631.54	20.0	J-355	
J-298	1,504.39	3,756.34	20.0	J-355	
J-299	1,504.39	3,775.95	20.0	J-355	
J-300	1,504.39	3,919.25	20.0	J-355	
J-301	1,504.39	3,856.22	20.0	J-355	
J-302	1,504.39	2,347.66	20.0	J-355	
J-303	1,504.39	2,335.19	20.0	J-355	
J-304	1,504.39	2,223.34	20.0	J-355	
J-305	1,504.39	2,235.51	20.0	J-355	
J-306	1,504.39	2,098.20	20.0	J-355	
J-307	1,504.39	2,150.94	20.0	J-355	
J-308	1,504.39	2,127.36	20.0	J-355	
J-309	1,504.39	2,146.99	20.0	J-355	
J-310	1,504.39	2,104.66	20.0	J-355	
J-311	1,504.39	2,100.00	20.0	J-355	
J-312	1,504.39	2,028.37	20.0	J-355	
J-313	1,504.39	2,025.35	20.0	J-355	
J-314	1,504.39	2,030.99	20.0	J-355	
J-315	1,504.39	2,040.77	20.0	J-355	
J-316	1,504.39	1,896.59	20.0	J-355	
J-317	1,504.39	2,001.66	20.0	J-355	
J-318	3,004.39	3,676.51	20.0	J-355	
J-319	3,004.39	3,688.14	20.0	J-355	
J-320	3,004.39	3,745.71	20.0	J-355	
J-321	3,004.39	3,628.18	20.0	J-355	
J-322	1,504.39	2,820.38	20.0	J-355	
J-323	1,504.39	2,776.61	20.0	J-355	
J-324	1,504.39	4,706.19	20.0	J-355	
J-325	1,504.39	2,703.35	20.0	J-355	
J-326	1,504.39	2,587.47	20.0	J-355	
J-327	1,504.39	2,643.41	20.0	J-355	
J-328	1,504.39	2,416.74	20.0	J-355	
J-329	1,504.39	2,323.50	20.0	J-355	
J-330	1,504.39	2,589.81	20.0	J-355	
J-331	1,504.39	2,338.39	20.0	J-355	
J-332	1,504.39	2,388.99	20.0	J-355	
J-333	1,504.39	2,544.13	20.0	J-355	
J-334	1,504.39	1,698.44	20.0	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Notes
J-335	1,504.39	1,820.28	20.0	J-355	
J-336	1,504.39	1,736.44	20.0	J-355	
J-337	1,504.39	1,726.26	20.0	J-355	
J-338	1,504.39	1,310.96	20.0	J-355	
J-339	1,504.39	1,236.19	20.0	J-355	
J-340	1,504.39	957.55	20.0	J-355	
J-341	1,504.39	1,617.71	20.0	J-355	
J-342	1,504.39	4.39	18.9	J-355	
J-343	1,504.39	4.39	9.6	J-355	
J-344	1,504.39	4.39	12.4	J-355	
J-345	1,504.39	3,182.59	20.0	J-355	
J-346	1,504.39	2,943.08	20.0	J-355	
J-347	1,504.39	3,024.29	20.0	J-355	
J-348	1,504.39	2,026.57	20.0	J-355	
J-349	1,504.39	1,880.19	20.0	J-355	
J-350	1,504.39	1,814.94	20.0	J-355	
J-351	1,504.39	1,852.21	20.0	J-355	
J-352	1,504.39	1,816.78	20.0	J-355	
J-353	1,504.39	2,216.26	20.0	J-355	
J-354	3,004.39	2,256.13	20.0	J-355	
J-355	1,500.00	0.00	2.9	J-263	This junction is by the 0.3 MG Tank and does not need to meet fire flow.
J-356	1,504.39	4,722.11	20.0	J-355	
J-357	3,004.39	2,809.67	20.0	J-355	
J-358	1,504.39	3,022.06	20.0	J-355	

APPENDIX J

Present Fire Flow with Average Day Demand

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	6133.76	1.18	6160.03	11.4
J-2	6112.00	1.18	6134.97	9.9
J-3	6174.06	1.18	6181.09	3.0
J-4	6171.86	1.18	6178.82	3.0
J-5	6172.81	1.18	6184.27	5.0
J-6	6166.00	1.18	6179.27	5.7
J-7	6156.44	1.18	6173.53	7.4
J-8	6152.00	1.18	6171.92	8.6
J-9	6196.00	1.18	6299.05	44.6
J-10	6162.74	1.18	6299.05	59.0
J-11	6289.91	0.00	6299.09	4.0
J-12	6149.08	1.18	6172.85	10.3
J-13	6111.82	1.18	6134.97	10.0
J-14	6111.64	1.18	6134.95	10.1
J-15	6140.68	1.18	6156.06	6.7
J-16	6117.12	1.18	6144.44	11.8
J-17	6112.17	1.18	6144.36	13.9
J-18	6146.54	1.18	6159.63	5.7
J-19	6124.16	1.18	6159.87	15.4
J-20	6124.06	1.18	6159.88	15.5
J-21	6169.92	1.18	6181.64	5.1
J-22	6172.88	1.18	6183.72	4.7
J-23	6124.40	1.18	6158.58	14.8
J-24	6170.19	1.18	6160.02	-4.4
J-25	6165.11	1.18	6160.02	-2.2
J-26	6160.53	1.18	6172.41	5.1
J-27	6158.37	1.18	6171.16	5.5
J-28	6150.00	1.18	6159.39	4.1
J-29	6161.23	1.18	6176.80	6.7
J-30	6136.18	1.18	6160.03	10.3
J-31	6138.94	1.18	6160.03	9.1
J-32	6100.03	1.18	6133.31	14.4
J-33	6098.00	1.18	6132.56	15.0
J-34	6121.91	1.18	6139.12	7.4
J-35	6117.27	1.18	6138.30	9.1
J-36	6126.45	1.18	6140.63	6.1
J-37	6122.77	1.18	6139.15	7.1
J-38	6132.10	1.18	6141.42	4.0
J-39	6125.69	1.18	6140.07	6.2
J-40	6132.00	1.18	6160.99	12.5
J-41	6128.61	1.18	6155.26	11.5
J-42	6152.95	1.18	6172.02	8.3
J-43	6117.50	1.18	6138.39	9.0
J-44	6123.12	1.18	6139.15	6.9
J-45	6107.64	1.18	6142.76	15.2
J-46	6116.06	1.18	6142.88	11.6
J-47	6123.45	1.18	6144.34	9.0

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-48	6110.19	1.18	6137.33	11.7
J-49	6104.00	1.18	6137.49	14.5
J-50	6116.21	1.18	6135.30	8.3
J-51	6111.40	1.18	6134.80	10.1
J-52	6106.01	1.18	6137.54	13.6
J-53	6099.88	1.18	6137.54	16.3
J-54	6104.66	1.18	6137.49	14.2
J-55	6112.52	1.18	6137.93	11.0
J-56	6160.00	1.18	6178.82	8.1
J-57	6174.00	1.18	6178.82	2.1
J-58	6110.59	3001.18	6126.40	6.8
J-59	6106.59	1.18	6142.88	15.7
J-60	6130.32	1.18	6160.03	12.9
J-61	6123.32	1.18	6143.91	8.9
J-62	6116.46	1.18	6135.83	8.4
J-63	6114.54	1.18	6138.39	10.3
J-64	6136.68	1.18	6153.61	7.3
J-65	6126.16	1.18	6149.28	10.0
J-66	6123.70	1.18	6137.05	5.8
J-67	6109.87	1.18	6136.82	11.7
J-68	6126.00	1.18	6137.80	5.1
J-69	6112.00	1.18	6137.62	11.1
J-70	6132.21	1.18	6149.36	7.4
J-71	6137.86	1.18	6141.74	1.7
J-72	6124.00	1.18	6154.86	13.4
J-73	6166.00	1.18	6160.02	-2.6
J-74	6124.10	1.18	6159.89	15.5
J-75	6130.00	1.18	6160.08	13.0
J-76	6146.00	1.18	6148.91	1.3
J-77	6144.00	1.18	6168.75	10.7
J-78	6110.29	1.18	6126.79	7.1
J-79	6113.84	1.18	6131.77	7.8
J-80	6142.00	1.18	6143.77	0.8
J-81	6096.00	1.18	6133.05	16.0
J-82	6103.58	1.18	6142.66	16.9
J-83	6086.00	1.18	6143.48	24.9
J-84	6086.00	1.18	6143.48	24.9
J-85	6126.00	1.18	6160.01	14.7
J-86	6127.25	1.18	6160.11	14.2
J-87	6086.00	1.18	6143.48	24.9
J-88	6086.00	1.18	6143.48	24.9
J-89	6128.35	1.18	6160.01	13.7
J-90	6129.87	1.18	6160.01	13.0
J-91	6273.47	1.18	6308.86	15.3
J-92	6271.21	1.18	6308.86	16.3
J-93	6108.90	1.18	6129.04	8.7
J-94	6110.69	1.18	6129.04	7.9

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-95	6086.00	1.18	6143.50	24.9
J-96	6086.00	1.18	6143.50	24.9
J-97	6218.16	1.18	6299.04	35.0
J-98	6215.16	1.18	6299.04	36.3
J-99	6086.00	1.18	6143.49	24.9
J-100	6084.23	1.18	6143.49	25.6
J-101	6094.66	1.18	6143.47	21.1
J-102	6094.33	1.18	6143.47	21.3
J-103	6131.47	1.18	6160.02	12.4
J-104	6089.99	1.18	6143.48	23.1
J-105	6089.50	1.18	6143.48	23.4
J-106	6086.00	1.18	6143.48	24.9
J-107	6248.00	1.18	6308.85	26.3
J-108	6247.38	1.18	6308.85	26.6
J-109	6190.47	1.18	6299.05	47.0
J-110	6194.40	1.18	6299.05	45.3
J-111	6114.82	1.18	6135.19	8.8
J-112	6113.35	1.18	6135.19	9.4
J-113	6086.00	1.18	6143.49	24.9
J-114	6086.00	1.18	6143.49	24.9
J-115	6101.79	1.18	6143.32	18.0
J-116	6105.90	1.18	6143.32	16.2
J-117	6244.00	1.18	6308.85	28.1
J-118	6242.61	1.18	6308.85	28.7
J-119	6086.00	1.18	6143.49	24.9
J-120	6110.81	1.18	6151.06	17.4
J-121	6112.21	1.18	6151.06	16.8
J-122	6086.00	1.18	6143.49	24.9
J-123	6086.00	1.18	6143.49	24.9
J-124	6101.98	1.18	6133.03	13.4
J-125	6101.02	1.18	6133.03	13.8
J-126	6107.43	1.18	6146.56	16.9
J-127	6113.19	1.18	6146.56	14.4
J-128	6115.27	1.18	6158.69	18.8
J-129	6194.08	1.18	6299.04	45.4
J-130	6198.00	1.18	6299.04	43.7
J-131	6116.00	1.18	6160.39	19.2
J-132	6189.15	1.18	6299.04	47.5
J-133	6192.00	1.18	6299.04	46.3
J-134	6104.46	1.18	6141.37	16.0
J-135	6095.16	1.18	6143.47	20.9
J-136	6095.40	1.18	6143.47	20.8
J-137	6128.31	1.18	6160.01	13.7
J-138	6130.36	1.18	6160.01	12.8
J-139	6104.00	1.18	6131.81	12.0
J-140	6100.00	1.18	6132.05	13.9
J-141	6086.00	1.18	6143.48	24.9

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-142	6282.33	1.18	6308.86	11.5
J-143	6280.24	1.18	6308.86	12.4
J-144	6096.00	1.18	6143.47	20.5
J-145	6096.75	1.18	6133.04	15.7
J-146	6097.80	1.18	6133.04	15.2
J-147	6086.05	1.18	6143.47	24.8
J-148	6086.00	1.18	6143.49	24.9
J-149	6104.00	1.18	6132.24	12.2
J-150	6107.05	1.18	6132.54	11.0
J-151	6098.14	1.18	6143.50	19.6
J-152	6088.80	1.18	6143.48	23.7
J-153	6126.00	1.18	6160.01	14.7
J-154	6130.59	1.18	6160.01	12.7
J-155	6095.75	1.18	6143.47	20.6
J-156	6097.38	1.18	6143.47	19.9
J-157	6086.00	1.18	6143.50	24.9
J-158	6086.00	1.18	6143.51	24.9
J-159	6086.00	1.18	6143.50	24.9
J-160	6268.43	1.18	6308.86	17.5
J-161	6259.64	1.18	6308.86	21.3
J-162	6096.14	1.18	6133.06	16.0
J-163	6086.00	1.18	6143.49	24.9
J-164	6169.93	1.18	6299.05	55.9
J-165	6169.71	1.18	6299.05	56.0
J-166	6120.00	1.18	6160.01	17.3
J-167	6127.02	1.18	6160.02	14.3
J-168	6104.00	1.18	6149.07	19.5
J-169	6110.00	1.18	6149.10	16.9
J-170	6106.00	1.18	6149.66	18.9
J-171	6111.26	1.18	6148.23	16.0
J-172	6104.00	1.18	6148.26	19.1
J-173	6111.45	1.18	6147.31	15.5
J-174	6104.00	1.18	6147.65	18.9
J-175	6101.73	1.18	6133.03	13.5
J-176	6105.82	1.18	6133.03	11.8
J-177	6119.63	1.18	6149.22	12.8
J-178	6130.00	1.18	6160.01	13.0
J-179	6123.39	1.18	6160.01	15.8
J-180	6108.00	1.18	6151.81	19.0
J-181	6113.84	1.18	6151.82	16.4
J-182	6204.53	1.18	6299.05	40.9
J-183	6212.90	1.18	6299.05	37.3
J-184	6203.34	1.18	6299.05	41.4
J-185	6211.23	1.18	6299.05	38.0
J-186	6109.79	1.18	6152.85	18.6
J-187	6116.17	1.18	6152.72	15.8
J-188	6214.48	1.18	6299.05	36.6

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-189	6209.23	1.18	6299.05	38.9
J-190	6168.98	1.18	6177.97	3.9
J-191	6177.11	1.18	6178.83	0.7
J-192	6390.48	1.18	6395.17	2.0
J-193	6384.55	1.18	6385.55	0.4
J-194	6118.22	1.18	6160.42	18.3
J-195	6090.44	1.18	6143.48	22.9
J-196	6089.48	1.18	6143.48	23.4
J-197	6104.00	1.18	6145.86	18.1
J-198	6111.18	1.18	6145.82	15.0
J-199	6096.33	1.18	6143.03	20.2
J-200	6102.25	1.18	6143.04	17.6
J-201	6096.93	1.18	6143.16	20.0
J-202	6171.61	1.18	6299.05	55.1
J-203	6168.23	1.18	6299.05	56.6
J-204	6095.43	1.18	6133.03	16.3
J-205	6095.01	1.18	6133.03	16.5
J-206	6118.11	1.18	6160.39	18.3
J-207	6229.44	1.18	6247.66	7.9
J-208	6232.00	1.18	6247.66	6.8
J-209	6111.90	1.18	6144.35	14.0
J-210	6104.00	1.18	6147.63	18.9
J-211	6106.00	1.18	6149.68	18.9
J-212	6178.84	1.18	6180.46	0.7
J-213	6188.00	1.18	6180.46	-3.3
J-214	6144.47	1.18	6144.74	0.1
J-215	6092.26	1.18	6143.48	22.2
J-216	6198.72	1.18	6299.05	43.4
J-217	6194.30	1.18	6299.05	45.3
J-218	6168.00	1.18	6299.05	56.7
J-219	6098.38	1.18	6133.03	15.0
J-220	6104.00	1.18	6133.03	12.6
J-221	6087.86	1.18	6143.48	24.1
J-222	6087.12	1.18	6143.48	24.4
J-223	6102.00	1.18	6144.83	18.5
J-224	6098.51	1.18	6133.40	15.1
J-225	6104.56	1.18	6135.33	13.3
J-226	6132.00	1.18	6140.28	3.6
J-227	6127.79	1.18	6138.92	4.8
J-228	6100.56	1.18	6133.03	14.1
J-229	6091.45	1.18	6133.03	18.0
J-230	6136.06	1.18	6160.03	10.4
J-231	6122.77	1.18	6160.01	16.1
J-232	6202.00	1.18	6299.05	42.0
J-233	6211.27	1.18	6299.05	38.0
J-234	6096.00	1.18	6143.60	20.6
J-235	6106.00	1.18	6144.30	16.6

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-236	6296.68	1.18	6308.87	5.3
J-237	6298.00	1.18	6308.87	4.7
J-238	6103.40	1.18	6144.37	17.7
J-239	6107.22	1.18	6147.24	17.3
J-240	6088.25	1.18	6143.48	23.9
J-241	6107.33	1.18	6150.07	18.5
J-242	6212.00	1.18	6299.04	37.7
J-243	6210.38	1.18	6299.04	38.4
J-244	6109.85	1.18	6150.01	17.4
J-245	6113.14	1.18	6153.69	17.5
J-246	6130.00	1.18	6160.09	13.0
J-247	6234.00	1.18	6247.66	5.9
J-248	6249.81	1.18	6247.66	-0.9
J-249	6094.33	1.18	6133.04	16.7
J-250	6091.22	1.18	6133.03	18.1
J-251	6202.00	1.18	6299.05	42.0
J-252	6212.00	1.18	6299.04	37.7
J-253	6357.22	1.18	6384.83	11.9
J-254	6385.97	1.18	6384.83	-0.5
J-255	6178.14	1.18	6178.82	0.3
J-256	6376.37	1.18	6384.83	3.7
J-257	6384.37	1.18	6384.83	0.2
J-258	6196.33	1.18	6299.04	44.4
J-259	6104.00	1.18	6133.03	12.6
J-260	6127.20	1.18	6160.01	14.2
J-261	6144.00	1.18	6160.01	6.9
J-262	6106.00	1.18	6131.14	10.9
J-263	6301.05	1.18	6308.88	3.4
J-264	6248.16	1.18	6308.85	26.3
J-265	6116.00	1.18	6157.10	17.8
J-266	6100.00	1.18	6143.61	18.9
J-267	6209.22	1.18	6299.05	38.9
J-268	6207.42	1.18	6299.05	39.6
J-269	6142.74	1.18	6155.82	5.7
J-270	6140.00	1.18	6148.70	3.8
J-271	6136.29	1.18	6143.78	3.2
J-272	6131.11	1.18	6143.24	5.3
J-273	6134.10	1.18	6147.70	5.9
J-274	6128.75	1.18	6145.86	7.4
J-275	6125.03	1.18	6141.65	7.2
J-276	6120.00	1.18	6138.63	8.1
J-277	6100.89	1.18	6144.16	18.7
J-278	6107.25	1.18	6145.84	16.7
J-279	6104.57	1.18	6144.83	17.4
J-280	6108.54	1.18	6144.73	15.7
J-281	6110.85	1.18	6151.82	17.7
J-282	6111.61	1.18	6152.80	17.8

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-283	6172.48	1.18	6178.90	2.8
J-284	6182.55	1.18	6299.04	50.4
J-285	6184.42	1.18	6299.04	49.6
J-286	6140.50	1.18	6160.01	8.4
J-287	6140.83	1.18	6160.01	8.3
J-288	6121.00	1.18	6160.01	16.9
J-289	6118.22	1.18	6160.01	18.1
J-290	6122.00	1.18	6160.01	16.4
J-291	6127.02	1.18	6160.02	14.3
J-292	6125.65	1.18	6160.01	14.9
J-293	6126.00	1.18	6160.02	14.7
J-294	6116.78	1.18	6160.27	18.8
J-295	6116.00	1.18	6160.39	19.2
J-296	6116.00	1.18	6160.39	19.2
J-297	6118.00	1.18	6153.17	15.2
J-298	6104.00	1.18	6148.87	19.4
J-299	6104.00	1.18	6148.34	19.2
J-300	6098.82	1.18	6143.96	19.5
J-301	6096.47	1.18	6143.73	20.5
J-302	6086.00	1.18	6143.49	24.9
J-303	6086.00	1.18	6143.49	24.9
J-304	6086.00	1.18	6143.48	24.9
J-305	6086.00	1.18	6143.48	24.9
J-306	6085.95	1.18	6143.48	24.9
J-307	6086.00	1.18	6143.48	24.9
J-308	6091.28	1.18	6143.48	22.6
J-309	6089.35	1.18	6143.48	23.4
J-310	6092.40	1.18	6143.48	22.1
J-311	6092.70	1.18	6143.48	22.0
J-312	6094.92	1.18	6143.47	21.0
J-313	6095.06	1.18	6143.47	20.9
J-314	6095.83	1.18	6143.47	20.6
J-315	6095.77	1.18	6143.47	20.6
J-316	6093.34	1.18	6143.47	21.7
J-317	6095.05	1.18	6143.47	21.0
J-318	6102.22	1.18	6132.21	13.0
J-319	6096.70	1.18	6132.10	15.3
J-320	6097.61	1.18	6132.08	14.9
J-321	6131.25	1.18	6160.69	12.7
J-322	6160.00	1.18	6177.71	7.7
J-323	6162.27	1.18	6178.29	6.9
J-324	6158.57	1.18	6174.89	7.1
J-325	6168.04	1.18	6181.42	5.8
J-326	6171.41	1.18	6181.30	4.3
J-327	6179.31	1.18	6178.71	-0.3
J-328	6181.92	1.18	6178.60	-1.4
J-329	6182.71	1.18	6178.50	-1.8

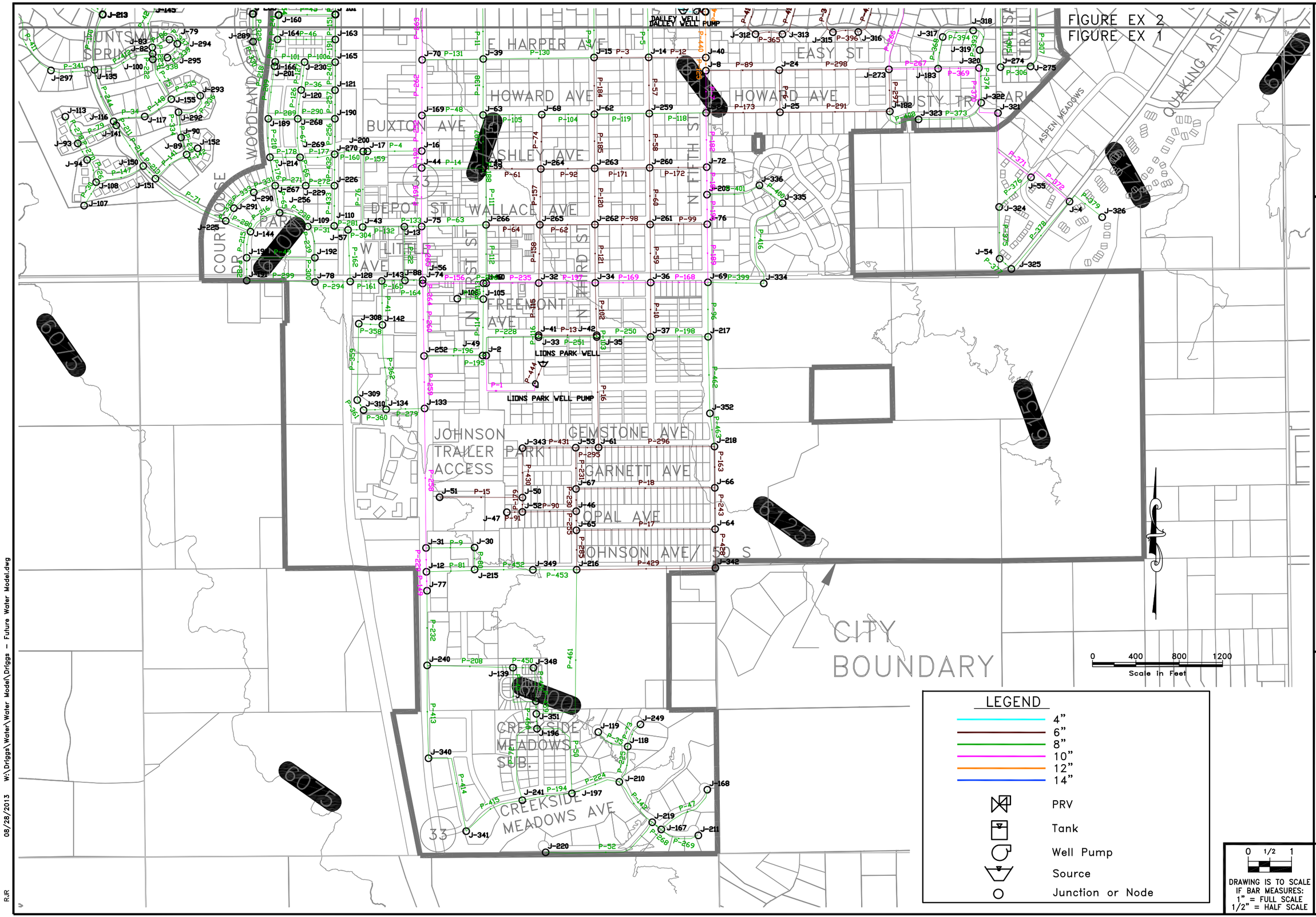
JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-330	6182.00	1.18	6178.83	-1.4
J-331	6174.00	1.18	6178.83	2.1
J-332	6175.25	1.18	6178.33	1.3
J-333	6172.35	1.18	6178.10	2.5
J-334	6170.20	1.18	6178.82	3.7
J-335	6163.27	1.18	6178.82	6.7
J-336	6170.29	1.18	6178.82	3.7
J-337	6198.51	1.18	6299.05	43.5
J-338	6199.24	1.18	6299.04	43.2
J-339	6205.70	1.18	6299.04	40.4
J-340	6214.52	1.18	6299.04	36.6
J-341	6205.04	1.18	6299.05	40.7
J-342	6264.50	1.18	6308.86	19.2
J-343	6286.00	1.18	6308.86	9.9
J-344	6375.05	1.18	6384.83	4.2
J-345	6141.11	1.18	6142.44	0.6
J-346	6151.37	1.18	6143.66	-3.3
J-347	6150.00	1.18	6144.03	-2.6
J-348	6190.00	1.18	6299.05	47.2
J-349	6195.26	1.18	6299.05	44.9
J-350	6199.08	1.18	6299.05	43.3
J-351	6088.43	1.18	6133.04	19.3
J-352	6086.36	1.18	6133.04	20.2
J-353	6118.91	1.18	6136.67	7.7
J-354	6106.75	1.18	6137.72	13.4
J-355	6289.91	0.00	6298.42	3.7
J-356	6155.21	1.18	6173.29	7.8
J-357	6118.00	1.18	6160.26	18.3
J-358	6116.03	1.18	6160.26	19.1

APPENDIX K

Year 2033 Culinary Distribution System Mapping



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

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DRIGGS, IDAHO

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FUTURE WATER MODEL PLAN

AQUA ENGINEERING

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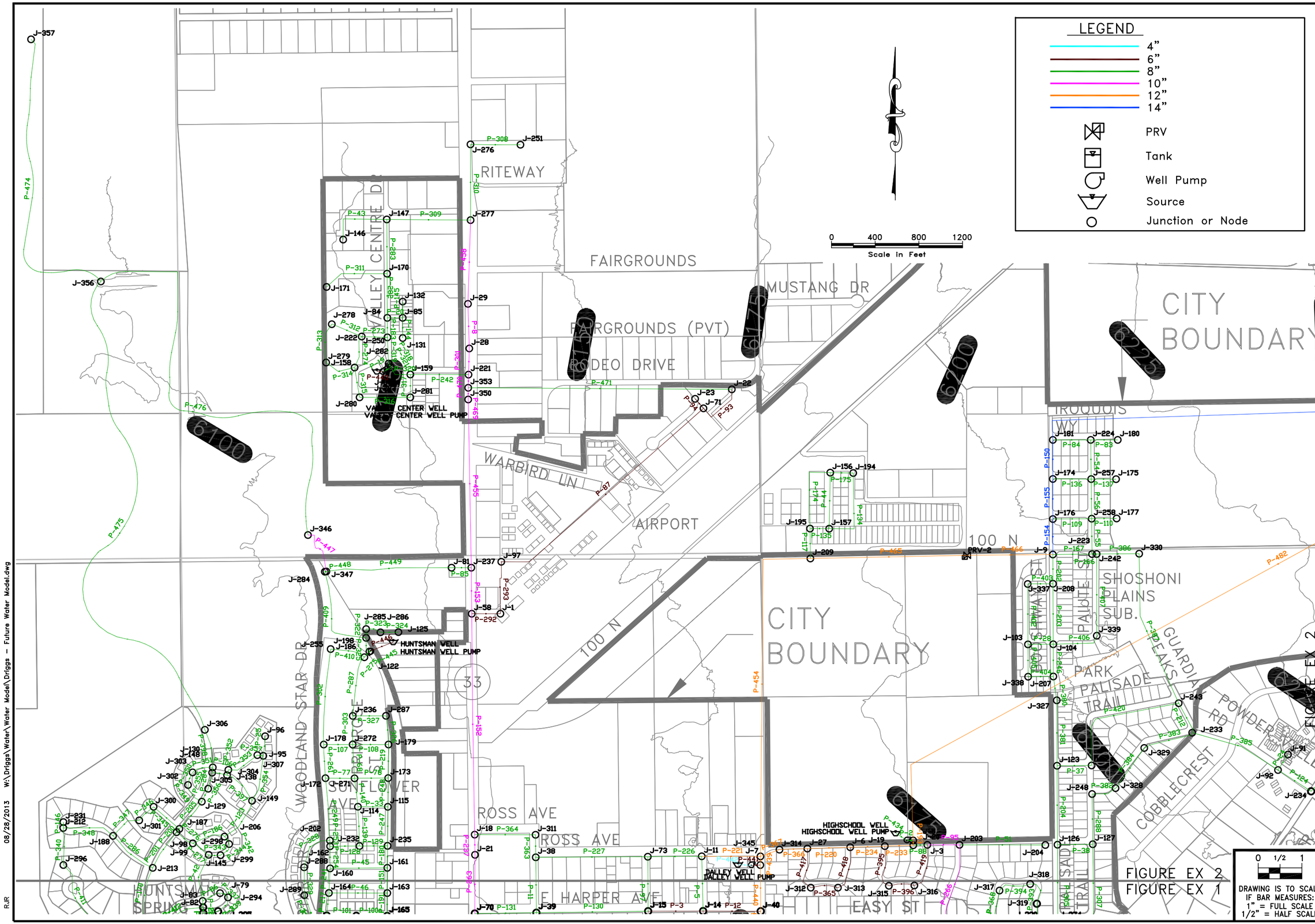
FIGURE

EX 1

08/28/2013 W:\Driggs\Water\Water Model\Driggs - Future Water Model.dwg

RJR



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

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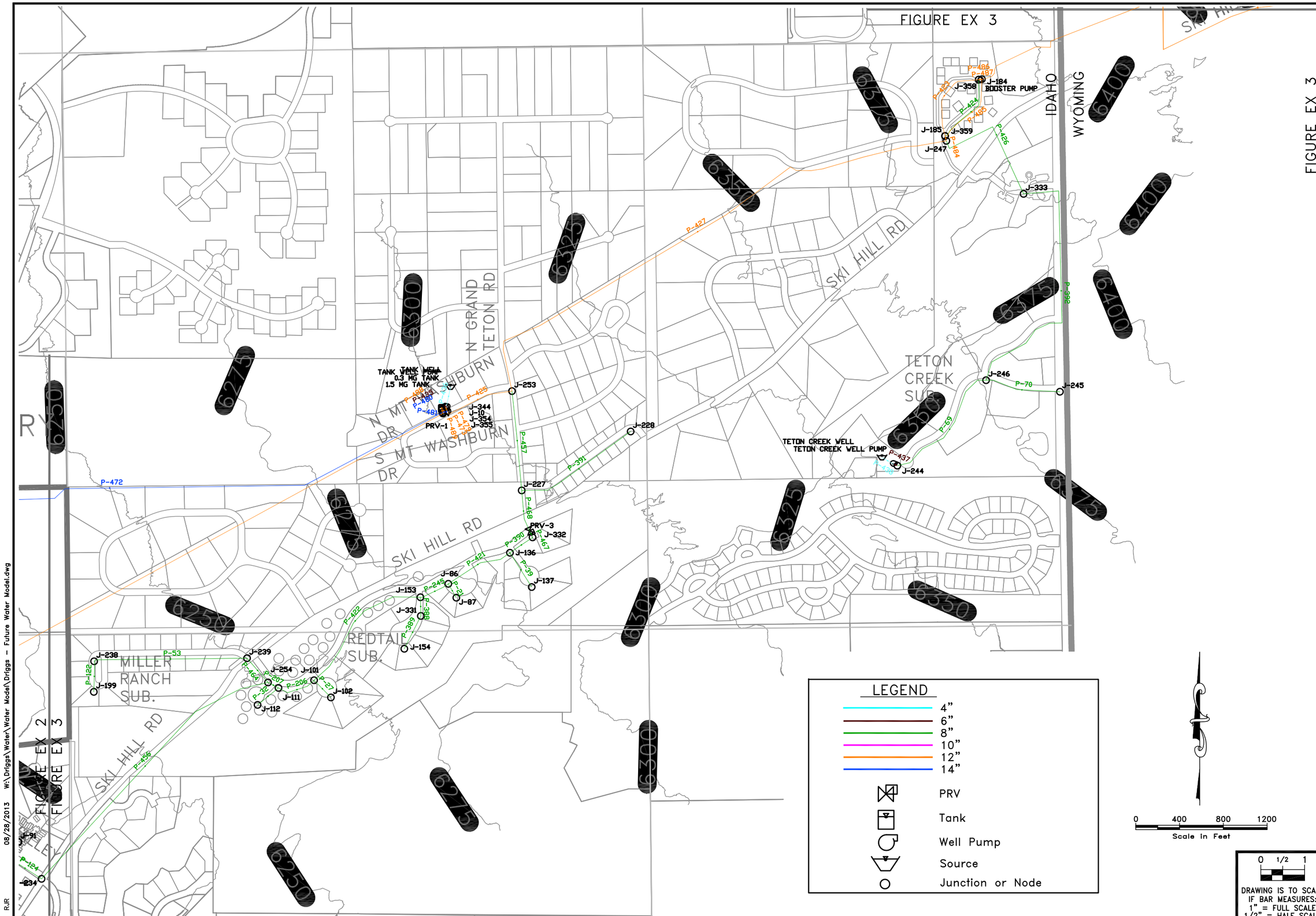
0 1/2 1
DRAWING IS TO SCALE IF BAR MEASURES:
1" = FULL SCALE
1/2" = HALF SCALE

FIGURE
EX 2

08/28/2013 W:\Driggs\Water\Water Model\Driggs - Future Water Model.dwg

RJR



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

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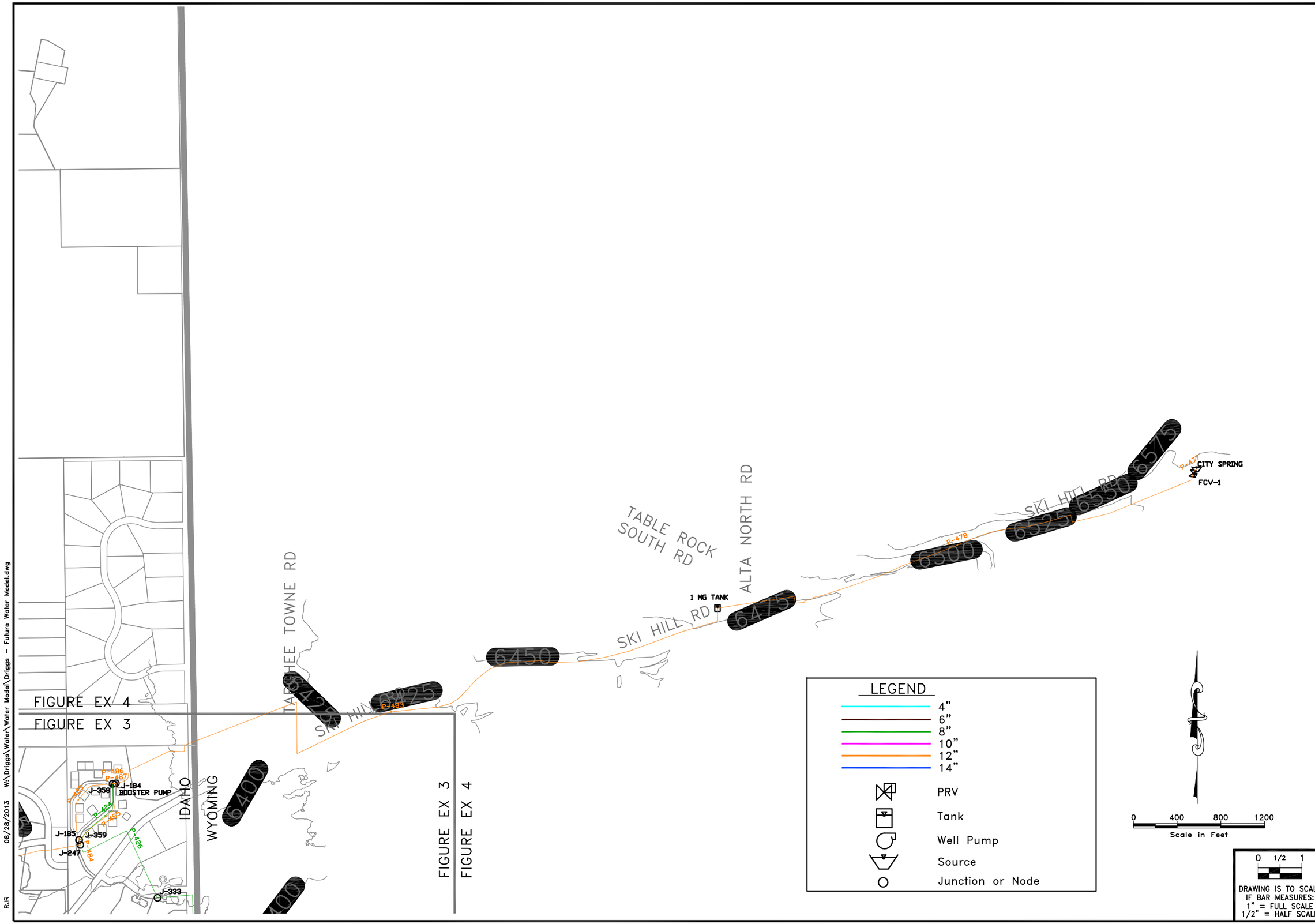
FIGURE

EX 3

08/28/2013 W:\Driggs\Water\Water Model\Driggs - Future Water Model.dwg

RJR



NO.	DATE	DESIGN	DRAWN	CHECKED
0	08/28/2013	RJR	JBM	RJR

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FIGURE

EX 4

08/28/2013 W:\Driggs\Water\Water Model\Driggs - Future Water Model.dwg

RJR

APPENDIX L

Year 2033 Peak Hour Demand

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-1	6133.76	19.61	6270.89	59.33	
J-2	6112.00	19.61	6273.47	69.86	
J-3	6174.06	19.61	6286.69	48.73	
J-4	6171.86	19.61	6283.27	48.20	
J-5	6172.81	19.61	6288.18	49.92	
J-6	6166.00	19.61	6285.92	51.89	
J-7	6156.44	19.61	6283.80	55.10	
J-8	6152.00	19.61	6281.56	56.05	
J-9	6196.00	19.61	6384.74	81.66	
J-10	6289.91	0.00	6447.46	68.16	
J-11	6149.08	19.61	6282.06	57.53	
J-12	6096.73	19.61	6268.57	74.35	
J-13	6111.82	19.61	6270.54	68.67	
J-14	6144.41	19.61	6280.34	58.81	
J-15	6140.68	19.61	6276.39	58.72	
J-16	6117.12	19.61	6271.34	66.72	
J-17	6112.17	19.61	6269.48	68.06	
J-18	6124.16	19.61	6272.03	63.97	
J-19	6169.92	19.61	6286.91	50.61	
J-20	6172.88	19.61	6287.82	49.73	
J-21	6124.40	19.61	6272.03	63.87	
J-22	6170.19	19.61	6270.72	43.49	
J-23	6165.11	19.61	6270.68	45.67	
J-24	6160.53	19.61	6281.68	52.42	
J-25	6158.37	19.61	6281.34	53.20	
J-26	6150.00	19.61	6278.64	55.66	
J-27	6161.23	19.61	6284.96	53.53	
J-28	6136.18	19.61	6270.83	58.26	
J-29	6138.94	19.61	6270.81	57.05	
J-30	6100.03	19.61	6268.59	72.93	
J-31	6098.00	19.61	6268.69	73.85	
J-32	6121.91	19.61	6272.63	65.21	
J-33	6117.27	19.61	6272.85	67.31	
J-34	6126.45	19.61	6272.98	63.40	
J-35	6122.77	19.61	6272.79	64.91	
J-36	6132.10	19.61	6273.30	61.09	
J-37	6125.69	19.61	6272.81	63.65	
J-38	6132.00	19.61	6273.27	61.12	
J-39	6128.61	19.61	6273.09	62.51	
J-40	6152.95	19.61	6281.92	55.80	
J-41	6117.50	19.61	6272.85	67.21	
J-42	6123.12	19.61	6272.79	64.76	
J-43	6107.64	19.61	6269.35	69.96	
J-44	6116.06	19.61	6271.34	67.18	
J-45	6123.45	19.61	6272.08	64.31	
J-46	6110.19	19.61	6268.96	68.69	
J-47	6104.00	19.61	6268.93	71.36	
J-48	6116.21	19.61	6272.06	67.43	
J-49	6111.40	19.61	6273.13	69.97	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-50	6106.01	19.61	6268.95	70.50	
J-51	6099.88	19.61	6268.91	73.13	
J-52	6104.66	19.61	6268.94	71.08	
J-53	6112.52	19.61	6269.60	67.96	
J-54	6160.00	19.61	6283.26	53.33	
J-55	6174.00	19.61	6283.28	47.28	
J-56	6110.59	19.61	6271.08	69.44	
J-57	6106.59	19.61	6268.94	70.24	
J-58	6130.32	19.61	6271.00	60.87	
J-59	6123.32	19.61	6272.07	64.36	
J-60	6116.46	19.61	6272.10	67.34	
J-61	6114.54	19.61	6270.41	67.44	
J-62	6136.68	19.61	6275.23	59.95	
J-63	6126.16	19.61	6272.61	63.36	
J-64	6123.70	19.61	6269.02	62.87	
J-65	6109.87	19.61	6268.84	68.78	
J-66	6126.00	19.61	6269.62	62.14	
J-67	6112.00	19.61	6269.26	68.04	
J-68	6132.21	19.61	6273.59	61.17	
J-69	6137.86	19.61	6273.63	58.74	
J-70	6124.00	19.61	6272.04	64.05	
J-71	6166.00	19.61	6270.68	45.29	
J-72	6146.00	19.61	6275.98	56.24	
J-73	6144.00	19.61	6277.18	57.62	
J-74	6110.29	19.61	6271.11	69.58	
J-75	6113.84	19.61	6271.10	68.04	
J-76	6142.00	19.61	6274.41	57.29	
J-77	6096.00	19.61	6268.49	74.63	
J-78	6103.58	19.61	6268.23	71.23	
J-79	6086.00	19.61	6254.47	72.89	
J-80	6126.00	19.61	6271.39	62.90	
J-81	6127.25	19.61	6270.85	62.13	
J-82	6086.00	19.61	6254.51	72.91	
J-83	6086.00	19.61	6254.47	72.89	
J-84	6128.35	19.61	6270.89	61.67	
J-85	6129.87	19.61	6270.87	61.01	
J-86	6273.47	19.61	6399.30	54.44	
J-87	6271.21	19.61	6399.30	55.42	
J-88	6108.90	19.61	6270.54	69.93	
J-89	6086.00	19.61	6256.10	73.59	
J-90	6086.00	19.61	6255.87	73.49	
J-91	6218.16	19.61	6385.72	72.50	
J-92	6215.16	19.61	6385.72	73.80	
J-93	6086.00	19.61	6255.33	73.26	
J-94	6084.23	19.61	6255.41	74.06	
J-95	6094.66	19.61	6254.27	69.05	
J-96	6094.33	19.61	6254.27	69.20	
J-97	6131.47	19.61	6270.80	60.28	
J-98	6089.99	19.61	6254.30	71.09	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-99	6089.50	19.61	6254.30	71.30	
J-100	6086.00	19.61	6254.49	72.90	
J-101	6248.00	19.61	6392.40	62.48	
J-102	6247.38	19.61	6392.40	62.74	
J-103	6190.47	19.61	6384.63	84.00	
J-104	6194.40	19.61	6384.64	82.31	
J-105	6114.82	19.61	6272.24	68.11	
J-106	6113.35	19.61	6272.24	68.75	
J-107	6086.00	19.61	6255.54	73.35	
J-108	6086.00	19.61	6255.55	73.35	
J-109	6101.79	19.61	6268.12	71.96	
J-110	6105.90	19.61	6268.47	70.34	
J-111	6244.00	19.61	6391.17	63.67	
J-112	6242.61	19.61	6391.17	64.27	
J-113	6086.00	19.61	6255.33	73.26	
J-114	6110.81	19.61	6268.87	68.38	
J-115	6112.21	19.61	6268.87	67.78	
J-116	6086.00	19.61	6255.13	73.17	
J-117	6086.00	19.61	6255.06	73.15	
J-118	6101.98	19.61	6266.69	71.26	
J-119	6101.02	19.61	6266.68	71.67	
J-120	6107.43	19.61	6268.35	69.62	
J-121	6113.19	19.61	6268.36	67.14	
J-122	6115.27	19.61	6271.61	67.64	
J-123	6194.08	19.61	6384.61	82.43	
J-124	6198.00	19.61	6384.63	80.75	
J-125	6116.00	19.61	6271.98	67.49	
J-126	6189.15	19.61	6384.57	84.55	
J-127	6192.00	19.61	6384.57	83.32	
J-128	6104.46	19.61	6268.96	71.17	
J-129	6095.16	19.61	6254.31	68.86	
J-130	6095.40	19.61	6254.35	68.77	
J-131	6128.31	19.61	6270.87	61.68	
J-132	6130.36	19.61	6270.87	60.79	
J-133	6104.00	19.61	6270.07	71.85	
J-134	6100.00	19.61	6269.92	73.52	
J-135	6086.00	19.61	6254.49	72.90	
J-136	6282.33	19.61	6403.17	52.28	
J-137	6280.24	19.61	6403.17	53.19	
J-138	6096.00	19.61	6254.28	68.48	
J-139	6096.75	19.61	6267.50	73.88	
J-140	6097.80	19.61	6267.48	73.42	
J-141	6086.00	19.61	6255.24	73.22	
J-142	6104.00	19.61	6269.88	71.77	
J-143	6107.05	19.61	6269.87	70.44	
J-144	6098.14	19.61	6267.38	73.22	
J-145	6088.80	19.61	6254.31	71.61	
J-146	6126.00	19.61	6270.77	62.64	
J-147	6130.59	19.61	6270.78	60.65	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-148	6095.75	19.61	6254.32	68.61	
J-149	6097.38	19.61	6254.28	67.88	
J-150	6086.00	19.61	6255.98	73.54	
J-151	6086.00	19.61	6256.79	73.89	
J-152	6086.00	19.61	6256.10	73.59	
J-153	6268.43	19.61	6397.81	55.98	
J-154	6259.64	19.61	6397.80	59.78	
J-155	6086.00	19.61	6255.02	73.13	
J-156	6169.93	19.61	6292.35	52.96	
J-157	6169.71	19.61	6292.35	53.06	
J-158	6120.00	19.61	6271.00	65.33	
J-159	6127.02	19.61	6271.10	62.34	
J-160	6104.00	19.61	6268.52	71.18	
J-161	6110.00	19.61	6268.53	68.59	
J-162	6106.00	19.61	6268.60	70.35	
J-163	6111.26	19.61	6268.44	68.00	
J-164	6104.00	19.61	6268.44	71.15	
J-165	6111.45	19.61	6268.38	67.90	
J-166	6104.00	19.61	6268.39	71.12	
J-167	6101.73	19.61	6266.57	71.32	
J-168	6105.82	19.61	6266.57	69.55	
J-169	6119.63	19.61	6271.82	65.85	
J-170	6130.00	19.61	6270.81	60.92	
J-171	6123.39	19.61	6270.80	63.78	
J-172	6108.00	19.61	6269.05	69.68	
J-173	6113.84	19.61	6269.05	67.15	
J-174	6204.53	19.61	6385.91	78.47	
J-175	6212.90	19.61	6385.81	74.81	
J-176	6203.34	19.61	6385.27	78.71	
J-177	6211.23	19.61	6385.26	75.29	
J-178	6109.79	19.61	6269.36	69.04	
J-179	6116.17	19.61	6269.30	66.25	
J-180	6214.48	19.61	6386.17	74.28	
J-181	6209.23	19.61	6386.65	76.76	
J-182	6168.98	19.61	6283.22	49.42	
J-183	6177.11	19.61	6283.58	46.06	
J-184	6390.48	19.61	6628.43	102.95	
J-185	6384.55	19.61	6628.43	105.51	
J-186	6118.22	19.61	6272.35	66.69	
J-187	6090.44	19.61	6254.30	70.90	
J-188	6089.48	19.61	6254.30	71.31	
J-189	6104.00	19.61	6268.29	71.08	
J-190	6111.18	19.61	6268.37	68.01	
J-191	6096.33	19.61	6267.86	74.21	
J-192	6102.25	19.61	6268.11	71.76	
J-193	6096.93	19.61	6267.76	73.91	
J-194	6171.61	19.61	6292.34	52.23	
J-195	6168.23	19.61	6292.36	53.70	
J-196	6095.43	19.61	6267.36	74.39	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-197	6095.01	19.61	6267.12	74.46	
J-198	6118.11	19.61	6272.00	66.58	
J-199	6232.00	19.61	6390.77	68.69	
J-200	6111.90	19.61	6269.34	68.12	
J-201	6104.00	19.61	6268.38	71.12	
J-202	6106.00	19.61	6268.61	70.35	
J-203	6178.84	19.61	6285.83	46.29	
J-204	6188.00	19.61	6285.82	42.32	
J-205	6144.47	19.61	6275.00	56.47	
J-206	6092.26	19.61	6254.29	70.10	
J-207	6198.72	19.61	6384.62	80.43	
J-208	6194.30	19.61	6384.66	82.36	
J-209	6168.00	19.61	6292.41	53.83	
J-210	6098.38	19.61	6266.73	72.84	
J-211	6104.00	19.61	6266.57	70.34	
J-212	6087.86	19.61	6254.30	72.01	
J-213	6087.12	19.61	6254.33	72.34	
J-214	6102.00	19.61	6268.15	71.89	
J-215	6098.51	19.61	6268.56	73.57	
J-216	6104.56	19.61	6268.49	70.93	
J-217	6132.00	19.61	6272.80	60.92	
J-218	6127.79	19.61	6270.98	61.95	
J-219	6100.56	19.61	6266.59	71.83	
J-220	6091.45	19.61	6266.57	75.77	
J-221	6136.06	19.61	6270.85	58.32	
J-222	6122.77	19.61	6271.00	64.13	
J-223	6202.00	19.61	6384.82	79.10	
J-224	6211.27	19.61	6386.17	75.67	
J-225	6096.00	19.61	6266.18	73.63	
J-226	6106.00	19.61	6268.39	70.26	
J-227	6296.68	19.61	6441.07	62.47	
J-228	6298.00	19.61	6441.06	61.89	
J-229	6103.40	19.61	6268.21	71.30	
J-230	6107.22	19.61	6268.37	69.72	
J-231	6088.25	19.61	6254.30	71.85	
J-232	6107.33	19.61	6268.67	69.80	
J-233	6212.00	19.61	6384.84	74.78	
J-234	6210.38	19.61	6386.24	76.08	
J-235	6109.85	19.61	6268.66	68.71	
J-236	6113.14	19.61	6269.64	67.71	
J-237	6130.00	19.61	6270.90	60.96	
J-238	6234.00	19.61	6390.77	67.83	
J-239	6249.81	19.61	6390.85	61.02	
J-240	6094.33	19.61	6267.70	75.01	
J-241	6091.22	19.61	6267.26	76.16	
J-242	6202.00	19.61	6384.80	79.09	
J-243	6212.00	19.61	6384.79	74.76	
J-244	6357.22	19.61	6493.41	58.92	
J-245	6385.97	19.61	6487.39	43.88	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-246	6376.37	19.61	6487.40	48.04	
J-247	6384.37	19.61	6472.41	38.09	This junction does not meet requirement so the pressure is boosted above 40 psi by a booster pump station.
J-248	6196.33	19.61	6384.60	81.46	
J-249	6104.00	19.61	6266.68	70.39	
J-250	6127.20	19.61	6271.02	62.22	
J-251	6144.00	19.61	6270.74	54.83	
J-252	6106.00	19.61	6271.02	71.40	
J-253	6301.05	19.61	6448.71	63.88	
J-254	6248.16	19.61	6390.88	61.75	
J-255	6116.00	19.61	6270.94	67.04	
J-256	6100.00	19.61	6267.82	72.61	
J-257	6209.22	19.61	6385.82	76.40	
J-258	6207.42	19.61	6385.26	76.94	
J-259	6142.74	19.61	6277.08	58.12	
J-260	6140.00	19.61	6275.22	58.50	
J-261	6136.29	19.61	6274.01	59.58	
J-262	6131.11	19.61	6273.43	61.58	
J-263	6134.10	19.61	6274.19	60.61	
J-264	6128.75	19.61	6273.13	62.47	
J-265	6125.03	19.61	6272.77	63.92	
J-266	6120.00	19.61	6272.00	65.76	
J-267	6100.89	19.61	6267.85	72.24	
J-268	6107.25	19.61	6268.31	69.68	
J-269	6104.57	19.61	6268.26	70.82	
J-270	6108.54	19.61	6268.47	69.19	
J-271	6110.85	19.61	6269.05	68.45	
J-272	6111.61	19.61	6269.34	68.24	
J-273	6172.48	19.61	6283.92	48.21	
J-274	6182.55	19.61	6384.56	87.40	
J-275	6184.42	19.61	6384.56	86.59	
J-276	6140.50	19.61	6270.74	56.35	
J-277	6140.83	19.61	6270.78	56.22	
J-278	6121.00	19.61	6271.00	64.90	
J-279	6118.22	19.61	6271.00	66.10	
J-280	6122.00	19.61	6271.01	64.47	
J-281	6127.02	19.61	6271.06	62.32	
J-282	6125.65	19.61	6271.33	63.03	
J-283	6126.00	19.61	6271.27	62.85	
J-284	6116.78	19.61	6270.68	66.59	
J-285	6116.00	19.61	6271.99	67.49	
J-286	6116.00	19.61	6271.98	67.49	
J-287	6118.00	19.61	6269.44	65.52	
J-288	6104.00	19.61	6268.48	71.16	
J-289	6104.00	19.61	6268.43	71.14	
J-290	6098.82	19.61	6267.19	72.84	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-291	6096.47	19.61	6266.53	73.58	
J-292	6086.00	19.61	6255.59	73.37	
J-293	6086.00	19.61	6255.26	73.23	
J-294	6086.00	19.61	6254.47	72.89	
J-295	6086.00	19.61	6254.49	72.90	
J-296	6085.95	19.61	6254.33	72.85	
J-297	6086.00	19.61	6254.41	72.86	
J-298	6091.28	19.61	6254.29	70.53	
J-299	6089.35	19.61	6254.30	71.36	
J-300	6092.40	19.61	6254.30	70.04	
J-301	6092.70	19.61	6254.30	69.92	
J-302	6094.92	19.61	6254.31	68.96	
J-303	6095.06	19.61	6254.32	68.91	
J-304	6095.83	19.61	6254.28	68.55	
J-305	6095.77	19.61	6254.31	68.59	
J-306	6093.34	19.61	6254.86	69.89	
J-307	6095.05	19.61	6254.27	68.89	
J-308	6102.22	19.61	6269.88	72.54	
J-309	6096.70	19.61	6269.89	74.93	
J-310	6097.61	19.61	6269.90	74.54	
J-311	6131.25	19.61	6272.90	61.29	
J-312	6160.00	19.61	6285.17	54.16	
J-313	6162.27	19.61	6285.39	53.27	
J-314	6158.57	19.61	6284.28	54.39	
J-315	6168.04	19.61	6286.75	51.36	
J-316	6171.41	19.61	6286.71	49.88	
J-317	6179.31	19.61	6283.46	45.06	
J-318	6181.92	19.61	6283.37	43.89	
J-319	6182.71	19.61	6283.32	43.53	
J-320	6182.00	19.61	6283.49	43.91	
J-321	6174.00	19.61	6283.38	47.33	
J-322	6175.25	19.61	6283.26	46.73	
J-323	6172.35	19.61	6283.22	47.97	
J-324	6170.20	19.61	6283.26	48.92	
J-325	6163.27	19.61	6283.26	51.91	
J-326	6170.29	19.61	6283.26	48.88	
J-327	6198.51	19.61	6384.61	80.52	
J-328	6199.24	19.61	6384.62	80.21	
J-329	6205.70	19.61	6384.71	77.45	
J-330	6205.04	19.61	6384.79	77.77	
J-331	6264.50	19.61	6397.81	57.67	
J-332	6286.00	19.61	6404.91	51.45	
J-333	6375.05	19.61	6477.01	44.11	
J-334	6141.11	19.61	6273.85	57.43	
J-335	6151.37	19.61	6274.35	53.21	
J-336	6150.00	19.61	6274.55	53.89	
J-337	6190.00	19.61	6384.65	84.21	
J-338	6195.26	19.61	6384.62	81.93	
J-339	6199.08	19.61	6384.68	80.30	

JUNCTION INFORMATION FOR FUTURE PEAK HOUR DEMAND

Satisfies minimum 40 psi pressure requirement
Does not satisfy minimum 40 psi pressure requiement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-340	6088.43	19.61	6267.47	77.46	
J-341	6086.36	19.61	6267.32	78.29	
J-342	6118.91	19.61	6268.83	64.86	
J-343	6106.75	19.61	6269.19	70.28	
J-344	6289.91	0.00	6447.48	68.17	
J-345	6155.21	19.61	6283.64	55.57	
J-346	6118.00	19.61	6270.38	65.93	
J-347	6116.03	19.61	6270.66	66.90	
J-348	6097.14	19.61	6267.49	73.70	
J-349	6101.97	19.61	6268.51	72.06	
J-350	6135.27	19.61	6270.86	58.66	
J-351	6096.71	0.00	6267.48	73.88	
J-352	6129.07	0.00	6271.53	61.63	
J-353	6135.64	0.00	6270.85	58.50	
J-354	6289.41	0.00	6405.32	50.15	
J-355	6289.80	0.00	6295.88	2.63	This junction is just below the 0.3 MG tank and does not need to meet the 40 psi requirement.
J-356	6098.24	0.00	6263.13	71.34	
J-357	6095.00	0.00	6263.13	72.74	
J-358	6390.90	0.00	6474.49	36.16	This junction does not meet requirement so the pressure is boosted above 40 psi by a booster pump station.
J-359	6384.54	0.00	6472.54	38.07	This junction does not meet requirement so the pressure is boosted above 40 psi by a booster pump station.

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-1	827	LIONS PARK WELL PUMP	J-2	10	Ductile Iron	120	884.61	3.61	4.71
P-2	53	HIGHSCHOOL WELL PUMP	J-5	8	Ductile Iron	120	1,123.81	7.17	1.39
P-3	504	J-14	J-15	6	Ductile Iron	120	274.16	3.11	3.94
P-4	501	J-16	J-17	8	Ductile Iron	120	390.48	2.49	1.86
P-5	502	J-11	J-14	8	Ductile Iron	120	374.07	2.39	1.72
P-6	388	J-24	J-25	6	Ductile Iron	120	83.54	0.95	0.34
P-7	389	J-8	J-26	10	Ductile Iron	120	1,026.91	4.19	2.92
P-8	408	J-28	J-29	10	Ductile Iron	120	76.35	0.31	0.02
P-9	448	J-30	J-31	8	Ductile Iron	120	-84.98	0.54	0.10
P-10	501	J-36	J-37	6	Ductile Iron	120	88.35	1.00	0.48
P-11	507	J-38	J-39	8	Ductile Iron	120	111.65	0.71	0.19
P-12	527	J-40	J-14	6	Ductile Iron	120	163.24	1.85	1.58
P-13	536	J-41	J-42	6	Ductile Iron	120	27.09	0.31	0.06
P-14	565	J-44	J-45	8	Ductile Iron	120	-223.48	1.43	0.75
P-15	764	J-50	J-51	6	Ductile Iron	120	19.61	0.22	0.04
P-16	1,019	J-35	J-61	6	Ductile Iron	120	142.48	1.62	2.37
P-17	1,280	J-64	J-65	6	Ductile Iron	120	31.67	0.36	0.18
P-18	1,280	J-66	J-67	6	Ductile Iron	120	45.23	0.51	0.36
P-19	80	VALLEY CENTER WELL PUMP	J-80	8	Ductile Iron	120	500.00	3.19	0.47
P-20	141	J-84	J-85	8	Ductile Iron	120	58.83	0.38	0.02
P-21	146	J-86	J-87	8	Ductile Iron	120	19.61	0.13	0.00
P-22	496	J-88	J-13	8	Ductile Iron	120	-6.31	0.04	0.00
P-23	166	J-89	J-90	8	Ductile Iron	120	230.54	1.47	0.23
P-24	169	J-91	J-92	8	Ductile Iron	120	-19.61	0.13	0.00
P-25	180	J-95	J-96	8	Ductile Iron	120	19.61	0.13	0.00
P-26	228	J-108	J-94	8	Ductile Iron	120	145.77	0.93	0.14
P-27	220	J-101	J-102	8	Ductile Iron	120	19.61	0.13	0.00
P-28	232	J-103	J-104	8	Ductile Iron	120	-25.97	0.17	0.01
P-29	240	J-105	J-106	8	Ductile Iron	120	19.61	0.13	0.00
P-30	250	J-107	J-108	8	Ductile Iron	120	-19.61	0.13	0.00
P-31	247	J-109	J-110	8	Ductile Iron	120	-233.76	1.49	0.35
P-32	246	J-111	J-112	8	Ductile Iron	120	19.61	0.13	0.00
P-33	274	J-114	J-115	8	Ductile Iron	120	2.16	0.01	0.00
P-34	293	J-116	J-117	8	Ductile Iron	120	83.93	0.54	0.06
P-35	319	J-118	J-119	8	Ductile Iron	120	19.61	0.13	0.00
P-36	313	J-120	J-121	8	Ductile Iron	120	-36.52	0.23	0.01
P-37	316	J-123	J-124	8	Ductile Iron	120	-44.74	0.29	0.02
P-38	323	J-126	J-127	8	Ductile Iron	120	-0.30	0.00	0.00
P-39	371	J-136	J-137	8	Ductile Iron	120	19.61	0.13	0.01
P-40	529	J-139	J-140	8	Ductile Iron	120	30.28	0.19	0.02
P-41	406	J-142	J-143	8	Ductile Iron	120	21.36	0.14	0.01
P-42	447	J-83	J-145	8	Ductile Iron	120	110.10	0.70	0.16
P-43	589	J-146	J-147	8	Ductile Iron	120	-19.61	0.13	0.01
P-44	513	J-156	J-157	8	Ductile Iron	120	-9.46	0.06	0.00
P-45	524	J-160	J-161	8	Ductile Iron	120	-16.99	0.11	0.01
P-46	534	J-163	J-164	8	Ductile Iron	120	-0.05	0.00	0.00
P-47	590	J-167	J-168	8	Ductile Iron	120	19.61	0.13	0.01
P-48	564	J-63	J-169	8	Ductile Iron	120	230.42	1.47	0.79
P-49	629	J-192	J-193	8	Ductile Iron	120	139.88	0.89	0.35
P-50	847	J-196	J-197	8	Ductile Iron	120	97.04	0.62	0.24
P-51	786	J-203	J-204	8	Ductile Iron	120	19.61	0.13	0.01
P-52	1,106	J-219	J-220	8	Ductile Iron	120	19.61	0.13	0.02
P-53	1,401	J-238	J-239	8	Ductile Iron	120	-39.22	0.25	0.07
P-54	359	J-257	J-224	8	Ductile Iron	120	-190.18	1.21	0.35
P-55	324	J-223	J-258	8	Ductile Iron	120	-226.49	1.45	0.44
P-56	362	J-258	J-257	8	Ductile Iron	120	-242.70	1.55	0.56
P-57	518	J-259	J-14	6	Ductile Iron	120	-243.55	2.76	3.26
P-58	500	J-260	J-259	6	Ductile Iron	120	-183.46	2.08	1.86
P-59	536	J-36	J-261	6	Ductile Iron	120	-105.00	1.19	0.71
P-60	523	J-261	J-260	6	Ductile Iron	120	-142.21	1.61	1.21
P-61	535	J-45	J-264	6	Ductile Iron	120	-129.54	1.47	1.04
P-62	509	J-265	J-262	6	Ductile Iron	120	-104.18	1.18	0.66
P-63	594	J-75	J-266	8	Ductile Iron	120	-240.66	1.54	0.90
P-64	496	J-266	J-265	6	Ductile Iron	120	-114.49	1.30	0.77
P-65	253	J-267	J-256	8	Ductile Iron	120	53.70	0.34	0.02
P-66	267	J-229	J-269	8	Ductile Iron	120	-81.84	0.52	0.06
P-67	358	J-269	J-268	8	Ductile Iron	120	-66.16	0.42	0.05
P-68	310	J-271	J-272	8	Ductile Iron	120	-183.53	1.17	0.28
P-69	1,207	J-244	J-246	8	Ductile Iron	120	457.44	2.92	6.01
P-70	691	J-246	J-245	8	Ductile Iron	120	19.61	0.13	0.01
P-71	763	J-225	J-151	8	Ductile Iron	120	745.84	4.76	9.39
P-72	808	J-196	J-241	8	Ductile Iron	120	63.31	0.40	0.10
P-73	242	J-118	J-249	8	Ductile Iron	120	19.61	0.13	0.00
P-74	501	J-68	J-264	6	Ductile Iron	120	86.73	0.98	0.47
P-75	410	J-155	J-82	8	Ductile Iron	120	216.42	1.38	0.51
P-76	698	J-43	J-200	8	Ductile Iron	120	14.01	0.09	0.01
P-77	266	J-172	J-271	8	Ductile Iron	120	4.19	0.03	0.00
P-78	308	J-271	J-173	8	Ductile Iron	120	7.47	0.05	0.00

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-79	392	J-141	J-93	8	Ductile Iron	120	-86.94	0.55	0.09
P-80	203	J-30	J-215	8	Ductile Iron	120	65.37	0.42	0.03
P-81	453	J-215	J-12	8	Ductile Iron	120	-9.05	0.06	0.00
P-82	211	J-191	J-193	8	Ductile Iron	120	124.68	0.80	0.09
P-83	247	J-180	J-224	8	Ductile Iron	120	-19.61	0.13	0.00
P-84	347	J-224	J-181	8	Ductile Iron	120	-229.40	1.46	0.48
P-85	181	J-81	J-237	8	Ductile Iron	120	-92.34	0.59	0.05
P-86	179	J-79	J-83	8	Ductile Iron	120	15.46	0.10	0.00
P-87	2,382	J-97	J-71	6	Ductile Iron	120	17.60	0.20	0.12
P-88	129	J-3	J-20	8	Ductile Iron	120	-621.61	3.97	1.13
P-89	677	J-24	J-8	6	Ductile Iron	120	35.49	0.40	0.12
P-90	496	J-46	J-52	6	Ductile Iron	120	15.69	0.18	0.02
P-91	144	J-52	J-47	6	Ductile Iron	120	19.61	0.22	0.01
P-92	497	J-264	J-263	6	Ductile Iron	120	-136.22	1.55	1.06
P-93	448	J-22	J-71	6	Ductile Iron	120	21.62	0.25	0.03
P-94	116	J-71	J-23	6	Ductile Iron	120	19.61	0.22	0.01
P-95	294	J-3	J-203	10	Ductile Iron	120	617.44	2.52	0.86
P-96	502	J-69	J-217	8	Ductile Iron	120	253.25	1.62	0.84
P-97	498	J-73	J-15	8	Ductile Iron	120	246.47	1.57	0.79
P-98	509	J-262	J-261	6	Ductile Iron	120	-96.00	1.09	0.57
P-99	527	J-261	J-76	6	Ductile Iron	120	-78.39	0.89	0.41
P-100	282	J-165	J-230	8	Ductile Iron	120	31.82	0.20	0.01
P-101	271	J-230	J-166	8	Ductile Iron	120	-38.12	0.24	0.01
P-102	484	J-34	J-42	6	Ductile Iron	120	53.87	0.61	0.19
P-103	16	J-42	J-35	8	Ductile Iron	120	61.35	0.39	0.00
P-104	485	J-62	J-68	8	Ductile Iron	120	371.45	2.37	1.64
P-105	542	J-68	J-63	8	Ductile Iron	120	265.11	1.69	0.98
P-106	139	J-148	J-138	8	Ductile Iron	120	91.16	0.58	0.04
P-107	265	J-178	J-272	8	Ductile Iron	120	52.77	0.34	0.02
P-108	328	J-272	J-179	8	Ductile Iron	120	57.36	0.37	0.04
P-109	355	J-176	J-258	8	Ductile Iron	120	23.01	0.15	0.01
P-110	229	J-258	J-177	8	Ductile Iron	120	19.61	0.13	0.00
P-111	509	J-59	J-266	8	Ductile Iron	120	66.74	0.43	0.07
P-112	538	J-266	J-60	8	Ductile Iron	120	-79.05	0.50	0.10
P-113	147	J-48	J-105	8	Ductile Iron	120	-217.78	1.39	0.18
P-114	520	J-105	J-49	8	Ductile Iron	120	-257.00	1.64	0.89
P-115	482	J-32	J-41	6	Ductile Iron	120	-58.91	0.67	0.22
P-116	17	J-41	J-33	8	Ductile Iron	120	-105.61	0.67	0.01
P-117	274	J-209	J-195	8	Ductile Iron	120	78.44	0.50	0.05
P-118	524	J-26	J-259	8	Ductile Iron	120	346.22	2.21	1.56
P-119	506	J-259	J-62	8	Ductile Iron	120	386.69	2.47	1.85
P-120	518	J-263	J-262	6	Ductile Iron	120	110.63	1.26	0.76
P-121	537	J-262	J-34	6	Ductile Iron	120	82.83	0.94	0.46
P-122	282	J-238	J-199	8	Ductile Iron	120	19.61	0.13	0.00
P-123	428	J-149	J-206	8	Ductile Iron	120	-26.50	0.17	0.01
P-124	360	J-92	J-234	8	Ductile Iron	120	-233.19	1.49	0.51
P-125	121	J-40	J-8	12	Ductile Iron	120	1,011.03	2.87	0.36
P-126	267	J-268	J-120	8	Ductile Iron	120	-67.24	0.43	0.04
P-127	260	J-120	J-230	8	Ductile Iron	120	-50.33	0.32	0.02
P-128	269	J-162	J-232	8	Ductile Iron	120	-89.74	0.57	0.07
P-129	257	J-232	J-235	8	Ductile Iron	120	29.51	0.19	0.01
P-130	1,023	J-15	J-39	8	Ductile Iron	120	362.29	2.31	3.30
P-131	564	J-39	J-70	8	Ductile Iron	120	269.52	1.72	1.05
P-132	385	J-43	J-13	8	Ductile Iron	120	-353.72	2.26	1.19
P-133	160	J-13	J-75	8	Ductile Iron	120	-379.65	2.42	0.56
P-134	740	J-194	J-157	8	Ductile Iron	120	-9.53	0.06	0.00
P-135	176	J-157	J-195	8	Ductile Iron	120	-38.60	0.25	0.01
P-136	351	J-174	J-257	8	Ductile Iron	120	91.73	0.59	0.09
P-137	228	J-257	J-175	8	Ductile Iron	120	19.61	0.13	0.00
P-138	517	J-39	J-63	8	Ductile Iron	120	184.81	1.18	0.48
P-139	360	J-232	J-114	8	Ductile Iron	120	-138.87	0.89	0.20
P-140	262	J-114	J-271	8	Ductile Iron	120	-160.64	1.03	0.19
P-141	368	J-151	J-89	8	Ductile Iron	120	269.76	1.72	0.69
P-142	117	J-89	J-152	8	Ductile Iron	120	19.61	0.13	0.00
P-143	484	J-210	J-219	8	Ductile Iron	120	98.05	0.63	0.14
P-144	185	J-131	J-85	8	Ductile Iron	120	-19.61	0.13	0.00
P-145	148	J-85	J-132	8	Ductile Iron	120	19.61	0.13	0.00
P-146	54	J-212	J-231	8	Ductile Iron	120	19.61	0.13	0.00
P-147	467	J-150	J-108	8	Ductile Iron	120	184.99	1.18	0.44
P-148	295	J-155	J-117	8	Ductile Iron	120	-64.32	0.41	0.04
P-149	175	J-77	J-12	10	Ductile Iron	120	-225.70	0.92	0.08
P-150	358	J-174	J-181	14	Ductile Iron	120	-1,243.33	2.59	0.74
P-151	231	J-163	J-161	8	Ductile Iron	120	-115.75	0.74	0.09
P-152	2,022	J-18	J-58	10	Ductile Iron	120	239.48	0.98	1.02
P-153	421	J-58	J-237	10	Ductile Iron	120	163.05	0.67	0.10
P-154	325	J-9	J-176	14	Ductile Iron	120	-1,089.37	2.27	0.53
P-155	367	J-176	J-174	14	Ductile Iron	120	-1,131.99	2.36	0.64
P-156	561	J-48	J-74	10	Ductile Iron	120	460.53	1.88	0.95
P-157	515	J-264	J-265	6	Ductile Iron	120	73.80	0.84	0.35

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-158	537	J-265	J-32	6	Ductile Iron	120	43.88	0.50	0.14
P-159	40	J-17	J-200	8	Ductile Iron	120	370.87	2.37	0.13
P-160	267	J-200	J-270	8	Ductile Iron	120	365.27	2.33	0.88
P-161	291	J-143	J-128	8	Ductile Iron	120	356.01	2.27	0.91
P-162	477	J-128	J-57	8	Ductile Iron	120	37.50	0.24	0.02
P-163	380	J-218	J-66	6	Ductile Iron	120	179.77	2.04	1.36
P-164	163	J-56	J-88	8	Ductile Iron	120	367.56	2.35	0.54
P-165	214	J-88	J-143	8	Ductile Iron	120	354.26	2.26	0.66
P-166	42	J-242	J-223	8	Ductile Iron	120	-119.79	0.76	0.02
P-167	359	J-223	J-9	8	Ductile Iron	120	87.09	0.56	0.08
P-168	529	J-69	J-36	10	Ductile Iron	120	271.46	1.11	0.34
P-169	511	J-36	J-34	10	Ductile Iron	120	268.49	1.10	0.32
P-170	525	J-213	J-135	8	Ductile Iron	120	-102.86	0.66	0.16
P-171	508	J-263	J-260	6	Ductile Iron	120	-132.10	1.50	1.03
P-172	526	J-260	J-72	6	Ductile Iron	120	-110.46	1.25	0.76
P-173	682	J-26	J-25	6	Ductile Iron	120	-189.75	2.15	2.70
P-174	707	J-195	J-156	8	Ductile Iron	120	20.23	0.13	0.01
P-175	211	J-156	J-194	8	Ductile Iron	120	10.08	0.06	0.00
P-176	266	J-214	J-267	8	Ductile Iron	120	208.62	1.33	0.31
P-177	321	J-270	J-269	8	Ductile Iron	120	150.70	0.96	0.20
P-178	278	J-269	J-214	8	Ductile Iron	120	115.41	0.74	0.11
P-179	132	J-52	J-50	6	Ductile Iron	120	-23.53	0.27	0.01
P-180	201	J-161	J-235	8	Ductile Iron	120	-152.34	0.97	0.13
P-181	254	J-205	J-72	10	Ductile Iron	120	-720.76	2.94	0.99
P-182	501	J-72	J-26	10	Ductile Iron	120	-850.83	3.48	2.65
P-183	179	J-250	J-84	8	Ductile Iron	120	158.97	1.01	0.13
P-184	523	J-15	J-62	6	Ductile Iron	120	138.72	1.57	1.16
P-185	499	J-62	J-263	6	Ductile Iron	120	134.36	1.52	1.04
P-186	312	J-206	J-99	8	Ductile Iron	120	-30.12	0.19	0.01
P-187	492	J-63	J-45	8	Ductile Iron	120	199.89	1.28	0.53
P-188	41	J-45	J-59	8	Ductile Iron	120	86.35	0.55	0.01
P-189	535	J-69	J-76	10	Ductile Iron	120	-423.18	1.73	0.78
P-190	273	J-76	J-205	10	Ductile Iron	120	-521.18	2.13	0.58
P-191	209	J-165	J-163	8	Ductile Iron	120	-96.19	0.61	0.06
P-192	156	J-44	J-16	10	Ductile Iron	120	-17.09	0.07	0.00
P-193	44	J-5	J-20	12	Ductile Iron	120	1,744.18	4.95	0.36
P-194	463	J-241	J-197	8	Ductile Iron	120	99.06	0.63	0.14
P-195	32	J-2	J-49	8	Ductile Iron	120	678.06	4.33	0.33
P-196	541	J-49	J-252	8	Ductile Iron	120	401.46	2.56	2.12
P-197	521	J-34	J-32	10	Ductile Iron	120	277.84	1.13	0.35
P-198	530	J-217	J-37	8	Ductile Iron	120	-29.72	0.19	0.02
P-199	540	J-75	J-44	10	Ductile Iron	120	-220.97	0.90	0.24
P-200	39	J-187	J-98	8	Ductile Iron	120	-10.52	0.07	0.00
P-201	394	J-98	J-213	8	Ductile Iron	120	-44.59	0.28	0.03
P-202	268	J-9	J-208	8	Ductile Iron	120	98.05	0.63	0.08
P-203	554	J-208	J-104	8	Ductile Iron	120	33.93	0.22	0.02
P-204	723	J-123	J-126	8	Ductile Iron	120	39.05	0.25	0.04
P-205	324	J-129	J-187	8	Ductile Iron	120	25.84	0.16	0.01
P-206	366	J-101	J-111	8	Ductile Iron	120	370.46	2.36	1.23
P-207	108	J-111	J-254	8	Ductile Iron	120	331.24	2.11	0.29
P-208	791	J-240	J-139	8	Ductile Iron	120	91.90	0.59	0.20
P-209	488	J-201	J-189	8	Ductile Iron	120	80.00	0.51	0.10
P-210	357	J-189	J-214	8	Ductile Iron	120	112.82	0.72	0.13
P-211	45	J-141	J-116	8	Ductile Iron	120	319.19	2.04	0.11
P-212	304	J-243	J-233	8	Ductile Iron	120	-76.14	0.49	0.05
P-213	162	J-151	J-150	8	Ductile Iron	120	456.46	2.91	0.80
P-214	450	J-150	J-141	8	Ductile Iron	120	251.87	1.61	0.74
P-215	247	J-193	J-144	8	Ductile Iron	120	244.95	1.56	0.39
P-216	336	J-144	J-256	8	Ductile Iron	120	-223.74	1.43	0.44
P-217	208	J-164	J-166	8	Ductile Iron	120	93.40	0.60	0.05
P-218	41	J-166	J-201	8	Ductile Iron	120	35.67	0.23	0.00
P-219	307	J-173	J-179	8	Ductile Iron	120	-172.03	1.10	0.25
P-220	392	J-6	J-27	12	Ductile Iron	120	906.01	2.57	0.96
P-221	537	J-7	J-11	12	Ductile Iron	120	1,055.79	3.00	1.75
P-222	53	J-82	J-100	8	Ductile Iron	120	122.53	0.78	0.02
P-223	59	J-100	J-83	8	Ductile Iron	120	114.25	0.73	0.02
P-224	462	J-197	J-210	8	Ductile Iron	120	176.49	1.13	0.39
P-225	345	J-210	J-118	8	Ductile Iron	120	58.83	0.38	0.04
P-226	494	J-11	J-73	8	Ductile Iron	120	662.11	4.23	4.87
P-227	1,026	J-73	J-38	8	Ductile Iron	120	396.03	2.53	3.91
P-228	648	J-33	J-2	8	Ductile Iron	120	-186.94	1.19	0.61
P-229	220	J-12	J-31	10	Ductile Iron	120	-254.36	1.04	0.12
P-230	206	J-46	J-67	6	Ductile Iron	120	-110.51	1.25	0.30
P-231	380	J-67	J-53	6	Ductile Iron	120	-84.89	0.96	0.34
P-232	689	J-77	J-240	8	Ductile Iron	120	206.09	1.32	0.78
P-233	260	J-20	J-19	12	Ductile Iron	120	1,102.96	3.13	0.92
P-234	317	J-19	J-6	12	Ductile Iron	120	1,028.69	2.92	0.98
P-235	485	J-32	J-60	10	Ductile Iron	120	361.02	1.47	0.53
P-236	25	J-60	J-48	8	Ductile Iron	120	262.36	1.67	0.04

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-237	185	J-21	J-18	10	Ductile Iron	120	13.92	0.06	0.00
P-238	305	J-256	J-109	8	Ductile Iron	120	-189.65	1.21	0.30
P-239	303	J-109	J-192	8	Ductile Iron	120	24.49	0.16	0.01
P-240	258	J-121	J-165	8	Ductile Iron	120	-44.76	0.29	0.02
P-241	225	J-160	J-164	8	Ductile Iron	120	113.06	0.72	0.08
P-242	532	J-221	J-159	8	Ductile Iron	120	-125.32	0.80	0.24
P-243	382	J-66	J-64	6	Ductile Iron	120	114.92	1.30	0.60
P-244	512	J-116	J-135	8	Ductile Iron	120	215.65	1.38	0.63
P-245	285	J-86	J-153	8	Ductile Iron	120	468.51	2.99	1.48
P-246	295	J-104	J-207	8	Ductile Iron	120	41.48	0.26	0.02
P-247	357	J-235	J-115	8	Ductile Iron	120	-142.44	0.91	0.20
P-248	263	J-115	J-173	8	Ductile Iron	120	-159.89	1.02	0.19
P-249	572	J-172	J-202	8	Ductile Iron	120	168.32	1.07	0.45
P-250	497	J-37	J-35	8	Ductile Iron	120	39.02	0.25	0.03
P-251	537	J-35	J-33	8	Ductile Iron	120	-61.72	0.39	0.07
P-252	328	J-16	J-169	10	Ductile Iron	120	-427.18	1.75	0.48
P-253	53	J-202	J-162	8	Ductile Iron	120	45.55	0.29	0.00
P-254	202	J-162	J-160	8	Ductile Iron	120	115.68	0.74	0.08
P-255	176	J-65	J-46	6	Ductile Iron	120	-75.21	0.85	0.13
P-256	327	J-270	J-190	8	Ductile Iron	120	101.94	0.65	0.10
P-257	264	J-190	J-121	8	Ductile Iron	120	11.37	0.07	0.00
P-258	1,286	J-31	J-133	10	Ductile Iron	120	-358.95	1.47	1.38
P-259	484	J-133	J-252	10	Ductile Iron	120	-497.97	2.03	0.95
P-260	669	J-252	J-74	10	Ductile Iron	120	-116.12	0.47	0.09
P-261	309	J-178	J-172	8	Ductile Iron	120	192.12	1.23	0.31
P-262	513	J-169	J-70	10	Ductile Iron	120	-216.38	0.88	0.22
P-263	537	J-70	J-21	10	Ductile Iron	120	33.53	0.14	0.01
P-264	31	J-74	J-56	10	Ductile Iron	120	324.80	1.33	0.03
P-265	494	J-56	J-75	10	Ductile Iron	120	-62.37	0.25	0.02
P-266	739	J-203	J-273	10	Ductile Iron	120	578.22	2.36	1.91
P-267	454	J-273	J-183	10	Ductile Iron	120	295.74	1.21	0.34
P-268	106	J-219	J-167	8	Ductile Iron	120	58.83	0.38	0.01
P-269	373	J-167	J-211	8	Ductile Iron	120	19.61	0.13	0.01
P-270	174	J-93	J-94	8	Ductile Iron	120	-126.16	0.81	0.08
P-271	282	J-267	J-229	8	Ductile Iron	120	-220.27	1.41	0.36
P-272	265	J-229	J-226	8	Ductile Iron	120	-158.04	1.01	0.18
P-273	236	J-250	J-222	8	Ductile Iron	120	42.87	0.27	0.01
P-274	300	J-222	J-158	8	Ductile Iron	120	3.52	0.02	0.00
P-275	70	J-186	J-122	8	Ductile Iron	120	684.95	4.37	0.74
P-276	183	J-98	J-99	8	Ductile Iron	120	14.45	0.09	0.00
P-277	182	J-99	J-145	8	Ductile Iron	120	-35.27	0.23	0.01
P-278	273	J-93	J-113	8	Ductile Iron	120	19.61	0.13	0.00
P-279	354	J-133	J-134	8	Ductile Iron	120	119.41	0.76	0.15
P-280	249	J-144	J-225	8	Ductile Iron	120	449.09	2.87	1.20
P-281	165	J-57	J-110	8	Ductile Iron	120	337.99	2.16	0.47
P-282	404	J-84	J-170	8	Ductile Iron	120	80.53	0.51	0.08
P-283	496	J-170	J-147	8	Ductile Iron	120	41.31	0.26	0.03
P-284	49	J-130	J-148	8	Ductile Iron	120	149.79	0.96	0.03
P-285	364	J-216	J-65	6	Ductile Iron	120	-87.28	0.99	0.34
P-286	472	J-188	J-213	8	Ductile Iron	120	-38.67	0.25	0.02
P-287	556	J-122	J-236	8	Ductile Iron	120	381.23	2.43	1.98
P-288	460	J-127	J-248	8	Ductile Iron	120	-39.39	0.25	0.02
P-289	272	J-189	J-268	8	Ductile Iron	120	-52.43	0.33	0.02
P-290	342	J-268	J-190	8	Ductile Iron	120	-70.96	0.45	0.05
P-291	1,014	J-25	J-182	6	Ductile Iron	120	-125.82	1.43	1.88
P-292	262	J-58	J-1	6	Ductile Iron	120	56.82	0.64	0.11
P-293	490	J-1	J-97	6	Ductile Iron	120	37.21	0.42	0.09
P-294	325	J-78	J-128	8	Ductile Iron	120	-298.90	1.91	0.74
P-295	211	J-53	J-61	6	Ductile Iron	120	-186.86	2.12	0.81
P-296	1,069	J-61	J-218	6	Ductile Iron	120	-63.99	0.73	0.57
P-297	388	J-182	J-273	6	Ductile Iron	120	-124.23	1.41	0.70
P-298	1,012	J-273	J-24	6	Ductile Iron	120	138.64	1.57	2.24
P-299	630	J-191	J-78	8	Ductile Iron	120	-144.29	0.92	0.37
P-300	223	J-192	J-78	8	Ductile Iron	120	-135.00	0.86	0.12
P-301	239	J-221	J-28	10	Ductile Iron	120	95.96	0.39	0.02
P-302	877	J-255	J-178	8	Ductile Iron	120	264.50	1.69	1.58
P-303	262	J-272	J-236	8	Ductile Iron	120	-207.73	1.33	0.30
P-304	159	J-57	J-43	8	Ductile Iron	120	-320.10	2.04	0.41
P-305	697	J-126	J-274	8	Ductile Iron	120	19.74	0.13	0.01
P-306	278	J-274	J-275	8	Ductile Iron	120	0.13	0.00	0.00
P-307	715	J-275	J-127	8	Ductile Iron	120	-19.48	0.12	0.01
P-308	458	J-276	J-251	8	Ductile Iron	120	19.61	0.13	0.01
P-309	767	J-147	J-277	8	Ductile Iron	120	2.09	0.01	0.00
P-310	693	J-277	J-276	8	Ductile Iron	120	39.22	0.25	0.04
P-311	600	J-170	J-171	8	Ductile Iron	120	19.61	0.13	0.01
P-312	297	J-278	J-222	8	Ductile Iron	120	-19.74	0.13	0.00
P-313	369	J-279	J-278	8	Ductile Iron	120	-0.13	0.00	0.00
P-314	292	J-158	J-279	8	Ductile Iron	120	19.48	0.12	0.00
P-315	277	J-158	J-280	8	Ductile Iron	120	-35.57	0.23	0.01

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-316	465	J-280	J-281	8	Ductile Iron	120	-55.18	0.35	0.05
P-317	209	J-281	J-159	8	Ductile Iron	120	-74.79	0.48	0.04
P-318	42	J-80	J-282	8	Ductile Iron	120	241.06	1.54	0.06
P-319	240	J-282	J-250	8	Ductile Iron	120	221.45	1.41	0.31
P-320	140	J-159	J-283	8	Ductile Iron	120	-219.72	1.40	0.18
P-321	77	J-283	J-80	8	Ductile Iron	120	-239.33	1.53	0.12
P-322	81	J-198	J-285	8	Ductile Iron	120	58.83	0.38	0.01
P-323	140	J-285	J-286	8	Ductile Iron	120	39.22	0.25	0.01
P-324	165	J-286	J-125	8	Ductile Iron	120	19.61	0.13	0.00
P-325	139	J-186	J-198	8	Ductile Iron	120	318.82	2.03	0.35
P-326	265	J-179	J-287	8	Ductile Iron	120	-134.28	0.86	0.14
P-327	304	J-287	J-236	8	Ductile Iron	120	-153.89	0.98	0.20
P-328	392	J-288	J-202	8	Ductile Iron	120	-103.17	0.66	0.12
P-329	255	J-289	J-288	8	Ductile Iron	120	-83.56	0.53	0.05
P-330	345	J-201	J-289	8	Ductile Iron	120	-63.95	0.41	0.04
P-331	210	J-290	J-267	8	Ductile Iron	120	-355.58	2.27	0.65
P-332	139	J-225	J-291	8	Ductile Iron	120	-316.36	2.02	0.35
P-333	235	J-291	J-290	8	Ductile Iron	120	-335.97	2.14	0.66
P-334	234	J-90	J-292	8	Ductile Iron	120	210.93	1.35	0.28
P-335	296	J-293	J-155	8	Ductile Iron	120	171.71	1.10	0.24
P-336	326	J-292	J-293	8	Ductile Iron	120	191.32	1.22	0.32
P-337	87	J-294	J-79	8	Ductile Iron	120	35.07	0.22	0.00
P-338	136	J-82	J-295	8	Ductile Iron	120	74.29	0.47	0.02
P-339	170	J-295	J-294	8	Ductile Iron	120	54.68	0.35	0.02
P-340	340	J-296	J-212	8	Ductile Iron	120	42.63	0.27	0.02
P-341	406	J-135	J-297	8	Ductile Iron	120	81.85	0.52	0.08
P-342	81	J-298	J-206	8	Ductile Iron	120	15.99	0.10	0.00
P-343	109	J-145	J-299	8	Ductile Iron	120	55.21	0.35	0.01
P-344	143	J-299	J-298	8	Ductile Iron	120	35.60	0.23	0.01
P-345	311	J-187	J-300	8	Ductile Iron	120	16.76	0.11	0.00
P-346	182	J-300	J-301	8	Ductile Iron	120	-2.85	0.02	0.00
P-347	298	J-301	J-188	8	Ductile Iron	120	-22.46	0.14	0.01
P-348	483	J-212	J-188	8	Ductile Iron	120	3.41	0.02	0.00
P-349	209	J-129	J-302	8	Ductile Iron	120	-26.04	0.17	0.00
P-350	123	J-302	J-303	8	Ductile Iron	120	-45.65	0.29	0.01
P-351	196	J-303	J-130	8	Ductile Iron	120	-65.26	0.42	0.03
P-352	50	J-138	J-304	8	Ductile Iron	120	51.77	0.33	0.00
P-353	312	J-304	J-307	8	Ductile Iron	120	32.16	0.21	0.01
P-354	431	J-95	J-149	8	Ductile Iron	120	-26.67	0.17	0.01
P-355	151	J-148	J-305	8	Ductile Iron	120	39.02	0.25	0.01
P-356	132	J-305	J-129	8	Ductile Iron	120	19.41	0.12	0.00
P-357	55	J-307	J-95	8	Ductile Iron	120	12.55	0.08	0.00
P-358	219	J-308	J-142	8	Ductile Iron	120	1.28	0.01	0.00
P-359	705	J-309	J-308	8	Ductile Iron	120	20.89	0.13	0.01
P-360	209	J-134	J-310	8	Ductile Iron	120	60.11	0.38	0.02
P-361	112	J-310	J-309	8	Ductile Iron	120	40.50	0.26	0.01
P-362	782	J-142	J-134	8	Ductile Iron	120	-39.69	0.25	0.04
P-363	206	J-38	J-311	8	Ductile Iron	120	264.77	1.69	0.37
P-364	557	J-311	J-18	8	Ductile Iron	120	245.16	1.56	0.87
P-365	253	J-312	J-313	6	Ductile Iron	120	-83.46	0.95	0.22
P-366	256	J-27	J-314	12	Ductile Iron	120	950.25	2.70	0.69
P-367	184	J-314	J-7	12	Ductile Iron	120	930.64	2.64	0.47
P-368	296	J-317	J-183	8	Ductile Iron	120	-119.25	0.76	0.12
P-369	378	J-183	J-320	10	Ductile Iron	120	156.88	0.64	0.09
P-370	584	J-320	J-321	10	Ductile Iron	120	137.27	0.56	0.11
P-371	740	J-321	J-55	10	Ductile Iron	120	117.66	0.48	0.10
P-372	482	J-55	J-4	10	Ductile Iron	120	58.23	0.24	0.02
P-373	652	J-323	J-322	8	Ductile Iron	120	-40.81	0.26	0.04
P-374	486	J-322	J-319	8	Ductile Iron	120	-60.42	0.39	0.06
P-375	477	J-54	J-324	8	Ductile Iron	120	-20.21	0.13	0.01
P-376	402	J-324	J-55	8	Ductile Iron	120	-39.82	0.25	0.02
P-377	143	J-54	J-325	8	Ductile Iron	120	0.60	0.00	0.00
P-378	823	J-325	J-4	8	Ductile Iron	120	-19.01	0.12	0.01
P-379	398	J-4	J-326	8	Ductile Iron	120	19.61	0.13	0.01
P-380	220	J-207	J-327	8	Ductile Iron	120	33.53	0.21	0.01
P-381	599	J-327	J-123	8	Ductile Iron	120	13.92	0.09	0.00
P-382	232	J-328	J-248	8	Ductile Iron	120	59.00	0.38	0.03
P-383	472	J-233	J-329	8	Ductile Iron	120	98.22	0.63	0.14
P-384	453	J-329	J-328	8	Ductile Iron	120	78.61	0.50	0.09
P-385	866	J-233	J-92	8	Ductile Iron	120	-193.97	1.24	0.88
P-386	392	J-242	J-330	8	Ductile Iron	120	27.43	0.18	0.01
P-387	1,443	J-330	J-243	8	Ductile Iron	120	7.82	0.05	0.00
P-388	171	J-153	J-331	8	Ductile Iron	120	39.22	0.25	0.01
P-389	336	J-331	J-154	8	Ductile Iron	120	19.61	0.13	0.00
P-390	251	J-332	J-136	8	Ductile Iron	120	546.95	3.49	1.74
P-391	1,166	J-227	J-228	8	Ductile Iron	120	19.61	0.13	0.02
P-392	2,466	J-246	J-333	8	Ductile Iron	120	418.22	2.67	10.40
P-393	251	J-319	J-318	8	Ductile Iron	120	-80.03	0.51	0.05
P-394	305	J-318	J-317	8	Ductile Iron	120	-99.64	0.64	0.09

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-395	400	J-19	J-315	6	Ductile Iron	120	54.66	0.62	0.16
P-396	236	J-315	J-316	6	Ductile Iron	120	35.05	0.40	0.04
P-397	338	J-138	J-149	8	Ductile Iron	120	19.78	0.13	0.00
P-398	355	J-130	J-306	8	Ductile Iron	120	-234.66	1.50	0.51
P-399	518	J-69	J-334	8	Ductile Iron	120	-121.14	0.77	0.22
P-400	271	J-335	J-336	8	Ductile Iron	120	-160.36	1.02	0.19
P-401	506	J-336	J-205	8	Ductile Iron	120	-179.97	1.15	0.45
P-402	553	J-103	J-337	8	Ductile Iron	120	-24.90	0.16	0.01
P-403	232	J-337	J-208	8	Ductile Iron	120	-44.51	0.28	0.02
P-404	233	J-207	J-338	8	Ductile Iron	120	-11.66	0.07	0.00
P-405	296	J-338	J-103	8	Ductile Iron	120	-31.27	0.20	0.01
P-406	443	J-104	J-339	8	Ductile Iron	120	-53.13	0.34	0.04
P-407	748	J-339	J-242	8	Ductile Iron	120	-72.74	0.46	0.12
P-408	357	J-323	J-182	8	Ductile Iron	120	21.20	0.14	0.01
P-409	872	J-198	J-284	8	Ductile Iron	120	240.38	1.53	1.32
P-410	325	J-122	J-255	8	Ductile Iron	120	284.11	1.81	0.67
P-411	681	J-296	J-297	8	Ductile Iron	120	-62.24	0.40	0.08
P-412	570	J-100	J-135	8	Ductile Iron	120	-11.33	0.07	0.00
P-413	857	J-240	J-340	8	Ductile Iron	120	94.58	0.60	0.23
P-414	898	J-340	J-341	8	Ductile Iron	120	74.97	0.48	0.16
P-415	611	J-341	J-241	8	Ductile Iron	120	55.36	0.35	0.06
P-416	892	J-335	J-334	8	Ductile Iron	120	140.75	0.90	0.50
P-417	399	J-27	J-312	6	Ductile Iron	120	-63.85	0.72	0.21
P-418	415	J-6	J-313	6	Ductile Iron	120	103.07	1.17	0.53
P-419	426	J-3	J-316	6	Ductile Iron	120	-15.44	0.18	0.02
P-420	1,210	J-124	J-243	8	Ductile Iron	120	-64.35	0.41	0.16
P-421	642	J-136	J-86	8	Ductile Iron	120	507.73	3.24	3.88
P-422	1,333	J-101	J-153	8	Ductile Iron	120	-409.68	2.61	5.41
P-423	748	J-184	J-185	12	HDPE	150	15.13	0.04	0.00
P-424	655	J-184	J-185	8	Ductile Iron	120	4.48	0.03	0.00
P-425	652	J-253	J-10	12	HDPE	150	992.35	2.82	1.25
P-426	1,192	J-247	J-333	8	Ductile Iron	120	-398.61	2.54	4.60
P-427	5,002	J-247	J-253	12	HDPE	150	1,617.74	4.59	23.70
P-428	358	J-64	J-342	6	Ductile Iron	120	63.64	0.72	0.19
P-429	1,280	J-342	J-216	6	Ductile Iron	120	44.03	0.50	0.34
P-430	456	J-50	J-343	6	Ductile Iron	120	-62.75	0.71	0.23
P-431	492	J-343	J-53	6	Ductile Iron	120	-82.36	0.93	0.42
P-432	290	J-270	J-226	8	Ductile Iron	120	93.02	0.59	0.08
P-433	371	J-226	J-110	8	Ductile Iron	120	-84.63	0.54	0.08
P-434	127	HIGHSCHOOL WELL	HIGHSCHOOL WELL PUMP	8	Ductile Iron	120	1,123.81	7.17	3.33
P-435	13	TANK WELL PUMP	J-344	6	Ductile Iron	120	500.00	5.67	0.31
P-436	180	TANK WELL	TANK WELL PUMP	4	Ductile Iron	120	500.00	12.77	30.84
P-437	38	TETON CREEK WELL PUMP	J-244	6	Ductile Iron	120	477.05	5.41	0.82
P-438	122	TETON CREEK WELL	TETON CREEK WELL PUMP	4	Ductile Iron	120	477.05	12.18	19.16
P-439	79	J-7	J-345	12	Ductile Iron	120	815.98	2.31	0.16
P-440	423	J-345	J-40	12	Ductile Iron	120	1,193.88	3.39	1.73
P-441	77	DALLEY WELL PUMP	J-345	6	Ductile Iron	120	397.51	4.51	1.20
P-442	128	DALLEY WELL	DALLEY WELL PUMP	4	Ductile Iron	120	397.51	10.15	14.41
P-443	59	VALLEY CENTER WELL	VALLEY CENTER WELL PUMP	6	Ductile Iron	120	500.00	5.67	1.40
P-444	201	LIONS PARK WELL	LIONS PARK WELL PUMP	6	Ductile Iron	120	884.61	10.04	13.77
P-445	9	HUNTSMAN WELL PUMP	J-186	8	Ductile Iron	120	1,023.38	6.53	0.19
P-446	225	HUNTSMAN WELL	HUNTSMAN WELL PUMP	6	Ductile Iron	120	1,023.38	11.61	20.22
P-447	445	J-346	J-347	10	Ductile Iron	120	-273.89	1.12	0.29
P-448	15	J-284	J-347	8	Ductile Iron	120	220.77	1.41	0.02
P-449	1,149	J-347	J-81	8	Ductile Iron	120	-72.73	0.46	0.19
P-450	190	J-139	J-348	8	Ductile Iron	120	42.00	0.27	0.01
P-451	317	J-348	J-140	8	Ductile Iron	120	22.39	0.14	0.01
P-452	538	J-215	J-349	8	Ductile Iron	120	54.81	0.35	0.05
P-453	404	J-349	J-216	8	Ductile Iron	120	35.20	0.22	0.02
P-454	3,152	J-209	J-7	12	Ductile Iron	120	960.75	2.73	8.60
P-455	1,540	J-237	J-350	10	Ductile Iron	120	51.10	0.21	0.04
P-456	2,795	J-254	J-234	8	Ductile Iron	120	252.80	1.61	4.64
P-457	912	J-253	J-227	8	Ductile Iron	120	605.78	3.87	7.63
P-458	767	J-277	J-29	10	Ductile Iron	120	-56.74	0.23	0.03
P-459	116	J-140	J-351	8	Ductile Iron	120	33.07	0.21	0.00
P-460	137	J-351	J-196	8	Ductile Iron	120	179.96	1.15	0.12
P-461	1,669	J-216	J-351	8	Ductile Iron	120	146.89	0.94	1.01
P-462	706	J-217	J-352	8	Ductile Iron	120	263.37	1.68	1.26
P-463	309	J-352	J-218	8	Ductile Iron	120	263.37	1.68	0.55
P-464	293	J-254	J-239	8	Ductile Iron	130	58.83	0.38	0.03
P-465	1,436	PRV-2	J-209	12	Ductile Iron	120	1,058.80	3.00	4.69
P-466	784	J-9	PRV-2	12	Ductile Iron	120	1,058.79	3.00	2.56
P-467	67	PRV-3	J-332	8	Ductile Iron	120	566.56	3.62	0.49
P-468	379	J-227	PRV-3	8	Ductile Iron	120	566.56	3.62	2.81
P-469	107	J-350	J-353	10	Ductile Iron	120	31.49	0.13	0.00
P-470	121	J-353	J-221	10	Ductile Iron	120	-9.75	0.04	0.00
P-471	2,413	J-22	J-353	8	Ductile Iron	120	-41.23	0.26	0.14
P-472	6,411	J-354	J-181	14	Ductile Iron	120	1,492.34	3.11	18.67

PIPE INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Length (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
P-473	68	1.5 MG TANK	J-355	12	Ductile Iron	120	279.76	0.79	0.02
P-474	2,831	J-356	J-357	8	Ductile Iron	120	0.00	0.00	0.00
P-475	4,925	J-306	J-356	8	Ductile Iron	120	-254.27	1.62	8.26
P-476	4,322	J-356	J-346	8	Ductile Iron	120	-254.28	1.62	7.25
P-477	55	CITY SPRING	FCV-1	12	HDPE	150	1,122.00	3.18	0.13
P-478	4,736	FCV-1	1 MG TANK	12	HDPE	150	1,122.00	3.18	11.40
P-479	46	J-10	J-344	12	HDPE	150	-500.00	1.42	0.02
P-480	19	PRV-1	J-10	14	Ductile Iron	130	-1,492.35	3.11	0.05
P-481	31	PRV-1	J-354	14	Ductile Iron	120	1,492.34	3.11	0.09
P-482	9,047	J-355	J-5	12	HDPE	150	639.97	1.82	7.70
P-483	6,620	J-358	1 MG TANK	12	HDPE	150	-1,277.95	3.63	20.27
P-484	45	J-359	J-247	12	HDPE	150	1,238.73	3.51	0.13
P-485	673	J-358	J-359	12	HDPE	150	1,238.73	3.51	1.95
P-486	12	J-184	BOOSTER PUMP	12	HDPE	150	-39.22	0.11	0.00
P-487	18	BOOSTER PUMP	J-358	12	HDPE	150	-39.22	0.11	0.00
P-488	7	1.5 MG TANK	0.3 MG TANK	12	Ductile Iron	130	0.07	0.00	0.00
P-489	49	0.3 MG TANK	J-355	12	Ductile Iron	130	360.22	1.02	0.02

PRV INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Elevation (ft)	Diameter (Valve) (in)	Hydraulic Grade Setting (Initial) (ft)	Pressure Setting (Initial) (psi)	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)
PRV-1	6289.80	8	6405.32	50.00	1,492.35	6447.41	6405.41
PRV-2	6186.00	8	6297.02	48.05	1,058.79	6382.18	6297.10
PRV-3	6287.80	6	6405.32	50.87	566.56	6438.27	6405.41

FCV INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Elevation (ft)	Diameter (Valve) (in)	Flow Setting (Initial) (gpm)	Flow (gpm)	Hydraulic Grade (From) (ft)	Hydraulic Grade (To) (ft)	Headloss (ft)
FCV-1	6538.71	12	500	500	6539.31	6497.31	42

WELL PUMP INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Elevation (ft)	Status (Initial)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Flow (Design) (gpm)	Pump Head (ft)	Head (Design) (ft)	Downstream Pipe	Flow (Target) (gpm)	Is Variable Speed Pump?	VSP Type
HIGHSCHOOL WELL PUMP	6172.46	On	6086.13	6289.57	1,123.81	825	203.45	285.0	P-2	825	FALSE	Fixed Flow
TANK WELL PUMP	6296.91	On	6137.07	6447.80	500.00	560	310.73	410.0	P-435	500	TRUE	Fixed Flow
TETON CREEK WELL PUMP	6357.22	On	6218.06	6494.24	477.05	500	276.18	265.0	P-437	500	TRUE	Fixed Flow
DALLEY WELL PUMP	6154.33	On	6075.05	6284.85	397.51	400	209.80	208.0	P-441	0	FALSE	Pattern Based
VALLEY CENTER WELL PUMP	6125.02	On	6083.62	6271.86	500.00	500	188.24	220.0	P-19	500	TRUE	Fixed Flow
LIONS PARK WELL PUMP	6114.58	On	6060.81	6278.18	884.61	560	217.37	410.0	P-1	0	FALSE	Pattern Based
HUNTSMAN WELL PUMP	6118.29	On	6036.07	6272.54	1,023.38	950	236.47	283.0	P-445	950	FALSE	Fixed Flow
BOOSTER PUMP	6390.65	On	6474.48	6628.43	39.22	1000	153.94	115.5	P-486	0	FALSE	Pattern Based

TANK INFORMATION FOR FUTURE PEAK HOUR DEMAND

Label	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Diameter (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)	Elevation (ft)
0.3 MG TANK	6282.00	6282.00	6295.90	6299.00	58	360.15	6295.90	6302.89
1 MG TANK	6480.86	6480.86	6494.76	6496.86	108	777.95	6494.76	6484.17
1.5 MG TANK	6282.00	6282.00	6295.90	6299.00	124	279.83	6295.90	6302.89

APPENDIX M

Year 2033 Fire Flow with Maximum Day Demand

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-1	3,012.26	2,079.79	20.00	J-355	
J-2	1,512.26	4,649.91	20.00	J-355	
J-3	1,512.26	4,391.62	20.00	J-355	
J-4	1,512.26	1,798.12	20.00	J-355	
J-5	1,512.26	5,408.20	20.00	J-355	
J-6	3,012.26	5,404.85	20.00	J-355	
J-7	3,012.26	5,577.73	20.00	J-355	
J-8	1,512.26	5,301.33	20.01	J-355	
J-9	1,512.26	3,015.96	20.03	J-355	
J-10	(N/A)	(N/A)	(N/A)	(N/A)	
J-11	1,512.26	5,318.00	20.00	J-355	
J-12	3,012.26	3,556.96	20.01	J-355	
J-13	3,012.26	4,727.12	20.00	J-355	
J-14	1,512.26	4,589.15	20.00	J-355	
J-15	1,512.26	4,383.19	20.00	J-355	
J-16	3,012.26	4,876.03	20.00	J-355	
J-17	3,012.26	4,380.09	20.00	J-355	
J-18	3,012.26	4,286.86	20.00	J-355	
J-19	1,512.26	5,376.32	20.00	J-355	
J-20	1,512.26	5,388.72	20.00	J-355	
J-21	3,012.26	4,306.25	20.00	J-355	
J-22	1,512.26	1,322.33	20.00	J-355	
J-23	1,512.26	1,120.49	20.00	J-355	
J-24	1,512.26	2,852.45	20.00	J-355	
J-25	1,512.26	2,853.11	20.00	J-355	
J-26	1,512.26	4,975.19	20.00	J-355	
J-27	1,512.26	5,470.81	20.00	J-355	
J-28	3,012.26	2,295.95	20.00	J-355	
J-29	3,012.26	2,182.74	20.00	J-355	
J-30	3,012.26	3,314.72	20.00	J-355	
J-31	3,012.26	3,631.99	20.01	J-355	
J-32	3,012.26	4,734.91	20.00	J-355	
J-33	1,512.26	4,324.37	20.00	J-355	
J-34	1,512.26	4,629.67	20.00	J-355	
J-35	1,512.26	4,264.78	20.00	J-355	
J-36	1,512.26	4,508.57	20.00	J-355	
J-37	1,512.26	4,011.47	20.00	J-355	
J-38	3,012.26	4,213.48	20.00	J-355	
J-39	3,012.26	4,605.07	20.00	J-355	
J-40	1,512.26	5,340.92	20.00	J-355	
J-41	1,512.26	4,295.73	20.00	J-355	
J-42	1,512.26	4,231.83	20.00	J-355	
J-43	3,012.26	4,557.84	20.00	J-355	
J-44	3,012.26	4,891.59	20.00	J-355	
J-45	3,012.26	4,592.90	20.00	J-355	
J-46	1,512.26	2,764.77	20.00	J-355	
J-47	1,512.26	1,778.01	20.00	J-355	
J-48	3,012.26	4,890.39	20.00	J-355	
J-49	1,512.26	4,692.57	20.00	J-355	
J-50	1,512.26	2,033.40	20.01	J-355	
J-51	1,512.26	1,196.66	20.00	J-355	
J-52	1,512.26	2,087.53	20.02	J-355	
J-53	1,512.26	2,695.47	20.00	J-355	
J-54	1,512.26	1,809.31	20.00	J-355	
J-55	1,512.26	1,861.82	20.00	J-355	
J-56	3,012.26	5,008.54	20.00	J-355	
J-57	3,012.26	4,536.99	20.00	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-58	3,012.26	3,192.39	20.00	J-355	
J-59	3,012.26	4,493.79	20.00	J-355	
J-60	3,012.26	4,895.15	20.00	J-355	
J-61	1,512.26	2,794.01	20.00	J-355	
J-62	1,512.26	4,445.72	20.00	J-355	
J-63	3,012.26	4,685.73	20.00	J-355	
J-64	1,512.26	2,381.60	20.00	J-355	
J-65	1,512.26	2,849.48	20.00	J-355	
J-66	1,512.26	2,598.21	20.00	J-355	
J-67	1,512.26	2,681.72	20.00	J-355	
J-68	3,012.26	4,226.82	20.00	J-355	
J-69	1,512.26	4,445.38	20.00	J-355	
J-70	3,012.26	4,593.92	20.00	J-355	
J-71	1,512.26	1,214.78	20.00	J-355	
J-72	1,512.26	4,551.28	20.00	J-355	
J-73	1,512.26	4,435.98	20.00	J-355	
J-74	3,012.26	5,016.50	20.00	J-355	
J-75	3,012.26	4,952.60	20.00	J-355	
J-76	1,512.26	4,369.65	20.00	J-355	
J-77	1,512.26	3,450.06	20.00	J-355	
J-78	3,012.26	4,244.95	20.00	J-355	
J-79	1,512.26	2,305.67	20.00	J-355	
J-80	1,512.26	2,216.26	20.00	J-355	
J-81	3,012.26	3,099.79	20.00	J-355	
J-82	1,512.26	2,370.03	20.00	J-355	
J-83	1,512.26	2,359.54	20.00	J-355	
J-84	1,512.26	2,131.05	20.04	J-355	
J-85	1,512.26	2,010.59	20.00	J-355	
J-86	1,512.26	1,979.61	20.00	J-355	
J-87	1,512.26	1,914.17	20.00	J-355	
J-88	3,012.26	4,800.37	20.00	J-355	
J-89	1,512.26	2,436.90	20.00	J-355	
J-90	1,512.26	2,398.27	20.00	J-355	
J-91	1,512.26	2,259.55	20.06	J-355	
J-92	1,512.26	2,371.18	20.04	J-355	
J-93	1,512.26	2,364.87	20.00	J-355	
J-94	1,512.26	2,368.85	20.00	J-355	
J-95	1,512.26	2,089.15	20.00	J-355	
J-96	1,512.26	1,972.67	20.00	J-355	
J-97	3,012.26	1,622.99	20.01	J-355	
J-98	1,512.26	2,288.84	20.00	J-355	
J-99	1,512.26	2,280.52	20.00	J-355	
J-100	1,512.26	2,369.24	20.00	J-355	
J-101	1,512.26	1,990.16	20.00	J-355	
J-102	1,512.26	1,883.04	20.00	J-355	
J-103	1,512.26	2,893.18	20.03	J-355	
J-104	1,512.26	2,899.09	20.03	J-355	
J-105	3,012.26	4,499.25	20.00	J-355	
J-106	3,012.26	3,469.46	20.00	J-355	
J-107	1,512.26	2,154.79	20.00	J-355	
J-108	1,512.26	2,363.87	20.00	J-355	
J-109	3,012.26	4,366.22	20.00	J-355	
J-110	3,012.26	4,445.78	20.00	J-355	
J-111	1,512.26	2,000.74	20.04	J-355	
J-112	1,512.26	1,886.90	20.00	J-355	
J-113	1,512.26	2,139.07	20.00	J-355	
J-114	1,512.26	3,792.44	20.00	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-115	1,512.26	3,764.61	20.00	J-355	
J-116	1,512.26	2,473.18	20.00	J-355	
J-117	1,512.26	2,397.52	20.00	J-355	
J-118	1,512.26	1,787.31	20.01	J-355	
J-119	1,512.26	1,666.39	20.00	J-355	
J-120	1,512.26	4,106.14	20.00	J-355	
J-121	1,512.26	4,008.77	20.00	J-355	
J-122	1,512.26	3,749.79	20.00	J-355	
J-123	1,512.26	2,728.47	20.00	J-355	
J-124	1,512.26	2,628.33	20.00	J-355	
J-125	1,512.26	2,730.96	20.02	J-355	
J-126	1,512.26	2,573.69	20.00	J-355	
J-127	1,512.26	2,540.74	20.00	J-355	
J-128	3,012.26	4,510.89	20.00	J-355	
J-129	1,512.26	2,194.16	20.00	J-355	
J-130	1,512.26	2,193.83	20.00	J-355	
J-131	1,512.26	1,906.21	20.00	J-355	
J-132	1,512.26	1,910.30	20.00	J-355	
J-133	3,012.26	4,522.04	20.00	J-355	
J-134	3,012.26	4,161.91	20.00	J-355	
J-135	1,512.26	2,375.66	20.00	J-355	
J-136	1,512.26	2,049.65	20.03	J-355	
J-137	1,512.26	1,851.20	20.00	J-355	
J-138	1,512.26	2,160.74	20.00	J-355	
J-139	1,512.26	2,659.93	20.00	J-355	
J-140	1,512.26	2,674.53	20.00	J-355	
J-141	1,512.26	2,480.85	20.00	J-355	
J-142	3,012.26	4,103.66	20.00	J-355	
J-143	3,012.26	4,640.51	20.00	J-355	
J-144	3,012.26	4,228.43	20.00	J-355	
J-145	1,512.26	2,286.95	20.00	J-355	
J-146	1,512.26	1,749.29	20.00	J-355	
J-147	1,512.26	2,052.82	20.00	J-355	
J-148	1,512.26	2,192.24	20.00	J-355	
J-149	1,512.26	2,135.69	20.00	J-355	
J-150	1,512.26	2,539.87	20.00	J-355	
J-151	1,512.26	2,643.56	20.00	J-355	
J-152	1,512.26	2,322.90	20.00	J-355	
J-153	1,512.26	1,971.72	20.00	J-355	
J-154	1,512.26	1,785.50	20.00	J-355	
J-155	1,512.26	2,425.53	20.00	J-355	
J-156	1,512.26	2,915.41	20.01	J-355	
J-157	1,512.26	3,063.71	20.02	J-355	
J-158	1,512.26	2,164.06	20.00	J-355	
J-159	1,512.26	2,241.57	20.00	J-355	
J-160	1,512.26	4,007.45	20.00	J-355	
J-161	1,512.26	3,902.38	20.00	J-355	
J-162	1,512.26	3,991.93	20.00	J-355	
J-163	1,512.26	3,929.08	20.00	J-355	
J-164	1,512.26	4,040.00	20.00	J-355	
J-165	1,512.26	3,996.67	20.00	J-355	
J-166	1,512.26	4,145.61	20.00	J-355	
J-167	1,512.26	1,681.32	20.00	J-355	
J-168	1,512.26	1,471.64	20.00	J-355	
J-169	3,012.26	4,804.02	20.00	J-355	
J-170	1,512.26	2,065.46	20.00	J-355	
J-171	1,512.26	1,769.15	20.00	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-172	1,512.26	3,825.38	20.00	J-355	
J-173	1,512.26	3,717.54	20.00	J-355	
J-174	1,512.26	2,985.16	20.03	J-355	
J-175	1,512.26	2,666.57	20.00	J-355	
J-176	1,512.26	2,979.54	20.03	J-355	
J-177	1,512.26	2,675.08	20.00	J-355	
J-178	1,512.26	3,759.53	20.00	J-355	
J-179	1,512.26	3,626.56	20.00	J-355	
J-180	1,512.26	2,598.16	20.00	J-355	
J-181	1,512.26	2,968.38	20.04	J-355	
J-182	1,512.26	2,555.71	20.00	J-355	
J-183	1,512.26	2,796.02	20.00	J-355	
J-184	1,512.26	2,099.80	20.00	J-355	
J-185	1,512.26	2,111.28	20.00	J-355	
J-186	1,512.26	3,707.20	20.00	J-355	
J-187	1,512.26	2,280.24	20.00	J-355	
J-188	1,512.26	2,232.70	20.00	J-355	
J-189	1,512.26	4,210.47	20.00	J-355	
J-190	1,512.26	4,129.11	20.00	J-355	
J-191	3,012.26	3,950.41	20.00	J-355	
J-192	3,012.26	4,230.31	20.00	J-355	
J-193	3,012.26	4,185.11	20.00	J-355	
J-194	1,512.26	2,710.76	20.01	J-355	
J-195	1,512.26	3,481.61	20.01	J-355	
J-196	1,512.26	2,636.74	20.00	J-355	
J-197	1,512.26	2,410.99	20.00	J-355	
J-198	1,512.26	3,559.45	20.00	J-355	
J-199	1,512.26	1,375.56	20.00	J-355	
J-200	3,012.26	4,420.54	20.00	J-355	
J-201	1,512.26	4,129.95	20.00	J-355	
J-202	1,512.26	3,962.83	20.00	J-355	
J-203	1,512.26	3,758.84	20.00	J-355	
J-204	1,512.26	1,725.51	20.00	J-355	
J-205	1,512.26	4,429.85	20.00	J-355	
J-206	1,512.26	2,230.68	20.00	J-355	
J-207	1,512.26	2,833.71	20.02	J-355	
J-208	1,512.26	2,920.65	20.03	J-355	
J-209	3,012.26	4,879.89	20.00	J-355	
J-210	1,512.26	1,996.29	20.00	J-355	
J-211	1,512.26	1,543.04	20.00	J-355	
J-212	1,512.26	2,141.70	20.00	J-355	
J-213	1,512.26	2,301.46	20.00	J-355	
J-214	1,512.26	4,329.63	20.00	J-355	
J-215	3,012.26	3,411.48	20.00	J-355	
J-216	1,512.26	3,208.73	20.00	J-355	
J-217	1,512.26	3,929.65	20.00	J-355	
J-218	1,512.26	3,022.51	20.00	J-355	
J-219	1,512.26	1,731.62	20.01	J-355	
J-220	1,512.26	1,454.33	20.00	J-355	
J-221	3,012.26	2,370.41	20.00	J-355	
J-222	1,512.26	2,159.78	20.00	J-355	
J-223	1,512.26	2,931.25	20.03	J-355	
J-224	1,512.26	2,838.86	20.03	J-355	
J-225	1,512.26	3,979.24	20.00	J-355	
J-226	1,512.26	4,340.82	20.00	J-355	
J-227	1,512.26	2,005.83	20.00	J-355	
J-228	1,512.26	1,531.69	20.04	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-229	1,512.26	4,356.51	20.00	J-355	
J-230	1,512.26	4,069.66	20.00	J-355	
J-231	1,512.26	2,100.01	20.00	J-355	
J-232	1,512.26	3,881.66	20.00	J-355	
J-233	1,512.26	2,594.08	20.00	J-355	
J-234	1,512.26	2,343.89	20.03	J-355	
J-235	1,512.26	3,862.46	20.00	J-355	
J-236	1,512.26	3,687.51	20.00	J-355	
J-237	3,012.26	3,138.94	20.00	J-355	
J-238	1,512.26	1,434.21	20.00	J-355	
J-239	1,512.26	1,828.66	20.00	J-355	
J-240	1,512.26	2,861.64	20.00	J-355	
J-241	1,512.26	2,549.38	20.00	J-355	
J-242	1,512.26	2,917.04	20.03	J-355	
J-243	1,512.26	2,625.06	20.00	J-355	
J-244	1,512.26	1,321.60	20.05	J-355	
J-245	1,512.26	1,112.02	20.03	J-355	
J-246	1,512.26	1,312.68	20.04	J-355	
J-247	1,512.26	2,507.54	20.00	J-355	
J-248	1,512.26	2,502.50	20.00	J-355	
J-249	1,512.26	1,674.70	20.00	J-355	
J-250	1,512.26	2,184.53	20.02	J-355	
J-251	3,012.26	1,450.07	20.00	J-355	
J-252	3,012.26	4,797.06	20.00	J-355	
J-253	1,512.26	2,745.51	20.02	J-355	
J-254	1,512.26	1,968.04	20.00	J-355	
J-255	1,512.26	3,390.86	20.00	J-355	
J-256	3,012.26	4,327.92	20.00	J-355	
J-257	1,512.26	2,895.50	20.03	J-355	
J-258	1,512.26	2,906.27	20.03	J-355	
J-259	1,512.26	4,539.79	20.00	J-355	
J-260	1,512.26	3,813.87	20.00	J-355	
J-261	1,512.26	3,763.72	20.00	J-355	
J-262	1,512.26	3,829.97	20.00	J-355	
J-263	1,512.26	3,853.73	20.00	J-355	
J-264	1,512.26	3,901.28	20.00	J-355	
J-265	1,512.26	3,931.73	20.00	J-355	
J-266	1,512.26	4,621.16	20.00	J-355	
J-267	1,512.26	4,421.15	20.00	J-355	
J-268	1,512.26	4,268.05	20.00	J-355	
J-269	1,512.26	4,403.61	20.00	J-355	
J-270	1,512.26	4,428.20	20.00	J-355	
J-271	1,512.26	3,848.54	20.00	J-355	
J-272	1,512.26	3,809.29	20.00	J-355	
J-273	1,512.26	3,307.22	20.00	J-355	
J-274	1,512.26	2,471.71	20.00	J-355	
J-275	1,512.26	2,460.65	20.00	J-355	
J-276	3,012.26	1,646.05	20.00	J-355	
J-277	3,012.26	2,064.22	20.02	J-355	
J-278	1,512.26	2,091.71	20.00	J-355	
J-279	1,512.26	2,113.13	20.00	J-355	
J-280	1,512.26	2,133.77	20.00	J-355	
J-281	1,512.26	2,150.87	20.00	J-355	
J-282	1,512.26	2,212.07	20.00	J-355	
J-283	1,512.26	2,219.88	20.00	J-355	
J-284	1,512.26	3,282.53	20.00	J-355	
J-285	1,512.26	3,346.55	20.00	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-286	1,512.26	3,018.29	20.01	J-355	
J-287	1,512.26	3,445.02	20.00	J-355	
J-288	1,512.26	3,647.94	20.00	J-355	
J-289	1,512.26	3,679.78	20.00	J-355	
J-290	1,512.26	4,023.20	20.00	J-355	
J-291	1,512.26	3,938.43	20.00	J-355	
J-292	1,512.26	2,371.05	20.00	J-355	
J-293	1,512.26	2,375.90	20.00	J-355	
J-294	1,512.26	2,299.26	20.00	J-355	
J-295	1,512.26	2,315.73	20.00	J-355	
J-296	1,512.26	2,138.46	20.00	J-355	
J-297	1,512.26	2,206.06	20.00	J-355	
J-298	1,512.26	2,229.01	20.00	J-355	
J-299	1,512.26	2,252.69	20.00	J-355	
J-300	1,512.26	2,182.02	20.00	J-355	
J-301	1,512.26	2,170.24	20.00	J-355	
J-302	1,512.26	2,152.55	20.00	J-355	
J-303	1,512.26	2,152.07	20.00	J-355	
J-304	1,512.26	2,139.87	20.00	J-355	
J-305	1,512.26	2,170.48	20.00	J-355	
J-306	1,512.26	2,129.89	20.00	J-355	
J-307	1,512.26	2,087.38	20.00	J-355	
J-308	3,012.26	3,774.40	20.01	J-355	
J-309	3,012.26	3,762.93	20.01	J-355	
J-310	3,012.26	3,848.44	20.01	J-355	
J-311	3,012.26	3,950.38	20.01	J-355	
J-312	1,512.26	2,585.15	20.00	J-355	
J-313	1,512.26	2,538.04	20.00	J-355	
J-314	1,512.26	5,523.13	20.00	J-355	
J-315	1,512.26	2,471.51	20.00	J-355	
J-316	1,512.26	2,384.14	20.00	J-355	
J-317	1,512.26	2,427.79	20.00	J-355	
J-318	1,512.26	2,219.00	20.00	J-355	
J-319	1,512.26	2,133.20	20.00	J-355	
J-320	1,512.26	2,365.26	20.01	J-355	
J-321	1,512.26	2,157.51	20.00	J-355	
J-322	1,512.26	2,206.50	20.00	J-355	
J-323	1,512.26	2,340.63	20.00	J-355	
J-324	1,512.26	1,748.33	20.00	J-355	
J-325	1,512.26	1,770.40	20.00	J-355	
J-326	1,512.26	1,559.76	20.00	J-355	
J-327	1,512.26	2,773.10	20.00	J-355	
J-328	1,512.26	2,494.94	20.00	J-355	
J-329	1,512.26	2,510.05	20.00	J-355	
J-330	1,512.26	2,737.04	20.00	J-355	
J-331	1,512.26	1,906.87	20.00	J-355	
J-332	1,512.26	2,092.29	20.04	J-355	
J-333	1,512.26	1,783.24	20.00	J-355	
J-334	1,512.26	3,319.51	20.00	J-355	
J-335	1,512.26	3,008.81	20.00	J-355	
J-336	1,512.26	3,186.36	20.00	J-355	
J-337	1,512.26	2,867.13	20.03	J-355	
J-338	1,512.26	2,821.57	20.03	J-355	
J-339	1,512.26	2,794.00	20.03	J-355	
J-340	1,512.26	2,499.66	20.00	J-355	
J-341	1,512.26	2,478.05	20.00	J-355	
J-342	1,512.26	2,055.16	20.01	J-355	

JUNCTION INFORMATION FOR PRESENT FIRE FLOW W/ MAX DAY DEMAND

0 - 1,499 GPM	1,500 - 2,999 GPM	> 3,000 GPM

* The majority of low Total Flow Available values are due to pipeline of 6-inches in diameter and smaller. They are also due to dead end mains.

Label	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Junction w/ Minimum Pressure (System)	Comments
J-343	1,512.26	2,077.01	20.01	J-355	
J-344	(N/A)	(N/A)	(N/A)	(N/A)	
J-345	1,512.26	5,539.75	20.00	J-355	
J-346	1,512.26	3,037.15	20.00	J-355	
J-347	1,512.26	3,294.10	20.00	J-355	
J-348	1,512.26	2,605.01	20.00	J-355	
J-349	1,512.26	3,156.58	20.00	J-355	
J-350	3,012.26	2,446.70	20.00	J-355	
J-351	1,500.00	2,706.93	20.00	J-355	
J-352	1,500.00	3,098.07	20.00	J-355	
J-353	3,000.00	2,404.58	20.00	J-355	
J-354	(N/A)	(N/A)	(N/A)	(N/A)	
J-355	(N/A)	(N/A)	(N/A)	(N/A)	
J-356	1,500.00	1,875.96	20.01	J-355	
J-357	1,500.00	1,192.00	20.00	J-355	
J-358	1,500.00	2,487.57	20.00	J-355	
J-359	1,500.00	2,499.36	20.00	J-355	

APPENDIX N

Year 2033 Fire Flow with Average Day Demand

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-1	6133.76	3.3	6267.18	57.72	
J-2	6112.00	3.3	6261.79	64.80	
J-3	6174.06	3.3	6286.54	48.67	
J-4	6171.86	3.3	6284.66	48.80	
J-5	6172.81	3.3	6287.75	49.73	
J-6	6166.00	3.3	6284.68	51.35	
J-7	6156.44	3.3	6281.04	53.91	
J-8	6152.00	3.3	6278.41	54.69	
J-9	6196.00	3.3	6395.76	86.43	
J-10	6289.91	0.0	6464.89	75.71	
J-11	6149.08	3.3	6278.97	56.20	
J-12	6096.73	3.3	6260.77	70.97	
J-13	6111.82	3.3	6261.65	64.83	
J-14	6144.41	3.3	6276.87	57.31	
J-15	6140.68	3.3	6271.96	56.80	
J-16	6117.12	3.3	6264.22	63.64	
J-17	6112.17	3.3	6263.59	65.51	
J-18	6124.16	3.3	6267.17	61.87	
J-19	6169.92	3.3	6286.20	50.31	
J-20	6172.88	3.3	6287.37	49.53	
J-21	6124.40	3.3	6267.06	61.72	
J-22	6170.19	3.3	6267.09	41.92	
J-23	6165.11	3.3	6267.09	44.12	
J-24	6160.53	3.3	6279.88	51.64	
J-25	6158.37	3.3	6279.63	52.46	
J-26	6150.00	3.3	6274.52	53.88	
J-27	6161.23	3.3	6283.11	52.73	
J-28	6136.18	3.3	6267.07	56.63	
J-29	6138.94	3.3	6267.07	55.43	
J-30	6100.03	3.3	6260.80	69.56	
J-31	6098.00	3.3	6260.75	70.41	
J-32	6121.91	3.3	6263.54	61.28	
J-33	6117.27	3.3	6263.43	63.24	
J-34	6126.45	3.3	6264.69	59.81	
J-35	6122.77	3.3	6263.98	61.10	
J-36	6132.10	3.3	6265.65	57.78	
J-37	6125.69	3.3	6264.78	60.18	
J-38	6132.00	3.3	6268.31	58.98	
J-39	6128.61	3.3	6267.79	60.22	
J-40	6152.95	3.3	6278.81	54.45	
J-41	6117.50	3.3	6263.44	63.14	
J-42	6123.12	3.3	6263.98	60.95	
J-43	6107.64	3.3	6262.48	67.00	
J-44	6116.06	3.3	6263.87	63.95	
J-45	6123.45	3.3	6264.53	61.04	
J-46	6110.19	3.3	6262.57	65.93	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-47	6104.00	3.3	6262.66	68.64	
J-48	6116.21	3.3	6261.71	62.95	
J-49	6111.40	3.3	6261.70	65.03	
J-50	6106.01	3.3	6262.69	67.79	
J-51	6099.88	3.3	6262.69	70.44	
J-52	6104.66	3.3	6262.66	68.36	
J-53	6112.52	3.3	6263.02	65.11	
J-54	6160.00	3.3	6284.66	53.93	
J-55	6174.00	3.3	6284.66	47.88	
J-56	6110.59	3003.3	6258.43	63.96	
J-57	6106.59	3.3	6262.50	67.46	
J-58	6130.32	3.3	6267.19	59.22	
J-59	6123.32	3.3	6264.40	61.04	
J-60	6116.46	3.3	6262.10	63.01	
J-61	6114.54	3.3	6263.39	64.40	
J-62	6136.68	3.3	6269.91	57.64	
J-63	6126.16	3.3	6266.38	60.67	
J-64	6123.70	3.3	6262.41	60.01	
J-65	6109.87	3.3	6262.24	65.92	
J-66	6126.00	3.3	6262.97	59.26	
J-67	6112.00	3.3	6262.80	65.24	
J-68	6132.21	3.3	6267.56	58.56	
J-69	6137.86	3.3	6266.52	55.66	
J-70	6124.00	3.3	6266.74	61.75	
J-71	6166.00	3.3	6267.09	43.74	
J-72	6146.00	3.3	6270.56	53.89	
J-73	6144.00	3.3	6273.05	55.83	
J-74	6110.29	3.3	6258.83	64.26	
J-75	6113.84	3.3	6261.67	63.96	
J-76	6142.00	3.3	6267.98	54.51	
J-77	6096.00	3.3	6260.77	71.29	
J-78	6103.58	3.3	6262.52	68.77	
J-79	6086.00	3.3	6262.89	76.53	
J-80	6126.00	3.3	6267.04	61.02	
J-81	6127.25	3.3	6267.31	60.60	
J-82	6086.00	3.3	6262.89	76.53	
J-83	6086.00	3.3	6262.89	76.53	
J-84	6128.35	3.3	6267.04	60.00	
J-85	6129.87	3.3	6267.04	59.35	
J-86	6273.47	3.3	6409.87	59.01	
J-87	6271.21	3.3	6409.87	59.99	
J-88	6108.90	3.3	6260.14	65.43	
J-89	6086.00	3.3	6262.89	76.53	
J-90	6086.00	3.3	6262.89	76.53	
J-91	6218.16	3.3	6398.55	78.05	
J-92	6215.16	3.3	6398.55	79.34	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-93	6086.00	3.3	6262.89	76.53	
J-94	6084.23	3.3	6262.89	77.30	
J-95	6094.66	3.3	6262.93	72.80	
J-96	6094.33	3.3	6262.93	72.94	
J-97	6131.47	3.3	6267.16	58.71	
J-98	6089.99	3.3	6262.91	74.81	
J-99	6089.50	3.3	6262.91	75.03	
J-100	6086.00	3.3	6262.89	76.53	
J-101	6248.00	3.3	6405.97	68.35	
J-102	6247.38	3.3	6405.97	68.62	
J-103	6190.47	3.3	6396.00	88.92	
J-104	6194.40	3.3	6396.00	87.22	
J-105	6114.82	3.3	6261.71	63.55	
J-106	6113.35	3.3	6261.71	64.19	
J-107	6086.00	3.3	6262.89	76.53	
J-108	6086.00	3.3	6262.89	76.53	
J-109	6101.79	3.3	6262.77	69.65	
J-110	6105.90	3.3	6262.77	67.87	
J-111	6244.00	3.3	6405.13	69.72	
J-112	6242.61	3.3	6405.13	70.31	
J-113	6086.00	3.3	6262.89	76.53	
J-114	6110.81	3.3	6266.04	67.16	
J-115	6112.21	3.3	6266.04	66.55	
J-116	6086.00	3.3	6262.89	76.53	
J-117	6086.00	3.3	6262.89	76.53	
J-118	6101.98	3.3	6260.78	68.71	
J-119	6101.02	3.3	6260.78	69.12	
J-120	6107.43	3.3	6264.20	67.83	
J-121	6113.19	3.3	6264.20	65.34	
J-122	6115.27	3.3	6269.50	66.73	
J-123	6194.08	3.3	6396.43	87.55	
J-124	6198.00	3.3	6396.47	85.87	
J-125	6116.00	3.3	6269.96	66.61	
J-126	6189.15	3.3	6396.53	89.72	
J-127	6192.00	3.3	6396.56	88.50	
J-128	6104.46	3.3	6262.02	68.17	
J-129	6095.16	3.3	6262.94	72.59	
J-130	6095.40	3.3	6262.96	72.50	
J-131	6128.31	3.3	6267.04	60.02	
J-132	6130.36	3.3	6267.04	59.13	
J-133	6104.00	3.3	6260.51	67.71	
J-134	6100.00	3.3	6260.57	69.47	
J-135	6086.00	3.3	6262.89	76.53	
J-136	6282.33	3.3	6411.55	55.91	
J-137	6280.24	3.3	6411.55	56.81	
J-138	6096.00	3.3	6262.93	72.22	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-139	6096.75	3.3	6260.82	70.99	
J-140	6097.80	3.3	6260.82	70.53	
J-141	6086.00	3.3	6262.89	76.53	
J-142	6104.00	3.3	6260.63	67.77	
J-143	6107.05	3.3	6260.73	66.49	
J-144	6098.14	3.3	6262.88	71.27	
J-145	6088.80	3.3	6262.90	75.33	
J-146	6126.00	3.3	6267.04	61.02	
J-147	6130.59	3.3	6267.04	59.04	
J-148	6095.75	3.3	6262.95	72.34	
J-149	6097.38	3.3	6262.92	71.62	
J-150	6086.00	3.3	6262.89	76.53	
J-151	6086.00	3.3	6262.90	76.53	
J-152	6086.00	3.3	6262.89	76.53	
J-153	6268.43	3.3	6409.15	60.88	
J-154	6259.64	3.3	6409.15	64.69	
J-155	6086.00	3.3	6262.89	76.53	
J-156	6169.93	3.3	6292.66	53.10	
J-157	6169.71	3.3	6292.66	53.20	
J-158	6120.00	3.3	6267.04	63.62	
J-159	6127.02	3.3	6267.05	60.58	
J-160	6104.00	3.3	6265.20	69.74	
J-161	6110.00	3.3	6265.21	67.15	
J-162	6106.00	3.3	6265.44	68.98	
J-163	6111.26	3.3	6264.86	66.45	
J-164	6104.00	3.3	6264.87	69.60	
J-165	6111.45	3.3	6264.49	66.21	
J-166	6104.00	3.3	6264.62	69.49	
J-167	6101.73	3.3	6260.78	68.81	
J-168	6105.82	3.3	6260.78	67.04	
J-169	6119.63	3.3	6265.61	63.16	
J-170	6130.00	3.3	6267.04	59.29	
J-171	6123.39	3.3	6267.04	62.15	
J-172	6108.00	3.3	6266.37	68.52	
J-173	6113.84	3.3	6266.37	65.99	
J-174	6204.53	3.3	6396.43	83.03	
J-175	6212.90	3.3	6396.41	79.40	
J-176	6203.34	3.3	6396.10	83.40	
J-177	6211.23	3.3	6396.13	80.00	
J-178	6109.79	3.3	6266.83	67.94	
J-179	6116.17	3.3	6266.77	65.16	
J-180	6214.48	3.3	6396.59	78.79	
J-181	6209.23	3.3	6396.78	81.15	
J-182	6168.98	3.3	6284.08	49.80	
J-183	6177.11	3.3	6284.67	46.54	
J-184	6390.48	3.3	6637.59	106.92	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-185	6384.55	3.3	6637.59	109.48	
J-186	6118.22	3.3	6270.30	65.80	
J-187	6090.44	3.3	6262.91	74.62	
J-188	6089.48	3.3	6262.90	75.03	
J-189	6104.00	3.3	6263.94	69.20	
J-190	6111.18	3.3	6263.93	66.09	
J-191	6096.33	3.3	6262.67	71.97	
J-192	6102.25	3.3	6262.67	69.41	
J-193	6096.93	3.3	6262.73	71.73	
J-194	6171.61	3.3	6292.66	52.37	
J-195	6168.23	3.3	6292.66	53.84	
J-196	6095.43	3.3	6260.82	71.56	
J-197	6095.01	3.3	6260.80	71.73	
J-198	6118.11	3.3	6269.96	65.70	
J-199	6232.00	3.3	6404.89	74.80	
J-200	6111.90	3.3	6263.54	65.61	
J-201	6104.00	3.3	6264.62	69.49	
J-202	6106.00	3.3	6265.45	68.99	
J-203	6178.84	3.3	6286.02	46.37	
J-204	6188.00	3.3	6286.02	42.41	
J-205	6144.47	3.3	6269.00	53.88	
J-206	6092.26	3.3	6262.91	73.83	
J-207	6198.72	3.3	6396.04	85.37	
J-208	6194.30	3.3	6395.90	87.22	
J-209	6168.00	3.3	6292.66	53.93	
J-210	6098.38	3.3	6260.78	70.27	
J-211	6104.00	3.3	6260.78	67.83	
J-212	6087.86	3.3	6262.90	75.73	
J-213	6087.12	3.3	6262.90	76.05	
J-214	6102.00	3.3	6263.54	69.89	
J-215	6098.51	3.3	6260.82	70.22	
J-216	6104.56	3.3	6261.27	67.80	
J-217	6132.00	3.3	6265.05	57.56	
J-218	6127.79	3.3	6263.87	58.87	
J-219	6100.56	3.3	6260.78	69.32	
J-220	6091.45	3.3	6260.78	73.26	
J-221	6136.06	3.3	6267.08	56.68	
J-222	6122.77	3.3	6267.04	62.42	
J-223	6202.00	3.3	6396.03	83.95	
J-224	6211.27	3.3	6396.59	80.18	
J-225	6096.00	3.3	6262.93	72.22	
J-226	6106.00	3.3	6263.29	68.05	
J-227	6296.68	3.3	6463.49	72.17	
J-228	6298.00	3.3	6463.49	71.60	
J-229	6103.40	3.3	6263.32	69.19	
J-230	6107.22	3.3	6264.47	68.03	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-231	6088.25	3.3	6262.90	75.56	
J-232	6107.33	3.3	6265.62	68.48	
J-233	6212.00	3.3	6396.91	80.00	
J-234	6210.38	3.3	6399.26	81.72	
J-235	6109.85	3.3	6265.59	67.38	
J-236	6113.14	3.3	6267.20	66.65	
J-237	6130.00	3.3	6267.21	59.36	
J-238	6234.00	3.3	6404.89	73.94	
J-239	6249.81	3.3	6404.90	67.10	
J-240	6094.33	3.3	6260.79	72.02	
J-241	6091.22	3.3	6260.80	73.37	
J-242	6202.00	3.3	6396.04	83.95	
J-243	6212.00	3.3	6396.65	79.89	
J-244	6357.22	3.3	6505.57	64.19	
J-245	6385.97	3.3	6499.70	49.21	
J-246	6376.37	3.3	6499.70	53.36	
J-247	6384.37	3.3	6482.48	42.45	
J-248	6196.33	3.3	6396.65	86.67	
J-249	6104.00	3.3	6260.78	67.83	
J-250	6127.20	3.3	6267.04	60.50	
J-251	6144.00	3.3	6267.06	53.24	
J-252	6106.00	3.3	6260.31	66.76	
J-253	6301.05	3.3	6466.11	71.42	
J-254	6248.16	3.3	6404.90	67.81	
J-255	6116.00	3.3	6268.76	66.09	
J-256	6100.00	3.3	6262.92	70.49	
J-257	6209.22	3.3	6396.41	80.99	
J-258	6207.42	3.3	6396.13	81.65	
J-259	6142.74	3.3	6272.42	56.11	
J-260	6140.00	3.3	6269.49	56.02	
J-261	6136.29	3.3	6267.25	56.66	
J-262	6131.11	3.3	6266.13	58.42	
J-263	6134.10	3.3	6267.92	57.90	
J-264	6128.75	3.3	6266.20	59.47	
J-265	6125.03	3.3	6264.69	60.42	
J-266	6120.00	3.3	6262.90	61.83	
J-267	6100.89	3.3	6263.20	70.23	
J-268	6107.25	3.3	6263.93	67.79	
J-269	6104.57	3.3	6263.54	68.78	
J-270	6108.54	3.3	6263.54	67.07	
J-271	6110.85	3.3	6266.37	67.28	
J-272	6111.61	3.3	6266.80	67.14	
J-273	6172.48	3.3	6284.74	48.57	
J-274	6182.55	3.3	6396.54	92.58	
J-275	6184.42	3.3	6396.54	91.77	
J-276	6140.50	3.3	6267.06	54.75	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-277	6140.83	3.3	6267.06	54.61	
J-278	6121.00	3.3	6267.04	63.19	
J-279	6118.22	3.3	6267.04	64.39	
J-280	6122.00	3.3	6267.04	62.75	
J-281	6127.02	3.3	6267.04	60.58	
J-282	6125.65	3.3	6267.04	61.17	
J-283	6126.00	3.3	6267.04	61.02	
J-284	6116.78	3.3	6268.04	65.44	
J-285	6116.00	3.3	6269.96	66.61	
J-286	6116.00	3.3	6269.96	66.61	
J-287	6118.00	3.3	6266.97	64.45	
J-288	6104.00	3.3	6265.11	69.71	
J-289	6104.00	3.3	6264.90	69.61	
J-290	6098.82	3.3	6263.10	71.08	
J-291	6096.47	3.3	6262.99	72.05	
J-292	6086.00	3.3	6262.89	76.53	
J-293	6086.00	3.3	6262.89	76.53	
J-294	6086.00	3.3	6262.89	76.53	
J-295	6086.00	3.3	6262.89	76.53	
J-296	6085.95	3.3	6262.89	76.56	
J-297	6086.00	3.3	6262.89	76.53	
J-298	6091.28	3.3	6262.91	74.26	
J-299	6089.35	3.3	6262.90	75.09	
J-300	6092.40	3.3	6262.90	73.77	
J-301	6092.70	3.3	6262.90	73.64	
J-302	6094.92	3.3	6262.94	72.70	
J-303	6095.06	3.3	6262.95	72.64	
J-304	6095.83	3.3	6262.93	72.30	
J-305	6095.77	3.3	6262.94	72.33	
J-306	6093.34	3.3	6263.13	73.46	
J-307	6095.05	3.3	6262.93	72.63	
J-308	6102.22	3.3	6260.62	68.53	
J-309	6096.70	3.3	6260.58	70.90	
J-310	6097.61	3.3	6260.58	70.51	
J-311	6131.25	3.3	6268.00	59.17	
J-312	6160.00	3.3	6283.66	53.50	
J-313	6162.27	3.3	6284.03	52.68	
J-314	6158.57	3.3	6281.90	53.36	
J-315	6168.04	3.3	6286.31	51.17	
J-316	6171.41	3.3	6286.38	49.74	
J-317	6179.31	3.3	6284.58	45.55	
J-318	6181.92	3.3	6284.50	44.38	
J-319	6182.71	3.3	6284.43	44.01	
J-320	6182.00	3.3	6284.67	44.42	
J-321	6174.00	3.3	6284.66	47.88	
J-322	6175.25	3.3	6284.31	47.19	

JUNCTION INFORMATION FOR AVERAGE DAY DEMAND PLUS FIRE FLOW DURING 3,000 GPM - 3 HOUR FIRE FLOW EVENT DOWNTOWN

Satisfies minimum 20 psi pressure requirement
Does not satisfy minimum 20 psi pressure requirement

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Comments
J-323	6172.35	3.3	6284.16	48.37	
J-324	6170.20	3.3	6284.66	49.52	
J-325	6163.27	3.3	6284.66	52.52	
J-326	6170.29	3.3	6284.66	49.48	
J-327	6198.51	3.3	6396.14	85.51	
J-328	6199.24	3.3	6396.69	85.43	
J-329	6205.70	3.3	6396.80	82.68	
J-330	6205.04	3.3	6396.16	82.69	
J-331	6264.50	3.3	6409.15	62.58	
J-332	6286.00	3.3	6412.24	54.62	
J-333	6375.05	3.3	6488.04	48.89	
J-334	6141.11	3.3	6267.08	54.50	
J-335	6151.37	3.3	6268.09	50.50	
J-336	6150.00	3.3	6268.40	51.23	
J-337	6190.00	3.3	6395.93	89.09	
J-338	6195.26	3.3	6396.02	86.86	
J-339	6199.08	3.3	6396.01	85.20	
J-340	6088.43	3.3	6260.79	74.57	
J-341	6086.36	3.3	6260.80	75.47	
J-342	6118.91	3.3	6262.15	61.97	
J-343	6106.75	3.3	6262.84	67.53	
J-344	6289.91	0.0	6464.89	75.71	
J-345	6155.21	3.3	6280.69	54.29	
J-346	6118.00	3.3	6267.92	64.86	
J-347	6116.03	3.3	6268.01	65.75	
J-348	6097.14	3.3	6260.82	70.82	
J-349	6101.97	3.3	6261.07	68.84	
J-350	6135.27	3.3	6267.09	57.03	
J-351	6096.71	3.3	6260.83	71.01	
J-352	6129.07	3.3	6264.22	58.47	
J-353	6135.64	3.3	6267.08	56.87	
J-354	6289.41	0.0	6405.37	50.17	
J-355	6289.80	0.0	6296.03	2.70	This junction is located just below 0.3 MG Tank and does not need to meet 20 psi requirement.
J-356	6098.24	3.3	6265.57	72.40	
J-357	6095.00	3.3	6265.57	73.80	
J-358	6390.90	0.0	6483.60	40.11	
J-359	6384.54	0.0	6482.55	42.40	

APPENDIX O

Public Participation Information

·· The Heart of Teton Valley ··

City of Driggs

- Home
- Economic Development & Business Assistance▼
  - Information and Assistance for Businesses
  - Quality of Life Improvements
  - Tourism Development
  - Coordination of Economic Development
- Community Links & Guide Maps
- Mayor's Comment Box
- City Center▼
  - Senior Center
  - Teton Indoor Sports Academy

- -- City Property Auction --
- ▶City Government
  - ▶City Council & Mayor
    - Community Survey- FY 2014 Budget Priorities
  - ▶Planning & Zoning Commission
    - Vacancy
  - Airport Board
  - ▶Committees
    - Tree Committee
    - Design Review Advisory Committee
    - Airport Master Plan Steering Committee
    - Outdoor Lighting Standards Committee
  - City Staff
- ▶Meeting Agendas and Minutes
  - Hearing Notices
  - ▶City Council
    - Agenda
    - ▶Minutes
      - 2013 Minutes
      - 2012 Minutes
      - 2011 Minutes
      - 2010 Minutes
      - 2009 Minutes
    - Current Public Hearing Notices
  - ▶Planning and Zoning Commission
    - Current Agenda
    - ▶Minutes
      - - 2013 Minutes
      - - 2012 Minutes
      - - 2011 Minutes
      - - 2010 Minutes
      - - 2009 Minutes
    - Public Hearing Notices
  - ▶P&Z Design Review Committee
    - Current Agenda
  - ▶Airport Board
    - Current Agenda
    - ▶Minutes
      - 2009 Minutes
      - 2010 Minutes
      - 2011 Minutes
      - 2012 Minutes
      - 2013 Minutes

Community Survey: FY 2014 Budget Priorities

The City of Driggs is seeking public input as staff begins the FY 2014 budgeting process. Please rate your #1 priority for each of the following sub-units so that we might better understand how you think the City should budget its funding for the next fiscal year. **Please respond by May 9, 2013.**

Category: Administration and Facilities

This poll question has expired. These are the results.

A. Upgrade internet capacity
39

B. Improve public communication
39

C. Improve Building efficiency (new roof)
69

D. Increase Mayor and Council salaries
16

E. Increase Staff salaries
16

Category: Water and Sewer

This poll question has expired. These are the results.

A. Explore possibility of separate irrigation system
10

B. Replace shallow water lines prone to freezing
110

C. Public education on conservation
30

D. Install updated meters
8

E. Install advanced control System (Scada)
3

F. Annual service to wells and lift stations
23

Category:Roads and Transportation

This poll question has expired. These are the results.

A. Improve Streetscapes and Street Lighting
12

B. Acquire land for Driggs-Tetonia Pathway
79

C. Fund Grant writing
7

D. Parking Development, esp. Park and Ride facility
5

E. Support and facilitate public transportation
14

F. Maintenance of existing Streets
72

- ►Airport Master Plan Steering Committee
  - Agenda
  - Minutes
- ►Urban Renewal Agency
  - Current Agenda
  - ►Minutes
    - 2012 Minutes
    - 2011 Minutes
    - 2010 Minutes
    - 2009 Minutes
    - 2008 Minutes
    - 2007 Minutes
    - 2013 Minutes
- Parks Committee
- ►P&Z Outdoor Lighting Standards Committee
  - Agenda
  - OLSC Minutes
  - Outdoor Lighting Standards
- ►Planning & Building
  - Building Permit Information
  - Permit Applications
  - ►Plans & Reports
    - EPA Smart Growth Report
    - Comprehensive Plan
    - Transportation Plan
    - I-STOP Travel Plans (Safe Routes to School)
  - ►Projects
    - Design Workshops with Code Studio
    - Zoning Ordinance Amendment- Height Exception
  - Frequently Asked Questions
  - Building Officials (Internal)
- ►Parks and Recreation
  - ►Community Garden
    - 2013 Community Garden Information & Policies
    - Community Garden Interest Form
    - Garden Photo Gallery
    - Education Program
    - Plot Assignments
- ►Public Works
  - ►Utilities
    - Water and Sewer Connection & Service
    - Water & Sewer Fees
  - Transportation / Streets
- ►Driggs Reed Memorial Airport
  - ►2011 Airport Master Plan
    - Public Comment Form
- Urban Renewal Agency
- City Code & Ordinances
- City Forms
- ►City Jobs
  - DDCA Event Coordinator for 2014 Snowscapes
- City Reports
- Construction Projects
- Volunteers

In City Government:

- City Council & Mayor
  - Community Survey- FY 2014 Budget Priorities

Category: Planning & Zoning

This poll question has expired. These are the results.

A. Develop Neighborhood land use plans
49

B. Improve streetscape planning
66

C. Update Comprehensive Plan
34

D. Public Outreach/engagement
22

E. Web Updates/Upgrade
12

Category: Community & Economic Development

This poll question has expired. These are the results.

A. Fund grant writing
18

B. Support and develop events like the Art Walk and Plein Air Festival
24

C. Create Venues for larger outdoor events like Music on Main
34

D. Fund a Business Development Center to attract new businesses
41

E. Improve Fiber optic availability
21

F. Develop Social media communication
3

G. Complete the Teton Scenic Byway Visitor Center
46

Category: Parks & Recreation

This poll question has expired. These are the results.

A. Develop Greenbelt along Teton Creek
71

B. Acquire additional lands for Parks
12

C. Improve existing parks, add bathrooms etc.
57

D. Develop Recreational uses in City Center building
28

E. Support Nordic ski track near High School
11

F. Develop bike and Skate park at 5th Street
9

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- Planning & Zoning Commission
- Airport Board
- Committees
- City Staff

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CITY OF DRIGGS
COUNCIL MINUTES
January 22, 2013

Pursuant to adjournment of the City Council meeting held January 8, 2013, and to the call of the Mayor, the Driggs City Council met on January 22, 2013 at 7:15 p.m. Present: Council President Mosher; Council Members Dye, Jones, Mossman; Mayor Powers. Also present: City Attorney Zollinger, Planning and Zoning Director Self, and Public Works Director Gunderson. Powers led in the *Pledge of Allegiance.*

Approval of Minutes

- January 8, 2013: **Mossman moved to approve the January 8, 2013 minutes as corrected. Jones seconded.** Motion carried.

Approval of Claims

- Powers requested the addition of late SnowScapes claims in the amount of $2,562.63 for: Team Wyoming, $1,100, first & People's Choice; Jane Linville, $400, second; Doug Cassidy, $200, third; Greg Geffner $100, honorable mention; Mary Mullaney, $515.95, Smartsheet: Jan & coordinator stipend; Peak Printing, $246.68.
- Questions:
    - BlackBox [Phone Repairs]
    - Teton Arts Council [Artists' City Hall Gallery Sales]
    - Crow Heating& Cooling [Ind. Bldg. Furnace Venting]
    - Ace Hardware: [misc. tools listed]
- **Jones moved to approve Claims dated January 9-22, 2013 with the addition of SnowScapes claims in the amount of $2,562.63 as outlined above. Mosher seconded.** Motion carried.

Teton County Sherriff's Report: Tony Liford

- Sheriff Liford presented a summary of 2012 calls within the city limits of Driggs. He noted that call number was higher in Driggs than in Victor. A variety of factors contribute to this higher number e.g. more clustered housing, more short term housing, more schools, and traffic on Ski Hill Road
- When questioned for concerns, Liford responded that he did not have any specific concerns even with a higher number of responses. He addressed two security issues at the Reed Memorial Airport (access to security areas and gate timing) and recommended implementing a basis ID card system so officers can know whether or not someone has authority to be in restricted areas. Providing such an ID card may be possible through the current driver's licensing system.
- Sherriff personnel responded to 16,008 calls in 2012 within Driggs city limits including pocket dials (callers sitting on their cell phone), bank alarms, business alarms, public assists, special patrols, and welfare checks.

TVRA Rec Center Lease

- Self presented the proposed contract between the Teton Valley Recreation Association (TVRA) and the City of Driggs for a 36x36 area of the North End of the City Hall building. This area will be used by the TVRA's Yama Judo program. The City's TVRA lease allows for upward adjustment of total leased area and has a maximum term of three years (one year plus two, one year renewal options).
- Self and Etta Rokes, TVRA board member, spoke of TVRA's future goals for the North End including the addition of a climbing wall and a supervised teen center.
- Corrections to the lease requested by the Council were: Pg. 2 (3.1) monthly lease amount to $336.96; (5.) removal of the words, an auction; (6.) removal of the parenthetical ($.027/month/sf for year 1, and adjusted annually)
- A lengthy discussion focused on the lease provision 4.1 concerning the Lessee's ability to rent out portions of the North End to non-profit organizations. Powers clarified that the goal of this section was to have TVRA responsible for scheduling events in the North End with the understanding that a request by the Lessor (City of Driggs) to use the space cannot be 'reasonably denied'
- **Mosher moved to approve the lease of a 36x36 North End space between the City of Driggs and the Teton Valley Recreation Association, with changes noted. Dye seconded.** Motion carried.

RFQ for City Engineer – Recommendation from Steering Committee, Contract

- Self outlined the process to reach a recommendation for City Engineer. Self, Gunderson, and Powers interviewed representative of the three finalists: Forsgren Engineering, Harmony Design/Aqua Engineering, and Sunrise Engineering. The selection committee was impressed with all of the firms and would have been comfortable selecting any of the three.
- Harmony Design/Aqua Engineering was selected primarily based on the companies' combined experience working with the City and local presence.
- **Mosher moved to affirm the selection committee's recommendation of Harmony Design/Aqua Engineering to serve as the City's engineering firm. Jones seconded.** Motion carried.
- Discussion of the proposed contract between Harmony Design, Inc. [lead contact] and the City was extensive with multiple revisions requested and questions concerning conflict of interest discussed. To allow time for additional review/revision of the proposed contract, **Mosher moved to table approval of a contract between Harmony Design, Inc. and the City. Mossman seconded.** Motion carried.

Aqua Engineering: Darin Hawkes – Water Study Progress

- Craig Neeley, principle with Aqua, addressed the Council instead of Hawkes. Neeley outlined the work currently being done by Aqua for the City. Work includes the Waste Water Treatment Plant (WWTP), slowed to a crawl with the arrival of winter; and the Department of Environmental Quality (DEQ) water study. For the water study, Aqua has begun work on creating an accurate computer model of the City's lines, capacity, and growth potential. The model should point out average daily and peak demand, current and potential areas of deficiency, and fire flow coverage.
- Neeley anticipated the computer model completed by February 15, 2013, with the first draft of the Water Study Report completed by March 15th.

- In response to a question from Mosher, Neeley stated that shallow/small diameter lines in the older part of the city are a known issue, small diameter mains, and some looping at Creekside are other areas of concern.

Ordinance 337-12 Consolidation of Liquor Ordinances – Third Reading

- Review of the ordinance resulted in the following revisions: Pg 5 Section 14 (c) Election Day Sales Hours –Removed; Pg 8 Section 1 (D) Hanging (E) at the end of the sentence – Removed; Pg. 8 Section 1 (D) wine corrected to beer; Pg 9 Section 6 Issuance and Display of License – no change; **Mossman moved to approve the third reading of Ordinance 337-12 Consolidation of Liquor Ordinances with changes as noted. Mosher seconded.** Motion carried. The ordinance shall be in effect after publication.

Utility 'Will Serve' for Redtail

- Darryl Johnson, Jorgensen Engineering, requested a new 'will serve' letter from the Council for the Redtail Planned Unit Development (PUD). Redtail is within the City's area of impact and received approval from the City (2008) and DEQ (2007) for water/wastewater infrastructure design and installation. The project was tabled late in 2008.
- Redtail was purchased in 2013 and the new owner(s) are seeking to amending the plat with minor changes to some of the cabin sites for location of service lines previously approved by DEQ and parking areas. Eastern Idaho Public Heath is requiring a new 'will serve' letter from the City for the plat amendment application to go forward.
- **Mossman moved to provide the owner(s) of the Redtail PUD a new 'will serve' letter for utility service from the City. Dye seconded.** Motion carried.

Cash Match Request for Driggs-Tetonia Pathway Land Acquisition (Idaho Parks & Rec Grant)

- Jay Mazalewski, Teton County Engineer, requested a letter of support from the Council for a cash match from the City toward the 20% match requirement for an Idaho Parks & Recreation (IPR), Recreational Trails Program (RTP) grant. Mazalewski asked the Council for $8,800, 23% of the 20% required match, $194,000 project cost. The purpose of the grant would be to purchase land or easements for the old rail-bed between Tetonia and Driggs to finish the missing link between pathways from Ashton to Victor.
- Dye questioned why the grant application restricted motorized use to winter only expressing his belief that doing so discriminated against disabled users. Mazalewski countered that at this point the application is for land & easement purchase only and not design/construction of the proposed pathway. Mazalewski went on to state that the Skyliners Club, one of the organizations that provided a letter of support, encouraged multiuse but would not pull its support of the acquisition if the trail was not multiuse (motorized vs. non-motorized users).
- Mazalewski anticipates award notifications to be sent out in June or July of 2013 with one year to complete the project.
- **Mossman moved to provide a letter of support for the Tetonia to Driggs Pathway RTP grant application with a commitment of $8,800 in match funds in fiscal year 2014 if the grant is awarded. Jones seconded.** The motion carried with Jones, Mosher, & Mossman aye; Dye nay.

Staff Reports

Community Development – Doug Self

- **Recreation Center Concept Design (Phase II Master Plan):** Plan One's updated conceptual layout plan for the North End of the Driggs City Center building, along with a map, list and rough estimate of initial improvements was provided for Council review. Two layout options were provided, A or B, which differed in the area of the east canopy that was enclosed.
    - Council discussion focused on the layout of internal spaces, current/anticipated tenant requirements, tie-in to City Center space already in use (City Hall) and providing up to 3,000 sq ft for the Scenic Byway Visitors' Center. To maximize interior space, the Council recommended fully enclosing the canopy, moving restroom facilities to the north or north-east, and possibly moving the proposed climbing wall further south.
    - **Mossman moved to table adoption of the Phase II Master Plan until Plan One provides a revised layout plan for review. Jones seconded.** Motion carried.
    - **Jones moved to approve design & construction documents by Plan One for the main north-south wall and south-west access door associated with the space currently rented by the Teton Indoor Sports Academy. Mosher seconded.** Motion carried.
- **City Center Plaza Design:** The Project Advisory Team (PAT) selected Design Workshop from Aspen Colorado as its top-ranked firm. A proposed contract has been received but is above budget. The PAT will review the contract and begin negotiations with Design Workshop to bring the project on budget.

Planning & Zoning – Ashley Koehler

- **Short-term projects:** staff is currently working on sign permits, a boundary line adjustment, and an annexation request by the School District. The annexation request will be heard by the P&Z Commissioners in February and will be brought to the Council in March.
    - Staff has also begun an enforcement effort of uses and activities not complying with zoning ordinance(s). When a complaint is received, staff investigates, applying respective ordinance(s) fairly and uniformly. If found in violation, correction options are usually recommended before enforcement is begun. Dye requested that complaints be in writing. Zollinger noted that unless a complainant requests anonymity, the complainant's name should be disclosed.
- **Long-term projects:** staff has begun work to update the City's comprehensive plan; update the Airport Overlay District, and create an amendment to categorize uses into a table format to reduce the number of uses that require a conditional use permit.
- **Web Site:** staff is investigating options to change the City's website to allow more local input

Public Works: Jared Gunderson

- **Sidewalk Snow Removal**: Going well, staff gets to them as quickly as possible
- **Broken Sprinkler**: fire alarm on 1/16 with broken sprinkler above the old walk-in freezer in the North End. Rocky Mountain Claims Service adjuster will be out to determine damages.

ICRMP notified of break. 3-D Fire Protection was out the following day to get sprinkler system on-line again.

- **Freeze-ups**: Continue to have some frozen water lines.
- **Airport Use of Canal Irrigation Water**: A request has been received from the Airport Board to use some of the City's shares in the Grand Teton Canal to green-up the land between the runway and taxiway. **Mosher moved to authorize the Reed Memorial Airport Board use of City's shares in the Grant Teton Canal to water airport property. Dye seconded.** Motion carried.
- Approval was given by the Council to replace broken bulb(s) in the Teton County Search & Rescue light used during SnowScapes activities.

Mayor's Business: Daniel J Powers

- Request for Utility Credit for Water Leak at 764 Palisade Trail – Jason Shiebler has submitted a written request for a $313 credit for excess water usage due to a leak. The leak has been repaired by Shiebler. **Dye moved to approve a $313 credit against excess water use at 794 Palisade Trail. Mossman seconded.** Motion carried.

10:00 p.m. Executive Session

Mossman moved to enter Executive Session pursuant to Idaho Code 67-2345 (b) Personnel, (f) Legal Considerations. Mosher seconded. The question was called by roll**: Dye, aye; Jones, aye; Mosher, aye; Mossman, aye.** Motion carried**.**

10:17 p.m. The Regular Session was rejoined.
No business was conducted as a result of Executive Session.

10:17 p.m. Adjournment

With no further business, **Jones moved to adjourn. Dye seconded.** Motion carried.

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Daniel J Powers, Mayor Attest: Carol Lenz, Deputy City Clerk

Dated this 22nd Day of January, 2013.

CITY OF DRIGGS
COUNCIL MINUTES
February 5, 2013

Pursuant to adjournment of the City Council meeting held January 22, 2013, and to the call of the Mayor, the Driggs City Council met on February 5, 2013 at 7:15 p.m. Present: Council President Mosher; Council Members Dye, Jones, Mossman; Mayor Powers. Also present: City Attorney Zollinger, Planning and Zoning Director Self, and Public Works Director Gunderson. Powers led in the *Pledge of Allegiance.*

Approval of Minutes

- January 22, 2013: **Jones moved to approve the January 22, 2013 minutes as corrected. Mosher seconded.** Motion carried.

Approval of Claims

- A coding change from City Hall Operations to Snowfest Expense was requested for Grande Rental $100 [Backhoe rental] and Mobilight Inc $285 [1500 W lights for TCS&R].
- Questions:
    - Grand Targhee Resort [GTR Shuttle]
    - Peak Printing [DDCA Map Update/Printing]
- **Dye moved to approve Claims dated January 23-February 5, 2013 with the coding changes requested above. Jones seconded.** Motion carried.

SnowScapes Recap: Mary Mullaney

- Mullaney began her presentation by stating that the SnowScapes were, "… pretty successful this year."
- Forty (40) sculptors worked on the blocks; in-kind contributions from volunteers and area businesses topped $14,600; cash from card sales, entry fees, and donations surpassed $6,100; expenses were $4,465 (including the $385 Snowfest claims above)
- Saturday & Sunday attendance was estimated at 2,400 with 25% of those polled stating they were just driving by and stopped. Latino and children attendance saw an increase with the snow activity of igloo building a huge hit with the kids
- Mullaney would like to have a hired coordinator in future years and earlier planning; a request for continued support will be brought back to the Council later in 2013

City Engineer Contract: Harmony Design, Inc

- Change was noted to Clause 6, pg. 2 Conflict of Interest. Also discussed was the two year term of the contract with no auto-renewal clause in the document. Also discussed was Exhibit A: no charge for mileage. **Mossman moved to approve the contract for engineering services between the City of Driggs and Harmony Design, Inc. as presented. Mosher seconded.** Motion carried.

Pet Law Committee: Ralph Mossman

- Mossman provided brief backgrounds on the applicants who have applied to serve with Mossman on an ad-hoc Pet Law Committee: Julie Gow (Driggs resident who brought the

issue up), Tony Liford (Teton County Sheriff), Aska Shiratori-Langman (animal shelter manager), and Summer Lee Winger (veterinarian). Mossman also reviewed the purpose of the committee: to provide the City of Driggs with an enforceable system for reducing the number of dogs at large and related conflicts, improving pet licensing, improving the neutering rate of pets, strengthening support for the existing animal shelter, and reducing the number of lost and abandoned pets in the City of Driggs. The goal of the committee would be to have a draft system in place by Fall 2013 with full implementation by March 2014

- The Council did not voice any concern over 2/5 of the applicants living outside of City limits. **Jones moved to approve the formation of an ad-hoc Pet Law Committee composed of the applicants listed above along with the stated purpose of the committee. Mosher seconded**. Motion carried.

Adoption of Conceptual Layout Plan for City Center Building, Phase II (North End)

- Council was provided with a revised conceptual plan for the North End based on comments from the January 22, 2013 meeting. Discussion focused on the SW mechanical room door [ordered, will be installed with deadbolt locks], movement of the restrooms, and the possible use of surveillance cameras. **Mossman moved to adopt Plan One's revised conceptual layout plan for the City Center Building, Phase II (North End) as presented. Mosher seconded.** Motion carried.

Staff Reports

Community Development – Doug Self

- **City Center Plaza Design:** The Project Advisory Team (PAT) renegotiated a contract with Design Workshop that is $10,000 above the FY 2013 budget which would require additional cash match of $5,325.00. Hyrum Johnson, Chair of the Driggs Urban Renewal Agency (DURA), has expressed his belief to Self that the DURA Board will provide 50% of the additional match, which would leave $2,663 for the City to fund. Self asked the Council to consider funding the additional expense. Members of the PAT believe the additional cost will pay for itself in the long run due to the expertise available at Design Workshop. Self will bring a contract to the next council meeting for the Council's consideration.
- **Skate Park Improvement Proposal – C-Ledge**: Mark Goddard has proposed to construct a C-ledge at the City's skate park using a form from the construction of a ledge in Pocatello. Goddard offered to build the ledge at a cost of $600. The Park Committee has reviewed and recommended the addition. **Jones moved to approve payment of $600 to Mark Goddard for the construction as presented of a C-ledge at the City Skate Park. Mosher seconded.** Motion carried. Payment will be made from the Park Improvement line.
- **Park Fee Schedule**: Theresa Paradis, British Soccer Camp Organizer, has verbally complained about the estimated cost, 150 persons x 7 hours x 5 days x $2.50/10 participants = $1,312.50 of holding camp based on the adopted Park Fee Schedule. Self will bring a proposed Youth Rate Fee Schedule to the next Council meeting.

Public Works: Jared Gunderson

- **Overnight Parking Handout**: Council reviewed, then recommended putting in the newspaper(s) as an op ed piece. Also recommended including contact information.

- **No Parking Zones**: Gunderson has discussed increasing enforcement efforts with Teton County Sheriff Liford for no-parking zones and double parking
- **Snowplowing**: Powers asked that scraping the roadways be made a priority as snow melts
- **Creekside Looping**: At this time there is nothing the City can do, recommendation will be a part of the Water Facility Study being conducted by Aqua Engineering
- **New Law Enforcement Line**: Gunderson spoke with Willie Tuescher at DEQ. Tuescher considers the proposed change a repair and is fine with the Council's proposal to Teton County i.e. an 8" ductile iron line down Buxton with 50/50 cost share
- **Perception of Public Works**: Gunderson expressed his concern with public perception of Public Works personnel. He has been hearing statements that complaints are not submitted because people are afraid of reprisals. He gave the example of a snow plowing complainant who would not give her name/address because she was afraid no snow plowing would occur as a result of the complaint. Gunderson assured the Council that reprisals do not occur
- **Lighting Policy:** Mossman requested that the City's lighting policy be brought to the next Council meeting for discussion. He would like to have one-half of the lights on 5th Street turned off. Zollinger cautioned the Council that once lights are on, turning them off can create a liability issue. Zollinger further cautioned that public safety would take precedence over lighting esthetics. He recommended that the City have a qualified study done to prove that reducing lights would be a good technical decision that would not create safety issues. Powers suggested finding the cost of such a study before proceeding.
- Powers relayed information received from Fall River Electric at a meeting earlier in the day concerning various lighting & bulb use around the City. Fall River personnel believe the City can save money over time by changing the type of bulbs used. For example changing to LED lighting in the Art Gallery as old bulbs burn out.

Mayor's Business: Daniel J Powers

- **AIC Legislative Meeting**: Powers attended the Association of Idaho Cities (AIC) Legislative Session in Boise. Elimination of the personal property tax proposal was the #1 issue. Elimination would be crippling for some counties/cities who receive as much as 40% of their funding from the tax. Mossman noted that all area legislators are opposed to elimination. Liquor by the Drink was getting some traction and land use legislation was also a topic of discussion

8:37 p.m. Executive Session

Jones moved to enter Executive Session pursuant to Idaho Code 67-2345 (b) Personnel. Mossman seconded. The question was called by roll**: Dye, aye; Jones, aye; Mosher, aye; Mossman, aye.** Motion carried**.**

8:43 p.m. The Regular Session was rejoined.
No business was conducted as a result of Executive Session.

8:43 p.m. Adjournment

With no further business, **Jones moved to adjourn. Dye seconded.** Motion carried.

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Daniel J Powers, Mayor Attest: Carol Lenz, Deputy City Clerk

Dated this 5th Day of February, 2013.

CITY OF DRIGGS
COUNCIL MINUTES
March 5, 2013

Pursuant to adjournment of the City Council meeting held February 19, 2013, and to the call of the Mayor, the Driggs City Council met on March 5, 2013 at 7:15 p.m. Present: Council President Mosher; Council Members Dye & Mossman; Mayor Powers. Also present: City Attorney Zollinger, Planning and Zoning Administrator Koehler, Community Development Director Self, and Public Works Director Gunderson. Council Member Jones was excused. Powers led in the *Pledge of Allegiance.*

Approval of Minutes

- February 19, 2013: **Mossman moved to approve the February 19, 2013 minutes as corrected. Mosher seconded.** Motion carried.

Approval of Claims

- Questions:
  - Electrical Wholesale [Sensor/Conduit/Bulbs]
- **Mosher moved to approve Claims dated February 20-March 5, 2013 as presented. Dye seconded.** Motion carried.

Planning Application Fee Waiver Request: Jay Mazalewski, Teton County

- Mazalewski requested waiver of the $1,215.00 application fee charged to Teton County for its code/ordinance amendment for essential communication facilities. City Code does not currently allow towers at the height proposed by the County for its requested communication equipment within City limits. Mazalewski noted that City code appears to contradict the City's Comprehensive Plan which encourages health & safety services within the City's core
- Discussion followed on the various fee options for the City and whether or not the Council agreed that the current ordinance should be revised. Koehler confirmed that tower height within City limits should be reviewed. Any proposed code revision will be brought back to the Council for approval.
- **Dye moved to approve waiving the $1,215.00 code amendment application fee charged to Teton County with the County paying associated hard costs, such as newspaper noticing, tied to its application. Mosher seconded.** The question was called with Dye & Mosher, aye; Mossman, nay. Motion carried.

Idaho Department of Commerce: Christine Jarski

- Jarski, an employee of the State's Economic Development Division at the Department of Commerce (DOC), whose territory includes the nine counties of Eastern Idaho, briefly outlined the DOC's goal for advancing economic development within the State. In essence the DOC will move 'at the speed of business' which will vary depending on where each business is at in its development. The DOC recognizes that there will be a need to adapt as business needs change. The DOC's number one goal is to protect and retain/grow businesses in Idaho.

- The DOC works with businesses through six broad areas: 1) Community & Economic Development; 2) State & Federal Grants; 3) Procurement & Technology Assistance Center (PTAC); 4) Tourism and Recreational Promotion; 5) International Export Assistance; and 6) Technology Transfer (IGEM)
- DOC's newest assistance program is the *Idaho Main Street Program* which will focus on revitalizing downtown historic buildings. Jarski stated the Driggs is well positioned to participate (entry at the Silver [second] level is anticipated) and she encouraged the Council to apply once the program opens mid-summer. Self noted that he will be attending the first training for this program in Burley on April 23, 2013.

Scenic Byway Visitor Center: Design Team Recommendation

- Self informed the Council of the Project Advisory Committee's (PAC) recommendation to hire Plan One/Studio Tectonic to design the Teton Scenic Byway Visitor Center (TSBVC). References for both teams have been checked. **Mosher moved to accept the PAC's recommendation of Plan One/Studio Tectonic as the design team for the TSBVC. Dye seconded.** Motion carried. Self noted that the approved recommendation will be forwarded to the Idaho Transportation Department (ITD) for its approval. Once ITD approves, a contract and detailed scope of work for Plan One/Studio Tectonic will be brought to the Council for approval.

Staff Reports

Community Development – Doug Self

- **City Center Update**: the dates for Design Workshop's on-site visit have been pushed back to May 8 for stakeholder interviews and May 9 for the planned community charrette. Prior to its on-site visit, Design Workshop and Jorgensen Engineering will be working on putting together a basemap and a design framework based on background data, project requirements, and PAC input.

Public Works - Jared Gunderson

- **Sewer Line Blocks**: Two lines have been blocked in the last two weeks: one at The Royal Wolf, shut-down for approximately two hours. Paperwork was given to the owner for an insurance claim but has not been turned back in; and one at Cobble Crest. No back-up issues were uncovered after interviewing surrounding line users.
- **RSCI**: Gunderson has been reviewing the punch list at the site. He believes that work is looking good and making progress
- **Water Source Protection**: representatives from the State of Wyoming were at the first county-wide water source protection meeting attended by Gunderson and Koehler. The Wyoming representatives offered their assistance to the City, specifically to assist with the City's water right in Alta
- **Asphalt Rejuvenation Meeting**: Gunderson attended last week. The topic was rejuvenation versus replacement. Technology changes now make it possible to rejuvenate at 1/3 the cost to replace asphalt. As long as a road's base is in good shape, a PASS [slurry] can be applied which eliminates chip sealing & crack sealing

- **Alta Spring Meter**: A new mag-meter has been installed at the Alta water tank. The first reading of the meter revealed 8 million gallons going into the 1 million gallon tank in 24 hrs (6% of shares). A second meter is slated for installation on March 6 at the Alta springhead.
- **Confiscated Valve, Hose, & Wrench**: Gunderson notified the Council that he had confiscated equipment tied into one of the City's water hydrants. The equipment was returned to the owner party

Mayor's Business: Daniel J Powers

- **Annual Report**: Council members were provided a copy of the City's first annual report (FY 2012). The report is a direct result of the Council's budgeting goal to be more proactive in communicating with residents. Consensus from the Council was 'job well done'.
- **Development Company Board Member request**: no interest from Council members to serve on this board
- **Letter to Idaho House State Affairs Committee**: Powers presented the Council a draft letter asking for support on the Resort City Restaurant Liquor bill. Approval to submit was received, with the addition of all Council member's names as signers
- **Arbor Day**: Powers asked the Council whether the City should continue sponsoring Arbor Day activities. Discussion focused on separating Arbor Day, which should be about trees, from the city-wide cleanup day. Council asked that City staff discuss options and propose a date (6/4 last year) for Arbor Day activities. The Council also asked that SnowScapes management/coordination be discussed at the next staff meeting.

9:42 p.m. Adjournment

With no further business, **Dye moved to adjourn. Mossman seconded.** Motion carried.

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Daniel J Powers, Mayor Attest: Carol Lenz, Deputy City Clerk

Dated this 19th Day of March, 2013.

CITY OF DRIGGS
COUNCIL MINUTES
March 19, 2013

Pursuant to adjournment of the City Council meeting held March 5, 2013, and to the call of the Mayor, the Driggs City Council met on March 19, 2013 at 7:15 p.m. Present: Council President Mosher; Council Members Dye, Jones, & Mossman; Mayor Powers. Also present: Community Development Director Self, and Public Works Director Gunderson. Powers led in the *Pledge of Allegiance.*

Approval of Minutes

- March 5, 2013: **Mosher moved to approve the March 5, 2013 minutes as corrected. Dye seconded.** Motion carried.

Approval of Claims

- Questions:
  - Grand Targhee Resort [GTR Shuttle]
  - Design Workshop [CC Plaza Design #1]
  - DEQ [Water Loan #9914]
  - Teton Microbiology [Lab Tests]
  - Ace [UPS freight]
- **Jones moved to approve Claims dated March 6-March 19, 2013 as presented. Mossman seconded.** Motion carried.

Grand Targhee Resort: Ken Rider, Director of Sales & Marketing

- Rider provided a summary of activity at Grand Teton Resort (GTR) over the winter noting that snow depths and advanced bookings were above last year's levels. The winter season will end on April 21 with the Cardboard Derby and possibly Pond Skimming. Next winter's season pass sale will start on March 20, with tickets selling for $499, $299 for seniors.
- Summer 2013 bookings are also above last year's with the main music events close to being sold out: July 4th weekend with Wide Spread Panic; 9th Annual Targhee Music Fest July 19-21, and the 26th Blue Grass Festival August 9-11. Rider went on to say that Targhee will be increasing its focus on summer trail activities with the help of a grant to build 12 miles of new trail this year. Rider stated that he will be bringing a proposal for major event summer bus shuttle service to the Council in which GTR will be asking the City for financial assistance to help fund the service. Finally, Rider provided Council with a Summer Events Calendar for 2013.
- Dye asked about the feasibility of GTR hosting a winter hill climb for snowmobiles to which Rider responded that GTR's focus and core clientele are skiers and riders and that a hill climb during the heart of the season would not be a good fit at this time. Jones told of a skier waiting for a shuttle ride up to the mountain who was told by GTR personnel to wait 'by Ace Hardware' for the ride, which was incorrect. The same client missed the bus that stopped at the City Hall parking lot because it left the lot prior to the scheduled 8:04 departure. Rider noted that some leeway is built into the bus schedules; however he appreciated hearing of the issue.

Water Account Reactivation Request: Lindsey Love

- Love requested reinstatement of City utility service at 90 E Short in Driggs. The property was in the estate of the previous owner whose executor chose to not pay the monthly maintenance fee to keep the account(s) active – there is a house and a trailer on the one lot. Rather than pay a new account hookup fee, Love proposed paying the monthly maintenance fee back to October 2012, plus the water turn-on fee, for the home since the meters were not pulled. She is aware that she will have to pay to have the home hooked into the City's sewer system. Love also asked Council for the same consideration for the trailer, should it be lived in or rented.
- **Mosher moved to approve reactivation of City utility services for the home at 90 E Short with payment by Lindsey Love of monthly maintenance fees back to October 2012, the water turn-on fee, and full hook-up fees into the City's sewer system. The same consideration is also approved for the trailer should it be lived in or rented. Jones seconded.** Motion carried.

Park Fee Waiver Request: US Bank, Wayne Maness

- Maness requested waiver of the $40 City Park rental fee for US Bank's Easter Egg Hunt on March 30, 2012. Maness anticipated 250 kids + parents at the event
- Discussion ensued on why park fees were initiated and the additional costs that participants may be required to pay for porta-potties and garbage disposal. After discussion of costs, Maness withdrew his waiver request.

Resolution 284-13: Fair Housing Month Proclamation

- Powers read the proclamation verbatim. Mossman requested inclusion in paragraph three of the words, '… age, gender identity, and sexual preference…'
- **Dye moved to adopt Resolution 284-13 as presented. Jones seconded. Aye: Dye & Jones. Nay: Mosher & Mossman.** To break the tie: **Powers, Nay.** Motion failed.
- **Mossman moved to adopt Resolution 284-13 with the words added to paragraph three. Mosher seconded. Aye: Mosher & Mossman. Nay: Dye & Jones.** To break the tie: **Powers, Aye.** Motion carried.

Resolution 285-13: Arbor Day Proclamation

- Powers read the proclamation verbatim. In Driggs, Arbor Day is slated for June 7, 2013. **Dye moved to adopt Resolution 285-13 as presented. Mossman seconded.** Motion carried.

Staff Reports

Community Development – Doug Self

- **Scenic Byway Center**: PAC members will review the contract proposal between the City and Plan One/Studio Tectonic on March 21. If approved by the PAC, the contract will be forwarded to the Idaho Transportation Department (ITD) for approval. If approved by ITD, the contract will be brought to the Council for final approval. The PAC will also be appointing members to the Exhibit Committee. Proposed members are:

  Dale Breckenridge – Teton Valley Museum
  Christine Dexter – Ashton; Instructor at BYU-I
  Scott Christensen – Artist
  Jim Hardee – Historian/Author

Anna Lindstedt – Friends of the Teton River
Michael McCoy – Powder Mountain Press
Craig Sherman – City of Victor
Lynda Skujins – TV Chamber of Commerce
Jenniver Walton – Photojournalist
Linda Lopez – Teton Arts Council
Emily Nichols – Teton Regional Land Trust
Brigid Sinram – GTR Naturalist
Bob Spoelhof – Geologist
Michael Whitfield – Heart of the Rockies

- **City Center Plaza**: Design Workshop will meet with stakeholders on Thursday May 9th, and conduct a design charette on Friday May 10th. The renovations approved for the TISA area have been moved to summer break. A fundraiser for the climbing wall will be held Friday April 12 in the North End. Bill Boney is catering. There will be a $15 entry fee and raffle prizes.
- **Transit Center**: the NEPA application required by ITD has been submitted.

Economic Development – Doug Self

- **Business Chance Meetings – Teton Valley**: the first *Chance Meeting*, an entrepreneurial networking event, will be held at Alpine Wines on Thursday, March 22 @ 5:00 p.m. and subsequent third Thursdays of each month.

Public Works - Jared Gunderson

- **Water Service Line Break**: The 3' waterline break by Key Bank on E Little Avenue has been repaired. There is $25,000 budgeted in Resort Tax to replace the entire first block of the line this summer. Gunderson anticipates having the work done before June.
- **Water System Shut Down:** March 13 the residents on Stateline Road were without water because the entire system that serves that area shut-down. The tank spring valve shut, the telemetry warning system failed, and the altitude control valve diaphragm was blocked by sticks and a plastic bottle. PW staff was successful in getting water flowing again via a temporary work-around; SKM/Aqua Engineering will be up to estimate cost to repair the system
- **Powder Valley Water Leak**: received a phone call today that Powder Valley was out of water. PW staff confirmed that reservoirs were full and hydrants charges. Determination was that the manifold/main line broke on the HOA's side of the meter. Advised HOA that residents were welcomed to fill containers of water at the City's Shop
- **Parking for Grand Targhee Resort summer events**: Gunderson will ask FTR & World Cast to remove their boats/trailers from the City's lot during the busiest weekends. Other open spaces for possible parking were discussed.
- **Fall River Industrial Rebate Program**: March 26 @ 11:30, Fall River will be presenting its Industrial Rebate Program and options for the City including the new Waste Water Treatment Plant
- **Flagging**: PW staff will be attending road flagging training before the start of the summer season if a class can be found. Teton County does have staff certified in flagging.

Mayor's Business: Daniel J Powers

- **Public Works Building Lighting Upgrade**: Fall River Electric Coop. estimates that retrofitting the lighting at the City's PW Shop would save approximately $579 per year by utilizing sensors and LEDs. The proposed lights will meet the City's lighting ordinance. Estimated cost

to convert is $5,235. Net cost would be $3,667 deducting anticipated incentives of $1,568 from Fall River. Powers suggested using the money received from this year's franchise fee to pay for the upgrade. **Dye moved to approve upgrading the lights at the Public Works building per the proposal presented at an estimated total cost of $5,235 less Fall River incentives of $1, 568. Mosher seconded.** Motion carried.

- **Rocky Mountain Environmental (RME) Water Rights Research Proposal**: RME provided a non-inclusive estimate of $6,450 to complete research on City water rights as follows: Licensing of the Teton Creek Well 22-7786 ($150); Alta Spring Claim ($3,000); Application for Transfer ($1,500); non-emergent costs: Proof of Beneficial use for Water Right 22-13979 ($300); and 1999 Alta Spring Right (Wyoming) ($1,500). After discussion of the various components, Council advised Powers to direct RME to hold off on completion of any additional work for the City until further written notice is received from the Mayor
- **Community Center Building Power Usage**: Powers presented the Council with a graph from Fall River Electric that showed the energy savings realized at the City Center after Fall River assisted in setting up the building-wide programmable thermostat for heating & cooling
- **Development Co. Board**: Lyn Christian, from the Driggs Urban Renewal Board, has expressed interest in serving on the Development Co's Board of Directors.
- **P&Z Commission:** P&Z is looking for one new member with the expiration of Rene Lusser's term. Rick Baldwin was reappointed.
- **Additional Claims:** Powers requested approval to pay additional claims in the amount of $469.62 as follows: City of Driggs, Petty Cash reimbursement, $204.62; Jodie Gunderson, Janitorial Services, $240.00; & Joann Scoggins, Animal Shelter banner deposit refund ($25). **Mossman moved to approve payment of additional claims in the amount of $469.62 as listed above. Mosher seconded.** Motion carried.

9:12 p.m. Executive Session

Jones moved to enter executive session per Idaho Code 67-2345 (b) personnel, (c) real property interest, and (f) legal considerations. Mossman seconded. The question was called by role: **Dye, aye; Jones, aye; Mosher, aye; Mossman, aye.** Motion carried.

9:35 p.m. The Regular Session was rejoined.

No business was conducted as a result of Executive Session.

9:35 p.m. Adjournment

With no further business, **Jones moved to adjourn. Dye seconded.** Motion carried.

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Daniel J Powers, Mayor Attest: Carol Lenz, Deputy City Clerk

Dated this _____ Day of _____, 2013.

CITY OF DRIGGS
COUNCIL MINUTES
March 26, 2013

Pursuant to adjournment of the City Council meeting held March 19, 2013, and to the call of the Mayor, the Driggs City Council met on March 26, 2013 at 7:15 p.m. Present: Council Members Dye, Jones & Mossman (via telephone); Mayor Powers. Also present: Public Works Director Gunderson, Planning & Zoning Administrator Koehler, and Finance Officer Lenz.

FY 2014 Budget Work Session

- The 2014 fiscal year budgeting process was started by Council and City staff with review of the vision statement and mission statement for the City. Goal statements and action items were outlined for six broad focus areas: Administration and Facilities, Transportation, Water and Sewer, Planning and Zoning, Economic Development, and Parks and Recreation.
- Attendees then chose their respective top priority action items under each focus area (see attached results).
- At the next Council work session, scheduled for May 14, 2013 at 7:00 p.m., the Council will begin prioritizing budget line items.

8:30 p.m. Adjournment

With no action items, the meeting was adjourned at 8:30 p.m.

_____ _____

Daniel J Powers, Mayor Attest: Carol Lenz, Deputy City Clerk

Dated this _____ Day of _____, 2013.

March 26 Budget Visioning workshop results.
In attendance: Colin Dye, Greer Jones, Ralph Mossman, Dan Powers, Jared Gunderson, Ashley Koehler, Carol Lenz [* = 1st priority * = 2nd priority]

I. Vision: An appealing, vibrant, engaged City that attracts residents, visitors and businesses by the quality of life it offers.

II. Mission: To protect and enhance the City's livability and economic well being for current and future generations through:
- Visionary leadership and responsible decision making
- Accountable and sustainable fiscal practice
- Involvement of the Community
- Efficient, effective and responsive service to the public
- The development of a unique and beautiful City.

III. Administration and Facilities:

Mission: Provide services to the public in a uniform and efficient way.
Action items:
- Upgrade internet capacity
  - Server ***
- Enhanced training budget *
- Improve public communication ****
  - Staff Communications Class *
- Improve Building efficiency
  - New Roof ****
- Review salaries:
  - Create wage scale
  - Job descriptions
  - Review Mayor's role, definitions, compensation
  - Review Council compensation
  - Review staffing needs
- Inventory of assets *
- Maintenance and upgrade plan for assets

IV. Transportation

Mission: To provide safe, efficient and attractive transportation throughout the City, including attractive and effective streetscapes and bicycle and pedestrian connectivity. To maintain and enhance transportation alternatives to and from the City to better connect us with the regional area.
Action Items:
- 5 Year Road CIP
  - Need Data
  - Need Community involvement
- Improve Streetscapes ****

    - Lights *
    - Truck Route Planning
- Storm Drainage at 5th street
- Lighting standards for pathways and roads
- Update pathways plan **
- Update snow removal plan, including community involvement
    - Sub-out parking lot clearance
- NS pathway, finish missing section *
- Fund Grant writing
- Parking Development, esp. Park and Ride facility
- Support and facilitate public transportation ***
- Development/Subdivision Standards **
    - Annexations *
    - Streets: Bonding, seal coating

V. Water and Sewer:

Mission: Provide reliable supply and capacity at as high a quality and as low a cost possible, and remain responsive to system user needs.

Action Items:

- Water facilities Plan
- Explore possibility of separate irrigation system *
- Replace shallow water lines ******
- Consolidate Water rights
- Public education on conservation
- Update collection system CIP
- Install updated meters
- Scada/Telemetry **
- Annual service to wells and lift stations
- Source Protection
    - Developments
- 300,000 gal well ****
- Update PW STDS *

VI. Planning and Zoning:

Mission: Provide efficient, fair and predictable permitting processes that both encourage business and development while maintaining the community vision. Ensure that growth and development occur in a manner that allow for the efficient provision of services. Engage the community to the greatest degree possible.

Action Items:

- Neighborhood land use plans
- Improve streetscape planning ***
- Comp. Plan update

- Ordinance Review ***
- Public Outreach/engagement *
- Web Updates/Upgrade ******

VII. Economic Development

Mission: Encourage diverse and resilient business growth that supports the community vision, led by the downtown core. Create a vibrant atmosphere for residents and visitors.

Action Items:

- Fund grant writing *
- Support events ****
- Participate and coordinate with other groups doing Ec. Dev. Work. *
- Create Venues
    - Outdoor **
    - Indoor
- Attract new businesses
- Infrastructure development
    - Front Street
    - Fiber optic
    - W Little *
- Develop Social media communication
- Visitor Center *****

VIII. Parks and Recreation

Mission: Provide recreational opportunities based on the unique needs and desires of the residents of Driggs and potential visitors and businesses.

Action Items:

- Driggs-Tetonia pathway, land acquisition. **
- Greenbelt pathway *
- Fund Grant writing
- Future Parks area land acquisition:
    - Creekside pathway ***
    - City park
    - 5th street park
- Develop what we have:
    - Rec Center Space *****
    - Valley Centre park **
    - Playground at Lions Park
- 5 year CIP *
- Teton Ave Pathway
- Support Nordic track

CITY OF DRIGGS
COUNCIL MINUTES
May 14, 2013

Pursuant to adjournment of the City Council meeting held May 7, 2013, and to the call of the Mayor, the Driggs City Council met on May 14, 2013 at 7:00 p.m. for a FY 2014 Budget work session. Present: Council President Mosher; Council Members Dye, Jones, and Mossman; Mayor Powers. Also present: Community Development Director Self and Finance Officer Lenz.

Fiscal Year 2014 Budget Work Session

- Powers reviewed the on-line FY 2014 Budget survey results with the Council. The public's first choice is listed by category:
  - Administration and Facilities — Improve Building Efficiency 39%
  - Water and Sewer — Replace Shallow Water Lines 60%
  - Roads & Transportation — Land for Driggs-Tetonia Pathway 42%
  - Planning & Zoning — Improve Streetscape Planning 36%
  - Com. & Econ. Development — Complete the TSBVC 25%
  - Parks & Rec. — No stand-out choice
- Powers then gave the Council a broad overview of the proposed budget for FY 2014. After general discussion, specific questions were answered by Self, Lenz & Powers. Individual revenue and expense lines were reviewed and adjusted as deemed appropriate. Follow-up questions will be addressed at the next Council work session scheduled for 7:00 p.m. on June 11, 2013.

9:00 p.m. Adjournment

With no further business, the work session was adjourned.

_____ _____

Daniel J Powers, Mayor Attest: Carol Lenz, Finance Officer

Dated this _____ Day of _____, 2013.

MINUTES OF THE CITY OF DRIGGS
CITY COUNCIL MEETING
MAY 28, 2013

Pursuant to adjournment of the Special City Council meeting held May 21, 2013, and the call of the Mayor, the Driggs City Council met **Tuesday, May 28, 2013**, at 7:15 p.m. A roll call was taken and present were council members: Greer Jones, Ralph Mossman George Mosher, and Colin Dye, Mayor Dan Powers, Community Development Director Doug Self, Planning and Zoning Administrator Ashley Koehler, City Attorney Stephen Zollinger, Public Works Director Jared Gunderson and City Clerk Kreslyn Schuehler. Mayor Dan Powers led the Pledge of Allegiance.

APPROVAL OF MINUTES

Council Member Mossman made a motion to approve the minutes from the City Council Meeting on May 7, 2013 as corrected. Council Member Mosher seconded the motion. The motion passed with all in favor.

Council Member Mosher made a motion to approve the minutes from the City Council Meeting on May 14, 2013. Council Member Jones seconded the motion. The motion passed with all in favor.

CLAIMS

The Council reviewed the claims presented.

Council Member Jones made a motion to approve the claims as presented dated May 8, 2013 through May 28, 2013. Council Member Mossman seconded the motion. The motion passed with all in favor.

BDPA SALARY STUDY – BONNIE BRAZIER AND ANDREA FOGELMAN

Bonnie Brazier spoke to the Council and explained the information provided was a preliminary report. She stated the goal of the discussion would be tounderstand what the ideal pay philosophy was for the city. She explained the reason for the study was to establish a foundation for a human resources system that included viable and defensible pay scales. The foundation would be compliant with all federal acts for employment and the city would be left with a set of administrative guidelines to development in the future.

Ms. Brazier stated the key element in job classification and compensation programs was to have a plan to be internally equitable and externally competitive. She stated the study did not take into consideration the length of employment or what qualifications or special skills individual employees brought to the jobs.

Data was collected from other cities in the area, where the City of Driggs drew employees from and where the city lost employees. The minimum and maximum wage for each job was obtained. The data would be finalized and presented to the City Council within the next three weeks, Ms. Brazier stated.

Ms. Fogelman explained the survey results stating the data had a lot of variables and that the results were setting the parameters to be competitive in the market place. She further stated that based on the data that had been collected, the pay rates were about 4% below average, but further explained that did not mean the Council needed to budget for the increase.

Ms. Fogelman described the total compensation worksheet, stating that it included the value of vacation time and retirement contributions. She felt the City of Driggs offered a vacation package that was very comparable to the other entities, being only 3.3% below the market. Ms. Fogelman stated that when the compensation was added to the wages, it made a less than 1% difference in the market wages.

Ms. Fogelman stated the Council needed to determine how employees were to move through the range of wages; with a step, grade or open range type wage schedule. She stated the goal was to move employees from the minimum to market range in order to keep them employed with the City.

Mayor Powers stated that he felt when hiring a new employee, the city often paid an employee a middle range wage, instead of the minimum in order to obtain more qualified employees. Ms. Fogelman asked the Council to determine if the pay scale should be based on performance, longevity or a combination.

Mayor Powers stated that having flexibility was ideal and that one of the challenges to working with a small group of people is that job descriptions often overlapped.

FARMER'S MARKET FEE WAIVER REQUEST – BARRY MCKAY

Barry McKay requested the fees be waived for the use of the plaza for the Farmer's Market. He stated the fees for the vendors covered the basic expenses and felt the benefit to the community exceeded the $350 in fees.

Council Member Mossman suggested charging each vendor $1 more for every event, stating the Farmer's Market would make an additional $100 after paying $350 in fees.

Mayor Powers questioned the cost of the port-a-potty, stating that the city restrooms seemed to get more use and that if the port-a-potty was not obtained, the fees for the plaza would be off set.

The Farmer's Market would be responsible for a port-a-potty for the season.

Council Member Mosher made a motion to waive the banner fee and the space usage fee for the Farmer's Market 2013 season. Council Member Dye seconded the motion. The motion passed with the majority in favor. Council Member Mossman voted in opposition.

TETON COUNTY PROSECUTOR – KATHY SPITZER

Kathy Spitzer made a request to the Council to increase the prosecution fee by $150 a month for the fiscal year 2013-2014. She reminded the Council that the city received

90% of the fees that were collected for violations. She also suggested adding to the contract a 2-2.5% fee increase per year so that a request would not have to be for each budget cycle.

TETON COUNTY SHERIFF – TONY LIFORD

Sheriff Liford requested that the original contract be renewed for $57,000 a year. He wanted to make it clear to the Council that citations were not counted as revenue for the department and to questioned if there were any special events this summer that would need more patrol. Mayor Powers stated that traffic control with the construction projects scheduled would need extra attention.

2014 TRPTA FUNDING REQUEST – AMANDA ELY

Amanda Ely presented the Council with a request for $5,000 for the fiscal year 2013-2014. She stated that the Board increased fees in Idaho Falls but did not do so in Teton Valley. She provided general information to the board and concluded by stating that an Asset Management Plan was required by Idaho Transportation Department for the next year.

DISCUSSION OF PARK FEES, TVRA LETTER

Faren Eddins spoke to the Council on behalf of the Teton Valley Recreation Association. He was requesting that the park fees be waived for the use of City and Lion's Park due to the contributions, donations and labor the association had put into the parks.

Mayor Powers clarified that the City did a lot of work to the parks as well, and did not want to undermine the work put in by the staff. He further stated that the City wanted to make sure the fee system was fair and was developed to ensure the park users help offset the park expenses. He did not feel it was fair to ask residents to "bear the entire burden."

Debbie Hunt spoke to the Council. She stated she received information that the fees would be used for port-a-potties and garbage and she didn't feel the fees justified that cost.

Lindsey Hatch requested that money collected be put toward a recreation district and concluded her comments by stating that it was getting too expensive to continue to play ball.

Jim Hamilton spoke and felt that the fees the city was charging was "undermining what we are trying to do." He felt a recreation district should be the City's "number one goal."

Dave Lienert stated an estimated 50% of the families involved in TVRA resided in Driggs. He stated the league ran on a "shoestring budget" and often paid for the children that couldn't afford to play. He felt that those involved would be more than willing to put volunteer time into maintaining the fields.

Todd Dustin spoke and stated he was not against paying fees but wanted to ensure "it didn't get out of hand."

Council Member Mossman felt the City did "our best to keep the fees as low as possible" and suggested that fees be associated with the amount of games and not per hour of park usage.

Council Member Mosher stated he would like to discuss the fee structure with staff before making a decision on it and further stated it didn't seem "fair on the part of the rest of the citizens of Driggs to just waive your fees without negotiating."

It was determined that a future meeting would be made to discuss a fair solution.

ORDINANCE #337-13: SECOND READING – AMENDMENT TO TITLE 9 OF DRIGGS CITY CODE; EMERGENCY WIRELESS TELECOMMUNICATON FACILITIES

Ashley Koehler presented information to the Council regarding setback recommendations. She recommended greater setbacks for residential zones and properties adjacent to a street. "Studies have indicated that ice and other debris falling from tower is usually contained in a radius of 50 percent of the tower's height. In order to balance the probability of a safety problem with other considerations, such as enhancing compatibility, a local jurisdiction may wish to create a waiver or variance process to any fall area or setback standard created," Ms. Koehler read from the American Planning Association update on the 1996 Telecommunications Act.

Ms. Koehler reviewed the changes from the last meeting.

Council Member Jones questioned if the proposed setbacks would work for Teton County's future proposal. Ms. Koehler stated she reviewed other public facilities and county properties and the setbacks would work on a majority of those lots.

Jay Mazalewski, Teton County Engineer, felt that allowing flexibility for 25 feet would ensure a level of safety.

Ms. Koehler discussed abandoned towers and language for such. Council Member Mossman suggested removal was within 6 months of the time the towers were abandoned.

Council Member Mossman made a motion to suspend the rules and read by title only Ordinance #337-13. Council Member Mosher seconded the motion. A roll-call vote was taken: Council Member Jones, aye; Council Member Mosher, aye; and Council Member Dye, aye; Council Member Mossman, aye. The motion carried unanimously.

Council Member Mossman made a motion to approve Ordinance #337-13 as amended. Council Member Dye seconded the motion. The motion passed with all in favor.

DISCUSSION OF AMENDMENT TO TITLE 8, CHAPTER 3 OF DRIGGS CITY CODE: EXEMPTION FROM STREET DEVELOPMENT IMPACT FEE FOR INFILL DEVELOPMENT

Mr. Self made a recommendation to the Council to waive the fees for infill development in regards to street impact fees. He felt this would encourage infill development within the 1920 City Limits (between 5th Street, Ross Avenue, the railroad right of way and Teton Avenue).

Council Member Dye was in opposition of the proposed ordinance, stating that it would increase taxes on one population and put it on another. Council Member Mossman suggested having a time limit to encourage growth in town in the immediate future.

The Council agreed to pose a time limit of 2 years.

Council Member Mossman made a motion to consider Ordinance #339-13 first read and to include a 2 year time limit. Council Member Mosher seconded the motion. The motion passed with all in favor.

HARMONY DESIGN CONTRACT FOR VALLEY CENTRE PATHWAY PROJECT

Mr. Self explained the design and administration for this project was not to exceed $18,000; $9,000 from the Safe Routes to School Grant and $9,000 from the resort tax fund. The Council requested that the design include the south portion to 5th street and the extension to the north into Valley Centre.

Council Member Mossman made a motion to approve the work order for Harmony Design. Council Member Jones seconded the motion. The motion passed with all in favor.

Council Member Mosher made a motion to ask for an additional work order from Harmony Design for additional distances to the north and south to make the connections. Council Member Mossman seconded the motion. The motion passed with all in favor.

Mr. Self reviewed his staff report.

BULK WATER PERMIT APPLICATION/FEES

Jared Gunderson reviewed the application and fees and stated that he reviewed similar fees from other cities.

Mayor Powers felt the fees where high. Stephen Zollinger stated the City of Rexburg charged a lot as well but the customer could get water anywhere in the City. He suggested that since the customer had to come to the public works shop, a reduction may be ideal. Mayor Powers suggested having one fee instead of making it a tiered system and suggested $100 per company, not per truck. Mr. Gunderson felt $200 per company was appropriate and the Council agreed on $150 per company for a year plus $1.50 per 1000 gallons.

Mr. Gunderson stated he received a proposal from Aqua Engineering for a SCADA System in the amount of $60,000. He would like to include this in this year's budget and pull funds from water reserves.

Mr. Gunderson stated in order to obtain the water rights for the Teton Creek Resort Well, the City must pay $125 and obtain a copy of the deed.

Council Member Mosher made a motion to allow Mr. Gunderson to go ahead with the costs required to obtain the water rights from IWDR for $125. Council Member Dye seconded the motion. The motion passed with all in favor.

MAYOR'S REPORT

Community Center Phase IIa Improvements – Headwaters Bid

Mayor Powers stated he met with Headwaters Construction and Plan One and were working on reducing the cost of the project. Headwaters Construction will present a proposal in the near future.

ADJOURNMENT

Council Member Jones made a motion to adjourn. Council Member Mossman seconded the above motion. The motion passed with all in favor and the meeting was adjourned at 10:31pm.

ATTEST:

_____ _____

Kreslyn Schuehler, City Clerk Mayor Daniel J. Powers

CITY OF DRIGGS
COUNCIL MINUTES
June 11, 2013

Pursuant to adjournment of the City Council meeting held June 4, 2013, and to the call of the Mayor, the Driggs City Council met on June 11, 2013 at 7:00 p.m. for a FY 2014 Budget work session. Present: Council President Mosher; Council Members Dye, Jones, and Mossman; Mayor Powers. Also present: Community Development Director Self, Public Works Director Gunderson, and Finance Officer Lenz.

Fiscal Year 2014 Budget Work Session

- Proposed budgets for FY 2014 were reviewed & refined by the Council.
- Discussion focused on support of non-city entities, transfers between funds, and use of reserve funds.
- Whether or not to hold a July 9, 2013 budget work session will be determined at the Council's regular meeting on July 2.

9:00 p.m. Adjournment

With no further business, the work session was adjourned.

_____ _____

Daniel J Powers, Mayor Attest: Carol Lenz, Finance Officer

Dated this _____ Day of _____, 2013.

MINUTES OF THE CITY OF DRIGGS
CITY COUNCIL MEETING
JUNE 18, 2013

Pursuant to adjournment of the Special City Council meeting held June 4, 2013, and the call of the Mayor, the Driggs City Council met **Tuesday, June 18, 2013**, at 7:15 p.m. A roll call was taken and present were council members: Greer Jones, Ralph Mossman, Colin Dye and George Mosher, Mayor Dan Powers, Community Development Director Doug Self, Planning and Zoning Administrator Ashley Koehler, City Financial Officer Carol Lenz, City Attorney Stephen Zollinger, Public Works Director Jared Gunderson and City Clerk Kreslyn Schuehler. Mayor Dan Powers led the Pledge of Allegiance.

APPROVAL OF MINUTES

Council Member Mosher made a motion to approve the minutes from the City Council Meeting on June 4, 2013. Council Member Jones seconded the motion. The motion passed with all in favor.

CLAIMS

The Council reviewed the claims presented.

Council Member Jones made a motion to approve the claims as presented dated June 5, 2013 through June 18, 2013. Council Member Mossman seconded the motion. The motion passed with all in favor.

AQUA ENGINEERING: TELEMETRY REVIEW AND WWTP UPDATE

Scott Rogers, from Aqua Engineering, spoke to the Council. He explained what would be involved with the water telemetry system, stating that installation was not included in the budget. He further explained the work that Aqua Engineering could accomplish.

Council Member Mossman made a motion to accept the work order from Aqua Engineering for the Water Telemetry System for no more than $42,000. Council Member Mosher seconded the motion. The motion passed with all in favor.

Mike Valentine, from Aqua Engineering, discussed the progress of the Waste Water Treatment Plant and the change orders for the project.

Council Member Jones made a motion to approve the change orders as presented. Council Member Mosher seconded the motion. The motion passed with all in favor.

PUBLIC HEARING – 7:30PM – BULK WATER PERMIT FEE

Mayor Powers reviewed the changes made from the previous discussion which included a reduction in fees.

Mayor Powers opened the Public Hearing at 7:45pm. There were no comments and the Public Hearing was closed.

Council Member Mossman made a motion to approve the fee for Bulk Water Permit and application as amended. Council Member Mosher seconded the motion. The motion passed with all in favor.

FISCAL YEAR 2012 AUDIT – JOSH BINGHAM AND BRAD REED, RUDD & CO.

Josh Bingham spoke to the Council, stating the present audit was a draft and must be reviewed within Rudd & Company before a final audit could be presented. He stated there were no issues and would have the final audit completed by the end of the week. Mr. Bingham concluded his presentation by explaining the standards for a single audit.

STAFF REPORT

Jared Gunderson reviewed his staff report for the Public Works Department.

FEE REDUCTION FOR TETONIC WINES CONDITIONAL USE PERMIT – AHSLEY KOEHLER

Ms. Koehler stated the request to reduce fees had originated from staff due to the zoning ordinance amendments. The closest use for the proposed business was a microbrewery, which required a Conditional Use Permit. At this time the Planning and Zoning Commission was working on amendments to the zoning ordinance which would allow this type of use and wanted to encourage new businesses. Ms. Koehler was requesting the fee be reduced by 50% which would still cover the cost of the public hearing notices and some of the staff time.

Council Member Mossman made a motion to grant a reduction by 50% for the Conditional Use Permit for Tetonic Wines. Council Member Mosher seconded the motion. The motion passed with all in favor.

STAFF REPORT

Ms. Koehler reviewed her staff report which included a brief summary of building activity.

WEST LITTLE AVENUE IMPROVEMENT PROJECT – CONCEPT PLAN DRAFT

Jennifer Zung from Harmony Design presented information to the Council. She reviewed the information given and obtained at the recent Open House for the public which included discussion regarding the installation of sidewalks, storm drainage, lighting and civic space. Ms. Zung explained the prioritization exercise that was conducted to determine the elements that were most important to the public, stating that drainage was a big concern to most in attendance. She stated the general public wanted more landscaping and a pedestrian friendly area while the landowners preferred improved parking.

Ms. Zung presented three different options stating all had the same layout within a small distance from Main Street.

The Council discussed parking and the majority preferred parallel parking to create wider sidewalks and more streetscape.

Drainage from the Colter Building was discussed. Randy Blough, from Harmony Design, stated that he would prefer to use the water being pumped from the building for landscaping along the road. He also felt it should be channeled further down as to not seep into the ground too soon, just to be pumped out again.

A discussion of how the street would appear in front of Kaufman's OK Tire was also discussed. It was determined a roll over curb may be more appropriate and less asphalt would be preferable.

The Council discussed the crosswalks and decided that placing crosswalks where pedestrians naturally cross was better. In conclusion, the Council talked about civic space and determined the parking should remain the same with less maintenance and simple landscaping.

ORDINANCE 339-13: THIRD READING – AMENDMENT TO TITLE 8, CHAPTER 3, TEMPORARY DEVELOPMENT IMPACT FEE EXEMPTION FOR INFILL DEVELOPMENT

Mr. Self stated it was previously discussed to include the park and fire impact fees in the exemption. Stephen Zollinger stated that he felt it would be harder to defend the reasoning to exempt park and fire fees than it would street fees and recommended the Council continue with just the street fee exemption, stating that once impact fees were established, the city must equally apply them.

Mr. Self suggested using Resort Tax to supplement the park fees and felt it could be exempt based on economic needs. Council Member Mosher agreed with the legal input and felt the Council should not discount Mr. Zollinger's advice.

Council Member Mosher made a motion to approve Ordinance 339-13. Council Member Dye seconded the motion. The motion passed with all in favor.

STAFF REPORT

Mr. Self requested the Industrial Building Lease be tabled.

He stated Juanita Flores would like to establish a lease to use the spare office in City Hall for the Teton Valley Hispanic Center. He stated he felt this would be a short term option until another place could be found. He recommended developing a 6 month lease. The Council agreed and Mr. Self would present a final lease to the Council in the future.

Mr. Self reviewed the remainder of his staff report.

MAYOR'S BUSINESS

Mayor Powers received a request to credit a water account in the amount of $2783.88 due to a broken water line that was discovered. The customer quickly fixed the broken line after being notified.

Council Member Dye made a motion to credit the account of Jesus Martinez in the amount of $2783.88 due to a broken water line. Council Member Mossman seconded the motion. The motion passed with all in favor.

Mayor Powers stated he would like to have the Sheriff's contract re-written so as to not have an automatic renewal. He did not want to bind future Council Members. The Council agreed to pursue this.

EXECUTIVE SESSION

Council Member Jones made a motion to go into executive session at 10:15 pm pursuant to Idaho Code 67-2345 Personnel. Council Member Mossman seconded the motion. A roll-call vote was taken: Council Member Jones, aye; Council Member Mosher, aye; and Council Member Dye, aye; Council Member Mossman, aye. The motion carried unanimously.

Council came out of Executive Session at 10:20 pm.

ADJOURNMENT

Council Member Jones made a motion to adjourn. Council Member Mossman seconded the above motion. The motion passed with all in favor and the meeting was adjourned at 10:20pm.

ATTEST:

_____ _____

Kreslyn Schuehler, City Clerk Mayor Daniel J. Powers

MINUTES OF THE CITY OF DRIGGS
CITY COUNCIL MEETING
July 23, 2013

Pursuant to adjournment of the City Council meeting held July 2, 2013, and the call of the Mayor, the Driggs City Council met **Tuesday, July 23, 2013**, at 7:15 p.m. A roll call was taken and present were council members: Greer Jones, Ralph Mossman, and Colin Dye, Mayor Dan Powers, Community Development Director Doug Self, City Attorney Stephen Zollinger, Public Works Director Jared Gunderson, City Financial Officer Carol Lenz, and City Clerk Kreslyn Schuehler. Mayor Dan Powers led the Pledge of Allegiance.

MOTION TO AMEND AGENDA
Council Member Jones made a motion to amend the agenda to include the Public Hearing for Ordinance #340-13. Council Member Mossman seconded the motion. The motion passed with all in favor.

APPROVAL OF MINUTES
Council Member Mossman made a motion to approve the minutes from the City Council Meeting on July 2, 2013 with corrections made. Council Member Dye seconded the motion. The motion passed with all in favor.

CLAIMS
The Council reviewed the claims presented.

Council Member Jones made a motion to approve the claims as presented dated July 3, 2013 through July 23, 2013. Council Member Mossman seconded the motion. The motion passed with all in favor.

TETON ARTS COUNCIL CHARITABLE EVENT BEER AND WINE APPLICATION – SHAKESPEARE IN THE PARK
Council Member Mossman made a motion to approve the beer and wine application for Shakespeare in the Park event through Teton Arts Council. Council Member Dye seconded the motion. The motion passed with all in favor.

DDCA PLEIN AIR BEER AND WINE APPLICATION – DAVE HENSEL
Council Member Dye made a motion to approve the beer and wine application for the Plein Air Gala with a condition payment is received prior to obtaining license. Council Member Mossman seconded the motion. The motion passed with all in favor.

PUBLIC HEARING 7:30PM – ORDINANCE #340-13 INCREASES IN MAYOR AND COUNCIL SALARY
Mayor Powers stated this proposal was discussed at the previous meeting and would change to $25,000 a year for Mayor and $4,800 a year for Council Members effective January 1, 2014. The Council felt it was necessary to have an engaged Mayor with the

ability to put the necessary time into the job without a fear of losing income. He further stated that Council salaries had not been increased since 2007.

Mayor Powers opened the Public Hearing at 7:32pm. There were no comments and the Public Hearing was closed.

Council Member Mossman made a motion to consider Ordinance #340-13 as first read. Council Member Jones seconded the motion. The motion passed with all in favor.

FISCAL YEAR 2012 AUDIT APPROVAL

Council Member Mossman made a motion to adopt the Fiscal Year 2012 Audit. Council Member Dye seconded the motion. The motion passed with all in favor.

TETON GEOTOURISM CENTER AND PLAZA CONCEPT DESIGNS

Garrett Chadwick, with Plan One, spoke to the Council. He stated they were ready to move to the next stage of design and wanted to present the current plan.

Mr. Chadwick explained the project, architectural and programming goals and stated a master plan was developed. He did not discuss the plaza much but did feel the two should be integrated. Mr. Chadwick continued to discuss the floor plan and presented drawings for the interior and exterior elements.

Council Member Jones mad a motion to approve concept designs as presented and proceed into the design development stage for the Geotourism Center. Council Member Mossman seconded the motion. The motion passed with all in favor.

Doug Self presented the revised plaza design and explained the changes. Mayor Powers stated Council Member Mosher wanted to see a big spruce tree in the plaza for holiday lighting. Council Member Mossman discussed moving the stage and wall closer to the south sidewalk. Jared Gunderson stated a shift would make snow removal harder.

Council Member Mossman made a motion to approve the schematic design for the plaza, Option A, with the considerations from the Council. Council Member Jones seconded the motion. The motion passed with all in favor.

DISCUSSION AND MOTION TO APPROVE PREL
IMINARY FY 2014 BUDGET

Carol Lenz presented information regarding the proposed budget to the Council. She stated animal control funds were added as well as park improvement and transportation plan funds. There was a discussion as to what reserve funds would pay.

Council Member Dye made a motion to approve the draft budget with the changes to the transportation plan as discussed. Council Member Jones seconded the motion. The motion passed with all in favor.

MOTION TO APPROVE HISPANIC CENTER OFFICE LEASE
Doug Self explained the lease and minor changes that would be made. He further stated that the lessee may use the meetings rooms and common space but must schedule such use with the City Clerk and those meetings cannot interfere with city meetings. The proposed lease was for 6 months.

Council Member Dye made a motion to approve the lease with the changes discussed. Council Member Mossman seconded the motion. The motion passed with all in favor.

MOTION TO APPROVE PARKS COMMITTEE APPOINTMENT
Council Member Dye made a motion to nominate August Christensen for the Parks Committee. Council Member Jones seconded the motion. The motion passed with all in favor.

STAFF REPORTS
Mr. Self reviewed his staff report and the work orders for the bus storage facility and the Valley Centre Pathway.

Council Member Mossman made a motion to approve the work order for the bus storage facility from Harmony Design. Council Member Dye seconded the motion. The motion passed with all in favor.

Council Member Jones made a motion to approve the work orders for the Valley Centre Pathway from Harmony Design as presented with funds coming from Resort Tax. Council Member Mossman seconded the motion. The motion passed with all in favor.

Jared Gunderson reviewed his staff report with the Council.

EXECUTIVE SESSION
Council Member Jones made a motion to go into executive session at 9:13 pm pursuant to Idaho Code 67-2345. Council Member Mossman seconded the motion. A roll-call vote was taken: Council Member Jones, aye; Council Member Dye, aye; Council Member Mossman, aye. The motion carried unanimously.

Council came out of Executive Session at 9:31 pm.

MAYOR'S REPORT
Proclamation, City of Pocatello Appreciation Day
Mayor Powers read the proclamation declaring Pocatello Appreciation Day as July 26, 2013.

EXECUTIVE SESSION
Council Member Jones made a motion to go into executive session at 9:36 pm pursuant to Idaho Code 67-2345. Council Member Mossman seconded the motion. A roll-call vote was taken: Council Member Jones, aye; Council Member Dye, aye; Council Member Mossman, aye. The motion carried unanimously.

Council came out of Executive Session at 9:55 pm.

Council Member Dye made a motion to direct Doug Self to write a letter to Sargent Engineers as discussed in Executive Session. Council Member Mossman seconded the motion. The motion passed with all in favor.

ADJOURNMENT

Council Member Jones made a motion to adjourn. Council Member Mossman seconded the above motion. The motion passed with all in favor and the meeting was adjourned at 9:58pm.

ATTEST:

_____ _____

Kreslyn Schuehler, City Clerk Mayor Daniel J. Powers

APPENDIX P

Water Quality Test Results and Sampling Schedule

Idaho DEQ Public Drinking Water System
Monitoring Schedule Report

Print Date: **January 18, 2013**

ID7410004 - DRIGGS CITY OF

Community water system serving 1300 people and 872 connections.
Regulated by IDAHO FALLS REGIONAL OFFICE.

The following schedules include monitoring periods between 01/01/2013 and 12/31/2021

Schedules for distribution system(s):

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
3100	COLIFORM (TCR)	2 per MN	1/1	12/31	Monthly
PBCU	LCR - LEAD COPPER	10 per 3Y to be taken 01/01/2011 and 12/31/2013 taken between the months of June through September.	6/1	9/30	**NO**
PBCU	LCR - LEAD COPPER	10 per 3Y to be taken 01/01/2014 and 12/31/2016 taken between the months of June through September.	6/1	9/30	*FUTURE
PBCU	LCR - LEAD COPPER	10 per 3Y to be taken 01/01/2017 and 12/31/2019 taken between the months of June through September.	6/1	9/30	*FUTURE
ZDBP	DBP - TTHM AND HAA5	1 per 3Y due between 01/01/2011 and 12/31/2013 taken between the months of July through September.	7/1	9/30	**NO**
ZDBP	DBP - TTHM AND HAA5	1 per 3Y due between 01/01/2014 and 12/31/2016 taken between the months of July through September.	7/1	9/30	*FUTURE
ZDBP	DBP - TTHM AND HAA5	1 per 3Y due between 01/01/2017 and 12/31/2019 taken between the months of July through September.	7/1	9/30	*FUTURE

Schedules for HIGH SCHOOL WELL, Tag # E0007616

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2013 and 03/31/2013			**NO**
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2013 and 06/30/2013			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2013 and 09/30/2013			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2013 and 12/31/2013			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2014 and 03/31/2014			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2014 and 06/30/2014			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2014 and 09/30/2014			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2014 and 12/31/2014			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2015 and 03/31/2015			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2015 and 06/30/2015			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2015 and 09/30/2015			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2015 and 12/31/2015			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2016 and 03/31/2016			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2016 and 06/30/2016			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2016 and 09/30/2016			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2016 and 12/31/2016			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2017 and 03/31/2017			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2017 and 06/30/2017			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2017 and 09/30/2017			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2017 and 12/31/2017			*FUTURE

2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2018 and 03/31/2018			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2018 and 06/30/2018			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2018 and 09/30/2018			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2018 and 12/31/2018			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 01/01/2019 and 03/31/2019			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 04/01/2019 and 06/30/2019			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 07/01/2019 and 09/30/2019			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per QT due between 10/01/2019 and 12/31/2019			*FUTURE
R226	RADS - RADIUM 226	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**
R228	RADS - RADIUM 228	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2011 and 12/31/2013			YES
URAN	RADS - URANIUM	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**
VOCS	VOCS - GROUP	1 per 6Y due between 01/01/2011 and 12/31/2016			**NO**
ZARS	ARSENIC (1005)	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZFLU	IOC - FLUORIDE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZIOC	IOCS - PHASE 2 AND 5	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019			*FUTURE
ALFA	RADS - GROSS ALPHA	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**

Schedules for HUNTSMAN WELL, Tag # 000000012115

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
2031	DALAPON	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
2031	DALAPON	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
2031	DALAPON	1 per 3Y due between 01/01/2011 and 12/31/2013			YES
2031	DALAPON	1 per 3Y due between 01/01/2011 and 12/31/2013			YES
2035	DI(2-ETHYLHEXYL) ADIPATE	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
2035	DI(2-ETHYLHEXYL) ADIPATE	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
2035	DI(2-ETHYLHEXYL) ADIPATE	1 per 3Y due between 01/01/2011 and 12/31/2013			YES
2035	DI(2-ETHYLHEXYL) ADIPATE	1 per 3Y due between 01/01/2011 and 12/31/2013			YES
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per 3Y due between 01/01/2011 and 12/31/2013			YES
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per 3Y due between 01/01/2011 and 12/31/2013			YES

2040	PICLORAM	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
2040	PICLORAM	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
2040	PICLORAM	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2040	PICLORAM	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2041	DINOSEB	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
2041	DINOSEB	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
2041	DINOSEB	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2041	DINOSEB	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2050	ATRAZINE	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
2050	ATRAZINE	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
2050	ATRAZINE	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2050	ATRAZINE	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2105	2,4-D	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
2105	2,4-D	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
2105	2,4-D	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2105	2,4-D	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2110	2,4,5-TP	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
2110	2,4,5-TP	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
2110	2,4,5-TP	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2110	2,4,5-TP	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2326	PENTACHLOROPHENOL	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
2326	PENTACHLOROPHENOL	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
2326	PENTACHLOROPHENOL	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
2326	PENTACHLOROPHENOL	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
R226	RADS - RADIUM 226	1 per QT due between 01/01/2013 and 03/31/2013	**NO**
R226	RADS - RADIUM 226	1 per QT due between 04/01/2013 and 06/30/2013	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 07/01/2013 and 09/30/2013	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2013 and 12/31/2013	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 01/01/2014 and 03/31/2014	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 04/01/2014 and 06/30/2014	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 07/01/2014 and 09/30/2014	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2014 and 12/31/2014	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 01/01/2015 and 03/31/2015	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 04/01/2015 and 06/30/2015	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 07/01/2015 and 09/30/2015	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2015 and 12/31/2015	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 01/01/2016 and 03/31/2016	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 04/01/2016 and 06/30/2016	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 07/01/2016 and 09/30/2016	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2016 and 12/31/2016	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 01/01/2017 and 03/31/2017	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 04/01/2017 and 06/30/2017	*FUTURE

R226	RADS - RADIUM 226	1 per QT due between 07/01/2017 and 09/30/2017	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2017 and 12/31/2017	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 01/01/2018 and 03/31/2018	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 04/01/2018 and 06/30/2018	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 07/01/2018 and 09/30/2018	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2018 and 12/31/2018	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 01/01/2019 and 03/31/2019	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 04/01/2019 and 06/30/2019	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 07/01/2019 and 09/30/2019	*FUTURE
R226	RADS - RADIUM 226	1 per QT due between 10/01/2019 and 12/31/2019	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2013 and 03/31/2013	**NO**
R228	RADS - RADIUM 228	1 per QT due between 04/01/2013 and 06/30/2013	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2013 and 09/30/2013	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2013 and 12/31/2013	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2014 and 03/31/2014	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 04/01/2014 and 06/30/2014	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2014 and 09/30/2014	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2014 and 12/31/2014	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2015 and 03/31/2015	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 04/01/2015 and 06/30/2015	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2015 and 09/30/2015	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2015 and 12/31/2015	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2016 and 03/31/2016	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 04/01/2016 and 06/30/2016	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2016 and 09/30/2016	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2016 and 12/31/2016	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2017 and 03/31/2017	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 04/01/2017 and 06/30/2017	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2017 and 09/30/2017	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2017 and 12/31/2017	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2018 and 03/31/2018	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 04/01/2018 and 06/30/2018	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2018 and 09/30/2018	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2018 and 12/31/2018	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 01/01/2019 and 03/31/2019	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 04/01/2019 and 06/30/2019	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 07/01/2019 and 09/30/2019	*FUTURE
R228	RADS - RADIUM 228	1 per QT due between 10/01/2019 and 12/31/2019	*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2011 and 12/31/2013	YES

URAN	RADS - URANIUM	1 per QT due between 01/01/2013 and 03/31/2013	**NO**
URAN	RADS - URANIUM	1 per QT due between 04/01/2013 and 06/30/2013	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2013 and 09/30/2013	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2013 and 12/31/2013	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 01/01/2014 and 03/31/2014	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 04/01/2014 and 06/30/2014	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2014 and 09/30/2014	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2014 and 12/31/2014	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 01/01/2015 and 03/31/2015	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 04/01/2015 and 06/30/2015	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2015 and 09/30/2015	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2015 and 12/31/2015	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 01/01/2016 and 03/31/2016	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 04/01/2016 and 06/30/2016	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2016 and 09/30/2016	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2016 and 12/31/2016	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 01/01/2017 and 03/31/2017	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 04/01/2017 and 06/30/2017	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2017 and 09/30/2017	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2017 and 12/31/2017	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 01/01/2018 and 03/31/2018	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 04/01/2018 and 06/30/2018	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2018 and 09/30/2018	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2018 and 12/31/2018	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 01/01/2019 and 03/31/2019	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 04/01/2019 and 06/30/2019	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 07/01/2019 and 09/30/2019	*FUTURE
URAN	RADS - URANIUM	1 per QT due between 10/01/2019 and 12/31/2019	*FUTURE
VOCS	VOCS - GROUP	1 per YR due between 01/01/2013 and 12/31/2013	**NO**
VOCS	VOCS - GROUP	1 per YR due between 01/01/2014 and 12/31/2014	*FUTURE
VOCS	VOCS - GROUP	1 per YR due between 01/01/2015 and 12/31/2015	*FUTURE
VOCS	VOCS - GROUP	1 per YR due between 01/01/2016 and 12/31/2016	*FUTURE
VOCS	VOCS - GROUP	1 per YR due between 01/01/2017 and 12/31/2017	*FUTURE
VOCS	VOCS - GROUP	1 per YR due between 01/01/2018 and 12/31/2018	*FUTURE
VOCS	VOCS - GROUP	1 per YR due between 01/01/2019 and 12/31/2019	*FUTURE
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2011 and 12/31/2013	YES

ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2014 and 12/31/2016	*FUTURE
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2017 and 12/31/2019	*FUTURE
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2011 and 12/31/2013	YES
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019	**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013	**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2013 and 03/31/2013	**NO**
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2013 and 06/30/2013	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2013 and 09/30/2013	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2013 and 12/31/2013	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2014 and 03/31/2014	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2014 and 06/30/2014	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2014 and 09/30/2014	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2014 and 12/31/2014	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2015 and 03/31/2015	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2015 and 06/30/2015	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2015 and 09/30/2015	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2015 and 12/31/2015	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2016 and 03/31/2016	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2016 and 06/30/2016	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2016 and 09/30/2016	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2016 and 12/31/2016	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2017 and 03/31/2017	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2017 and 06/30/2017	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2017 and 09/30/2017	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2017 and 12/31/2017	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2018 and 03/31/2018	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2018 and 06/30/2018	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2018 and 09/30/2018	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2018 and 12/31/2018	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 01/01/2019 and 03/31/2019	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 04/01/2019 and 06/30/2019	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 07/01/2019 and 09/30/2019	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per QT due between 10/01/2019 and 12/31/2019	*FUTURE

Schedules for TETON CR SPRINGS/MANIFOLD, Tag

E0007049M

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
R226	RADS - RADIUM 226	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**
R228	RADS - RADIUM 228	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2011 and 12/31/2013			**NO**
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
URAN	RADS - URANIUM	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**
VOCS	VOCS - GROUP	1 per 6Y due between 01/01/2011 and 12/31/2016			**NO**
ZARS	ARSENIC (1005)	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZFLU	IOC - FLUORIDE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZIOC	IOCS - PHASE 2 AND 5	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019			*FUTURE
ALFA	RADS - GROSS ALPHA	1 per 9Y due between 01/01/2008 and 12/31/2016			**NO**

Schedules for TETON CREEK WELL , Tag # 000000012091

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
R226	RADS - RADIUM 226	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
R228	RADS - RADIUM 228	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2011 and 12/31/2013			**NO**
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
URAN	RADS - URANIUM	1 per 6Y due between 01/01/2011 and 12/31/2016			**NO**
VOCS	VOCS - GROUP	1 per 6Y due between 01/01/2014 and 12/31/2019			*FUTURE
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2011 and 12/31/2013			**NO**
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2011 and 12/31/2013			**NO**
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2011 and 12/31/2013			**NO**
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2014 and 12/31/2016			*FUTURE
ZIOC	IOCS - PHASE 2 AND 5	1 per 3Y due between 01/01/2017 and 12/31/2019			*FUTURE
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**

ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013	
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018	*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019	*FUTURE
ALFA	RADS - GROSS ALPHA	1 per 9Y due between 01/01/2011 and 12/31/2019	**NO**

Schedules for VALLEY CENTRE WELL (BACKUP), Tag # 000000011681

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019			*FUTURE

Schedules for WELL #1, TANK (BACKUP) , Tag # E0007048

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019			*FUTURE

Schedules for WELL #2, DALLEY (BACKUP) , Tag # E0007047

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019			*FUTURE

Schedules for WELL #3, LIONS (BACKUP) , Tag # E0007046

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2011 and 12/31/2019			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2013 and 12/31/2013			**NO**
ZNO3	NITRATE	1 per YR due between 01/01/2014 and 12/31/2014			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2015 and 12/31/2015			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2016 and 12/31/2016			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2017 and 12/31/2017			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2018 and 12/31/2018			*FUTURE
ZNO3	NITRATE	1 per YR due between 01/01/2019 and 12/31/2019			*FUTURE

"*FUTURE" in the "Satisfied" column indicates that the sampling requirement begins sometime in the future. Sampling before the monitoring period begin date will not satisfy the requirement for the monitoring period.

"*See CO" in the "Satisfied" column indicates that the operator needs to contact their Compliance Officer(CO) to verify that samples have been taken and the schedule has been satisfied.

IMPORTANT NOTICE : This monitoring schedule is provided to you as a courtesy and is current as of**January 18, 2013**. This monitoring schedule may be changed or modified as needed. Please revisit the monitoring schedule tool and review the system's monitoring schedule prior to sampling as to ensure compliance with the most current monitoring requirements. Contact your public water system regulating agency if you have any questions.

Chemical and Radiological Sampling History

PWS NUMBER: ID7410004

PWS NAME: DRIGGS CITY OF

Total Records: 281

- **A PWS is only required to report the most recent detections of any contaminant at each representative sampling location.** For example, if nitrate is detected in a sample collected at Well X in 2007, but is not detected at Well X in 2008, then the system is not required to report nitrate for Well X in the 2008 CCR. **Note:** If a contaminant (e.g., nitrate) is listed with a "Y" (meaning Yes) in the non-detect column, this means that sampling results showed a non-detect that is to say, nitrate was not detected.

- **Required Language.** If a system reports a detection, the system must give the major sources of the contaminant. To report this information, go to **Appendix A of the CCR template,** find the contaminant, and copy the information from the *Major Sources in Drinking Water* column and place it in your CCR. If the system exceeds the MCL (maximum contaminant level) value of a contaminant, the system must show the potential health effects of the contaminant. To report this information, go to **Appendix A of the CCR template** , find the contaminant, and copy the information from the *Health Effects Language* column and place it in your CCR.

Abbreviations used below:

MG/L (mg/L) = milligrams per liter (mg/L = ppm in Appendix A)
UG/L (ug/L) = micrograms per liter (ug/L = ppb in Appendix A)
PIC/L (pCi/L) = picocuries per liter

Contaminant	Date Collected	Facility	Non Detect?	Detected level	Units	CCR Units
1,1,1-TRICHLOROETHANE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
1,1,1-TRICHLOROETHANE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0
1,1,1-TRICHLOROETHANE	03/15/2006	TETON CREEK WELL	Y	0	UG/L	0
1,1,1-TRICHLOROETHANE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
1,1,2-TRICHLOROETHANE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
1,1,2-TRICHLOROETHANE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0
1,1,2-TRICHLOROETHANE	03/15/2006	TETON CREEK WELL	Y	0	UG/L	0
1,1,2-TRICHLOROETHANE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
1,1-DICHLOROETHYLENE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
1,1-DICHLOROETHYLENE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0
1,1-DICHLOROETHYLENE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
1,2,4-TRICHLOROBENZENE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
1,2,4-TRICHLOROBENZENE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0
1,2,4-TRICHLOROBENZENE	03/15/2006	TETON CREEK WELL	Y	0	UG/L	0
1,2,4-TRICHLOROBENZENE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
1,2-DICHLOROETHANE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
1,2-DICHLOROETHANE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0
1,2-DICHLOROETHANE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
1,2-DICHLOROPROPANE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
1,2-DICHLOROPROPANE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0
1,2-DICHLOROPROPANE	03/15/2006	TETON CREEK WELL	Y	0	UG/L	0
1,2-DICHLOROPROPANE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
2,4,5-TP (SILVEX)	08/23/2007	HIGH SCHOOL WELL	Y	0		0
2,4,5-TP (SILVEX)	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0
2,4,5-TP (SILVEX)	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
2,4-D	08/23/2007	HIGH SCHOOL WELL	Y	0		0
2,4-D	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0
2,4-D	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0
ALACHLOR (LASSO)	01/14/2009	HIGH SCHOOL WELL	Y	0		0
ALACHLOR (LASSO)	12/04/2008	WELL #1, TANK (BACKUP)	Y	0	MG/L	0
ALACHLOR (LASSO)	07/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
ALACHLOR (LASSO)	04/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0
ALACHLOR (LASSO)	03/05/2008	HIGH SCHOOL WELL	Y	0	MG/L	0
ALACHLOR (LASSO)	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0

ALACHLOR (LASSO)	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
ANTIMONY	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
ANTIMONY	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
ANTIMONY	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
ARSENIC	08/23/2007	HIGH SCHOOL WELL	Y	0			
ARSENIC	03/15/2006	TETON CREEK WELL	Y	0			
ARSENIC	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
ATRAZINE	01/14/2009	HIGH SCHOOL WELL	Y	0		0	
ATRAZINE	12/04/2008	WELL #1, TANK (BACKUP)	Y	0	MG/L	0	
ATRAZINE	07/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
ATRAZINE	04/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
ATRAZINE	03/05/2008	HIGH SCHOOL WELL	Y	0	MG/L	0	
ATRAZINE	10/05/2007	HIGH SCHOOL WELL	Y	0		0	
ATRAZINE	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
ATRAZINE	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
ATRAZINE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
BARIUM	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
BARIUM	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
BARIUM	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
BENZENE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
BENZENE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0	
BENZENE	03/15/2006	TETON CREEK WELL	Y	0	UG/L	0	
BENZENE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
BENZO (A) PYRENE	01/14/2009	HIGH SCHOOL WELL	Y	0		0	
BENZO (A) PYRENE	12/04/2008	WELL #1, TANK (BACKUP)	Y	0	MG/L	0	
BENZO (A) PYRENE	07/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
BENZO (A) PYRENE	04/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
BENZO (A) PYRENE	03/05/2008	HIGH SCHOOL WELL	Y	0	MG/L	0	
BENZO (A) PYRENE	10/05/2007	HIGH SCHOOL WELL	Y	0		0	
BENZO (A) PYRENE	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
BENZO (A) PYRENE	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
BENZO (A) PYRENE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
BERYLLIUM	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
BERYLLIUM	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
BERYLLIUM	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
BHC-GAMMA (LINDANE)	07/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
BHC-GAMMA (LINDANE)	04/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
BHC-GAMMA (LINDANE)	03/05/2008	HIGH SCHOOL WELL	Y	0	MG/L	0	
BHC-GAMMA (LINDANE)	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
BHC-GAMMA (LINDANE)	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CADMIUM	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
CADMIUM	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
CADMIUM	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CARBOFURAN	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
CARBOFURAN	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CARBON TETRACHLORIDE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
CARBON TETRACHLORIDE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0	
CARBON TETRACHLORIDE	03/15/2006	TETON CREEK WELL	Y	0	UG/L	0	
CARBON TETRACHLORIDE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CHLORDANE	07/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
CHLORDANE	04/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
CHLORDANE	03/05/2008	HIGH SCHOOL WELL	Y	0	MG/L	0	
CHLORDANE	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
CHLORDANE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CHROMIUM	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
CHROMIUM	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
CHROMIUM	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CIS-1,2-DICHLOROETHYLENE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
CIS-1,2-DICHLOROETHYLENE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0	
CIS-1,2-DICHLOROETHYLENE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
CYANIDE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
DALAPON	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
DALAPON	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
DALAPON	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
DI(2-ETHYLHEXYL) - ADIPATE	01/14/2009	HIGH SCHOOL WELL	Y	0		0	
DI(2-ETHYLHEXYL) - ADIPATE	12/04/2008	WELL #1, TANK (BACKUP)	Y	0	MG/L	0	
DI(2-ETHYLHEXYL) - ADIPATE	07/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
DI(2-ETHYLHEXYL) - ADIPATE	04/23/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
DI(2-ETHYLHEXYL) - ADIPATE	03/05/2008	HIGH SCHOOL WELL	Y	0	MG/L	0	
DI(2-ETHYLHEXYL) - ADIPATE	10/05/2007	HIGH SCHOOL WELL	Y	0		0	
DI(2-ETHYLHEXYL) - ADIPATE	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
DI(2-ETHYLHEXYL) - ADIPATE	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
DI(2-ETHYLHEXYL) - ADIPATE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
DI(2-ETHYLHEXYL) - PHTHALATE	01/14/2009	HIGH SCHOOL WELL	N	3.37	UG/L	3.37	
DI(2-ETHYLHEXYL) - PHTHALATE	12/04/2008	WELL #1, TANK (BACKUP)	N	1.71	UG/L	1.71	
DI(2-ETHYLHEXYL) - PHTHALATE	07/23/2008	HIGH SCHOOL WELL	N	7.1	UG/L	7.1	
DI(2-ETHYLHEXYL) - PHTHALATE	04/23/2008	HIGH SCHOOL WELL	N	4.6	UG/L	4.6	
DI(2-ETHYLHEXYL) - PHTHALATE	03/05/2008	HIGH SCHOOL WELL	N	7.6	UG/L	7.6	*
DI(2-ETHYLHEXYL) - PHTHALATE	03/05/2008	HIGH SCHOOL WELL	N	7.6	UG/L	7.6	
DI(2-ETHYLHEXYL) - PHTHALATE	10/05/2007	HIGH SCHOOL WELL	Y	0		0	
DI(2-ETHYLHEXYL) - PHTHALATE	08/23/2007	HIGH SCHOOL WELL	N	22	UG/L	22	
DI(2-ETHYLHEXYL) - PHTHALATE	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	
DI(2-ETHYLHEXYL) - PHTHALATE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	N	2.2	UG/L	2.2	
DIBROMOCHLOROPROPANE (DBCP)	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
DIBROMOCHLOROPROPANE (DBCP)	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
DICHLOROMETHANE	03/05/2008	HIGH SCHOOL WELL	Y	0	UG/L	0	
DICHLOROMETHANE	08/15/2007	HIGH SCHOOL WELL	Y	0	MG/L	0	
DICHLOROMETHANE	08/03/2005	VALLEY CENTRE WELL (BACKUP)	Y	0	MG/L	0	
DINOSEB	08/23/2007	HIGH SCHOOL WELL	Y	0		0	
DINOSEB	03/15/2006	TETON CREEK WELL	Y	0	MG/L	0	

APPENDIX Q

IDEQ Sanitary Survey

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

June 28, 2010

City of Driggs
Attn: Jared Gunderson, Public Works Director
P.O. Box 48
Driggs, ID 83422

Re: Sanitary Survey Results for the City of Driggs Public Water System (PWS) # 7410004

Dear Jared:

On June 8, 2010 you and I conducted a sanitary survey of the Driggs public water system. I appreciated your help, cooperation, and support in scheduling and performing this survey with me.

A sanitary survey is a security and safety measure that should be performed every 5 years for groundwater sources. The purpose of the survey was to identify any areas where the system does not meet the requirements of the State of Idaho Drinking Water Rules and Regulations and identify potential sources of contamination.

During this inspection there were **(11) deficiencies** observed that need to be addressed in order to comply with the State of Idaho Drinking Water Rules and Regulations (IDAPA). A Sanitary Deficiency is defined in IDAPA 58.01.08.003.71. that states: As identified during a sanitary survey, any defect in a system's design, operation, maintenance, or administration, as well as any failure or malfunction of any system component, that the Department determines to cause, of have the potential to cause, risk to health and safety, or that could affect the reliable delivery of safe drinking water.

Recommendations are made as an item to consider in order to improve the overall operations of the water system. Recommendations are not deemed as an eminent health threat, but are helpful suggests that should be considered to enhance the operations of the water system. Some recommendations maybe in violation of the current Rule or may not, but do not present a potential health or safety concern.

Overall, the Driggs public water system is in good order. A copy of the Enhanced Sanitary Survey form, photo log, and monitoring schedule are enclosed for your records. DEQ appreciates your commitment to providing adequate and responsive service, as well as supplying a safe and reliable supply of drinking water to your users.

If you have any questions or need any further assistance, please feel free to call me at 528-2650.

Sincerely,

Rochelle Mason

Rochelle Mason
Drinking Water Quality Analyst

Encl: (3)

State of Idaho Public Water System Enhanced Sanitary Survey

WATER SYSTEM INVENTORY INFORMATION

SURVEY DATE	PWS #
6/8/2010 (mm/dd/yyyy)	7410004

Name of Public Water System: City of Driggs		# of Groundwater Sources: 7	# of Storage Facilities: 2
		#of Surface Water Sources: NA	Total Storage (gal) 1,300,000
Date of Last Survey: 04/19/2005	Health District: ☑ N/A	DEQ Region: ☐ N/A IFDEQ	County: Teton
Number of Service Connections: 884	Residential Population: 1300	Status: ☑ Approved ☐ Disapproved	Water Purchased From: ☑ N/A PWS #: Name:
			Water Sold To: ☑ N/A PWS #: Name:

Owner Type:	Legal Entity:	Water System Classification:	Combined Sources?	System Classification:	Seasonal Operation Dates: ☑ N/A
City	City	☑ Community Water System ☐ Nontransient Noncommunity ☐ Transient Noncommunity - NC	☑ Yes ☐ No If yes, ☐ Well Field ☑ Manifold/Spring Box Sources Combined: Teton Spring/well	Distribution: Dist 1 Treatment: ☐ N/A Disinfection	Date Open: Date Closed:

Responsible Charge Operator (DO): ☐ No DO ☐ N/A - Identify Operator for GW-NC PWS)

☑ Mr. ☐ Ms. Jared Gunderson

Properly Licensed? ☑ Yes ☐ No ☐ N/A-GW-NC	License Type: DWD3 ☐ N/A	Mailing Address: P.O. Box 48
Mailing Address: P.O. Box 48	License Number: DWD3-15244	City, State, Zip Code: Driggs, ID 83422
City, State, Zip Code: Driggs, ID 83422	Telephone Day: 208-390-1709 Night: Fax:	Telephone Day: Night: Fax:
E-mail: pwdriggs@ida.net		E-mail:

Legal Owner's Name: ☐ Mr. ☐ Ms. City of Driggs

Substitute Responsible Charge Operator (OP): ☐ No OP ☐ N/A for GW-NC PWS

☑ Mr. ☐ Ms. Henry McCracken

Properly Licensed? ☑ Yes ☐ No ☐ N/A-GW-NC	License Type: DWD1 ☐ N/A	Mailing Address: P.O. Box 48
Mailing Address: P.O. Box 48	License Number: DWD1-12892	City, State, Zip Code: Driggs, ID 83422
City, State, Zip Code: Driggs, ID 83422	Telephone Day: 208-390-0594 Night: Fax:	Physical location of the PWS (Township, Range, Section):
E-mail: hjmidaho@msn.com		

Individuals present during inspection:

Name	Title
Jared Gunderson	operator

Samples taken at the time of survey by inspector?	Survey performed by:	Agency:
☐ Yes ☑ No	Name: Rochelle Mason	☑ IDEQ
If yes, what:	Title: Drinking Water Analyst	☐ Health Dept.
	Phone #: 208-528-2650	☐ Other:

yes	no	n/a	unk	note	General Information
☑	☐	☐	☐	☐	1. Have previously required Significant Deficiencies & Deficiencies been addressed?
☑	☐	☐	☐	☐	2. Have modifications been made to the PWS since the last ESS?
☑	☐	☐	☐	☐	3. If yes, are the modifications considered to be significant?
☑	☐	☐	☐	☐	4. If yes, were plans and specs submitted to and approved by DEQ?
☐	☑	☐	☐	☐	5. Are there any known issues or problems with equipment or operation of the PWS that could negatively effect the quality of the water produced? *(If yes, comment)*

Comments:

New Construction since last survey: Teton Creek well and pump facility. Valley Centre well and pump facility, Huntsman Spring well (proposed source at this time) has been drilled and initial monitoring completed - water right transfer to Driggs has been withdrawn

Sanitary Survey Index

Modules used.	#
☑ General Information	1
☑ Groundwater Source	7
☑ Storage	2
☑ Hydropneumatic Tanks	1
☑ Distribution	1
☑ Pumping	1
☑ Financial Capacity	1
☑ Managerial Capacity	1
☐ Treatment Application	
☑ Disinfection	1
☐ Notes	
☑ Photo Log	1
Total Modules	24

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: E007049M	Common Name of Source: Teton Creek Infiltration Gallery	Source: ☐ Well → ☐ Manifold; ☐ Spring → ☑ Spring Box	Is this Source Treated? ☑ Yes ☐ No
Physical Location: Wyoming			Treatment Objective: ☐ N/A
			Disinfection
			Treatment Types: ☐ N/A (Identify Treatment Train in Comments)
Is there a well log for the groundwater source? ☐ Yes ☐ No ☑ N/A ☐ Unk			Miox

Pump Capacity (GPM)	Casing Size (In)	Date Drilled:	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
700 ☐ Unk	☐ Unk	☐ Unk	☐ Unk	☐ Unk	☐ Unk	☐ Unk

Is the Casing Screened?	Screen Depth (Ft):	Is the Casing Perforated?	Perforation Depth (Ft):
☐ Yes ☐ No ☐ Unk ☐ N/A	☐ N/A ☐ Unk From: To:	☐ Yes ☐ No ☐ Unk ☐ N/A	☐ N/A ☐ Unk From: To:

Latitude (Decimal): 43.758858

Longitude (Decimal): 111.01239

All Sources

1. This source is: ☑ Active ☐ Proposed ☐ Inactive ☐ Emergency (<60 days per year)

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	2. Has there been a Source Water Assessment conducted for the source? Date: 2001
☐	☑	☐	☐	☑	3. Has a final GWUDI determination been done for this source? Date:

☑ N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
☐	☐		☐	☐	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77) ☐ Significant ☐ Deficiency
					Are the following minimum distances from the PWS well being met?
☐	☐		☐	☐	5. - Gravity sewer line.....50 Ft.
☐	☐		☐	☐	6. - Pressure sewer line.....100 Ft.
☐	☐		☐	☐	7. - Individual home septic tank.....100 Ft.
☐	☐		☐	☐	8. - Individual home disposal field.....100 Ft.
☐	☐		☐	☐	9. - Individual home seepage pit.....100 Ft.
☐	☐		☐	☐	10. - Privies.....100 Ft.
☐	☐		☐	☐	11. - Livestock.....50 Ft.
☐	☐		☐	☐	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances.....50 Ft.
☐	☐		☐	☐	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
☐	☐		☐	☐	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
☐	☐		☐	☐	15. Is the well in a pit? If yes, Date constructed:
☐	☐	☐	☐	☐	16. Was the well that is located in a pit installed after 11/5/64?
☐	☐	☐	☐	☐	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?
yes	no	n/a	unk	note	
☐	☐	☐	☐	☐	18. Is the well protected from unauthorized entry? *(Recommended)*
☐	☐	☐	☐	☐	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor? ☐ Significant ☐ Deficiency
☐	☐	☐	☐	☐	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
☐	☐		☐	☐	21. Is the well provided with a sanitary cap that prevents surface water entry?
☐	☐		☐	☐	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

COMMENTS:
(Please indicate question number)

3. **Deficiency:** Department requested system in 2005 to conduct a GWUDI evaluation because the infiltration gallery was reconstructed in 2003-04; no record is on file that confirms a MPA has been completed

GROUNDWATER SOURCES - PG. 2

Common Name	SURVEY DATE		PWS #
ton Creek Infiltration Gall	6/8/2010	(mm/dd/yyyy)	7410004

yes	no	n/a	unk	note		
					WELL INFORMATION (cont.)	
☐	☐	☐	☐	☐	23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)	
☐	☐	☐	☐	☐	24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? ____ gallons	☐ Unnecessary
☐	☐	☐	☐	☐	25. Is a pressure gauge provided at all installations and is it maintained and working properly? ____ psi.	
☐	☐	☐	☐	☐	26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?	
yes	no	n/a	unk	note	**PUMP HOUSE** *(Any structure containing important water system components)*	
☐	☐	☐	☐	☐	27. Is the source located in a pump house?	
☐	☐	☐	☐	☐	28. Is the pump house kept clean and in good repair? *(Floor cracks?)*	
☐	☐	☐	☐	☐	29. Is the pump house protected from unauthorized personnel?	
☐	☐	☐	☐	☐	30. Does the pump house have adequate lighting throughout? *(Recommended)*	
☐	☐	☐	☐	☐	31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?	
☐	☐	☐	☐	☐	32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment?	☐ Significant ☐ Deficiency
☐	☐	☐	☐	☐	33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing?	☐ Significant ☐ Deficiency
☐	☐	☐	☐	☐	34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?	
☐	☐	☐	☐	☐	35. Is the sump for pump house floor drains closer than 30 feet from the well?	
☐	☐	☐	☐	☐	36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?	
yes	no	n/a	unk	note	**SPRING INFORMATION**	
☑	☐	☐	☐	☑	37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?	
☑	☐	☐	☐	☑	38. Is surface water diverted from the 100 foot protection zone around the spring?	
☑	☐	☐	☐	☐	39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?	
☐	☑	☐	☐	☑	40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)	
☑	☐	☐	☐	☑	41. Is a flow meter or other flow measuring device provided?	
yes	no	n/a	unk	note	**SPRING BOX INFORMATION** *(Not all existing springs have a spring box)*	
☐	☐	☐	☑	☑	42. Is the spring box equipped with a screened overflow?	
☑	☐	☐	☐	☐	43. Is the supply intake located above the floor of the collection chamber?	
☑	☐	☐	☐	☐	44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?	
☑	☐	☐	☐	☐	45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?	
☑	☐	☐	☐	☐	46. Is the access port a framed opening that is at least 4 inches high with a locking device?	
☑	☐	☐	☐	☐	47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?	

COMMENTS:
(Please indicate question number)

37. (**Fig. 2**) chain-linked fence topped with bared wire

38. (**Fig. 1**) lot ground level is sloped away from spring facility/buiding

40. Not considered a deficiency: source sampling is conducted as a "grab" sample within the Spring gallery.

41. Recommendation: (**Fig. 5**) replacing the sonic type flow meter upon the Teton Spring discharge line with a more accurate meter. An instantaneous and totalizing flow meter equipped with nonvolatile memory is recommended to be installed upon system modifications (No action required at this time)

42. (**Fig. 11**) overflows into a near by stream (area secured with bared wire fence)

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: [redacted]

Common Name of Source: Teton Creek Well

Source: [redacted] ☑ Well → ☐ Manifold ☐ Spring → ☐ Spring Box

Is this Source Treated? ☑ Yes ☐ No

Treatment Objective: ☐ N/A

Physical Location: [redacted]
Teton Creek - phase III

Disinfection Treatment Types: ☐ N/A
(Identify Treatment Train in Comments)
hypochlorination

Is there a well log for the groundwater source? ☑ Yes ☐ No ☐ N/A ☐ Unk

Pump Capacity (GPM)	Casing Size (In)	Date Drilled	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
500 ☐ Unk	16 ☐ Unk	2005 ☐ Unk	300 ☐ Unk	300 ☐ Unk	106 ☐ Unk	87 ☐ Unk

Is the Casing Screened? ☑ Yes ☐ No ☐ Unk ☐ N/A

Screen Depth (Ft): ☐ N/A ☐ Unk
From: 141
To: 212

Is the Casing Perforated? ☐ Yes ☑ No ☐ Unk ☐ N/A

Perforation Depth (Ft): ☑ N/A ☐ Unk
From:
To:

Latitude (Decimal): 43.44482

Longitude (Decimal): 111.03.083

All Sources

1. This source is: ☑ Active ☐ Proposed ☐ Inactive ☐ Emergency (<60 days per year)

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	2. Has there been a Source Water Assessment conducted for the source? Date: 2007
☑	☐	☐	☐	☐	3. Has a final GWUDI determination been done for this source? Date: 2010

☐ N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
☑	☐		☐	☐	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77) ☐ Significant ☐ Deficiency

Are the following minimum distances from the PWS well being met?

☑	☐		☐	☐	5. - Gravity sewer line....50 Ft.
☑	☐		☐	☐	6. - Pressure sewer line....100 Ft.
☑	☐		☐	☐	7. - Individual home septic tank....100 Ft.
☑	☐		☐	☐	8. - Individual home disposal field....100 Ft.
☑	☐		☐	☐	9. - Individual home seepage pit....100 Ft.
☑	☐		☐	☐	10. - Privies....100 Ft.
☑	☐		☐	☐	11. - Livestock....50 Ft.
☑	☐		☐	☐	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances....50 Ft.
☐	☑		☐	☐	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
☐	☑		☐	☐	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
☐	☑		☐	☐	15. Is the well in a pit? If yes, Date constructed:
☐	☐	☑	☐	☐	16. Was the well that is located in a pit installed after 11/5/64?
☐	☐	☑	☐	☐	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?
☑	☐	☐	☐	☐	18. Is the well protected from unauthorized entry? *(Recommended)*
☐	☐	☑	☐	☐	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor? ☐ Significant ☐ Deficiency
☐	☐	☑	☐	☐	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
☑	☐		☐	☐	21. Is the well provided with a sanitary cap that prevents surface water entry?
☑	☐		☐	☐	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

COMMENTS:
(Please indicate question number)

Form 238-7
11/97
10/01
Andrew

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT
Use Typewriter or Ballpoint pen

Office Use Only
Inspected by: _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1 WELL TAG NO.
DRILLING PERMIT NO #D0037953
Other IDWR NO.

2 OWNER:
Name: Teton Creek Resort
Address: PO Box 1143
City: Wilson State: WY Zip 83014

3 LOCATION OF WELL by legal description.

N / S

Twp 5 ☑ North ☐ South
Rge 46 ☑ East ☐ West
Sec 20 ____ 1/4 (10 Acres) NE 1/4 (40 Acres) SW 1/4 (160 Acres)
Gov't Lot County Teton
Lat: 43:44.482 Long: 111.03.083

Address of Well Site: Approx 250 E 180 N
City: Driggs
(Give at least name of Road + Distance to Road or Landmark)

Lot No. ____ Blk No ____ Subd. Name: Teton Creek Resort

4 USE:
☐ Domestic ☑ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5 TYPE OF WORK:
☑ New Well ☐ Modify ☐ Abondonment ☐ Other ____

6 DRILL METHOD:
☑ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other ____

7 SEALING PROCEDURES:

SEAL/FILTER PACK			AMOUNT	
Material	From	To	Sacks/Pounds	Method
Neat Cement	0	80'	6580 lbs	Tremie
Bentonite	80'	106'	650 lbs	Tremie

Was drive shoe used? ☑ Yes ☐ No Shoe Depth(s) 136'
Was drive shoe seal tested ? ☐ Yes ☑ No How? ____

8 CASING/LINER:

Dia	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12"	+2'	136'	0.375	Steel	☑	☐	☑	☐
10'	134'	140'	0.322	Steel	☑	☐	☑	☐
10"	212'	231'	0.322	Steel	☑	☐	☑	☐

Length of Headpipe: 9' Length of Tailpipe: 19'

9 PERFORATIONS/SCREENS:

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
141'	212'	060		10"	Stainless	☑	☐
						☐	☐
						☐	☐

 # STATIC WATER LEVEL OR ARTESIAN PRESSURE:
87 ft below ground Artesian Pressure: ____ lb
Depth flow encountered: ____ ft
Describe access port or control devices: Sanitary Well Cap

11 WELL TESTS:
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian
Flowing Artesian

Yield	Drawdown	Pumping Level	Time
500 gpm	33'	120'	26.5 hrs

Water Temp ____ Bottom hole temp ____
Water Quality test or comments: ____
Depth first water encountered: 100'

12 LITHOLOGIC LOG:

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
16"	0	3	Soil		X
	3	60	Cobbles, clay, gravel, boulders		X
	60	80	Boulders. clay, gravel		X
12"	80	100	Cobbles, gravel, boulders		X
	100	104	Gravel, sand, boulders	X	
	104	114	Gravel, sand, boulders	X	
	114	120	Clay, gravel	X	
	120	125	Cobbles, gravel, sand	X	
	125	132	Cobbles, gravel, sand	X	
	132	140	Clay, boulders	X	
	140	146	Cobbles, gravel, sand	X	
	146	156	Cobbles, gravel, sand	X	
	156	162	Sand cinders, gravel	X	
	162	167	Gravel, sand, cobbles	X	
	167	180	Gravel, sand, cobbles	X	
	180	185	Rhyolite	X	

CONTINUED

Completed Depth: 300 ft
Date Started: 12/10/05
Date Completed: 03/16/06

13 DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Firm: ANDREW WELL DRILLING SERVICES, INC. Firm: #5
Firm Official: Roger P. Buchanan Date: 3/28/2006
and
Supervisor/Operator: Raymond Hernandez Date: 3/28/2006

5181

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Use Typewriter or Ballpoint pen

1 DRILLING PERMIT NO. #D0037953

Other IDWR NO.

12 LITHOLOGIC LOG:

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	185	187	Rhyolite	X	
	187	206	Boulders, sand, gravel	X	
	206	214	Boulders	X	
	214	220	Conglomorate	X	
	220	230	Rhyolite		X
	230	300	Rhyolite		X

Completed Depth: 300 ft

Date Started: 12/10/2005

Date Completed: 3/16/2006

GROUNDWATER SOURCES - PG. 2

Common Name	SURVEY DATE		PWS #
Teton Creek Well	6/8/2010	(mm/dd/yyyy)	7410004

yes	no	n/a	unk	note	WELL INFORMATION (cont.)
	✓			✓	23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
✓					24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? ☐ Unnecessary ____ gallons
✓					25. Is a pressure gauge provided at all installations and is it maintained and working properly? ____ psi
✓					26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?

yes	no	n/a	unk	note	PUMP HOUSE *(Any structure containing important water system components)*
✓					27. Is the source located in a pump house?
✓					28. Is the pump house kept clean and in good repair? *(Floor cracks?)*
✓					29. Is the pump house protected from unauthorized personnel?
✓					30. Does the pump house have adequate lighting throughout? *(Recommended)*
	✓			✓	31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?
✓					32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment? ☐ Significant ☐ Deficiency
✓					33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing? ☐ Significant ☐ Deficiency
✓					34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?
		✓			35. Is the sump for pump house floor drains closer than 30 feet from the well?
		✓			36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?

yes	no	n/a	unk	note	SPRING INFORMATION
		✓			37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?
		✓			38. Is surface water diverted from the 100 foot protection zone around the spring?
		✓			39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?
		✓			40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
		✓			41. Is a flow meter or other flow measuring device provided?

yes	no	n/a	unk	note	SPRING BOX INFORMATION *(Not all existing springs have a spring box)*
		✓			42. Is the spring box equipped with a screened overflow?
		✓			43. Is the supply intake located above the floor of the collection chamber?
		✓			44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?
		✓			45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?
		✓			46. Is the access port a framed opening that is at least 4 inches high with a locking device?
		✓			47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?

COMMENTS:
(Please indicate question number)

23. - 31. (Fig. 19) deficiencies corrected during inspection - backflow device placed

34. no floor drain - sloped floor - not considered a deficiency

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: E0007048

Common Name of Source: Tank Well

Source: ☑ Well → ☐ Manifold; ☐ Spring → ☐ Spring Box

Is this Source Treated? ☐ Yes ☑ No

Treatment Objective: ☑ N/A

Physical Location: next to 300,000 storage tank

Treatment Types: ☑ N/A (Identify Treatment Train in Comments)

Is there a well log for the groundwater source? ☑ Yes ☐ No ☐ N/A ☐ Unk

Pump Capacity (GPM)	Casing Size (In)	Date Drilled	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
400 ☐ Unk	14 ☐ Unk	1987 ☐ Unk	260 ☐ Unk	255 ☐ Unk	40 ☐ Unk	129 ☐ Unk

Is the Casing Screened? ☐ Yes ☑ No ☐ Unk ☐ N/A

Screen Depth (Ft): ☑ N/A ☐ Unk — From: To:

Is the Casing Perforated? ☐ Yes ☑ No ☐ Unk ☐ N/A

Perforation Depth (Ft): ☑ N/A ☐ Unk — From: To:

Latitude (Decimal): 43.0743233

Longitude (Decimal): 111.067799

All Sources

1. This source is: ☐ Active ☐ Proposed ☐ Inactive ☑ Emergency (<60 days per year)

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	2. Has there been a Source Water Assessment conducted for the source? Date: 2001
☑	☐	☐	☐	☐	3. Has a final GWUDI determination been done for this source? Date: 2005

☐ N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
☑	☐		☐	☑	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77)
☐ Significant	☐ Deficiency				

Are the following minimum distances from the PWS well being met?

☑	☐		☐	☐	5. - Gravity sewer line.....50 Ft.
☑	☐		☐	☐	6. - Pressure sewer line.....100 Ft.
☑	☐		☐	☐	7. - Individual home septic tank.....100 Ft.
☑	☐		☐	☐	8. - Individual home disposal field.....100 Ft.
☑	☐		☐	☐	9. - Individual home seepage pit.....100 Ft.
☑	☐		☐	☐	10. - Privies.....100 Ft.
☑	☐		☐	☐	11. - Livestock.....50 Ft.
☑	☐		☐	☐	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances.....50 Ft.
☐	☑		☐	☐	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
☐	☑		☐	☐	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
☐	☑		☐	☐	15. Is the well in a pit? If yes, Date constructed:
☐	☐	☑	☐	☐	16. Was the well that is located in a pit installed after 11/5/64?
☐	☐	☑	☐	☐	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	18 Is the well protected from unauthorized entry? *(Recommended)*
☐	☑	☐	☐	☑	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor?
☐ Significant	☑ Deficiency				
☐	☑	☐	☐	☑	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
☑	☐		☐	☐	21. Is the well provided with a sanitary cap that prevents surface water entry?
☑	☐		☐	☑	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

COMMENTS:
(Please indicate question number)

4. Recommendation: (Fig. 22) placing a chain-linked fence to secure the area from potential vandalism and to define the well lot within the residential area.
19. - 22. Deficiency: (Fig. 26) Upon system upgrades casing is required to be extended to meet current IDAPA requirements
20. Not considered a deficency - currnet vent is acceptable

Form 238-7
9-82

Tank Well

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

RECEIVED OCT 18 1988 Department of Water Resources

1. WELL OWNER

Name City of Driggs

Address Driggs, Idaho 83472

Owner's Permit No. 22 7524
22-88-Z-004

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	14 inches	1 feet	166 feet
.250 inches	10 inches	205 feet	255 feet
inches	inches	feet	feet
inches	inches	feet	feet

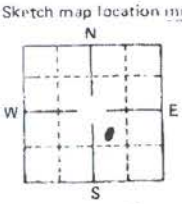
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 40+ Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port Well Cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name Targhee Ranch

Lot No. 35 Block No. 2

County Teton

NW ¼ SE ¼ Sec. 19, T. 5 N/S, R. 46 E/W

7. WATER LEVEL

Static water level 129 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature _____ °F. Quality Good
Describe artesian or temperature zones below

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
14	0	4	Soil		X
	4	25	Gravel & large boulders		X
	25	112	Clay gravel & large boulders		X
	112	184	Cemented gravel	X	
	184	198	Loose gravel	X	
	198	205	Hard rock formation		X
	205	234	Firm limestone	X	
	234	240	Broken limestone	X	
	240	249	Firm limestone		X
	249	260	Broken limestone	X	

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10. Work started 7/6/87 finished 7/31/87

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Andrew Well Drilling Firm No. 5

Address 1268 E. 17th Street Date 8/20/87
Idaho Falls, Idaho 83404

Signed by (Firm Official) Maxwell F. Andrew

and

(Operator) Dale Hulse

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

GROUNDWATER SOURCES - PG. 2

Common Name	SURVEY DATE	PWS #
Tank Well	6/8/2010 (mm/da/yyyy)	7410004

yes	no	n/a	unk	note	WELL INFORMATION (cont.)
	✓			✓	23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
✓					24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? [ ] gallons (☐ Unnecessary)
✓					25. Is a pressure gauge provided at all installations and is it maintained and working properly? [ ] psi.
✓				✓	26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?

yes	no	n/a	unk	note	PUMP HOUSE *(Any structure containing important water system components)*
		✓			27. Is the source located in a pump house?
		✓			28. Is the pump house kept clean and in good repair? *(Floor cracks?)*
		✓			29. Is the pump house protected from unauthorized personnel?
		✓			30. Does the pump house have adequate lighting throughout? *(Recommended)*
		✓			31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?
		✓			32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment? (☐ Significant ☐ Deficiency)
		✓			33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing? (☐ Significant ☐ Deficiency)
		✓			34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?
		✓			35. Is the sump for pump house floor drains closer than 30 feet from the well?
		✓			36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?

yes	no	n/a	unk	note	SPRING INFORMATION
		✓			37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?
		✓			38. Is surface water diverted from the 100 foot protection zone around the spring?
		✓			39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?
		✓			40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
		✓			41. Is a flow meter or other flow measuring device provided?

yes	no	n/a	unk	note	SPRING BOX INFORMATION *(Not all existing springs have a spring box)*
		✓			42. Is the spring box equipped with a screened overflow?
		✓			43. Is the supply intake located above the floor of the collection chamber?
		✓			44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?
		✓			45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?
		✓			46. Is the access port a framed opening that is at least 4 inches high with a locking device?
		✓			47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?

COMMENTS:
(Please indicate question number)

23. Recommendation: upon system modifications it is recommended installing a sampling hydrant instead of using the firehydrant as a source sampling location (no actions are required at this time).
26. fire hydrant is used

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: E0007047

Common Name of Source: Dalley Well

Source: ☑ Well → ☐ Manifold; ☐ Spring → ☐ Spring Box

Is this Source Treated? ☐ Yes ☑ No

Treatment Objective: ☑ N/A

Physical Location: no well log available through IDWR due to age of well

Treatment Types: ☑ N/A (Identify Treatment Train in Comments)

Is there a well log for the groundwater source? ☐ Yes ☑ No ☐ N/A ☐ Unk

Pump Capacity (GPM)	Casing Size (In)	Date Drilled:	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
30 ☐ Unk	14 ☐ Unk	1956 ☐ Unk	☑ Unk	☑ Unk	☑ Unk	☑ Unk

Is the Casing Screened?	Screen Depth (Ft): ☐ N/A ☑ Unk	Is the Casing Perforated?	Perforation Depth (Ft): ☐ N/A
☐ Yes ☐ No ☑ Unk ☐ N/A	From: To:	☐ Yes ☐ No ☑ Unk ☐ N/A	From: To: ☑ Unk

Latitude (Decimal): 43.729953

Longitude (Decimal): 111.101258

All Sources

1. This source is: ☐ Active ☐ Proposed ☐ Inactive ☑ Emergency (<60 days per year)

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	2. Has there been a Source Water Assessment conducted for the source? Date: 2001
☑	☐	☐	☐	☐	3. Has a final GWUDI determination been done for this source? Date: 2005

☐ N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
☑	☐		☐	☐	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77)

☐ Significant ☐ Deficiency

Are the following minimum distances from the PWS well being met?

☑	☐		☐	☐	5. - Gravity sewer line.....50 Ft.
☑	☐		☐	☐	6. - Pressure sewer line.....100 Ft.
☑	☐		☐	☐	7. - Individual home septic tank.....100 Ft.
☑	☐		☐	☐	8. - Individual home disposal field.....100 Ft.
☑	☐		☐	☐	9. - Individual home seepage pit.....100 Ft.
☑	☐		☐	☐	10. - Privies.....100 Ft.
☑	☐		☐	☐	11. - Livestock.....50 Ft.
☑	☐		☐	☐	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances.....50 Ft.
☐	☑		☐	☐	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
☐	☑		☐	☐	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
☐	☑		☐	☐	15. Is the well in a pit? If yes, Date constructed:
☐	☐	☑	☐	☐	16. Was the well that is located in a pit installed after 11/5/64?
☐	☐	☑	☐	☐	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	18 Is the well protected from unauthorized entry? *(Recommended)*
☐	☑	☐	☐	☑	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor?
☐	☑	☐	☐	☑	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
☑	☐		☐	☐	21. Is the well provided with a sanitary cap that prevents surface water entry?
☑	☐		☐	☑	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

☐ Significant ☑ Deficiency

COMMENTS:
(Please indicate question number)

Recommendation: abandoning this source since it produces approximately only 30 gpm. Unknown drinking water construction standards are met because of no well log

19.- 22. Deficiency: (Fig. 37) casing needs to be extended upon system modifications to meet current IDAPA requirements

20. Not considered a deficiency - current vent acceptable

GROUNDWATER SOURCES - PG. 2

Common Name	SURVEY DATE	PWS #
Dalley Well	6/8/2010 (mm/dd/yyyy)	7410004

yes	no	n/a	unk	note		
					WELL INFORMATION (cont.)	
	✓			✓	23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)	
✓					24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? ____ gallons	☐ Unnecessary
✓					25. Is a pressure gauge provided at all installations and is it maintained and working properly? ____ psi.	
✓				✓	26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?	
yes	no	n/a	unk	note	**PUMP HOUSE** *(Any structure containing important water system components)*	
	✓				27. Is the source located in a pump house?	
		✓			28. Is the pump house kept clean and in good repair? *(Floor cracks?)*	
		✓			29. Is the pump house protected from unauthorized personnel?	
		✓			30. Does the pump house have adequate lighting throughout? *(Recommended)*	
		✓			31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?	
		✓			32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment?	☐ Significant ☐ Deficiency
		✓			33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing?	☐ Significant ☐ Deficiency
		✓			34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?	
		✓			35. Is the sump for pump house floor drains closer than 30 feet from the well?	
		✓			36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?	
yes	no	n/a	unk	note	**SPRING INFORMATION**	
		✓			37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?	
		✓			38. Is surface water diverted from the 100 foot protection zone around the spring?	
		✓			39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?	
		✓			40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)	
		✓			41. Is a flow meter or other flow measuring device provided?	
yes	no	n/a	unk	note	**SPRING BOX INFORMATION** *(Not all existing springs have a spring box)*	
		✓			42. Is the spring box equipped with a screened overflow?	
		✓			43. Is the supply intake located above the floor of the collection chamber?	
		✓			44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?	
		✓			45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?	
		✓			46. Is the access port a framed opening that is at least 4 inches high with a locking device?	
		✓			47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?	

COMMENTS:
(Please indicate question number)

23. Not considered a deficancy - system uses near-by hydrant; upon system modification a frost free hydrant is recommended to be installed for sampling purposes
26. fire hydrant used

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: E0007616

Common Name of Source: High School Well

Source: ☑ Well → ☐ Manifold; ☐ Spring → ☐ Spring Box

Is this Source Treated? ☑ Yes ☐ No

Treatment Objective: ☐ N/A

disinfection

Treatment Types: ☐ N/A
(Identify Treatment Train in Comments)

chlorine

Physical Location: near the high school

Is there a well log for the groundwater source? ☑ Yes ☐ No ☐ N/A ☐ Unk

Pump Capacity (GPM)	Casing Size (In)	Date Drilled:	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
1100 ☐ Unk	14 ☐ Unk	1998 ☐ Unk	216 ☐ Unk	216 ☐ Unk	40 ☐ Unk	83 ☐ Unk

Is the Casing Screened? ☑ Yes ☐ No ☐ Unk ☐ N/A

Screen Depth (Ft): ☐ N/A ☐ Unk
From: 130
To: 190

Is the Casing Perforated? ☐ Yes ☑ No ☐ Unk ☐ N/A

Perforation Depth (Ft): ☑ N/A ☐ Unk
From:
To:

Latitude (Decimal): 430730651

Longitude (Decimal): 111.099525

All Sources

1. This source is: ☑ Active ☐ Proposed ☐ Inactive ☐ Emergency (<60 days per year)

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	2. Has there been a Source Water Assessment conducted for the source? Date: 2001
☑	☐	☐	☐	☐	3. Has a final GWUDI determination been done for this source? Date: 2005

☐ N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
☑	☐		☐	☑	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77) ☐ Significant ☐ Deficiency

Are the following minimum distances from the PWS well being met?

☑	☐		☐	☐	5. - Gravity sewer line ..... 50 Ft.
☑	☐		☐	☐	6. - Pressure sewer line ..... 100 Ft.
☑	☐		☐	☐	7. - Individual home septic tank ..... 100 Ft.
☑	☐		☐	☐	8. - Individual home disposal field ..... 100 Ft.
☑	☐		☐	☐	9. - Individual home seepage pit ..... 100 Ft.
☑	☐		☐	☐	10. - Privies ..... 100 Ft.
☑	☐		☐	☐	11. - Livestock ..... 50 Ft.
☑	☐		☐	☐	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances ..... 50 Ft.
☐	☑		☐	☐	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
☐	☑		☐	☐	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
☐	☑		☐	☐	15. Is the well in a pit? If yes, Date constructed:
☐	☐	☑	☐	☐	16. Was the well that is located in a pit installed after 11/5/64?
☐	☐	☑	☐	☐	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	18. Is the well protected from unauthorized entry? *(Recommended)*
☑	☐	☐	☐	☐	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor? ☐ Significant ☐ Deficiency
☐	☑	☐	☐	☑	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
☑	☐		☐	☐	21. Is the well provided with a sanitary cap that prevents surface water entry?
☑	☐		☐	☐	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

COMMENTS:
(Please indicate question number)

4. (Fig. 27) well lot secured with locked chain-linked fence

19. - 22. Note: casing was extended to meet current IDAPA requirements in 2009

20. (Fig. 28) Not considered a deficiency - current vent acceptable

Form 238-7
3/95

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT
Use Typewriter or Ballpoint Pen

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 22-97-E-119
Other IDWR No. D000-4300

2. OWNER:
Name Driggs High School Well
Address
City Driggs State Id Zip 83422

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

Twp. 5 North ☒ or South ☐
Rge. 45 East ☒ or West ☐
Sec. 25 , ____ 1/4 SW 1/4 NW 1/4
Gov't Lot ____ County Teton
Lat: : : Long: : :
Address of Well Site
City
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

TYPE OF WORK check all that apply (Replacement etc.)
New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD
☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
bentonite	0	40	57	overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 130
Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
14	2	130	375	steel	☐	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe

9. PERFORATIONS/SCREENS
☐ Perforations Method
☒ Screens Screen Type SST 304

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
130	190	045		10"	SST	☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
83 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices:

11. WELL TESTS:
☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
1100	68	150	24 hrs.

Water Temp. 52° Bottom hole temp.
Water Quality test or comments:
Depth first Water Encountered

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
20	2	43	clay & gravel		X
14	43	80	clay & gravel		X
14	80	110	clay & gravel	X	
14	110	112	gravel	X	
14	112	132	gravel & alittle sand	X	
14	132	170	gravel & trace of sand	X	
14	170	190	gravel & alittle clay	X	
14	190	196	gravel	X	
14	196	216	clay & trace of gravel		X
			Finished		

Completed Depth 216 (Measurable)
Date: Started Nov 24, 1997 Completed March 30, 1998

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Firm No. 299
Firm Official Marcus Franklin Date 4-25-98
and
~~Supervisor~~ or Operator Danny Franklin Date 4-25-98
(Sign once if Firm Official & Operator)

Common Name	SURVEY DATE		PWS #
High School Well	6/8/2010	(mm/dd/yyyy)	7410004

yes	no	n/a	unk	note	WELL INFORMATION (cont.)
✓					23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
✓					24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? [ ] gallons — ☐ Unnecessary
✓					25. Is a pressure gauge provided at all installations and is it maintained and working properly? [ ] psi.
✓					26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?

yes	no	n/a	unk	note	PUMP HOUSE *(Any structure containing important water system components)*
	✓				27. Is the source located in a pump house?
✓					28. Is the pump house kept clean and in good repair? *(Floor cracks?)*
✓					29. Is the pump house protected from unauthorized personnel?
✓					30. Does the pump house have adequate lighting throughout? *(Recommended)*
	✓			✓	31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?
✓					32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment? — ☐ Significant ☐ Deficiency
✓					33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing? — ☐ Significant ☐ Deficiency
✓					34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?
		✓			35. Is the sump for pump house floor drains closer than 30 feet from the well?
	✓				36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?

yes	no	n/a	unk	note	SPRING INFORMATION
		✓			37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?
		✓			38. Is surface water diverted from the 100 foot protection zone around the spring?
		✓			39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?
		✓			40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
		✓			41. Is a flow meter or other flow measuring device provided?

yes	no	n/a	unk	note	SPRING BOX INFORMATION *(Not all existing springs have a spring box)*
		✓			42. Is the spring box equipped with a screened overflow?
		✓			43. Is the supply intake located above the floor of the collection chamber?
		✓			44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?
		✓			45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?
		✓			46. Is the access port a framed opening that is at least 4 inches high with a locking device?
		✓			47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?

COMMENTS:
(Please indicate question number)

31. Deficiency: (Fig. 30) cross connection identified (hose is required to be removed and an approved back flow device placed) **Note:** operator corrected deficiency 6/8/2010

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: [redacted]

Common Name of Source: Valley Centre Well

Source: [redacted]
- [x] Well → [ ] Manifold
- [ ] Spring → [ ] Spring Box

Is this Source Treated? [ ] Yes [ ] No

Treatment Objective: [x] N/A

Physical Location: [redacted]
within the Valley Centre residential development

Treatment Types: [x] N/A
(Identify Treatment Train in Comments)

Is there a well log for the groundwater source? [x] Yes [ ] No [ ] N/A [ ] Unk

Pump Capacity (GPM)	Casing Size (In)	Date Drilled:	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
2000 [ ] Unk	20 [ ] Unk	2000 [ ] Unk	252 [ ] Unk	252 [ ] Unk	60 [ ] Unk	40 [ ] Unk

Is the Casing Screened? [ ] Yes [x] No [ ] Unk [ ] N/A

Screen Depth (Ft): [x] N/A [ ] Unk
From:
To:

Is the Casing Perforated? [x] Yes [ ] No [ ] Unk [ ] N/A

Perforation Depth (Ft): [ ] N/A [ ] Unk
From: 180
To: 230

Latitude (Decimal):

Longitude (Decimal):

All Sources

1. This source is:
   [ ] Active [ ] Proposed
   [ ] Inactive [x] Emergency (<60 days per year)

yes	no	n/a	unk	note	
[x]	[ ]	[ ]	[ ]	[ ]	2. Has there been a Source Water Assessment conducted for the source? Date 2009
[x]	[ ]	[ ]	[ ]	[ ]	3. Has a final GWUDI determination been done for this source? Date: 6/8/2010

[ ] N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
[x]	[ ]		[ ]	[ ]	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77)
[ ] Significant	[ ] Deficiency				

Are the following minimum distances from the PWS well being met?

[x]	[ ]		[ ]	[ ]	5. - Gravity sewer line.....50 Ft.
[x]	[ ]		[ ]	[ ]	6. - Pressure sewer line.....100 Ft.
[x]	[ ]		[ ]	[ ]	7. - Individual home septic tank.....100 Ft.
[x]	[ ]		[ ]	[ ]	8. - Individual home disposal field.....100 Ft.
[x]	[ ]		[ ]	[ ]	9. - Individual home seepage pit.....100 Ft.
[x]	[ ]		[ ]	[ ]	10. - Privies.....100 Ft.
[x]	[ ]		[ ]	[ ]	11. - Livestock.....50 Ft.
[x]	[ ]		[ ]	[ ]	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances.....50 Ft.
[ ]	[x]		[ ]	[ ]	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
[ ]	[x]		[ ]	[ ]	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
[ ]	[x]		[ ]	[ ]	15. Is the well in a pit? If yes, Date constructed:
[ ]	[ ]	[x]	[ ]	[ ]	16. Was the well that is located in a pit installed after 11/5/64?
[ ]	[ ]	[x]	[ ]	[ ]	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?

yes	no	n/a	unk	note	
[x]	[ ]	[ ]	[ ]	[ ]	18. Is the well protected from unauthorized entry? *(Recommended)*
[ ]	[ ]	[x]	[ ]	[ ]	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor?
[ ] Significant	[ ] Deficiency				
[ ]	[ ]	[x]	[ ]	[ ]	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
[x]	[ ]		[ ]	[ ]	21. Is the well provided with a sanitary cap that prevents surface water entry?
[x]	[ ]		[ ]	[ ]	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

COMMENTS:
(Please indicate question number)

Recommendation: (Fig. 38) check the operatational condition of the check valve because water was running continuous through the pump to waste line

44-3-41

Form 238-7
11/97

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Valley Center

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: Long:

1. WELL TAG NO. D 0014389
DRILLING PERMIT NO. 766057
her IDWR No. 22-7814

2. OWNER:
Name Teton Valley Association LLC.
Address 100 S. 200 W.
City Driggs State ID Zip 83422

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 05 North ☒ or South ☐
Rge. 45 East ☒ or West ☐
Sec. 23 ____ 1/4 NE 1/4 SW 1/4 (10 acres / 40 acres / 160 acres)
Gov't Lot ____ County Teton County
Lat: Long:
Address of Well Site Valley Center
Subdivision City Driggs
(Give at least name of road + Distance to Road or Landmark)
Lt. ____ Blk. ____ Sub. Name ____

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other ____

DRILL METHOD
☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Neat Cement	0	18	16 sacks	pull back, pour
3/8 hole plug	18	60	46 sacks	" "

Was drive shoe used? ☒Y ☐ N Shoe Depth(s) 240'
Was drive shoe seal tested? ☐ Y ☒ N How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16	+1	240	.312	Steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
Perforations 366 Method Mills Knife
Screens Screen Type ____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
180	230	5/8 x 3/2				☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
40 ft. below ground Artesian pressure ___ lb.
Depth flow encountered ____ ft. Describe access port or control devices: 1½ access pipe

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
2000	@ 165	Air	8hrs

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: Clean with little sand at that volume
Depth first Water Encounter 80'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
20	0	2	Topsoil, Gravel + Cobble		X
	2	60	Gravel, Large Cobble with Clay		X
16	60	103	Gravel, Large cobble w/clay	X	
	103	108	Brown Clay		X
	108	165	Large Cobble Rock, Gravel Sand, Brown Clay	X	
	165	205	Large Cobble rock, Gravel Sand + less clay, but more compacted Formation	X	
	205	247	same as above but softer Formation clay Color white	X	
	247	252	Silty Clay		X
	252	252	Cobble Rock + Gravel	X	
			Gravel Packed From 240 - 252		

RECEIVED
DEC 15 2000
Department of Water Resources
Eastern Region

Completed Depth 238 (Measurable)
Date Started 9-1-00 Completed 11-3-00

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Findlay Well Drilling Firm No. 062
Firm Official [signature] Date 11-6-00
and
Driller or Operator [signature] Date 11-6-00
(Signature of Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

GROUNDWATER SOURCES - PG. 2

Common Name	SURVEY DATE	PWS #
Valley Centre Well	6/8/2010 (mm/dd/yyyy)	7410004

yes	no	n/a	unk	note	WELL INFORMATION (cont.)
☑	☐	☐	☐	☑	23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
☑	☐	☐	☐	☐	24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? ☐ gallons ☐ Unnecessary
☑	☐	☐	☐	☐	25. Is a pressure gauge provided at all installations and is it maintained and working properly? ☐ psi.
☑	☐	☐	☐	☐	26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?

yes	no	n/a	unk	note	PUMP HOUSE *(Any structure containing important water system components)*
☑	☐	☐	☐	☐	27. Is the source located in a pump house?
☑	☐	☐	☐	☐	28. Is the pump house kept clean and in good repair? *(Floor cracks?)*
☑	☐	☐	☐	☐	29. Is the pump house protected from unauthorized personnel?
☑	☐	☐	☐	☐	30. Does the pump house have adequate lighting throughout? *(Recommended)*
☐	☐	☑	☐	☐	31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?
☑	☐	☐	☐	☐	32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment? ☐ Significant ☐ Deficiency
☑	☐	☐	☐	☐	33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing? ☐ Significant ☐ Deficiency
☑	☐	☐	☐	☐	34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?
☐	☐	☑	☐	☐	35. Is the sump for pump house floor drains closer than 30 feet from the well?
☐	☑	☐	☐	☐	36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?

yes	no	n/a	unk	note	SPRING INFORMATION
☐	☐	☑	☐	☐	37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?
☐	☐	☑	☐	☐	38. Is surface water diverted from the 100 foot protection zone around the spring?
☐	☐	☑	☐	☐	39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?
☐	☐	☑	☐	☐	40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
☐	☐	☑	☐	☐	41. Is a flow meter or other flow measuring device provided?

yes	no	n/a	unk	note	SPRING BOX INFORMATION *(Not all existing springs have a spring box)*
☐	☐	☑	☐	☐	42. Is the spring box equipped with a screened overflow?
☐	☐	☑	☐	☐	43. Is the supply intake located above the floor of the collection chamber?
☐	☐	☑	☐	☐	44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?
☐	☐	☑	☐	☐	45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?
☐	☐	☑	☐	☐	46. Is the access port a framed opening that is at least 4 inches high with a locking device?
☐	☐	☑	☐	☐	47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?

COMMENTS:
(Please indicate question number)

23. (Fig. 42) back flow device placed

GROUNDWATER SOURCE - PG.1

A separate sources form must be filled out for **each** groundwater source in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Tag #: E0007046	Common Name of Source: Lions Well	Source: ☑ Well → ☐ Manifold; ☐ Spring → ☐ Spring Box	Is this Source Treated? ☐ Yes ☑ No
Physical Location: Lions Park			Treatment Objective: ☑ N/A
			Treatment Types: ☑ N/A (Identify Treatment Train in Comments)

Is there a well log for the groundwater source? ☐ Yes ☐ No ☐ N/A ☑ Unk

Pump Capacity (GPM)	Casing Size (in)	Date Drilled:	Well Depth (Ft)	Casing Depth (Ft)	Grout Depth(Ft)	Static Water Depth (Ft)
600 ☐ Unk	16 ☐ Unk	1992 ☐ Unk	505 ☐ Unk	505 ☐ Unk	40 ☐ Unk	☑ Unk

Is the Casing Screened?	Screen Depth (Ft): ☐ N/A ☑ Unk	Is the Casing Perforated?	Perforation Depth (Ft): ☐ N/A
☐ Yes ☐ No ☑ Unk ☐ N/A	From: To:	☐ Yes ☐ No ☑ Unk ☐ N/A	From: To: ☑ Unk

Latitude (Decimal): 43.729953

Longitude (Decimal): 111.101258

All Sources

1. This source is: ☐ Active ☐ Proposed ☐ Inactive ☑ Emergency (<60 days per year)

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	2. Has there been a Source Water Assessment conducted for the source? Date: 2001
☑	☐	☐	☐	☐	3. Has a final GWUDI determination been done for this source? Date: 2005

☐ N/A 4-36 if source is a spring

WELL INFORMATION

yes	no	n/a	unk	note	
☑	☐		☐	☐	4. Is the well on a separate lot that is large enough to provide a minimum distance of 50 feet between the well and the nearest property line? (applicable if constructed after 11/1/77) ☐ Significant ☐ Deficiency

Are the following minimum distances from the PWS well being met?

☑	☐		☐	☐	5. - Gravity sewer line ..... 50 Ft.
☑	☐		☐	☐	6. - Pressure sewer line ..... 100 Ft.
☑	☐		☐	☐	7. - Individual home septic tank ..... 100 Ft.
☑	☐		☐	☐	8. - Individual home disposal field ..... 100 Ft.
☑	☐		☐	☐	9. - Individual home seepage pit ..... 100 Ft.
☑	☐		☐	☐	10. - Privies ..... 100 Ft.
☑	☐		☐	☐	11. - Livestock ..... 50 Ft.
☑	☐		☐	☐	12. - Canals, streams, ditches, lakes, ponds and tanks used to store nonpotable substances ..... 50 Ft.
☐	☑		☐	☐	13. Are pesticides, herbicides, fertilizers, portable containers of petroleum products, or other toxic or hazardous materials stored on the well lot?
☐	☑		☐	☐	14. Are pesticides, herbicides, or fertilizers applied to the well lot?
☐	☑		☐	☐	15. Is the well in a pit? If yes, Date constructed:
☐	☐	☑	☐	☐	16. Was the well that is located in a pit installed after 11/5/64?
☐	☐	☑	☐	☐	17. If pit was installed prior to 11/5/64 – Has DEQ granted an exception and does the pit have water tight construction of pit walls and floor, a floor drain and an acceptable pit cover?

yes	no	n/a	unk	note	
☑	☐	☐	☐	☐	18. Is the well protected from unauthorized entry? *(Recommended)*
☑	☐	☐	☐	☐	19. Does the casing extend a minimum of 18 inches above the final ground surface and/ or 12 inches above the pump house floor? ☐ Significant ☐ Deficiency
☐	☑	☐	☐	☑	20. Is the well vented with the open end of the vent screened and terminated downward at least 18 inches above the final ground surface?
☑	☐		☐	☐	21. Is the well provided with a sanitary cap that prevents surface water entry?
☑	☐		☐	☐	22. Is the well cased and sealed in such a manner that surface water cannot enter the well?

COMMENTS:
(Please indicate question number)

20. not considered a deficiency
(Fig 44) - current vent acceptable

Lion's well

38-7

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

RECEIVED SEP 13 1993

1. DRILLING PERMIT NO. 92-71-E-0024-000
Other IDWR No. 23-7698

2. OWNER:
Name City of Driggs
Address 80 N. MAIN
City Driggs State ID Zip 83

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

T. 5N North ☐ or South ☐
R. 45E East ☐ or West ☐
Sec. 35 ____ 1/4 NW 1/4 NE 1/4
Gov't Lot ____ County TETON

Address of Well Site FREMONT AVE
(Give at least Direction + Distance to Road or Landmark)

Lot No. 5 Block No. ____ Subd Name ____

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

Was drive shoe seal tested? Y☐ N☐ How? ____

8. CASING/LINER:

Diameter	From	To	Guage	Casing	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

Final location of shoes ____
Top Packer or Headpipe ____ Bottom Tailpipe ____

9. PERFORATIONS/SCREENS
☒ Perforations Method mills knife
☐ Screens Type ____ Material ____

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casing	Liner
155	170	3/4x3	120	12	12	☐	☒
230	235	3/4x3	40	12	12	☐	☒
						☐	☐
						☐	☐

10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Depth	Time

Temperature of water ____ Was a water analysis done? Yes☐ No☐
By whom? ____
Water Quality (odor, etc.) ____
Bottom Hole Temperature ____

11. STATIC WATER LEVEL:
____ ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port ____
Describe Controlling Devices: ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL

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RECEIVED OCT 01 1993 Department of Water Resources Eastern District Office

RECEIVED FEB 09 1994

Date: Started ____ Completed ____

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Drilling Firm No 299
Firm Official Marcus Franke Date 9-8-93
and
Supervisor or Operator Marcus Franke Date 9-8-93
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238
11/91

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

USE TYPEWRITER OR BALLPOINT PEN

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

RECEIVED SEP 13 1993 Department of Water Resources

1. WELL OWNER

Name: City of Driggs
Address: 80 N Main Driggs 83422
Drilling Permit No. 22-91E-024-000
Water Right Permit No. ~~25~~ 22-07698

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase ☐ Modification
☐ Abandoned (describe abandonment or modification procedures such as liners, screen, materials, plug depths, etc. in lithologic log, section 9.)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Monitor
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☒ Other municipal (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Auger ☐ Reverse rotary
☒ Cable ☐ Mud ☐ Other _____ (backhoe, hydraulic, etc.)

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.375 inches	16 inches	+ 2 feet	362 feet
.312 inches	12 inches	171 feet	375 feet
.280 inches	10 inches	350 feet	505 feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch ☐ Gun
Size of perforation? ~~1/2~~ inches by 3 inches

Number		From	To
104	perforations	377 feet	390 feet
88	perforations	443 feet	[illegible] feet
[illegible]	perforations	[illegible] feet	[illegible] feet

209 Well screen installed? ☐ Yes ☐ No 486-505
Manufacturer _____ Type _____
Top Packer or Headpipe _____
Bottom of Tailpipe _____

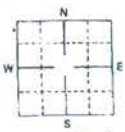
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal depth 40 Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit
☒ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded
☐ Solvent Weld ☐ Cemented between strata

Describe access port 2" pipe to south

6. LOCATION OF WELL – Fremont AVE

Sketch map location must agree with written location.



Subdivision Name _____
Lot No. 5 Block No. _____
County Teton
NW ¼ NE ¼ Sec. 35 T. 5N S ☐ N ☐ R. 45E W ☐ E ☐

RECEIVED OCT 07 1993 Department of Water Resources

FEB 09 1994

7. WATER LEVEL

Static water level 40 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap
Temperature 50 °F. Quality _____
Describe artesian or temperature zones below

RECEIVED OCT 01 1993 Department of Water Resources Eastern District Office

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
~~350-345~~	~~[illegible]~~	~~[illegible]~~
200	350	4
400	505	2

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
20	0	40	clay & gravel		X
16	40	90	clay & gravel	X	
16	90	95	gravel	X	
16	95	105	gravel & clay		X
16	105	110	clay		X
16	110	120	gravel & thick clay		X
16	120	150	gravel & clay	X	
16	150	155	gravel & clay		X
16	155	170	2" gravel, clay & sand	X	
16	170	190	clay		X
16	190	230	clay & gravel		X
16	230	235	gravel & sand	X	
16	235	250	clay & alittle gravel		X
16	250	255	clay		X
16	255	260	clay & 2" gravel		X
16	260	270	clay & gravel	X	
16	270	285	clay & (gravel alittle)	~~X~~	X
16	285	295	gravel alittle water	X	
16	295	300	clay & sand	~~X~~	X
16	300	315	gravel & clay		X
16	315	325	sand or sandstone		X
16	325	330	clay		X
16	330	335	real hard sandstone		X
16	335	345	real hard clay & gravel		X
16	345	350	gravel & alot of clay	X	
16	350	362	clay & gravel		X
16	362		16" wont go any more		X
12	362	375	real hard cemented gravel		X
12	375	390	real hard fractured clay	X	
12	390	415	hard clay & gravel	X	
12	415	448	gravel & alittle clay	X	
12	448	455	sand		X
12	455	480	mostly clay hard gravel	~~X~~	~~X~~
12	480	505	gravel alittle clay	X	

10.

Work started Oct 1, 1992 finished Dec 3, 92

11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Firm No. 299
Address _____ Date _____
Signed by Drilling Supervisor [illegible]
and
(Operator) _____
(If different than the Drilling Supervisor)

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

GROUNDWATER SOURCES - PG. 2

Common Name	SURVEY DATE	PWS #
Lions Well	6/8/2010 (mm/dd/yyyy)	7410004

yes	no	n/a	unk	note	WELL INFORMATION (cont.)
	✓			✓	23. Is there a smooth nosed sample tap provided on the well discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
✓					24. Is an instantaneous and totalizing flow meter equipped with nonvolatile memory installed on the pump distribution line of the well and is it maintained and working properly? _____ gallons (☐ Unnecessary)
✓					25. Is a pressure gauge provided at all installations and is it maintained and working properly? _____ psi.
✓					26. Can the well be pumped to waste at the design capacity of the well via an approved air gap at a location prior to the first service connection?

yes	no	n/a	unk	note	PUMP HOUSE *(Any structure containing important water system components)*
	✓				27. Is the source located in a pump house?
		✓			28. Is the pump house kept clean and in good repair? *(Floor cracks?)*
		✓			29. Is the pump house protected from unauthorized personnel?
		✓			30. Does the pump house have adequate lighting throughout? *(Recommended)*
		✓			31. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?
		✓			32. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment? (☐ Significant ☐ Deficiency)
		✓			33. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment to prevent freezing? (☐ Significant ☐ Deficiency)
		✓			34. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?
		✓			35. Is the sump for pump house floor drains closer than 30 feet from the well?
		✓			36. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?

yes	no	n/a	unk	note	SPRING INFORMATION
		✓			37. Is the entire area within a one hundred (100) foot radius of the spring box fenced to prevent trespassing of livestock and void of buildings, dwellings and sources of contamination?
		✓			38. Is surface water diverted from the 100 foot protection zone around the spring?
		✓			39. Is the spring housed in a permanent structure and protected from contamination including the entry of surface water, animals and dust?
		✓			40. Is there a smooth nosed sample tap provided on the spring discharge pipe prior to treatment? (Threaded tap is approved with backflow preventer)
		✓			41. Is a flow meter or other flow measuring device provided?

yes	no	n/a	unk	note	SPRING BOX INFORMATION *(Not all existing springs have a spring box)*
		✓			42. Is the spring box equipped with a screened overflow?
		✓			43. Is the supply intake located above the floor of the collection chamber?
		✓			44. Is the spring box protected from contamination including the entry of surface water, animals, and dust?
		✓			45. Is the access port fitted with a solid water tight cover which overlaps a framed opening and extended down around the frame at least 2 inches?
		✓			46. Is the access port a framed opening that is at least 4 inches high with a locking device?
		✓			47. Is the access port elevated at least twenty-four (24) inches above the top of the box or ground level, whichever is higher?

COMMENTS:
(Please indicate question number)

23. Not considered a deficancy(Fig. 45) - system uses near-by hydrant; upon system modification a frost free hydrant is recommended to be installed for sampling purposes

26. fire hydrant used

STORAGE

SURVEY DATE: 6/8/2010 (mm/dd/yyyy) | PWS #: 7410004

A separate storage form must be filled out for **each** storage unit in the PWS.

Storage Structure Name: Million Gallon Tank	Storage Structure ID #:
Physical Location: Wyoming	Date in service: 2004 ☐ Unk
	Volume (gal): 1,000,000 ☐ Unk
Storage Type: ☑ Reservoir/Tank ☐ Standpipe	Construction: ☐ Elevated ☐ Above Ground ☐ Partially Below Ground ☑ Below Ground
	Type of material: ☐ Plastic ☐ Wood ☐ Fiberglass ☐ Metal ☑ Concrete ☐ Naturally Contained
Total Days Supply (This structure): ☑ Unk	Date Last: Inspected: ☑ Unk Cleaned: ☑ Unk
How is the water level measured? no overflow control ☐ Unk	

yes	no	n/a	unk	note	ALL STORAGE STRUCTURES
☑	☐	☐	☐	☐	1. Is the storage structure safely accessible to the inspector?
☐	☑	☐	☐	☐	2. Is the PWS storage tank located within 500 feet of any municipal or Industrial wastewater treatment plant or any land which is spray irrigated with wastewater or used for sludge disposal?
☐	☑	☐	☐	☐	3. Are any of the storage structure drains directly connected to a sewer or storm drain?
☑	☐	☐	☐	☑	4. Is an overflow provided that discharges to daylight in a way that will preclude the possibility of backflow to the reservoir and, where practical, provided with an expanded metal screen installed within the pipe that will exclude rodents and deter vandalism?
☑	☐	☐	☐	☐	5. Are overflows brought down to an elevation between 12 and 24 inches above the ground surface? *(2X the diameter of the discharge pipe above a basin rim)*
☑	☐	☐	☐	☐	6. Do overflows discharge over a drainage inlet structure or splash plate?(storm or sanitary)
☑	☐	☐	☐	☑	7. Is the storage structure secure from unauthorized access?
☑	☐	☐	☑	☑	8. Does the storage reservoir have a watertight roof or cover and is it sloped to facilitate drainage?
☑	☐	☐	☐	☑	9. Is the storage water protected from contamination?
☑	☐	☐	☐	☑	10. Is the storage structure structurally sound?
☑	☐	☐	☐	☑	11. Could vegetation in the area potentially impact the storage structure?*(Recommended)*
☑	☐	☐	☐	☐	12. Is the storage structure designed so that it can be isolated from the distribution system without necessitating loss of pressure in the distribution system?
☐	☑	☐	☑	☐	13. Is leakage evident at time of inspection?
☐	☐	☐	☑	☐	14. Is the storage structure interior coating or liner peeling or cracked?
☑	☐	☐	☐	☐	15. Is the storage structure used to store finished water?
☑	☐	☐	☐	☐	16. Are access manhole openings for the storage structure 4 inches or greater above the surface of the roof, with a cover 2 inches overlapping, water tight, hinged and locked?
☑	☐	☐	☐	☐	17. Are all vents extended 12 inches above the roof and constructed to exclude potential sources of contamination? *(The overflow pipe shall not be considered a vent)*

yes	no	n/a	unk	note	ABOVE GROUND STORAGE
☐	☐	☑	☐	☐	18. Do all vents open downward and are they fitted with a 4 mesh non-corrodible screen?

yes	no	n/a	unk	note	GROUND-LEVEL, PARTIALLY BURIED, or BELOW-GROUND STORAGE
☑	☐	☐	☐	☐	19. Does the overflow for the storage structure have a vertical section of pipe at least 2 pipe diameters in length?
☑	☐	☐	☐	☐	20. Is the overflow for the storage structure provided with either a 24 mesh non-corrodible screen installed within the pipe when practical, or an expanded metal screen installed within the pipe plus a weighted flapper or check?
☑	☐	☐	☐	☐	21. Is the area surrounding the storage structure graded in a manner that will prevent surface water from standing within 50 feet of it?
☑	☐	☐	☐	☐	22. Are all vents for the storage structure open downward with the opening at least 24 inches above the roof or the ground level and covered with 24 mesh non-corrodible screen to exclude potential contamination?

yes	no	n/a	unk	note	PARTIALLY BURIED OR BELOW-GROUND STORAGE
☐	☐	☑	☐	☐	23. Are "ALL" manholes elevated 24 inches above the surface of the roof or the ground level, which ever is higher?
☐	☐	☑	☐	☐	24. Is there a minimum distance of 50 feet between the storage structure and any non-potable main, standing water, or other possible source of contamination?

COMMENTS:
(Please indicate question number)

Note: scheduled to be cleaned Spring of 2011

4. (**Fig. 13**) overflows into an irrigation ditch

7. Recommendation: (**Fig. 12**) Although both hatches and isolation valve vault are secured with locks it is recommended fencing the well lot because of the close proximity to surrounding property's (**recommend applying for Source Water Protection Grant to fund the construction of security fence in 2011**)

9. Deficiency: (IDAPA 58.01.08.544.03.) the tank lot shows that herbicides have been applied to the lot that presents a potential contamination. The application of any chemical to the storage tank or well lot is considered a deficiency.

8 - 11. Recommendation: A sprinkler system has been installed upon tank making the roof area of the tank swamping so the overall integtiy of the tank is assumed. The pooling of surface water from the sprinkler system has the potential to lessen the overall life spand of the concrete tank and is recommended considering discontinuing its use.

STORAGE

A separate storage form must be filled out for **each** storage unit in the PWS

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

Storage Structure Name: 300,000 Tank

Storage Structure ID #:

Physical Location:

Date in service: ☐ Unk 1989

Volume (gal): ☐ Unk 300,000

Storage Type: ☑ Reservoir/Tank ☐ Standpipe

Construction: ☐ Elevated ☐ Above Ground ☐ Partially Below Ground ☑ Below Ground

Type of material: ☐ Plastic ☐ Wood ☐ Fiberglass ☐ Metal ☑ Concrete ☐ Naturally Contained

Total Days Supply (This structure): ☑ Unk

Date Last Inspected: ☑ Unk

Cleaned: ☑ Unk

How is the water level measured? ☐ Unk

float

yes	no	n/a	unk	note	ALL STORAGE STRUCTURES
☑	☐	☐	☐	☐	1. Is the storage structure safely accessible to the inspector?
☐	☑	☐	☐	☐	2. Is the PWS storage tank located within 500 feet of any municipal or Industrial wastewater treatment plant or any land which is spray irrigated with wastewater or used for sludge disposal?
☐	☑	☐	☐	☐	3. Are any of the storage structure drains directly connected to a sewer or storm drain?
☑	☐	☐	☐	☐	4. Is an overflow provided that discharges to daylight in a way that will preclude the possibility of backflow to the reservoir and, where practical, provided with an expanded metal screen installed within the pipe that will exclude rodents and deter vandalism?
☐	☑	☐	☐	☑	5. Are overflows brought down to an elevation between 12 and 24 inches above the ground surface? *(2X the diameter of the discharge pipe above a basin rim)*
☐	☑	☐	☐	☑	6. Do overflows discharge over a drainage inlet structure or splash plate?(storm or sanitary)
☑	☐	☐	☐	☑	7. Is the storage structure secure from unauthorized access?
☑	☐	☐	☐	☐	8. Does the storage reservoir have a watertight roof or cover and is it sloped to facilitate drainage?
☑	☐	☐	☐	☐	9. Is the storage water protected from contamination?
☑	☐	☐	☐	☐	10. Is the storage structure structurally sound?
☐	☑	☐	☐	☐	11. Could vegetation in the area potentially impact the storage structure?*(Recommended)*
☑	☐	☐	☐	☐	12. Is the storage structure designed so that it can be isolated from the distribution system without necessitating loss of pressure in the distribution system?
☐	☑	☐	☐	☐	13. Is leakage evident at time of inspection?
☐	☐	☑	☐	☐	14. Is the storage structure interior coating or liner peeling or cracked?
☑	☐	☐	☐	☐	15. Is the storage structure used to store finished water?
☑	☐	☐	☐	☐	16. Are access manhole openings for the storage structure 4 inches or greater above the surface of the roof, with a cover 2 inches overlapping, water tight, hinged and locked?
☑	☐	☐	☐	☐	17. Are all vents extended 12 inches above the roof and constructed to exclude potential sources of contamination? *(The overflow pipe shall not be considered a vent)*

yes	no	n/a	unk	note	ABOVE GROUND STORAGE
☐	☐	☑	☐	☐	18. Do all vents open downward and are they fitted with a 4 mesh non-corrodible screen?

yes	no	n/a	unk	note	GROUND-LEVEL, PARTIALLY BURIED, or BELOW-GROUND STORAGE
☐	☑	☐	☐	☑	19. Does the overflow for the storage structure have a vertical section of pipe at least 2 pipe diameters in length?
☑	☐	☐	☐	☐	20. Is the overflow for the storage structure provided with either a 24 mesh non-corrodible screen installed within the pipe when practical, or an expanded metal screen installed within the pipe plus a weighted flapper or check?
☐	☑	☐	☐	☑	21. Is the area surrounding the storage structure graded in a manner that will prevent surface water from standing within 50 feet of it?
☑	☐	☐	☐	☐	22. Are all vents for the storage structure open downward with the opening at least 24 inches above the roof or the ground level and covered with 24 mesh non-corrodible screen to exclude potential contamination?

yes	no	n/a	unk	note	PARTIALLY BURIED OR BELOW-GROUND STORAGE
☐	☐	☑	☐	☐	23. Are "ALL" manholes elevated 24 inches above the surface of the roof or the ground level, which ever is higher?
☐	☐	☑	☐	☐	24. Is there a minimum distance of 50 feet between the storage structure and any non-potable main, standing water, or other possible source of contamination?

COMMENTS:
(Please indicate question number)

Note: Scheduled to be cleaned Spring of 2011

5-6. Deficiency - (Fig. 22): required to install a cement plate under the overflow drain and direct the water away from the tank in effort to lessen the errosion around edge of the tank

7. **Recommendation (Fig. 24):** installing security fencing to define the well and storage lot

19. 21. not considered a deficency - per design approval

HYDROPNEUMATIC TANKS

SURVEY DATE 6/8/2010 (mm/dd/yyyy)

PWS # 7410004

One form for **all** Hydropneumatic Tanks.

Tank ID#:	Physical Location:	Brand:	Model:	Bladder: (yes/no)	Size: (gal.)	Installation Date:

ALL HYDROPNEUMATIC TANKS

yes	no	n/a	unk	note		
☐	☐	☑	☐	☐	1.	Do the tank(s) maintain adequate distribution system pressures?
☐	☐	☑	☐	☐	2.	Is the tank(s) located above normal ground surface and completely housed?
☐ Significant			☐ Deficiency			
☐	☐	☑	☐	☐	3.	Can the hydropneumatic tank(s) be isolated from the system, permitting operation of the system?
☑	☐	☐	☐	☐	4.	Are the interior and/or exterior surfaces in good condition?
☑	☐	☐	☐	☐	5.	Are tank supports structurally sound and adequate?
☐	☐	☑	☐	☐	6.	Is there a pressure gauge and pressure operated start-stop controls?
☐	☐	☑	☐	☐	7.	Does the PWS using the hydropneumatic (pressure) tank(s) serve less than 150 homes?

Non-bladder Tanks Only

yes	no	n/a	unk	note		
☐	☐	☑	☐	☐	8.	Is the recharge air free of pollutants such as oil from an air compressor? Do all non-bladder hydropneumatic tank(s) have the following?
☐	☐	☑	☐	☐	9.	- A drain?
☐	☐	☑	☐	☐	10.	- Means to add air?
☐	☐	☑	☐	☐	11.	- Automatic or manual air blow-off?
☐	☐	☑	☐	☐	12.	- An access manhole (24 inches in diameter where practical)?
☐	☐	☑	☐	☐	13.	- Water sight glass?
☐	☐	☑	☐	☐	14.	Has the non-bladder pressure tank(s) been tested for structural integrity in the past 5 years? *(Recommended)*

COMMENTS:
(Please indicate the question number)

Note: (Fig. 10) pressure tank within the Teton Spring facility is associated with the Miox system (equipped with isolation valve)

DISTRIBUTION

One form for all distribution systems in the PWS.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

What are water lines made of:

Material(s): ☐ Unk

☐ Steel ☐ HDPE (black) ☐ Asbestos/Cement

☑ PVC ☑ Ductile Iron ☐ Copper

☐ Other:

Size(s): ☐ Unk

6 inch

How many services are metered?

782 out of 884

Number of Fire Hydrants:

unk

COMMENTS: (Please indicate the question number)

yes	no	n/a	unk	note	DISTRIBUTION
☐	☑	☐	☐	☐	1. Have there been any interruptions in service during the past year? (including pressure loss)
☐	☐	☑	☐	☐	2. If a loss of pressure occurred (>20 psi), did the PWS provide public notice and disinfect the system? *(Reminder)*
☑	☐	☐	☐	☐	3. Is the PWS able to maintain a minimum pressure of twenty (20) psi throughout the distribution system (including fire flow), or forty (40) psi for PWSs constructed after 7/1/1985 (excluding fire flow), during maximum hourly demand conditions?
☐	☑	☐	☐	☐	4. Was the pressure observed at a service connection?
					5. If yes: psi. Location: Time: ☐ A.M. ☐ P.M.
☑	☐	☐	☐	☐	6. Do all water mains that provide fire flow have a diameter of at least 6 inches?
☑	☐	☐	☐	☐	7. Are valves exercised regularly? *(Recommended)* If yes, how often? annually
☑	☐	☐	☐	☐	8. Is there a leak detection program? *(Recommended)*
☐	☐	☐	☑	☐	9. Is 15% or more of the water unaccounted for?
☐	☑	☐	☐	☐	10. Is a water conservation program in effect? *(Recommended)*
☑	☐	☐	☐	☐	11. Is an adequate map of the distribution system maintained? *(Recommended)*
☑	☐	☐	☐	☐	12. Does the system flush all main lines annually? *(Recommended)*
☑	☐	☐	☐	☐	13. Are all dead end water mains equipped with a means to flush?
☑	☐	☐	☐	☐	14. If yes, are the deadends flushed at least semiannually?
☐	☑	☐	☐	☐	15. Are there any distribution materials used that should not be in contact with the drinking water? *If yes, explain in comments section.*
☑	☐	☐	☐	☐	16. Is the system adequately protected from freezing?
☑	☐	☐	☐	☐	17. Is there a cross connection control program? *(Community PWSs Only)*
☐	☑	☐	☐	☐	18. Is the operator trained in cross connection control? *(Recommended)*
☐	☑	☐	☐	☐	19. Is the operator aware of any cross connections or were any cross connections observed during the course of the survey?
☐	☐	☐	☑	☐	20. If a separate non-potable irrigation system is provided for the consumer, are all mains, hydrants, and appurtenances easily identified as non-potable? (Purple Tape or other) *(Recommended)*

yes	no	n/a	unk	note	**Air/Vacuum Relief Valves** - *Placed at high points in water mains.*
☐	☐	☑	☐	☐	21. Are all automatic air relief valves equipped with a means of backflow protection?

PUMPING - PG. 1

One form for all Pumps.

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

PUMPS, PUMPHOUSES, AND CONTROLS

Pump ID#:	Physical Location:	Type of Pump:	Brand:	Model:	Horsepower:	Purpose:
	Teton Creek	submersible				distribution
	Tank well	submersible			60	storage/300,000
	High School well	submersible			75	distribution
	Dalley well	submersible			60	distribution
	Valley Centre well	submersible				distribution
	Lions well	submersible			60	distribution

yes	no	n/a	unk	note	**ALL PUMPS**
✓				✓	1. Are all pumps capable of providing the maximum pumping demand of the system?
	✓				2. Does the pump(s) cycle excessively? *(Recommended)*
✓					3. Are all pumps provided with readily available spare parts and tools?
✓				✓	4. Is a water pressure relief valve installed where the pump is directly connected to the distribution system?
✓					5. Is a standard pressure gauge installed on the discharge line?

yes	no	n/a	unk	note	**WELL PUMPS**
✓					6. Is there an accessible check valve installed in the discharge line of each well between the pump and the shut-off valve?
		✓			7. If the system has a vertical turbine motor driven pump(s), is an air release-vacuum relief valve located upstream from the check valve, with exhaust/relief piping terminating in a down-turned position at least 18 inches above the floor and covered with a 24 mesh corrosion resistant screen?
		✓			8. If the pump(s) is "oil lubricated", is the oil NSF approved and suitable for human consumption?

yes	no	n/a	unk	note	**WATER PUMPS** *(not well pumps)*
✓					9. Is an accessible check valve on the discharge side between the pump and the shut-off valve?

yes	no	n/a	unk	note	**AUXILIARY POWER**
	✓			✓	10. Is there auxiliary power on-site?
Significant			Deficiency		
		✓			11. Is auxiliary power tested? *(Recommended)*
		✓			12. If a diesel or gasoline fueled engine is used on the well lot; is the fuel tank and connecting piping double walled?
		✓			13. Is the fuel tank above ground?
		✓			14. Is a certified operator present during the filling of the fuel tank?
					If the engine is in the well house
		✓			15. Is the engine exhaust directly discharged outside the well house?
		✓			16. Is a spill containment structure surrounding all fuel tanks adequate? *(Secondary containment - 110% fuel tank volume)*
					Community Systems Only
	✓			✓	17. *(Community Systems built after 4/15/07 only)* Is on-site power or standby storage provided so water can be treated and supplied to pressurize the entire distribution system during a power outage for a minimum of 8 hours?
	✓			✓	18. *(Community Systems built after 4/15/07 only)* If standby power is provided, Is there a minimum of 8 hours of fuel stored and located on site?

COMMENTS:
(Please indicate the question number)

1. except for Dalley well
4. except for Dalley and Lions wells - not considered a deficiency
Note: **(Fig. 6)** sm vertical booster pump located upon the discharge line of the Teton Spring facility assists to pump water into filtration gallery
10. and **17-18**. Deficiency

PUMPING - PG. 2

SURVEY DATE 6/8/2010 (mm/dd/yyyy)

PWS # 7410004

COMMENTS:
(Please indicate the question number)

BOOSTER PUMPS

yes	no	n/a	unk	note	
☐	☐	☑	☐	☐	19. Is an instantaneous and totalizing flow meter installed where the booster pump is directly connected to the distribution system? ☐ Unnecessary
☐	☐	☑	☐	☐	20. Are all in-line booster pumps supplied with an automatic cutoff that activates when intake pressure is less than or equal to 5 psi?
☐	☐	☑	☐	☐	21. Is the booster pump located on a suction line that is directly connected to any storage reservoir?
☐	☐	☑	☐	☐	22. If yes, are all booster pumps protected by an automatic cutoff to prevent pump damage and avoid excessive reservoir drawdown?

PUMP HOUSE *(Only pump houses that don't contain a Groundwater Source)*

yes	no	n/a	unk	note	
☐	☐	☑	☐	☐	23. Is the pump house kept clean and in good repair? *(Floor cracks?)*
☐	☐	☑	☐	☐	24. Is the pump house protected from unauthorized personnel?
☐	☐	☑	☐	☐	25. Does the pump house have adequate lighting throughout? *(Recommended)*
☐	☐	☑	☐	☐	26. Are all non-sample taps installed in the pump house equipped with an appropriate backflow prevention device?
☐	☐	☑	☐	☐	27. Is adequate ventilation provided in the pump house for dissipation of excess heat and moisture from the equipment? ☐ Significant ☐ Deficiency
☐	☐	☑	☐	☐	28. Is adequate heating provided in the pump house to provided safe and efficient operation of equipment *(prevent moisture buildup and/or freezing)*? ☐ Significant ☐ Deficiency
☐	☐	☑	☐	☐	29. Is the pump house protected from flooding, have adequate drainage, is the floor surface at least six (6) inches above the final ground surface, and is the ground surface graded so as to lead surface water away from the pump house?
☐	☐	☑	☐	☐	30. Is the sump for pump house floor drains closer than 30 feet from the well?
☐	☐	☑	☐	☐	31. Is the floor drain connected to sewer, storm drains, chlorination room drains, or any other source of contamination?

FINANCIAL CAPACITY

SURVEY DATE: 6/8/2010 (mm/dd/yyyy)

PWS #: 7410004

yes	no	n/a	unk	note	FINANCIAL CAPACITY
✓					1. Is the PWS current with the payment of drinking water fees?
			✓		2. Does the PWS charge a drinking water fee to the user? If yes, what is the fee: $
	✓				3. Is the PWS in the business of selling water?
					#3 Note: - If no, identify why in the comments section and mark "N/A" on questions 4 - 19.
✓					4. Does the PWS provide and use an annual budget? *(Recommended)*
✓					5. If applicable, is the PWS fund separate from the waste water/sewer utility fund? *(Recommended)*
✓					6. Do water system revenues exceed expenditures? *(Recommended)*
✓					7. Are controls established to prevent expenditures from exceeding revenues?
			✓		8. Has an independent financial audit been completed? *(Recommended)*
		✓			9. If yes, is a copy of the most recent balance sheet for the water system available? *(Recommended)*
✓					10. Does the water system include a cash budget within its annual budget for cash flow? *(Recommended)*
✓					11. Does the water system management review the user fee, user charge, or rate system at least annually? *(Recommended)*
					12. When was the last user fee, user charge, or rate system adjustment? *mm/dd/yyyy*
yes	no	n/a	unk	note	
			✓		13. Does the water system management review financial reports at least monthly? *(Recommended)*
✓					14. Does the PWS provide and use a capital budget? *(Recommended)*
✓					15. Has this PWS produced and does it currently utilize a capital improvements plan? *(Recommended)*
					16. If yes, when was the capital improvements budget produced? *mm/dd/yyyy*
			✓		17. Has the capital improvement budget been updated in the last 18 months? *(Recommended)*
✓					18. Does the water system budget provide funding for depreciation of existing plant in service and/or for the funding of reserves for system replacement?
✓					19. Are there sufficient funds for training personnel?

COMMENTS:
(Please indicate the question number)

MANAGERIAL CAPACITY

SURVEY DATE 06/08/2010 (mm/dd/yyyy)

PWS # 7410004

yes	no	n/a	unk	note	MANAGERIAL CAPACITY
☑	☐	☐	☐	☐	1. Is a properly licensed operator available at all times? (N/A for GW-NC PWS)
☐	☐	☐	☑	☐	2. Is there a Drinking Water Source Protection Plan developed for this system? Date:
☑	☐	☐	☐	☐	3. Does this PWS have a governing body or board of directors?

If no, please indicate:
- ☐ Sole Proprietorship
- ☐ Partnership
- ☐ Limited Liability Corp.
- ☑ Other: City Council

4. How often does the board meet? ☐ N/A
- ☐ weekly ☐ semi-annually ☐ never
- ☑ monthly ☐ annually ☐ unknown
- ☐ bimonthly ☐ as necessary ☐ other:

yes	no	n/a	unk	note	Are the following records maintained onsite or located near by?
☑	☐	☐	☐	☐	5. - Bacteriological Analysis - **5 years retention.**
☑	☐	☐	☐	☐	6. - Chemical Analysis - **10 years retention.**
☑	☐	☐	☐	☐	7. - Records of actions taken to correct violations - **3 years retention.**
☑	☐	☐	☐	☐	8. - Copies of reports summaries or communication related to sanitary surveys - **10 years retention.**
☑	☐	☐	☐	☐	9. - Reports concerning variances or exemptions - **5 years retention.**
☑	☐	☐	☐	☐	10. - Copies of public notices issued - **3 years retention.**
☑	☐	☐	☐	☐	11. - Daily free chlorine residuals *(required disinfection)* - **1 year retention.**
☑	☐	☐	☐	☐	12. Are routine maintenance schedules established? *(Recommended)*
☑	☐	☐	☐	☐	13. Is an operation and maintenance manual(s) provided for the PWS and does it include; daily operating instructions, operator safety procedures, location of valves and other key system features, parts list and parts order form, and information for contacting the water system operator?
☑	☐	☐	☐	☐	14. Is there a clear plan of organization and control among the people responsible for management and operations of the water system? *(Recommended)*

yes	no	n/a	unk	note	Are any samples of the following parameters past due?
☐	☑	☐	☐	☐	15. Coliform
☐	☑	☐	☐	☐	16. Nitrates
☐	☑	☐	☐	☐	17. Nitrites
☐	☑	☐	☐	☐	18. Lead and Copper
☐	☑	☐	☐	☐	19. IOCs
☐	☑	☐	☐	☐	20. VOCs
☐	☑	☐	☐	☐	21. SOCs
☐	☑	☐	☐	☐	22. Disinfection Byproducts
☐	☑	☐	☐	☐	23. Radionuclide
☑	☐	☐	☐	☑	24. Is a written total coliform rule (TCR) sample site plan available for review?
☑	☐	☐	☐	☐	25. Does the (TCR) sample site plan meet the minimum requirements?
☑	☐	☐	☐	☐	26. Does the system have a sufficient supply of approved sampling bottles properly stored? *(Recommended)*
☐	☐	☑	☐	☐	27. Does the PWS provide stairways, ladders and handrails where needed?
☐	☐	☑	☐	☐	28. Are treads of non-slip material provided where needed?
☐	☑	☐	☐	☐	29. Is a health concern produced from inadequately protected electrical wiring?
☐	☐	☑	☐	☐	30. Are all confined space entry requirements considered? *(Recommended)*
☐	☑	☐	☐	☐	31. Are there any unused subsurface water storage tanks that need to be abandoned?
☐	☑	☐	☐	☐	32. Are there any water supply wells that are no longer being used that need to be abandoned?

COMMENTS:
(Please indicate the question number)

25. submitted 2009 - support Ground Water Rule

DISINFECTION - PG. 1 - Systems Using Only Groundwater

Survey Date	1/0/1900	PWS #
6/8/2010	(mm/dd/yyyy)	7410004

A separate form must be filled out for **each** disinfection unit in the PWS.

Treatment Facility Name:	Treatment Facility Location: (Location)	Date Online: ☐ Unk	Treated Water (GPD): ☐ Unk

Select all disinfection types used:
☐ Gas cl2 ☐ UV Light ☑ Sodium Hypochlorite ☐ Calcium Hypochlorite ☑ Miox ☐ Ozone ☐ Chlorine Dioxide ☐ Other

yes	no	n/a	unk	note	DISINFECTION
☑	☐	☐	☐	☐	1. Is disinfection used on a voluntary basis to prevent bacterial contamination of the distribution system?
☐	☑	☐	☐	☐	2. Any interruptions in disinfection in the past year? If yes, comment.
☑	☐	☐	☐	☑	3. Have any changes been made to this treatment facility since the last ESS?
☑	☐	☐	☐	☐	4. If yes, were plans and specs submitted to DEQ? Date approved: 2007
☑	☐	☐	☐	☐	5. Does the system have a means of measuring the residual disinfectant concentrations of free chlorine, combined chlorine (chloramines), and/or chlorine dioxide?
☑	☐	☐	☐	☐	6. Is a smooth nosed sample tap provided before and after treatment?
☑	☐	☐	☐	☐	7. Is a chlorine residual being recorded when all compliance total coliform samples are being taken?

yes	no	n/a	unk	note	VOLUNTARY DISINFECTION
☑	☐	☐	☐	☐	8. Is a measurable free chlorine residual maintained throughout the distribution system? *(Recommended)*
☑	☐	☐	☐	☐	9. Is the free chlorine residual being measured daily? *(Recommended)*
☑	☐	☐	☐	☐	10. Is an automatic proportioning chlorinator being used where the rate of flow is not reasonably constant?
☑	☐	☐	☐	☐	11. Is the analysis for free chlorine residual being made at a frequency that is sufficient to detect variations in chlorine demand or changes in water flow?

yes	no	n/a	unk	note	REQUIRED DISINFECTION
☐	☐	☑	☐	☐	12. Is the free chlorine residual being measured daily at a location prior to the first service connection?
☐	☐	☑	☐	☐	13. Is the daily free chlorine residual being recorded and kept on file for a minimum of 1 year?
☐	☐	☑	☐	☐	14. Is a detectable chlorine residual maintained throughout the distribution system?
☐	☐	☑	☐	☐	15. Is an automatic proportioning chlorinator being used where the rate of flow is not reasonably constant?
☐	☐	☑	☐	☐	16. Where chlorination is required for protection of the supply, is there standby equipment of sufficient capacity available to replace the largest unit?
☐	☐	☑	☐	☐	17. If primary disinfection is accomplished using ozone or some other chemical that does not provide a residual disinfectant, is chlorine added to provide a residual disinfectant?

Comments:
(Please indicate the question number)

Note: Point of treatment application: 1) Teton Spring (Miox) Chlorine Residual is maintained 0.14 - 0.24 mg/L; 2) Teton Creek Well (meter chlorinator - T-Chlor); 3) High School Well (meter chlorinator)
6. Noted deficiency - need backflow devices installed on threaded taps

State of Idaho
Department of Environmental Quality
Photo Log

Name of Facility:		Inspection Date	PWS#
City of Driggs		6/8/2010 (mm/dd/yyyy)	7410004
Camera Type: ☑ Digital ☐ 35mm ☐ Other:	Camera Brand:	Camera Model:	Camera ID#:

Photo:	Date:	By: (initials)	Direction: (N,S,E,W, etc.)	File Name:	Description:
Fig. 1	6/8/2010	RM		Driggs	Teton Creek Spring Filtration gallery facility
Fig. 2	6/8/2010	RM		Driggs	Teton Creek Spring lot and isolation valves
Fig. 3	6/8/2010	RM		Driggs	spring isolation valve
Fig. 4	6/8/2010	RM		Driggs	treatment injection site - Teton Creek Spring
Fig. 5	6/8/2010	RM		Driggs	sonic flow meter - Teton Creek Spring
Fig. 6	6/8/2010	RM		Driggs	booster pump - Teton Creek Spring
Fig. 7	6/8/2010	RM		Driggs	filtration gallery
Fig. 8	6/8/2010	RM		Driggs	miox treatment system
Fig. 9	6/8/2010	RM		Driggs	miox treatment system
Fig. 10	6/8/2010	RM		Driggs	pressure tank associated with miox system
Fig. 11	6/8/2010	RM		Driggs	spring over flow
Fig. 12	6/8/2010	RM		Driggs	million gallon storage tank
Fig. 13	6/8/2010	RM		Driggs	storage tank overflow - milion gal.
Fig. 14	6/8/2010	RM		Driggs	Teton Creek Wellhouse
Fig. 15	6/8/2010	RM		Driggs	Teton Creek well - pump to waste
Fig. 16	6/8/2010	RM		Driggs	well head and pressure relief
Fig. 17	6/8/2010	RM		Driggs	teton creek well - discharge line
Fig. 18	6/8/2010	RM		Driggs	teton creek well - pump to waste line
Fig. 19	6/8/2010	RM		Driggs	teton creek well sample tap and pressure gauge
Fig. 20	6/8/2010	RM		Driggs	discharge line
Fig. 21	6/8/2010	RM		Driggs	treatment application - teton creek well
Fig. 22	6/8/2010	RM		Driggs	300,000 gallon storage tank
Fig. 23	6/8/2010	RM		Driggs	tank isolation valves
Fig. 24	6/8/2010	RM		Driggs	same
Fig. 25	6/8/2010	RM		Driggs	flow meter and controls
Fig. 26	6/8/2010	RM		Driggs	tank well
Fig. 27	6/8/2010	RM		Driggs	highschool well house
Fig. 28	6/8/2010	RM		Driggs	highschool well
Fig. 29	6/8/2010	RM		Driggs	highschool well discharge line
Fig. 30	6/8/2010	RM		Driggs	pump to waste and cross connection - highschool well
Fig. 31	6/8/2010	RM		Driggs	high school well - flow meter, pressure gauge and isolation valve
Fig. 32	6/8/2010	RM		Driggs	highschool sample tap
Fig. 33	6/8/2010	RM		Driggs	chlorine treatment system
Fig. 34	6/8/2010	RM		Driggs	treatment injection site - highschool well
Fig. 35	6/8/2010	RM		Driggs	highschool well - pump to waste
Fig. 36	6/8/2010	RM		Driggs	Dalley Well lot
Fig. 37	6/8/2010	RM		Driggs	Dalley well
Fig. 38	6/8/2010	RM		Driggs	Valley Centre Well house
Fig. 39	6/8/2010	RM		Driggs	Valley Centre Wellhead
Fig. 40	6/8/2010	RM		Driggs	Valley Centre - pressure switch
Fig. 41	6/8/2010	RM		Driggs	check valve - valley centre
Fig. 42	6/8/2010	RM		Driggs	flow meter, pressure gauge, isolation valve - Valley Centre well
Fig. 43	6/8/2010	RM		Driggs	lions well lot
Fig. 44	6/8/2010	RM		Driggs	lions well
Fig. 45	6/8/2010	RM		Driggs	isolation valve vault - Lions well

Photographer(s) Signature(s): Date:

State of Idaho

Bureau Of Occupational Licenses

Public Record Information (Detail)

Public Record

Name:	Mr. JARED D GUNDERSON
Profession:	DRINKING WATER & WASTEWATER PROFESSIONALS
Type:	DRINKING WATER DISTRIBUTION OPERATOR - CLASS III
Number:	DWD3 - 15244
Address Of Record:	
City/State/Zip:	VICTOR ID 83455
Country:	USA
Business Phone:	(208) 354 - 2362
Original Date of Issue:	1/25/2007
Registered/Licensed By:	Endorsemt
License Status:	Current
Discipline:	
Expiration Date:	2/26/2011

Disciplinary Action

None

NOTE: This document is a copy of the electronic record of the person named above and constitutes a verification of that record. If official certification of this record is required, a written request must be submitted together with a $10.00 fee to the Bureau of Occupational Licenses, 1109 Main St., Suite 220, Boise, ID 83702.

Form 238
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

22

Office Use Only
Well ID No
Inspected by
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0045908
DRILLING PERMIT NO
Water Right or Injection Well No 22-13589

2. OWNER:
Name Huntsman Springs C/o Rendezvous Eng.
Address P.O. Box 4858
City Jackson Hole State Wyo. Zip 83001

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk Sub or Directions to well.
Twp 5N North ☐ or South ☐
Rge 45E East ☐ or West ☐
Sec 26 ____ 1/4 NE 1/4 NW 1/4
Gov't Lot ____ County Teton
Lat: : : Long: : :
Address of Well Site 97 N Hwy 33
City Driggs
(Give at least name of road + Distance to Road or Landmark)
Lt ____ Blk ____ Sub Name Huntsman Springs

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
NEAT Cement	0	62'	4yds	over bore

Was drive shoe used? ☒Y ☐N Shoe Depth(s)
Was drive shoe seal tested? ☐Y ☒N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10"	+1	244'	.365"	Steel	☒	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe
Packer ☒Y ☐N Type Triple K

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method
Screen Type & Method of Installation

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
232'	275'	.050"	10" telescope		Stainless	☐	☒
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
45' ft below ground Artesian pressure ____ lb
Depth flow encountered ____ ft Describe access port or control devices:

12. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Pumping Level	Time

Water Temp ____ Bottom hole temp
Water Quality test or comments:
Depth first Water Encounter

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology Water Quality & Temperature	Water Y	Water N
14"	0	34'	Clay		X
14"	34'	41'	Clay Sand Small Gravel		X
14"	41'	62'	Clay Sand Gravel first water	X	
10"	62'	80'	Sand Gravel	X	
10"	80'	220'	Sand Gravel Lots of Water	X	
10"	220	240'	Sand Gravel Clay Lost Water		X
10"	240'	245'	Cemented Gravels		X
10"	245	262'	Cemented Gravels 50gpm	X	
10"	262	280'	Cemented Gravels Lots of water	X	

RECEIVED
JUN 22 2007
Department of Water Resources
Eastern Region

Completed Depth 280' (Measurable)
Date Started 5-1-07 Completed 5-18-07

14. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed

Company Name Denning Drilling Firm No 518
Principal Driller Daniel Denning Date 5-21-07
and
Driller or Operator II [signature] Date 5-21-07
Operator I ____ Date ____
Principal Driller and Rig Operator *Required*
Operator I must have signature of Driller/Operator II

FORWARD WHITE COPY TO WATER RESOURCES

FORM 211 10/07

Fee 50.00
Receipt E034446
Receipted by ____
Date 10/1/2008

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR AMENDMENT OF A PERMIT

Name of Applicant City of Driggs Phone (208) 354-2362

Mailing address PO Box 48, Driggs, ID 83422 Email pzdriggs@pdt.net

Representative: Rocky Mountain Environmental Associates, Inc Phone: (208) 524-2353 Fax: (208) 524-1795

482 Constitution, Ste 303, Idaho Falls, ID 83402 Email: kmoore@rockymountainenvironmental.com

I am the owner and the holder of Permit to Appropriate the Public Waters of the State of Idaho No. 22-13589, and request that the permit and permit map be amended and/or changed as follows:

Purpose of Amendment.

____ Change Point of Diversion X Add diversion point(s) X Change Place of use

X Change Nature of Use ____ Change Period of Use ____ Other ____

1. Location of point of diversion is Township 5N Range 45E Sec. 26, in the ___ ¼, NE ¼, NW ¼, Govt. Lot ___, E.B.M., TETON County; additional points of diversion if any: See attached for additional points *

2. Period and nature of use: (irrigation, domestic, stockwatering, industrial, etc.)

   Amount 1.1 (cfs or acre-feet per annum) for MUNICIPAL purposes from 1/01 to 12/31 (both dates inclusive)

   Amount ____ (cfs or acre-feet per annum) for ____ purposes from ____ to ____ (both dates inclusive)

   Amount ____ (cfs or acre-feet per annum) for ____ purposes from ____ to ____ (both dates inclusive)

3. Place of use or land to be irrigated:

			NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTALS
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
							City Limits of Driggs												

Total number of acres to be irrigated: ____

4. a. Who owns the property at the point of diversion? Applicant

   b. Who owns the land to be irrigated or place of use? Applicant

   c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: ____

RECEIVED
JAN 28 2009
Department of Water Resources
Eastern Region

RECEIVED
JUL 10 2009
Department of Water Resources
Eastern Region

FORM 211 10/07

Fee 50.00
Receipt E03446
Receipted by
Date 10/1/2008

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR AMENDMENT OF A PERMIT

Name of Applicant City of Driggs Phone (208) 354-2362

Mailing address PO Box 48, Driggs, ID 83422 Email pzdriggs@pdt.net

Representative: Rocky Mountain Environmental Associates, Inc Phone: (208) 524-2353 Fax: (208) 524-1795

482 Constitution, Ste 303, Idaho Falls, ID 83402 Email: kmoore@rockymountainenvironmental.com

I am the owner and the holder of Permit to Appropriate the Public Waters of the State of Idaho No. 22-13589, and request that the permit and permit map be amended and/or changed as follows:

Purpose of Amendment:

___ Change Point of Diversion X Add diversion point(s) X Change Place of use

X Change Nature of Use ___ Change Period of Use ___ Other ___

1. Location of point of diversion is Township 5N Range 45E Sec. 26, in the __ ¼, NE ¼, NW ¼, Govt. Lot __, E.B.M., TETON County; additional points of diversion if any: See attached for additional points *
2. Period and nature of use: (irrigation, domestic, stockwatering, industrial, etc.)

   Amount 1.1 (cfs or acre-feet per annum) for MUNICIPAL purposes from 1/01 to 12/31 (both dates inclusive)

   Amount ___ (cfs or acre-feet per annum) for ___ purposes from ___ to ___ (both dates inclusive)

   Amount ___ (cfs or acre-feet per annum) for ___ purposes from ___ to ___ (both dates inclusive)

3. Place of use or land to be irrigated:

			NE 1/4				NW 1/4				SW 1/4				SE 1/4				TOTALS
Twp	Rge	Sec	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
								City Limits of Driggs											

Total number of acres to be irrigated: ___

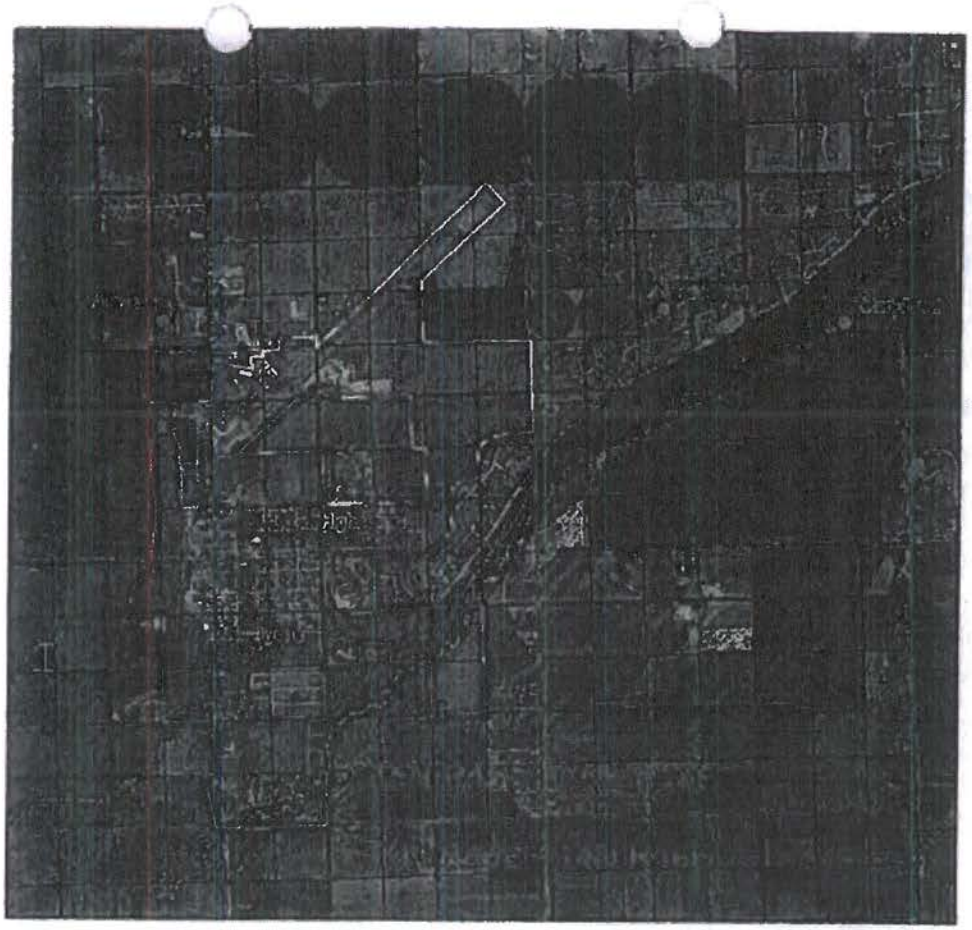
4. a. Who owns the property at the point of diversion? Applicant

   b. Who owns the land to be irrigated or place of use? Applicant

   c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: ___

RECEIVED
JAN 28 2009
Department of Water Resources
Eastern Region

RECEIVED
JUL 10 2009
Department of Water Resources
Eastern Region



Legend

- POD
- POU
- Twp and Rng
- Sections
- QQ

0 0.25 0.5 1 Miles

Place of use boundary is the City Limits of Driggs as of July 2008.

2006 NAIP Photography

I hereby request approval of this change subject to the fact that no one will be injured by the change, and that the change will be made at my own risk.

Signed this 23 day of January, 2009. Travis B. Christensen Mayor

Permit Holder Signature (and title, if for a company or organization)

ACTION OF THE DEPARTMENT OF WATER RESOURCE

Preliminary check by _____ Publication prepared by _____ Date _____ Published in _____ Publication dates _____

Witness my hand this _____ day of _____, 20____

_____

Signature

All points of diversion to be included in amendment:

*Includes previously described point of diversion.

Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Local Name for Diversion
		NE	SW	23	5N	45E	TETON	VALLEY CENTER WELL
		SW	NW	25	5N	45E	TETON	HIGHSCHOOL WELL
	NE	NE	SE	26	5N	45E	TETON	DALLEY WELL
		NE	NW	26	5N	45E	TETON	HUNTSMAN WELL
		NW	NE	35	5N	45E	TETON	LYONS WELL
		NW	SE	19	5N	46E	TETON	TANK WELL
		NE	SW	20	5N	46E	TETON	TETON CREEK WELL

Fig. 1 – Teton Creek Spring Infiltration

Fig. 2 – spring isolation valves and well lot

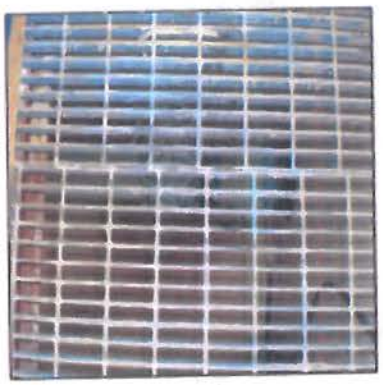


Fig. 3 – spring isolation valve

Fig. 4 – treatment injection site

Fig. 5 – sonic flow meter

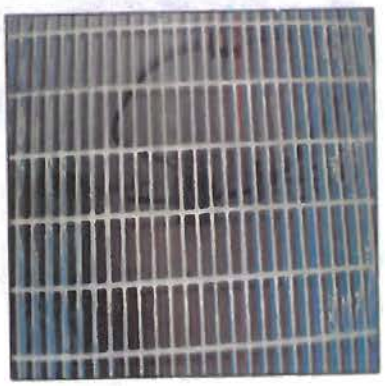


Fig. 6 – booster pump/ spring water to infiltration gallery

Fig. 7 – infiltration gallery

Fig. 8 – miox treatment

Fig. 9 – miox treatment system

Fig. 10 – pressure tank associated w/treatment injection

Fig. 11 – spring over flow

Fig. 12 – 1,000,000 storage tank lot

Fig. 13 – storage tank overflow/drain

Fig. 14 – Teton Creek pump house

Fig. 15 – Teton Creek pump to waste

Fig. 16 – well head pressure relief

Fig. 17 – discharge line

Fig. 18 – pump to waste line, check valve w/pressure reducer

Fig. 19 – sample tap, pressure gauge

Fig. 20 – overview of discharge line

Fig. 21 – treatment application/chlorine meter

Fig. 22 – 300,000/gallon storage tank

Fig. 23 – isolation valves vaults

Fig. 24 – isolation valve vaults

Fig. 25 – flow meter, electrical controls

Fig. 26 – tank well

Fig. 27 – high school well house

Fig. 28 – high school well

Fig. 29 – high school well discharge line

Fig. 30 – pump to waste, cross connection

Fig. 31 – flow meter, pressure gauge, isolation valve

Fig. 32 – high school well sample tap

Fig. 33 – chlorine application

Fig. 34 – chlorine injection site

Fig. 35 – pump to waste

Fig. 36 – Dalley well lot

Fig. 37 – dalley well

Fig. 38 – Valley Center Wellhouse

Fig. 39 – Valley Center well head

Fig. 40 – pressure switch

Fig. 41 – valley center check valve

Fig. 42 – flow meter, pressure gauge, isolation valve

Fig. 43 – Lions well well lot

Fig. 44 – Lions well

Fig. 45 – isolation valves/vault

Idaho DEQ Public Drinking Water System
Monitoring Schedule Report

ID7410004 - DRIGGS CITY OF
Community water system serving 1300 people and 102 connections.
Regulated by IDAHO FALLS REGIONAL OFFICE.

The following schedules include monitoring periods between 01/01/2010 and 12/31/2010

Schedules for distribution system(s):

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
3100	COLIFORM (TCR)	2 per MN	1/1	12/31	Monthly
PBCU	LCR - LEAD COPPER	10 per 3Y to be taken 01/01/2008 and 12/31/2010 taken between the months of June through September.	6/1	9/30	NO
ZDBP	DBP - TTHM AND HAA5	1 per 3Y due between 01/01/2008 and 12/31/2010 taken between the months of July through September	7/1	9/30	NO

Schedules for HIGH SCHOOL WELL, Tag # E0007616

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
2039	DI(2-ETHYLHEXYL) PHTHALATE	1 per YR due between 01/01/2010 and 12/31/2010	7/1	7/31	NO
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
VOCS	VOCS - GROUP	1 per 3Y due between 01/01/2008 and 12/31/2010			YES
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
ZFLU	IOC - FLUORIDE	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
ZIOC	IOCS - GROUP	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
ZNO2	NITRITE	1 per 9Y due between 01/01/2002 and 12/31/2010			NO
ZNO3	NITRATE	1 per YR due between 01/01/2010 and 12/31/2010			NO

Schedules for TETON CR SPRINGS/MANIFOLD, Tag # E0007049M

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
SODI	IOC - SODIUM	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
VOCS	VOCS - GROUP	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
ZARS	ARSENIC (1005)	1 per 3Y due between 01/01/2008 and 12/31/2010			NO
ZNO2	NITRITE	1 per 9Y due between 01/01/2002 and 12/31/2010			NO
ZNO3	NITRATE	1 per YR due between 01/01/2010 and 12/31/2010			NO

Schedules for TETON CREEK WELL, Tag # 000000012091

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
URAN	RADS - URANIUM	1 per QT due between 01/01/2010 and 03/31/2010			NO
URAN	RADS - URANIUM	1 per QT due between 04/01/2010 and 06/30/2010			NO

Schedules for VALLEY CENTRE WELL (BACKUP), Tag # 000000011681

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied

ZNO3	NITRATE	1 per YR due between 01/01/2010 and 12/31/2010			NO

Schedules for WELL #1, TANK (BACKUP), Tag # E0007048

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2002 and 12/31/2010			YES
ZNO3	NITRATE	1 per YR due between 01/01/2010 and 12/31/2010			NO

Schedules for WELL #2, DALLEY (BACKUP), Tag # E0007047

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2002 and 12/31/2010			NO
ZNO3	NITRATE	1 per YR due between 01/01/2010 and 12/31/2010			NO

Schedules for WELL #3, LIONS (BACKUP), Tag # E0007046

Code	Group/Analyte Name	Monitoring Frequency	Season Begin &	End Date	Satisfied
ZNO2	NITRITE	1 per 9Y due between 01/01/2002 and 12/31/2010			NO
ZNO3	NITRATE	1 per YR due between 01/01/2010 and 12/31/2010			NO

"*FUTURE" in the "Satisfied" column indicates that the sampling requirement begins sometime in the future. Sampling before the monitoring period begin date will not satisfy the requirement for the monitoring period.

"*See CO" in the "Satisfied" column indicates that the operator needs to contact their Compliance Officer(CO) to verify that samples have been taken and the schedule has been satisfied.

IMPORTANT NOTICE : This monitoring schedule is provided to you as a courtesy and is current as of June 28, 2010. This monitoring schedule may be changed or modified as needed. Please revisit the monitoring schedule tool and review the system's monitoring schedule prior to sampling as to ensure compliance with the most current monitoring requirements. Contact your public water system regulating agency if you have any questions.

APPENDIX R

City of Driggs Cross Connection Program

CHAPTER 3

WATER AND SEWER USE AND SERVICE

ARTICLE A. CROSS CONNECTION CONTROL[1]

SECTION:

7-3A-1: City Policies
7-3A-2: Responsibilities Of City
7-3A-3: Responsibilities Of Plumbing Inspector
7-3A-4: Responsibilities Of Customer
7-3A-5: Responsibilities Of Certified Backflow Assembly Technician

7-3A-1: **CITY POLICIES:** The city adopts the following policies concerning backflow prevention:

A. No water service connection to any premises shall be installed after the effective date hereof unless the water supply is protected as required by state laws, regulations and codes and this article. Existing service of water to any premises shall be discontinued by the city if a backflow prevention assembly required by this article is not installed, tested, and maintained, or if it is found that a backflow prevention assembly has been removed or bypassed, or if an unprotected cross connection exists on the premises. Services will not be restored until such conditions or defects are corrected.

B. The customer's water system shall be open for inspection at all reasonable times to authorized representatives of the city to determine whether cross connections exist. When such a condition is known, the water purveyor shall deny or immediately discontinue service to the premises by providing a physical break in the service line until the customer has corrected the condition(s) in conformance with state statutes and city regulations relating to plumbing and water supplies and the regulations adopted pursuant thereto.

---

1. See section 7-3-1 of this chapter for definitions applicable to this article.

C. An approved backflow prevention assembly shall be installed on each service to a customer's water system, at or near the property line, or immediately inside the building being served but, in all cases, before the first branch line leading off the water supply.

D. The type of protective assembly required shall depend on the degree of hazard which exists at the point of cross connection (whether direct or indirect) as stipulated in the uniform plumbing code, chapter 6.

E. All presently installed backflow prevention assemblies which do not meet the requirements of this article but were approved assemblies for the purpose described in this article at the time of installation and which have been properly maintained, shall be upgraded to current code and/or regulations for the installation and degree of hazard. (1985 Code § 13.08.390)

7-3A-2: **RESPONSIBILITIES OF CITY:** The water purveyor shall be responsible for the protection of the public potable water distribution system from contamination or pollution due to the backflow of contaminants or pollutants through the water service connections. If, in the judgment of the purveyor, an approved backflow prevention assembly is required (at the customer's water service connection or within the customer's private water system) for the safety of the water system, the water purveyor or his/her designated agent shall give notice, in writing, to such customer to install such approved backflow prevention assembly(ies) at specific location(s) on his/her premises. The consumer shall immediately install such approved assembly(ies) at his/her own expense; and failure, refusal or inability on the part of the consumer to install, have tested and maintain such assembly(ies) shall constitute grounds for discontinuing water service to the premises until such requirements have been satisfactorily met. (1985 Code § 13.08.390)

7-3A-3: **RESPONSIBILITIES OF PLUMBING INSPECTOR:**

A. The designated plumbing inspector has the responsibility to not only review building plans and inspect plumbing as it is installed, but has the explicit responsibility of preventing cross connections from being designed and built into structures within his/her jurisdiction.

B. When the review of building plans suggests or detects the potential for a cross connection being made an integral part of the plumbing system, the building official has the responsibility to require such

cross connections be either eliminated or provided with an approved backflow prevention assembly in accordance with the plumbing code.

C. The designated plumbing inspector's responsibility begins at the point of service (the downstream side of the meter) and carries throughout the entire length of the customer's water system.

D. The inspector should inquire about the intended use of water at any point where it is suspected that a cross connection might be made or where one is actually called for by the plans.

E. When such a cross connection is discovered, it will be mandatory that a suitable, approved backflow prevention assembly be required by the plans and be properly installed in accordance with the uniform plumbing code. (1985 Code § 13.08.390)

7-3A-4: RESPONSIBILITIES OF CUSTOMER:

A. It is the duty and responsibility of the customer at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at least once per year at the customer's expense. In those instances where the water purveyor deems the hazard to be great, it may require certified inspections and tests at a more frequent interval. These inspections and tests shall be performed by a certified backflow assembly technician, licensed through the Idaho department of environmental quality or equal certification. It is the duty of the water purveyor to see that these tests are made according to the standards set forth by the Idaho DEQ.

B. Backflow prevention assemblies shall be installed in water supply lines to provide at least the degree of protection stipulated in the uniform plumbing code, chapter 6. All backflow prevention assemblies shall be exposed for easy observation and be readily accessible.

C. All backflow assemblies installed in a potable water supply system for protection against backflow shall be maintained in good working order by the person having control of such assemblies. If, upon inspection, such backflow assemblies are found to be defective or inoperative, the water purveyor shall require the replacement thereof. No assembly shall be removed from use, relocated, or another assembly substituted without approval from the water purveyor.

D. All backflow assemblies shall be tested upon installation, relocation, and repair, and annually thereafter.

E. No backflow assembly shall be installed to create a safety hazard (for example, installed over electrical panels). (1985 Code § 13.08.390)

7-3A-5: **RESPONSIBILITIES OF CERTIFIED BACKFLOW ASSEMBLY TECHNICIAN:** When employed by a consumer or the water purveyor to test, repair, overhaul and/or maintain backflow prevention assemblies, a certified backflow assembly technician will have the following responsibilities:

A. To use acceptable testing equipment and procedures.

B. To make reports of such testing and/or repair to the consumer and water purveyor on forms approved by the water purveyor.

C. To include on such report a complete list of materials or replacement parts used.

D. To ensure that replacement parts are equal in quality to parts originally supplied by the manufacturer of the assembly being repaired.

E. To not change the design, material or operational characteristics of the assembly during repair or maintenance.

F. To ensure that a certified technician performs the work and to be responsible for the competence and accuracy of all tests and reports.

G. To ensure that his/her license is current and that all testing equipment being used is acceptable to the state and is in proper operating condition.

H. To be equipped with, and be competent to use, all tools, gauges and other equipment necessary to properly test, repair, and maintain backflow prevention assemblies.

I. To tag each assembly and air gap application showing date tested and by whom and reference number to test form.

7-3A-5

J. To report any failing assembly(ies) to the water purveyor. Such failure to report may be grounds for revocation of the technician's certification. (1985 Code § 13.08.390)

APPENDIX S

City of Driggs Water Budget and
FY 2011 Basic Financial Statements

City of Driggs

Account Number	Account Title	2010-11 Prior Yr Budget	2010-11 Prior Yr Actual	2011-12 Current Yr Budget	2011-12 Current Yr 12 mn Est	2012-13 Adopted Budget
WATER FUND						
Revenue						
5137100	SERVICE FEES	446000	494734	449000	428963	430000
5137110	PROJECT FUNDS (RESERVE)	274726	0	118394		116584
5137200	HOOKUP FEES	6000	3237	3500	1750	3500
5138100	INTEREST INCOME	500	1878	500	240	500
5138500	GRANTS	240000	0		0	30000
5138900	MISCELLANEOUS INCOME	5000	9072	1800	0	0
	Total Revenue	972226	508921	573194	430953	580584
Expense						
5180110	SALARIES AND WAGES	96052	87871	96052	76019	72123
5180111	COUNCIL SALARIES AND WAGES	8600	8599	11267	9755	11155
5180130	FICA & MEDICARE	8005	7236	8005	6562	6371
5180131	HEALTH INSURANCE	26500	23948	26500	16553	12879
5180132	RETIREMENT	10873	10023	10873	8912	8846
5180133	WORKERS COMPENSATION	2500	2468	2700	2815	3500
5180134	INSURANCE - MISC BENEFIT	0	0	0	0	0
5180135	INSURANCE - ICRMP(1/4TH)	5300	5717	5130	5716	6181
5180200	FEES & CHARGES	3500	4649	4200	2111	2500
5180210	POSTAGE/PUBL/SUPPLIES	3300	3292	3300	2436	4000
5180240	TRAINING & TRAVEL	2000	1256	2000	1500	1500
5180245	SAFETY	4000	3760	4000	2062	2000
5180250	POWER - WELLS	30000	25399	20000	21373	10000
5180265	SHOP OPERATIONS: gas/elec			0	6674	15500
5180290	WATER ASSESSMENT FEES	0	0	0	3536	3600
5180309	ENGINEERING SERVICE	15000	7116	15000	0	60000
5180310	LEGAL & PROFESSIONAL	6500	4569	6500	10321	6500
5180311	REPAIRS - WWTP			0	3037	0
5180320	TELEPHONE	2000	2029	2000	1503	1500
5180410	LAB TESTS	3500	920	3500	8320	8000
5180455	CITY HALL PROJECT	20000	0	6667	2000	0
5180610	CITY HALL OPERATIONS	20000	17615	11960	5682	3000
5180616	PARTS & REPAIRS	30000	47027	36000	50125	53000
5180621	SBA LOAN #1	0	0	0	0	0
5180622	SBA LOAN #2	13140	13554	7884	8981	13554
5180670	BOND-RURAL DEV #93-03 '97 W	16265	16265	16265	16265	16265
5180680	2006 DEQ LOAN#9914	42910	42911	42910	21455	42910
5180690	657 LAND PURCHASE INTEREST	3581	2311	3581	2160	0
5180703	2004 RDA LOAN#	30700	30700	30700	30700	30700
5180720	BACKHOE PAYMENT(1/2)	8000	7896	0	0	0
5180735	CAPITAL IMPROVEMENT	365000	53829	12000	46733	12000
5180738	CAPITAL EXPENDITURES	40000	82775	0	6870	0
5180739	CAPITAL EQUIPMENT EXPENDIT	0	7767	3000	16031	14000
5180740	SHOP MAINTENANCE(1/2)	15000	13891	12000	4638	4000
5180750	METER READING EQUIPMENT	10000	18565	52200	47223	35000
5180760	METER REPAIR EQUIPMENT	7000	465	1000	2607	3000
5180770	VEHICLE REPLACEMENT EXP	7000	7200	0	0	0
5180790	DEPRECIATION	116000	0	116000	116000	116000
5180800	BAD DEBT EXPENSE	0	965	0	0	1000
5180990	MISCELLANEOUS EXPENSE	0	0	0	0	0
	Total Expense	972226	562588	573194	566676	580584
	Net Income/(Loss)	0	-53667		-135723	0

RUDD & COMPANY PLLC

certified public accountants | business consultants

CITY OF DRIGGS, IDAHO

Basic Financial Statements
and
Supplementary Information
with
Independent Auditors' Report

Year Ended September 30, 2012

giving direction to your future

CITY OF DRIGGS, IDAHO
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September 30, 2012

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CITY OF DRIGGS, IDAHO
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September 30, 2012

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INDEPENDENT AUDITORS' REPORT

Honorable Mayor and City Council
City of Driggs, Idaho

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the aggregate discreetly presented component unit, each major fund, and the aggregate remaining fund information of the City of Driggs, Idaho as of and for the year ended September 30, 2012, which collectively comprise the City's basic financial statements as listed in the table of contents. These financial statements are the responsibility of the management of the City of Driggs, Idaho. Our responsibility is to express an opinion on these basic financial statements based on our audit. We did not audit the financial statements of the Driggs Urban Renewal Agency (the Agency), which are presented as a discrete component unit. Those financial statements were audited by other auditors whose report thereon, dated January 17, 2013, has been furnished to us, and our opinion, insofar as it relates to the amounts included for the Driggs Urban Renewal Agency, is based solely on the report of the other auditors.

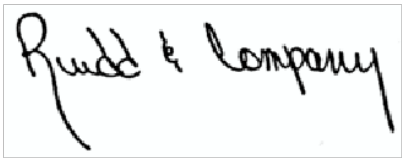
We conducted our audit in accordance with auditing standards generally accepted in the United States of America, and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discreetly presented component unit, each major fund, and the aggregate remaining fund information of the City of Driggs, Idaho as of September 30, 2012, and the respective changes in financial position and cash flows, where applicable, thereof, for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated June 18, 2013, on our consideration of the City of Driggs, Idaho internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in conjunction with this report in considering the results of our audit.

The management's discussion and analysis and budgetary comparison information as listed in the table of contents, are not a required part of the basic financial statements but are supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplementary information. However, we did not audit the information and express no opinion on it.

Our audit was performed for the purpose of forming an opinion on the financial statements that collectively comprise the City of Driggs, Idaho basic financial statements. The accompanying budgetary comparison schedule for the water and sewer funds, combining and individual nonmajor fund financial statements and supplementary information listed in the table of contents, are presented for purpose of additional analysis and are not a required part of the basic financial statements. The combining and individual nonmajor fund financial statements and supplementary information are the responsibility of management and were derived from and related directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.



June 18, 2013

City of Driggs
P.O. BOX 48
DRIGGS, IDAHO 83422

Management's Discussion and Analysis

As management of the City of Driggs, we offer readers of the City of Driggs' financial statements this narrative overview and analysis of the financial activities of the City of Driggs for the fiscal year ended September 30, 2012. All amounts, unless otherwise indicated, are expressed of dollars.

Financial Highlights

- The assets of the City of Driggs exceeded its liabilities at the close of the most recent fiscal year by $27,578,823 *(net assets).* Of this amount, $3,816,394 (*unrestricted net assets)* may be used to meet the government's ongoing obligations to citizens and creditors.

- The government's total net assets increased by $95,561.

- As of the close of the current fiscal year, the City of Driggs' governmental funds reported combined ending fund balances of $1,682,721, an increase of $88,989 in comparison with the prior year. Of this total amount, $1,189,613 is *available for spending* at the government's discretion (unreserved fund balance).

- At the end of the current fiscal year, unassigned fund balances were as follows for the general fund, $1,305,082, for the water fund, $429,430, and the sewer fund, $1,499,276.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the City of Driggs' basic financial statements. The City of Driggs' basic financial statements comprise three components: 1) government-wide financial statements, 2) fund financial statements, and 3) notes to the financial statements. This report also contains other supplementary information in addition to the basic financial statements themselves.

Government-wide financial statements. The *government-wide financial statements* are designed to provide readers with a broad overview of the City of Driggs' finances, in a manner similar to a private-sector business.

The *statement of net assets* presents information on all of the City of Driggs' assets and liabilities, with the difference between the two reported as *net assets.* Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the City of Driggs is improving or deteriorating.

The *statement of activities* presents information showing how the government's net assets changed during the most recent fiscal year. All changes in net assets are reported as soon as the underlying event giving rise to the change occurs, *regardless of the timing of related cash flows.* Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

Both of the government-wide financial statements distinguish functions of the City of Driggs that are principally supported by taxes and intergovernmental revenues *(governmental activities)* from other functions that are intended to recover all or a significant portion of their costs through user fees and charges *(business-type activities).* The governmental activities of the City of Driggs include general government, public safety, public works, parks, and streets. The business-type activities of the City of Driggs include a Water and Sewer operation.

The government-wide financial statements include not only the City of Driggs itself, known as the *primary government,* but the Water and Sewer operation. Although legally separate, water and sewer functions for all practical purposes as a department of the City of Driggs, and therefore have been included as an integral part of the primary government.

The government-wide financial statements can be found as part of this report.

Fund financial statements. *A fund* is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City of Driggs, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of the City of Driggs can be divided into two categories: governmental funds and proprietary funds.

Governmental funds. *Governmental funds* are used to account for essentially the same functions reported as *governmental activities* in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on *balances of spendable resources* available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for *governmental funds* with similar information presented for *governmental activities* in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. Both the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate this comparison between *governmental funds* and *governmental activities.*

The City of Driggs maintains nine individual governmental funds. Information is presented separately in the governmental fund balance sheet and in the governmental fund statement of revenues, expenditures, and changes in fund balances for the general fund, road and street fund, airport fund, the local improvement district fund and the resort tax fund, all of which are considered to be major funds. Data from the other four governmental funds are combined into a single, aggregated presentation. Individual fund data for each of these non-major governmental funds is provided in the form of *combining statements* elsewhere in this report.

The City of Driggs adopts an annual appropriated budget for its general fund. A budgetary comparison statement has been provided for the general fund to demonstrate compliance with this budget.

Proprietary funds. The City of Driggs maintains one type of proprietary fund, known as e*nterprise. Enterprise funds* are used to report the same functions presented as *business-type activities* in the government-wide financial statements. The City of Driggs uses enterprise funds to account for its Water and Sewer operation

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for the Water and Sewer operation, both of which are considered to be major funds of the City of Driggs.

Notes to the financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the financial statements can be found as part of this report.

The combining statements referred to earlier in connection with non-major governmental funds and internal service funds are presented immediately following the required supplementary information on pensions. Combining and individual fund statements and schedules can be found as part of this report.

Government-wide Financial Analysis

As noted earlier, net assets may serve over time as a useful indicator of a government's financial position. In the case of the City of Driggs, assets exceeded liabilities by $27,578,823 at the close of the most recent fiscal year.

By far the largest portion of the City of Driggs' net assets (86 %) reflects its investment in capital assets (e.g., land, buildings, machinery, and equipment); less any related debt used to acquire those assets that is still outstanding. The City of Driggs uses these capital assets to provide services to citizens; consequently, these assets are *not* available for future spending. Although the City of Driggs' investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

City of Driggs' Net Assets	Governmental Activities		Business-Type Activities		Total	
	2012	2011	2012	2011	2012	2011
ASSETS:						
Current and other assets	$ 2,362,930	$ 2,019,598	$ 2,729,549	$ 1,958,025	$ 5,092,479	$ 3,977,623
Capital Assets	19,424,362	19,509,462	9,425,577	6,664,581	28,849,939	26,174,043
TOTAL ASSETS	21,787,292	21,529,060	12,155,126	8,622,606	33,942,418	30,151,666
LIABILITIES:	2012	2011	2012	2011	2012	2011
Current liabilities	506,261	167,034	935,212	340,421	1,441,473	507,455
Noncurrent liabilities	187,497	218,399	4,734,625	1,942,550	4,922,122	2,160,949
TOTAL LIABILITIES	693,758	385,433	5,669,837	2,282,971	6,363,595	2,668,404
NET ASSETS:						
Unvested in capital assets net of related debt	19,205,846	19,263,132	4,556,583	4,611,863	23,762,429	23,874,995
Unrestricted	1,887,688	1,880,495	1,928,706	1,727,772	3,816,394	3,608,267
TOTAL NET ASSETS	$ 21,093,534	$ 21,143,627	$ 6,485,289	$ 6,339,635	$ 27,578,823	$ 27,483,262

City of Driggs' Net Assets represents resources that are subject to external restrictions on how they may be used. The remaining balance of *unrestricted net assets* ($3,816,394) may be used to meet the government's ongoing obligations to citizens and creditors.

At the end of the current fiscal year, the City of Driggs is able to report positive balances in all three categories of net assets, both for the government as a whole, as well as for its separate governmental and business-type activities. The same situation held true for the prior fiscal year.

The government's net assets decreased by $50,093 during the current fiscal year.

Business-type activities increased the City of Driggs' net assets by $145,654.

City of Driggs' Activities	Governmental Activities		Business-Type Activities		Total	
	2012	2011	2012	2011	2012	2011
REVENUES:						
Program Revenues:						
Charges for Services:						
General and administrative	$ 75,276	$ 125,552	$ -	$ -	$ 75,276	$ 125,552
Airport	145,846	117,959	-	-	145,846	117,959
LID assessments/interest	18,687	4,344	-	-	18,687	4,344
Water	-	-	509,344	507,043	509,344	507,043
Sewer	-	-	584,678	531,537	584,678	531,537
Total	239,809	247,855	1,094,022	1,038,580	1,333,831	1,286,435
Operating Grants and Contributions						
Public works	258,355	165,969		-	258,355	165,969
Cpaital Grants and Contributions						
Airport	805,150	130,485		-	805,150	130,485
Sewer	-	-	28,535	284,139	28,535	284,139
Total	805,150	130,485	28,535	284,139	833,685	414,624
General Revenues						
Property taxes	341,977	340,935			341,977	340,935
Resort taxes	193,371	180,472			193,371	180,472
State and Federal funds	275,251	172,098			275,251	172,098
Investment earnings	14,701	5,358	4,378	3,755	19,079	9,113
Miscellaneous	100,462	9,358			100,462	9,358
Total	925,762	708,221	4,378	3,755	930,140	711,976
TOTAL REVENUES	$ 2,229,076	$ 1,252,530	$ 1,126,935	$ 1,326,474	$ 3,356,011	$ 2,579,004
EXPENSES:						
General and administrative	$ 1,405,666	$ 873,964		$ -		$ 873,964
Airport	288,589	677,815		-		677,815
Public works	516,261	275,416		-		275,416
Public safety	54,000	54,000		-		54,000
Interest on long-term debt	14,653	14,575		-		14,575
Water		-	473,967	484,125		484,125
Sewer		-	507,314	572,624		572,624
TOTAL EXPENSES	2,279,169	1,895,770	981,281	1,056,749	-	2,952,519
CHANGE IN NET ASSETS	(50,093)	(643,240)	145,654	269,725	3,356,011	(373,515)
NET BEGINNING ASSETS	21,143,627	21,786,867	6,339,635	6,069,910	27,483,262	27,856,777
NET ENDING ASSETS	$ 21,093,534	$ 21,143,627	$ 6,485,289	$ 6,339,635	$ 30,839,273	$ 27,483,262

Financial Analysis of the Government's Funds

As noted earlier, the City of Driggs uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

Governmental funds. The focus of the City of Driggs' *governmental funds* is to provide information on near-term inflows, outflows, and balances of *spendable* resources. Such information is useful in assessing the City of Driggs' financing requirements. In particular, *unreserved fund balance* may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year.

As of the end of the current fiscal year, the City of Driggs' governmental funds reported combined ending fund balances of $1,682,721, an increase of $88,989 in comparison with the prior year. Of this amount $1,189,613 constitutes *unassigned fund balance,* which is available for spending at the government's discretion. The remainder of fund balance is *reserved* to indicate that it is not available for new spending because it has already been committed 1) to pay debt service, 2) encumbrances, or 3) or for a variety of other restricted purposes.

The general fund is the chief operating fund of the City of Driggs. At the end of the current fiscal year, unreserved fund balance of the general fund was $1,305,082, while total fund balance was the same. As a measure of the general fund's liquidity, it may be useful to compare both unreserved fund balance and total fund balance to total fund expenditures.

Proprietary funds. The City of Driggs' proprietary funds provide the same type of information found in the government-wide financial statements, but in more detail.

General Fund Budgetary Highlights.

The road fund increased its negative fund balance over the prior year from ($6,715) in FY 2011 to ($248,293).

The airport fund had a positive fund balance of $212,566 as compared to $176,138 in FY 2011.

The LID fund had a negative balance of ($27,616) due to early pay-off of loan 91522 and 91523.

Capital Asset and Debt Administration

Capital assets. The City of Driggs' investment in capital assets for its governmental and business type activities as of September 30, 2012, amounts to $28,849,939 (net of accumulated depreciation). This investment in capital assets includes land, buildings and system, improvements, machinery and equipment, park facilities, and roads.

Long-term debt. At the end of the current fiscal year, the City of Driggs had total long term debt outstanding of $5,087,510 including funds received toward construction of the new regional Waste Water Treatment Plant.

Economic Factors and Next Year's Budgets and Rates

- Development remains at a standstill as the region was hard hit by the recession.
- State of Idaho revenues have been negatively affected by the recession. Projections of state revenues provided to the City have been adjusted accordingly.
- The impacts of growth over the long-term are being considered as an on-going process. The City continues the process of meeting water and sewer capacity challenges.
- The City is moving forward with expansion of its Waste Water Treatment Facility. This regional project (treatment will be provided to the City of Victor) has received significant funding and loan opportunities from the State of Idaho. In FY 2012 $2,938,365 was requested out of the $8,500,000 total funds available.

All of these factors were considered in preparing the City of Driggs' budget for the 2013 fiscal year.

Requests for Information

This financial report is designed to provide a general overview of the City of Driggs' finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Office of the City Clerk, P.O. Box 48, Driggs, Idaho 83422.

BASIC FINANCIAL STATEMENTS

CITY OF DRIGGS, IDAHO
Statement of Net Assets – Government Wide
September 30, 2012

	Primary Government			Component Unit
	Governmental Activities	Business-type Activities	Total	Driggs Urban Renewal Agency
ASSETS				
Current Assets:				
Cash and investments	$ 1,626,589	$ 1,881,346	$ 3,507,935	$ 136,197
Receivables:				
Teton County--property taxes	182,547	-	182,547	13,620
Utility accounts	-	104,101	104,101	-
Internal balances	181,770	(181,770)	-	-
Due from component Unit	5,000	-	5,000	
Due from other government entities	-	904,417	904,417	-
Other receivables	367,024	21,455	388,479	935
Total Current Assets	2,362,930	2,729,549	5,092,479	150,752
Noncurrent Assets:				
Capital Assets:				
Nondepreciable capital assets	3,070,948	3,699,831	6,770,779	-
Depreciable capital assets	20,942,842	8,050,465	28,993,307	-
Accumulated depreciation	(4,589,428)	(2,324,719)	(6,914,147)	-
Total Noncurrent Assets	19,424,362	9,425,577	28,849,939	-
TOTAL ASSETS	21,787,292	12,155,126	33,942,418	150,752
LIABILITIES				
Current Liabilities:				
Accruals and other current liabilities	470,142	800,843	1,270,985	4,948
Deferred revenues	5,100	-	5,100	-
Payable to primary government - Current	-	-	-	5,000
Current portion of long-term obligations	31,019	135,117	166,136	-
Total Current Liabilities	506,261	935,960	1,442,221	9,948
Noncurrent Liabilities:				
Noncurrent portion of long-term obligations	187,497	4,733,877	4,921,374	-
Total Noncurrent Liabilities	187,497	4,733,877	4,921,374	-
TOTAL LIABILITIES	693,758	5,669,837	6,363,595	9,948
NET ASSETS:				
Invested in capital assets, net of related debt	19,205,846	4,556,583	23,762,429	-
Unrestricted	1,887,688	1,928,706	3,816,394	140,804
TOTAL NET ASSETS	$ 21,093,534	$ 6,485,289	$ 27,578,823	$ 140,804

The Accompanying Notes are an Integral Part of the Financial Statements

CITY OF DRIGGS, IDAHO
Statement of Activities – Government Wide
For the Year Ended 30, 2012

FUNCTIONS/PROGRAMS	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants and Contributions	Program Revenues: Capital Grants and Contributions	Net (Expense) Revenue and Changes in Net Assets – Primary Government: Governmental Activities	Primary Government: Business-type Activities	Primary Government: Total	Component Unit: Driggs Urban Renewal Agency
PRIMARY GOVERNMENT:								
Governmental Activities:								
General and administrative	$ 1,405,666	$ 75,276	$ -	$ -	$ (1,330,390)	$ -	$ (1,330,390)	
Airport	288,589	145,846	-	805,150	662,407	-	662,407	
Public works	516,261	-	258,355	-	(257,906)	-	(257,906)	
Public safety	54,000	-	-	-	(54,000)	-	(54,000)	
LID assessment/interest	-	18,687	-	-	18,687	-	18,687	
Interest on long-term debt	14,653	-	-	-	(14,653)	-	(14,653)	
Total Governmental Activities	2,279,169	239,809	258,355	805,150	(975,855)	-	(975,855)	
Business-type activities:								
Water	473,967	509,344	-	-	-	35,377	35,377	
Sewer	507,314	584,678	-	28,535	-	105,899	105,899	
Total Business-type Activities	981,281	1,094,022	-	28,535	-	141,276	141,276	
TOTAL PRIMARY GOVERNMENT	$ 3,260,450	$ 1,333,831	$ 258,355	$ 833,685	(975,855)	141,276	(834,579)	
Component Unit:								
Driggs Urban Renewal Agency	$ 171,662	$ -	$ -	$ -				$ (171,662)
Total Component Unit	$ 171,662	$ -	$ -	$ -				(171,662)
GENERAL REVENUES:								
Taxes:								
Property taxes levied for general purposes					341,977	-	341,977	209,290
Resort taxes					193,371	-	193,371	-
State and Federal Funds					275,251	-	275,251	-
Investment Earnings					14,701	4,378	19,079	17
Miscellaneous					100,462	-	100,462	-
Total General Revenues and Transfers					925,762	4,378	930,140	209,307
Changes in Net Assets					(50,093)	145,654	95,561	37,645
Net Assets - Beginning					21,143,627	6,339,635	27,483,262	103,159
Net Assets - Ending					$ 21,093,534	$ 6,485,289	$ 27,578,823	$ 140,804

The Accompanying Notes are an Integral Part of the Financial Statements

CITY OF DRIGGS, IDAHO
Balance Sheet
Governmental Funds
September 30, 2012

ASSETS	General Fund	Road and Street Fund	Airport Fund	Resort Tax Fund	LID Fund	Other Governmental Funds	Total Governmental Funds
CASH AND INVESTMENTS	$ 674,069	$ -	$ 557,010	$ 313,624	$ -	$ 81,886	$ 1,626,589
RECEIVABLES:							
Teton County--property taxes	69,134	113,413	-	-	-	-	182,547
Due from other funds	614,661	-	-	-	-	7,144	621,805
Due from component unit	5,000	-	-	-	-	-	5,000
State of Idaho	-	-	-	-	-	-	-
Other receivables	46,421	-	13,710	-	200,644	106,249	367,024
TOTAL ASSETS	$ 1,409,285	$ 113,413	$ 570,720	$ 313,624	$ 200,644	$ 195,279	$ 2,802,965
LIABILITIES AND FUND BALANCES							
LIABILITIES:							
Accruals and other current liabilities	$ 43,141	$ 5,625	$ 353,054	$ 67,717	$ -	$ 204	$ 469,741
Due to other funds	42,390	356,081	-	-	41,564	-	440,035
Deferred revenue	18,672	-	5,100	-	186,696	-	210,468
TOTAL LIABILITIES	104,203	361,706	358,154	67,717	228,260	204	1,120,244
FUND BALANCES (DEFICIT):							
Restricted	-	-	212,566	245,907	-	34,635	493,108
Unassigned	1,305,082	(248,293)	-	-	(27,616)	160,440	1,189,613
TOTAL FUND BALANCES (DEFICIT)	1,305,082	(248,293)	212,566	245,907	(27,616)	195,075	1,682,721
TOTAL LIABILITIES AND FUND BALANCES	$ 1,409,285	$ 113,413	$ 570,720	$ 313,624	$ 200,644	$ 195,279	$ 2,802,965

The Accompanying Notes are an Integral Part of the Financial Statements

CITY OF DRIGGS, IDAHO
Reconciliation of the Balance Sheet of Governmental Funds
To the Statement of Net Assets
September 30, 2012

Amounts reported for governmental activities in the statement of net assets are different because:

TOTAL FUND BALANCE - GOVERNMENTAL FUNDS	$ 1,682,721
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in the funds. The cost of assets is $24,013,790 and the accumulated depreciation is $4,589,428.	19,424,362
Certain receivables are not financial resources and are reported as deferred revenues	
Property tax deferred revenue	18,672
Other deferred revenue	186,696
Long-term liabilities, including bonds payable, are not due and payable in the current period and therefore are not reported in the funds	
Long-term debt	(218,516)
Accrued interest	(401)
TOTAL NET ASSETS - GOVERNMENTAL ACTIVITIES	$ 21,093,534

CITY OF DRIGGS, IDAHO
Statement of Revenues, Expenditures and Changes in Fund Balances
Governmental Funds
September 30, 2012

	General Fund	Road and Street Fund	Airport Fund	Resort Tax Fund	LID Fund	Other Governmental Funds	Total Governmental Funds
REVENUES:							
Property taxes	$ 406,400	$ -	$ -	$ -	$ -	$ -	$ 406,400
Fines and fees	15,992	-	-	-	-	-	15,992
Building Permits	24,095	-	-	-	-	-	24,095
Rental/lease income	31,340	-	145,846	-	-	3,849	181,035
Interest earned	13,386	-	-	1,315	-	-	14,701
Miscellaneous/donations	66,812	3,650	-	30,000	-	-	100,462
Resort tax	-	-	-	193,371	-	-	193,371
LID principal	-	-	-	-	17,373	-	17,373
LID interest/late fees	-	-	-	-	18,687	-	18,687
State sales tax	28,242	-	-	-	-	-	28,242
State liquor fund	63,183	-	-	-	-	-	63,183
State highway users fund	-	53,239	-	-	-	-	53,239
State revenue sharing	91,718	-	-	-	-	-	91,718
Other state revenues	15,382	100,000	-	-	-	-	115,382
County road	-	105,116	-	-	-	-	105,116
Federal revenues	76,726	-	805,150	-	-	-	881,876
TOTAL REVENUES	833,276	262,005	950,996	224,686	36,060	3,849	2,310,872
EXPENDITURES:							
General and administrative	415,704	155,509	34,213	170,748	-	7,731	783,905
Public works	-	461,156	-	-	-	-	461,156
Public safety	54,000	-	-	-	-	-	54,000
Interest on capital leases and other debt	5,658	-	-	-	8,995	-	14,653
Principal on capital leases and other debt	7,814	-	-	-	20,000	-	27,814
Capital improvements	-	-	880,355	-	-	-	880,355
TOTAL EXPENDITURES	483,176	616,665	914,568	170,748	28,995	7,731	2,221,883
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	350,100	(354,660)	36,428	53,938	7,065	(3,882)	88,989
OTHER FINANCING SOURCES (USES):							
Transfers in	-	113,082	-	-	-	-	113,082
Transfers out	(113,082)	-	-	-	-	-	(113,082)
TOTAL OTHER FINANCING SOURCES (USES)	(113,082)	113,082	-	-	-	-	-
EXCESS OF REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURES AND OTHER USES	237,018	(241,578)	36,428	53,938	7,065	(3,882)	88,989
FUND BALANCE (DEFICIT) AT BEGINNING OF YEAR	1,068,064	(6,715)	176,138	191,969	(34,681)	198,957	1,593,732
FUND BALANCE (DEFICIT) AT END OF YEAR	$1,305,082	$ (248,293)	$ 212,566	$ 245,907	$ (27,616)	$ 195,075	$ 1,682,721

The Accompanying Notes are an Integral Part of the Financial Statements

CITY OF DRIGGS, IDAHO
Reconciliation of the Statement of Revenues, Expenditures and Changes In Fund Balances of Governmental Funds to the Statement of Activities
September 30, 2012

Amounts reported for governmental activities in the statement of activities are different because:

NET CHANGES IN FUND BALANCES - TOTAL GOVERNMENTAL FUNDS	$ 88,989
Governmental funds report capital outlays as expenditures. However, in the statement of activities, assets with an initial, individual cost of more than $5,000 are capitalized and the cost is allocated over their estimated useful lives and reported as depreciation expesne. This is the amount by which capital outlays are reduced by depreciation in the current period.	
Capital expenditures capitalized as fixed assets	880,355
Depreciation expense	(965,455)
Revenues in the Statement of Activities that do not provide current financial resources are not reported as revenues in the funds.	
Property taxes	(64,423)
Special assessments	(17,373)
Governmental funds report principal repayment on debt as an expenditure. However, in the statement of activities debt payments are not an expense.	
Principal payments on long-term liabilities	27,814
Changes in accrued interest	-
CHANGE IN NET ASSETS OF GOVERNMENTAL ACTIVITIES	$ (50,093)

CITY OF DRIGGS, IDAHO
Statement of Net Assets
Proprietary Funds
September 30, 2012

	Enterprise Funds		
	Water Fund	Sewer Fund	Total
ASSETS			
Current Assets:			
Cash and investments	$ 475,568	$ 1,405,778	$ 1,881,346
Receivables:			
Utility accounts (net of allowance for doubtfull accounts of $6,881 and $5,410)	61,922	42,179	104,101
Prepaid expenses	21,455	-	21,455
Due from other governmental entities	-	904,417	904,417
Due from other funds	46,586	46,853	93,439
Total Current Assets	605,531	2,399,227	3,004,758
Noncurrent Assets:			
Capital Assets:			
Nondepreciable capital assets	45,774	3,654,057	3,699,831
Depreciable capital assets	4,275,218	3,775,247	8,050,465
Accumulated depreciation	(1,144,495)	(1,180,224)	(2,324,719)
Total Noncurrent Assets	3,176,497	6,249,080	9,425,577
TOTAL ASSETS	3,782,028	8,648,307	12,430,335
LIABILITIES:			
Current Liabilities:			
Accruals and other current liabilities	37,192	763,651	800,843
Due to other funds	138,909	136,300	275,209
Current portion of long-term obligations	56,253	78,864	135,117
Total Current Liabilities	232,354	978,815	1,211,169
Noncurrent Liabilities:			
Noncurrent portion of long-term obligations	1,021,864	3,712,013	4,733,877
TOTAL LIABILITIES	1,254,218	4,690,828	5,945,046
NET ASSETS:			
Invested in capital assets, net of related debt	2,098,380	2,458,203	4,556,583
Unrestricted	429,430	1,499,276	1,928,706
TOTAL NET ASSETS	$ 2,527,810	$ 3,957,479	$ 6,485,289

The Accompanying Notes are an Integral Part of the Financial Statements

CITY OF DRIGGS, IDAHO
Statement of Revenues, Expenses and Changes in Fund Net Assets
Proprietary Funds
September 30, 2012

	Business-type Activities - Enterprise Funds		
	Water Fund	Sewer Fund	Totals
OPERATING REVENUES:			
Utility services	$ 501,811	$ 502,635	$ 1,004,446
One time charges	7,533	9,188	16,721
Other operating revenues	-	72,855	72,855
TOTAL OPERATING REVENUES	509,344	584,678	1,094,022
OPERATING EXPENSES:			
Utility expenses	288,783	331,469	620,252
Depreciation	131,483	132,033	263,516
TOTAL OPERATING EXPENSES	420,266	463,502	883,768
OPERATING INCOME	89,078	121,176	210,254
NON-OPERATING REVENUES (EXPENSES):			
Capital grants	-	28,535	28,535
Interest revenue	2,189	2,189	4,378
DEQ Loan for Victor	-	1,257,453	1,257,453
Passthrough loan to Victor	-	(1,257,453)	(1,257,453)
Interest expense	(53,701)	(43,812)	(97,513)
TOTAL NON-OPERATING REVENUES (EXPENSES)	(51,512)	(13,088)	(64,600)
CHANGE IN NET ASSETS	37,566	108,088	145,654
TOTAL NET ASSETS - BEGINNING	2,490,244	3,849,391	6,339,635
TOTAL NET ASSETS - ENDING	$ 2,527,810	$ 3,957,479	$ 6,485,289

The Accompanying Notes are an Integral Part of the Financial Statements

CITY OF DRIGGS, IDAHO
Statement of Cash Flows
Proprietary Funds
September 30, 2012

	Business-type Activities - Enterprise Funds		
	Water Fund	Sewer Fund	Totals
CASH FLOWS FROM OPERATING ACTIVITIES:			
Receipts from customers	$ 515,310	$ 584,626	$ 1,099,936
Payments to suppliers and other venders	(206,448)	(223,731)	(430,179)
Payments to employees	(90,439)	(107,738)	(198,177)
NET CASH PROVIDED BY OPERATING ACTIVITIES	218,423	253,157	471,580
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:			
Acquisitions of property, plant and equipment	(92,312)	(2,342,053)	(2,434,365)
Principal payments on revenue bonds	(51,805)	(70,284)	(122,089)
Loan proceeds	-	3,291,400	3,291,400
Interest payments on bonds and leases	(62,579)	(46,351)	(108,930)
Capital Grants	-	28,535	28,535
Loan pass through to Victor	-	(1,257,453)	(1,257,453)
NET CASH USED BY CAPITAL AND RELATED FINANCING ACTIVITIES	(206,696)	(396,206)	(602,902)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Interest Income	2,189	2,189	4,378
NET CASH PROVIDED BY INVESTING ACTIVITIES	2,189	2,189	4,378
NET DECREASE IN CASH AND INVESTMENTS	13,916	(140,860)	(126,944)
CASH AND INVESTMENTS AT BEGINNING OF YEAR	461,722	1,546,638	2,008,360
CASH AND INVESTMENTS AT END OF THE YEAR	$ 475,638	$ 1,405,778	$ 1,881,416
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:			
Operating income (loss)	$ 89,078	$ 121,176	$ 210,254
Adjustments to reconcile operating income to Net cash provided by operating activities:			
Depreciation and amortization	131,483	132,033	263,516
Changes in Assets and Liabilities:			
Increase in accounts receivable	5,966	(52)	5,914
Increase in accruals and other payables	(8,104)	-	(8,104)
NET CASH PROVIDED BY OPERATING ACTIVITIES	$ 218,423	$ 253,157	$ 471,580

The Accompanying Notes are an Integral Part of the Financial Statements

1. Summary of Significant Accounting Policies

The City of Driggs was incorporated in May of 1910 under the laws of the State of Idaho. The City operates under a Mayor/Council form of government and provides the following services: Planning and Zoning, Parks and Recreation, Streets, Water, Sewer, Public Works, and General Administrative Services.

The financial statements of the City of Driggs, Idaho have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to local government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The more significant accounting policies of the City are described below.

Basic Financial Statements

Basic financial statements are presented at both the government-wide and fund financial level. Both levels of statements categorize primary activities as either governmental or business-type. Governmental activities, which are normally supported by taxes and intergovernmental revenues, are reported separately from business-type activities, which rely to a significant extent on fees and charges for support.

Government-Wide and Fund Financial Statements

The government-wide financial statements (i.e., the statement of net assets and the statement of activities) report information on all of the non-fiduciary activities of the Primary Government and its component units. For the most part, the effect of interfund activity has been removed from these statements. Governmental activities, which normally are supported by taxes and intergovernmental revenues, are reported separately from business-type activities, which rely to a significant extent on fees and charges for support.

The statement of activities demonstrates the degree to which the direct expenses of a given function or segment are offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function. Program revenues include 1) charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as general revenues.

Separate financial statements are provided for governmental funds and fiduciary funds, even though the latter are excluded from the government-wide financial statements. Major individual governmental funds are reported as separate columns in the fund financial statements.

1. Summary of Significant Accounting Policies (continued)

Measurement Focus, Basis of Accounting, and Financial Statement Presentation

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, as are the proprietary fund statements. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Property taxes are recognized as revenues in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures, as well as expenditures related to compensated absences, early retirement, arbitrage rebates, and post employment healthcare benefits, are recorded only when payment is due.

Property taxes, licenses and interest associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenues of the current fiscal period. Only the portion of special assessments receivable due within the current fiscal period is considered to be accrued as revenue of the current period. All other revenue items are considered to be measurable and available only when the City receives cash.

The City reports the following major governmental funds:

- The General Fund is the City's primary operating fund. It is used for all financial resources of the general government, except those required to be accounted for in another fund.

- The Road & Street Fund accounts for the resources accumulated and payments made for street and bridge maintenance, street lighting, traffic engineering, snow removal, street sweeping and storm sewer maintenance. The Road & Street Fund resources are restricted by law to be used only to benefit city streets.

- The Airport Fund accounts for the operations of the Driggs Reed Memorial Airport.

- The Resort Tax Fund accounts for municipal sales tax collections used for improvement to roads and associated infrastructure within the City.

1. Summary of Significant Accounting Policies (continued)

- LID Fund accounts for the collection of receivables related to special assessments and the payment of the debt relating to the special assessment.

The City reports the following major enterprise funds:

- The Water & Sewer Funds are the funds that account for the activities provided to the residents of the City for its utilities. These utilities include water and wastewater.

Component Unit

Component units are organizations which are legally separated from the City, which are financially accountable to the City, or their relationship with the City are such that exclusion would cause the City's financial statements to be misleading or incomplete. Discretely presented component units are reported in a separate column to emphasize that they are legally separate from the primary government and are governed by separate boards. The City has one discretely presented component unit. A brief description of the discretely presented component unit follows:

- *Driggs Urban Renewal Agency* – was organized to make improvements to infrastructure in specific areas of the City. It derives its revenues from the incremental tax increases that all taxing districts forfeit from increase in value of the land and buildings in the new construction areas.

Private-sector standards of accounting and financial reporting issued prior to December 1, 1989, generally are followed in both government-wide and proprietary fund financial statements to the extent that those standards do not conflict with or contradict guidance of the Governmental Accounting Standards Board. Governments also have the option of following subsequent private-sector guidance for their business-type activities, subject to this same limitation. The City has elected not to follow subsequent private-sector guidance.

When both restricted and unrestricted resources are available for use, it is the government's policy to use restricted resources first, then unrestricted resources as they are needed.

As a general rule the effect of interfund activity has been eliminated from the government-wide financial statements.

Amounts reported as program revenues include 1)charges to customers or applicants for goods, services, or privileges provided, 2) operating grants and contributions, and 3) capital grants and contributions, including special assessments. Internally dedicated resources are reported as general revenues rather than as program revenues. Likewise, general revenues include all taxes.

1. Summary of Significant Accounting Policies (continued)

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principle on going operations. The principle operating revenues of water and sewer services enterprise funds are charges to customers and users for sales and services. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses and depreciation on capital assets. All revenue and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Property, Plant and Equipment

Property, plant and equipment used in governmental fund type operations (those items which relate to the general activities and services of the City) are accounted for in the government-wide financial statements. The City defines capital assets as assets with an initial, individual cost of more than $5,000, with an estimated useful life in excess of two years. Property, plant and equipment used in proprietary fund type operations (i.e., the water and the sewer funds) is accounted for within the proprietary funds and on the government-wide financial statements.

Depreciation is provided on property, plant and equipment using the straight-line method over the estimated useful lives of the related assets:

Computers	5 years
Office Equipment	5 years
Furniture	5 years
Vehicles	5 years
Light Equipment	7 years
Heavy Equipment	10 years
Buildings	39 years
Water and Wastewater Systems	20-100 years

Budgetary Policy

The City prepares one combined budget which includes the operations of all funds. Under Idaho Code, the City's budget establishes maximum legal authorization for expenditures during the fiscal year. Expenditures are not to exceed the budgeted amounts, except as allowed by the Code for certain events. During the fiscal year ended September 30, 2012, the City amended budgets in the general fund, road fund, airport fund, impact fee fund, and sewer fund.

1. Summary of Significant Accounting Policies (continued)

Encumbrances

Encumbrance accounting, under which purchase orders, contracts, and other commitments for the expenditures of monies are recorded in order to reserve that portion of the applicable appropriation, is not employed by the City because it is not considered necessary to assure effective budgetary control or to facilitate effective cash planning and control.

Cash Equivalents

For the purpose of the statement of cash flows for the proprietary funds, the City considers all highly liquid debt instruments purchased with maturity of three months or less to be cash equivalents. Funds invested with the State Treasurer's Pool are classified as investments on the combined balance sheet and are considered to be cash equivalents.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

2. Cash and Short-Term Investments

The City is authorized under Idaho Code to invest in cash, certificates of deposit, U.S. Government securities, commercial paper and repurchase agreements. All investments must be held by or registered in the name of the City.

Cash balances of most of the City's funds are pooled and invested. Interest earned from investments purchased with pooled cash is allocated to each of the funds based on the fund's cash balance. The City maintains checking accounts for various funds. All excess funds are then invested with the State Treasurer's pooled cash investment account. This account invests in time certificates of deposit, local government tax anticipation notes, federal loans, U.S. treasury notes and other U.S. governmental securities. Information regarding insurance or collateralization of amounts invested in the pooled accounts is not available.

The City adopted the provisions of GASB Statement No. 40, *Deposit and Investment Risk Disclosures* for the year ended September 30, 2012. This statement establishes and modifies disclosure requirements related to investment and deposit risk; accordingly, the note disclosures on cash and investments are in conformity with the provisions of GASB Statement No. 40.

- Deposits – At September 30, 2012, the carrying amount of the City's deposits were $1,171,511 and the respective bank balances totaled $1,351,821. Of the bank balances $560,523 were federally insured.

2. Cash and Short-Term Investments (continued)

- Custodial Credit Risk, Deposits – Custodial credit risk is the risk that, in the event of a bank failure, the government's deposits may not be returned. As of September 30, 2012, 48% of the City's total deposits of $1,171,511 were covered by federal depository insurance, and thus not exposed to custodial credit risk. In addition, the Transaction Account Guarantee (TAG) program, wherein participating institutions in partnership with the federal government, provide unlimited deposit coverage to accounts meeting program criteria. The City of Driggs deposits in excess of $250,000 were covered under this plan.

- Investments – As of September 30, 2012, the City invested $2,336,424 in the State Treasurer's pooled cash investment, with a carrying amount of $2,336,424. Fair market value was equal to the investment amount and the investments have a maturity of less than one year. The investment pool has an S&P Rating of AAAf.

- Custodial Credit Risk, Investments – For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, the City will not be able to recover the value of the investments. The State diversifies these funds to reduce this risk. The investment pool has an S&P Rating of AAAf.

- Interest Rate Risk – As a means of limiting its exposure to fair value losses arising from changes in interest rates the City structures its portfolio so that securities mature to meet cash requirements for ongoing operations. Because the State Investment Pool, as of September 30, 2012, had a weighted average maturity of less than one year, it was presented as an investment with a maturity of less than one year and included with cash and short-term investments.

The following is a reconciliation of the City's deposit and investment balance as of September 30, 2012:

Cash	$ 1,171,511
State Treasurer's Pool	2,336,424
Total	$ 3,507,935

3. Property Taxes

Property taxes of the City are based on the assessments against property owners as of the first Monday in January of the calendar year in which the fiscal year commences. Tax levies on such assessed values are certified by the county prior to the commencement of the fiscal year.

Taxes are collected by Teton County and remitted to the City primarily in January and July of the fiscal year. Accordingly, the tax revenues for the fiscal year ended September 30, 2012, are based on the assessed values and tax revenues established in 2011.

3. Property Taxes (continued)

The City defers recognition of property taxes assessed but not collected within 60 days of the fiscal year-end. Such amounts will be recognized as revenues in the fiscal year they become available.

4. Capital Assets

Capital asset activity for the year ended September 30, 2012 was as follows:

Primary Government:	September 30 2011	Additions	Disposals	September 30 2012
Governmental activities:				
Capital Assets, not being depreciated				
Land	$ 3,070,948	$ -	$ -	$ 3,070,948
Total Capital Assets, not being depreciated	$ 3,070,948	$ -	$ -	$ 3,070,948
Capital Assets, being depreciated:				
Buildings and Improvements	$ 19,381,792	$ 880,355	$ -	$ 20,262,147
Furniture and Fixtures	312,843	-	-	312,843
Vehicles	367,852	-	-	367,852
Total Capital assets, being depreciated	$ 20,062,487	$ 880,355	$ -	$ 20,942,842
Accumulated Depreciation	$ 3,623,973	$ 965,455	$ -	$ 4,589,428

Depreciation expense was charged to the government activities as follows:

General and administrative	$ 655,974
Airport	254,376
Public works	55,105
Total	$ 965,455

Primary Government:	September 30 2011	Additions	Disposals	September 30 2012
Business-type activities:				
Capital Assets, not being depreciated				
Sewer - Land	$ 31,500	$ -	$ -	$ 31,500
Water - Land	24,395	-	-	24,395
Water - Construction in progress	21,379	-	-	21,379
Sewer - Construction in progress	711,768	2,910,789	-	3,622,557
Total Capital Assets, not being depreciated	$ 789,042	$ 2,910,789	$ -	$ 3,699,831
Capital Assets, being depreciated:				
Sewer - Buildings and Improvements	$ 3,676,345	$ -	$ -	$ 3,676,345
Water - Buildings and Improvements	4,105,718	46,590	-	4,152,308
Sewer - Furniture, Fixtures, and Equipment	80,022	-	-	80,022
Water - Furniture, Fixtures, and Equipment	55,976	45,754	-	101,730
Sewer - Vehicles	18,880	-	-	18,880
Water - Vehicles	21,180	-	-	21,180
Total Capital assets, being depreciated	$ 7,828,837	$ 92,344	$ -	$ 8,050,465
Accumulated Depreciation - Sewer	$ 1,048,191	$ 132,033	$ -	$ 1,180,224
Accumulated Depreciation - Water	1,013,012	131,483	-	1,144,495
Total Accumulated Depreciation	$ 1,814,534	$ 263,516	$ -	$ 2,324,719

5. Supplemental Proprietary Fund Cash Flow Information

Interest Paid During Year

The City paid cash interest of $106,992 in the Proprietary Funds for the year ended September 30, 2012.

6. Long-Term Debt

SBA #2 Note Payable

In August 2004, the City assumed a long-term note with the Small Business Administration from the purchase of the Broulim's Building. The note bears interest at 6.35% per annum and is repayable in monthly installments of $3,285. This note is split evenly between the general fund, water fund and sewer fund.

Description	Interest Rate	Fiscal Years	Balance
SBA #2 Note Payable Issued August 2004 (Original Amount $318,046)	6.35 %	2013-2016	$115,551

Water/Sewer Revenue Bond Payable

In November 1997, the City issued a Sewer Revenue Bond which bears interest at 5% per annum. The bond is repayable in annual installments of $32,530.

Description	Interest Rate	Fiscal Years	Balance
Water/Sewer Revenue Bond Issued November 1997 (Original Amount $500,000)	5.00 %	2013-2027	$336,846

Rural Development Agency Note Payable

In November 2004, the City financed a long-term note with RDA for the completion of the Driggs Springs Water Project. The note bears interest at 4.5% per annum and is repayable in annual installments of $30,700.

Description	Interest Rate	Fiscal Years	Balance
RDA Note Payable Issued November 2004 (Original Amount $500,000)	4.50 %	2013-2035	$434,243

6. Long-Term Debt (continued)

Sewer Note Payable

In December 2004, the City refinanced a long-term note with the Idaho Department of Environmental Quality for revenue bonds with the Idaho Bond Bank. The bonds have a variable interest rate from 3.0% to 5.0% and are repayable in biannual installments with the first payment beginning March 2005.

Description	Interest Rate	Fiscal Years	Balance
Sewer Revenue Bond Issued December 2004 (Original Amount $1,005,000)	3.0% - 5.0%	2013-2021	$600,000

Department of Environmental Quality Note Payable

In October 2005, the City financed a long-term note with the Idaho Department of Environmental Quality for revenue bonds with the Idaho Bond Bank. The bonds have a fixed interest rate of 3.7% and are repayable in biannual installments with the first payment beginning February 2006.

Description	Interest Rate	Fiscal Years	Balance
DEQ Revenue Bond Issued October 2005 (Original Amount $600,000)	3.7%	2013-2026	$436,933

LID Revenue Bond 2008D

In October 2008, the City financed a local improvement district long-term note for revenue bonds with the Idaho Bond Bank. The bonds have an interest rate of 4.99% and are repayable in annual installments with the first payment beginning September 2009.

Description	Interest Rate	Fiscal Years	Balance
Revenue Bond 2008D Issued October 2008 (Original Amount $320,000)	4.99%	2013-2023	$180,000

Department of Environmental Quality Note Payable (not closed)

The City of Driggs is improving it waste water treatment system. This is being funded by a loan from the Department of Environmental Quality. The project started in 2011 and as of September 30, 2012 a total of $2,983,937 in funds has been requested for the project. The total loan will be for $8,500,000 and is expected to be completed in the 2013 fiscal year. The terms and rates of interest will be established at the end of the project.

6. Long-Term Debt (continued)

The annual requirements to amortize all long-term debt outstanding as of September 30, 2012, including interest, are as follows:

Year Ending September 30,	Governmental Funds	Proprietary Funds
2013	41,375	219,029
2014	40,575	221,029
2015	44,744	217,780
2016	33,815	199,823
2017	29,417	189,751
Thereafter	75,800	1,519,969
Total commitment	$ 265,726	$ 2,567,381
Interest portion	$ 47,210	$ 682,324

7. Changes in Long-Term Obligations

The following is a summary of long-term obligation transactions of the City for the year ended September 30, 2012:

	Long-Term Obligations September 30, 2011	Obligations Incurred	Obligations Paid	Long-Term Obligations September 30, 2012	Current Portion Due
Revenue bond 2008D	$ 200,000	$ -	$ 20,000	$ 180,000	$ 20,000
SBA #2 note payable	46,330		7,814	38,516	11,019
Total governmental funds	246,330	-	27,814	218,516	31,019
SBA #2 note payable	92,662	-	15,627	77,035	22,040
Water/sewer revenue bonds payable	351,786	-	14,940	336,846	15,688
RDA water loan payable	444,921	-	10,678	434,243	11,159
Sewer revenue bonds payable	655,000	-	55,000	600,000	60,000
DEQ note payable	462,777	-	25,844	436,933	26,230
DEQ note payable -not closed	45,572	2,938,365	-	2,983,937	-
Total business-type funds	2,052,718	2,938,365	122,089	4,868,994	135,117
Total long-term obligations	$ 2,299,048	$ 2,938,365	$ 149,903	$ 5,087,510	$ 166,136

8. Retirement Plans

Public Employee Retirement System of Idaho

The Public Employee Retirement System of Idaho (PERSI) – the PERSI Base Plan, a cost sharing multiple-employer public retirement system, was created by the Idaho State Legislature. It is a defined benefit plan requiring that both the member and the employer contribute. The plan provides benefits based on members' years of service, age, and compensation. In addition, benefits are provided for disability, death, and survivors of eligible members or beneficiaries. The authority to establish and amend benefit provisions is established in Idaho Code. Designed as a mandatory system for eligible state and school district employees, the legislation provided for other political subdivisions to participate by contractual agreement with PERSI. After five years of credited services, members become fully vested in retirement benefits earned to date. Members are eligible for retirement benefits upon attainment of the ages specified for their employment classification. For each month of credited service, the annual service retirement allowance is 2.0% (2.3% police/firefighter) of the average monthly salary for the highest consecutive 42 months.

PERSI issues publicly available stand alone financial statement reports that include audited financial statements and required supplementary information. These reports may be obtained from PERSI's website www.persi.idaho.gov.

The actuarially determined contribution requirements for the City of Driggs and its employees are established and may be amended by the PERSI Board of Trustees. For the year ended September 30, 2012, the required contribution rate as a percentage of covered payroll for members was 6.23% for general employees and 7.65% for police/firefighters. The employer rate as a percent of covered payroll was 10.39% for general members and 10.73% for police/firefighter members. The City of Driggs contributions required and paid were $39,023, $38,148 and $36,150 for the three years ended September 30, 2012, 2011, and 2010 respectively.

9. Other Required Individual Fund Disclosures

The following individual funds had fund deficits on September 30, 2012:

Road and Street Fund--There is a fund deficit of $248,293. The City expects to eliminate this deficit as reimbursements are received from the Resort Tax Fund.

LID Fund—There is a fund deficit of $27,616. The City expects to eliminate this deficit as payments come in from the property owners for their share of the LID payments.

9. Other Required Individual Fund Disclosures (Continued)

The following funds exceeded their budget:

Road and Street	$ 169,249

10. Interfund Transactions

The following is a schedule of interfund receivables and payables:

	Due from Other Funds	Due to Other Funds
Primary Government:		
Governmental Funds:		
General fund	$ 614,661	$ 42,390
Road and street fund	-	356,081
LID fund	-	41,564
Industrial building fund	7,144	-
Proprietary Funds:		
Water fund	46,586	138,909
Sewer fund	46,853	136,300
	$ 715,244	$ 715,244

The due to and due from other funds occurred for two reasons. One is that at the end of the fiscal year, if there are any negative cash amounts, the general fund loans funds to those funds to cover the negative amounts. These are expected to be paid back in the next year. The other is that loans occurred several years ago when certain funds needed funds to cover projects until the related revenues came in. These are not expected to be paid back in the next year.

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10. Interfund Transactions (Continued)

Operating transfers between funds during the year ended September 30, 2012 were as follows:

	Transfers In	Transfers Out
Primary Government:		
Governmental Funds:		
General Fund	$ -	$ 113,082
Road and Street	113,082	-
	$ 113,082	$ 113,082

The transfers were budgeted during the year to cover street costs that were part of the general funds of the City and also allowed to be used under the Resort Tax requirements.

14. Fund Balances

Fund balance is classified depending on the relative strength of the spending constraints placed on the purposes for which resources can be used as follows:

Restricted fund balance – amounts constrained to specific purposes externally imposed by creditors (such as through debt covenants), grantor and contributors, or laws, or regulations of other governments, or through constitutional provisions, or by enabling legislation.

Committed fund balance – amounts that can only be used for specific purposes, pursuant to constraints imposed by formal action of the government's highest level of decisions making authority. In the case of the City it is by council action.

Unassigned fund balance – amounts that represent fund balances that have not been assigned to other funds and that have not been restricted, committed, or assigned to specific purposes within the general fund. In other governmental funds, it may be necessary to report a negative residual balance as unassigned.

Details of constraints on fund balances of governmental funds:

	General Fund	Special Revenue Funds	Total
Fund Balances:			
Restricted:			
Airport operations and maintnenance	$ -	$ 212,566	$ 212,566
Restricted for City improvements	-	245,907	245,907
Restricted for utility improvements	-	34,635	34,635
Unassigned	1,305,082	(115,469)	1,189,613
Total fund balances	$ 1,305,082	$ 377,639	$ 1,682,721

11. Component Unit – Driggs Urban Renewal Agency

Reporting Entity
In evaluating how to define the City, for financial reporting purposes, management has considered all potential component units. The decision to include a potential component unit in the reporting entity was made by applying the criteria set forth in Generally Accepted Accounting Principles. The basic, but not the only, criterion for including a potential component within the reporting entity is the governing body's ability to exercise oversight responsibility. The most significant manifestation of this ability is financial interdependency. Other manifestations of the ability to exercise oversight responsibility include, but are not limited to, the selection of governing authority, the designation of management, the ability to significantly influence operations and accountability for fiscal matters. Other criteria used to evaluate potential component units for inclusion or exclusion from the reporting entity include the existence of special financing relationships, regardless of whether the City is able to exercise oversight responsibilities. Based upon the application of these criteria, the following is a brief review of the component unit addressed in defining the government's reporting entity.

Included with the reporting entity:

Driggs Urban Renewal Agency. This component unit was organized to make improvements to infrastructure in specific areas of the City area. It derives its revenues from the incremental tax increases that all taxing districts forfeit from increase in value of the land and buildings in the new construction areas.

Cash and Investments – The component unit had cash deposits with a book balance of $136,197 and a bank balance of $140,505, which was all covered by FDIC insurance.

REQUIRED SUPPLEMENTARY INFORMATION

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
General Fund
September 30, 2012

	Orignal Budgeted Amount	Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
REVENUES:				
Property taxes	$ 358,820	$ 358,820	$ 406,400	$ 47,580
Fines and fees	23,000	23,000	15,992	(7,008)
Building permits	5,000	5,000	24,095	19,095
Rental/lease income	25,000	25,000	31,340	6,340
Interest earned	-	-	13,386	13,386
Miscellaneous/donations	67,500	197,606	66,812	(130,794)
State sales tax	26,398	26,398	28,242	1,844
State liquor fund	63,000	63,000	63,183	183
Other state revenues	-	-	15,382	15,382
State revenue sharing	78,236	78,236	91,718	13,482
Urban renewal repayment	5,000	5,000	-	(5,000)
Grant	-	-	76,726	76,726
TOTAL REVENUES	651,954	782,060	833,276	51,216
EXPENDITURES:				
General and administrative	484,872	614,978	415,704	199,274
Public safety	54,000	54,000	54,000	-
Interest on capital leases and other debt	-	-	5,658	(5,658)
Principal on capital leases and other debt	-	-	7,814	(7,814)
TOTAL EXPENDITURES	538,872	668,978	483,176	185,802
EXCESS OF REVENUES OVER EXPENDITURES	113,082	113,082	350,100	237,018
OTHER FINANCING SOURCES (USES):				
Transfers out	(113,082)	(113,082)	(113,082)	-
EXCESS OF REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURES AND OTHER USES	-	-	237,018	237,018
FUND BALANCE AT BEGINNING OF YEAR	1,068,064	1,068,064	1,068,064	-
FUND BALANCE AT END OF YEAR	$1,068,064	$1,068,064	$ 1,305,082	$ 237,018

See Independent Auditors' Report

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
Road and Street Fund
September 30, 2012

	Original Budgeted Amount	Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
REVENUES:				
State highway users fund	$ 54,545	$ 54,545	$ 53,239	$ (1,306)
County road	92,000	92,000	105,116	13,116
Grant	91,989	91,989	100,000	8,011
Miscellaneous	-	95,800	3,650	(92,150)
TOTAL REVENUES	238,534	334,334	262,005	(72,329)
EXPENDITURES:				
General and administrative	-	-	155,509	(155,509)
Public works	351,616	447,416	461,156	(13,740)
TOTAL EXPENDITURES	351,616	447,416	616,665	(169,249)
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	(113,082)	(113,082)	(354,660)	(241,578)
OTHER FINANCING SOURCES:				
Transfers from general fund	113,082	113,082	113,082	-
TOTAL OTHER FINANCING SOURCES	113,082	113,082	113,082	-
EXCESS OF REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURES AND OTHER USES	-	-	(241,578)	(241,578)
FUND BALANCE (DEFICIT) AT BEGINNING OF YEAR	(6,715)	(6,715)	(6,715)	-
FUND BALANCE (DEFICIT) AT END OF YEAR	$ (6,715)	$ (6,715)	$ (248,293)	$ (241,578)

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
Airport Fund
September 30, 2012

	Original Budgeted Amount	Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
REVENUES:				
Rental/lease income	$ 118,750	$ 118,750	$ 145,846	$ 27,096
Interest earned	1,000	1,000	-	(1,000)
Miscellaneous/donations	1,000	1,000	-	(1,000)
Other state revenues	6,895	6,895	-	(6,895)
Federal revenues	307,895	1,335,287	805,150	(530,137)
TOTAL REVENUES	435,540	1,462,932	950,996	(511,936)
EXPENDITURES:				
General and administrative	277,645	277,645	34,213	243,432
Capital improvements	157,895	1,185,287	880,355	304,932
TOTAL EXPENDITURES	435,540	1,462,932	914,568	548,364
EXCESS OF REVENUES OVER EXPENDITURES	-	-	36,428	36,428
FUND BALANCE AT BEGINNING OF YEAR	176,138	176,138	176,138	-
FUND BALANCE AT END OF YEAR	$ 176,138	$ 176,138	$ 212,566	$ 36,428

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
Resort Tax Fund
September 30, 2012

	Original Budgeted Amount	Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
REVENUES:				
Resort tax	$ 150,000	$ 150,000	$ 193,371	$ 43,371
Miscellaneous/donations	-	126,009	30,000	(96,009)
Interest earned	200	200	1,315	1,115
TOTAL REVENUES	150,200	276,209	224,686	(51,523)
EXPENDITURES:				
General and administrative	164,000	290,009	170,748	119,261
Capital improvements	-	-	-	-
TOTAL EXPENDITURES	164,000	290,009	170,748	119,261
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	(13,800)	(13,800)	53,938	67,738
OTHER FINANCING SOURCES (USES):				
Transfers in	13,800	13,800	-	(13,800)
EXCESS OF REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURES AND OTHER USES	-	-	53,938	53,938
FUND BALANCE (DEFICIT) AT BEGINNING OF YEAR	191,969	191,969	191,969	191,969
FUND BALANCE (DEFICIT) AT END OF YEAR	$ 191,969	$ 191,969	$ 245,907	$ 245,907

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
LID Fund
September 30, 2012

	Original and Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
REVENUES:			
LID principal	$ 23,223	$ 17,373	$ (5,850)
LID interest/late fees	11,777	18,687	6,910
TOTAL REVENUES	35,000	36,060	1,060
EXPENDITURES:			
Interest on capital leases and other debt	11,777	8,995	2,782
Principal on capital leases and other debt	23,223	20,000	3,223
TOTAL EXPENDITURES	35,000	28,995	6,005
EXCESS OF REVENUES OVER EXPENDITURES	-	7,065	7,065
OTHER FINANCING SOURCES (USES):			
Proceeds from long-term obligations	-	-	-
EXCESS OF REVENUES AND OTHER SOURCES OVER (UNDER) EXPENDITURES AND OTHER USES	-	7,065	7,065
FUND BALANCE AT BEGINNING OF YEAR	(34,681)	(34,681)	-
FUND BALANCE AT END OF YEAR	$ (34,681)	$ (27,616)	$ 7,065

OTHER SUPPLEMENTARY INFORMATION

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
Water Fund
September 30, 2012

	Original and Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
OPERATING REVENUES:			
Utility services	$ 449,000	$ 501,811	$ 52,811
One time charges	3,500	7,533	4,033
Other operating revenues	120,194	-	(120,194)
TOTAL OPERATING REVENUES	572,694	509,344	(63,350)
OPERATING EXPENSES:			
Utility expenses	275,654	288,783	(13,129)
Depreciation	116,000	131,483	(15,483)
TOTAL OPERATING EXPENSES	391,654	420,266	(28,612)
OPERATING INCOME	181,040	89,078	(91,962)
NON-OPERATING REVENUES (EXPENSES):			
Interest revenue	500	2,189	1,689
Interest expense	(101,340)	(53,701)	47,639
Capital improvements	(80,200)	(92,344)	(12,144)
TOTAL NON-OPERATING REVENUES (EXPENSES)	(181,040)	(143,856)	37,184
CHANGE IN NET ASSETS	$ -	$ (54,778)	$ (54,778)

CITY OF DRIGGS, IDAHO
Budgetary Comparison Schedule
Sewer Fund
September 30, 2012

	Original Budgeted Amount	Final Budgeted Amount	Actual Amounts Budgetary Basis	Variance with Final Budget - Positive (Negative)
OPERATING REVENUES:				
Utility services	$ 531,000	$ 531,000	$ 502,635	$ (28,365)
One time charges	5,000	5,000	9,188	4,188
Other operating revenues	77,028	105,563	72,855	(32,708)
TOTAL OPERATING REVENUES	613,028	641,563	584,678	(56,885)
OPERATING EXPENSES:				
Utility expenses	419,714	448,249	331,469	116,780
Depreciation	115,000	115,000	132,033	(17,033)
TOTAL OPERATING EXPENSES	534,714	563,249	463,502	99,747
OPERATING INCOME	78,314	78,314	121,176	42,862
NON-OPERATING REVENUES (EXPENSES):				
Capital grants	450,000	450,000	29,535	(420,465)
Interest revenue	2,000	2,000	2,189	189
Interest expense	(115,369)	(115,369)	(43,812)	71,557
Construction Loan	6,375,000	6,375,000	4,195,818	(2,179,182)
Capital improvements	(6,789,945)	(6,789,945)	(4,168,242)	2,621,703
TOTAL NON-OPERATING REVENUES (EXPENSES)	(78,314)	(78,314)	15,488	93,802
CHANGE IN NET ASSETS	$ -	$ -	$ 136,664	$ 136,664

CITY OF DRIGGS, IDAHO
Combining Balance Sheet
Nonmajor Governmental Funds
September 30, 2012

ASSETS	Industrial Building Fund	Impact Fee Combined Fund	Total Nonmajor Governmental Funds
CASH AND INVESTMENTS	$ 47,251	$ 34,635	$ 81,886
RECEIVABLES:			
Due from other funds	7,144	-	7,144
Other receivables	106,249	-	106,249
TOTAL ASSETS	$ 160,644	$ 34,635	$ 195,279
LIABILITIES AND FUND BALANCES			
LIABILITIES:			
Pre-paid	$ 204	$ -	$ 204
Interfund payables	-	-	-
TOTAL LIABILITIES	204	-	204
FUND BALANCES:			
Fund balances:			
Restricted	-	34,635	34,635
Unassigned	160,440	-	160,440
TOTAL FUND BALANCES (DEFICIT)	160,440	34,635	195,075
TOTAL LIABILITIES AND FUND BALANCES	$ 160,644	$ 34,635	$ 195,279

CITY OF DRIGGS, IDAHO
Combining Statement of Revenues, Expenditures and Changes in Fund Balances
Nonmajor Governmental Funds
September 30, 2012

	Industrial Building Fund	Impact Fee Combined Funds	Total Nonmajor Governmental Funds
REVENUES:			
Rental/lease income	$ 3,849	$ -	$ 3,849
Other revenues	-	-	-
TOTAL REVENUES	3,849	-	3,849
EXPENDITURES:			
General and administrative	7,731	-	7,731
TOTAL EXPENDITURES	7,731	-	7,731
EXCESS OF REVENUES OVER EXPENDITURES	(3,882)	-	(3,882)
OTHER FINANCING SOURCES (USES):			
Transfer to outside entity	-	-	-
	(3,882)	-	(3,882)
FUND BALANCE (DEFICIT) AT BEGINNING OF YEAR	164,322	34,635	198,957
FUND BALANCE (DEFICIT) AT END OF YEAR	$ 160,440	$ 34,635	$ 195,075

CITY OF DRIGGS, IDAHO
Loans Payable
Future Principal and Interest Requirements
September 30, 2012

		ANNUAL PAYMENT		
	Interest Rate	Fiscal Year	Principal Amount	Interest Payment
SBA Loan #2-General	6.35%	2013	33,059	6,359
August 2004 Issue		2014	35,219	4,199
		2015	37,520	1,898
		2016	9,753	105
			$ 115,551	$ 12,561
Water/Sewer Revenue Bond	5.0%	2013	15,688	16,842
November 1997 Issue		2014	16,472	16,058
		2015	17,296	15,234
		2016	18,160	14,370
		2017	19,069	13,461
		2018	20,022	12,508
		2019	21,023	11,507
		2020	22,074	10,456
		2021	23,178	9,352
		2022	24,337	8,193
		2023	25,554	6,976
		2024	26,831	5,699
		2025	28,173	4,357
		2026	29,582	2,948
		2027	29,386	-
			$ 336,845	$ 147,961

CITY OF DRIGGS, IDAHO
Loans Payable (continued)
Future Principal and Interest Requirements
September 30, 2012

	ANNUAL PAYMENT			
	Interest Rate	Fiscal Year	Principal Amount	Interest Payment
RDA Loan Payable	4.50%	2013	11,159	19,541
November 2004 Issue		2014	11,661	19,039
		2015	12,186	18,514
		2016	12,734	17,966
		2017	13,307	17,393
		2018	13,906	16,794
		2019	14,532	16,168
		2020	15,186	15,514
		2021	15,869	14,831
		2022	16,583	14,117
		2023	17,330	13,370
		2024	18,110	12,590
		2025	18,924	11,776
		2026	19,776	10,924
		2027	20,666	10,034
		2028	21,596	9,104
		2029	22,568	8,132
		2030	23,583	7,117
		2031	24,645	6,055
		2032	25,754	4,946
		2033	26,912	3,788
		2034	28,124	2,576
		2035	29,131	1,311
			$434,242	$271,600
Sewer Note Payable	5.0%	2013	60,000	26,610
December 2004 Issue	5.0%	2014	65,000	23,610
Refinance of	5.0%	2015	65,000	20,360
November 1999 Issue	5.0%	2016	70,000	17,110
	3.8%	2017	70,000	13,610
	4.0%	2018	75,000	10,950
	4.0%	2019	80,000	7,950
	4.1%	2020	80,000	4,750
	4.2%	2021	35,000	1,470
			$600,000	$126,420

CITY OF DRIGGS, IDAHO
Loans Payable (continued)
Future Principal and Interest Requirements
September 30, 2012

		ANNUAL PAYMENT		
	Interest Rate	Fiscal Year	Principal Amount	Interest Payment
DEQ Loan Payable -Water	3.70%	2013	26,230	16,681
October 2005 issue.		2014	27,223	15,688
		2015	28,253	14,658
		2016	29,322	13,588
		2017	30,432	12,479
		2018	31,584	11,327
		2019	32,780	10,131
		2020	34,021	8,890
		2021	35,308	7,603
		2022	36,645	6,266
		2023	38,032	4,879
		2024	39,471	3,440
		2025	40,965	1,945
		2026	6,667	395
			$436,934	$127,970
LID Revenue Bond 2008D	4.99%	2013	20,000	8,235
October 2008 issue.		2014	20,000	7,435
Revenue Bond 2008D		2015	25,000	6,605
Issued October 2008		2016	25,000	5,530
		2017	25,000	4,417
		2018	5,000	3,255
		2019	-	3,015
		2020	30,000	3,015
		2021	30,000	1,515
			$180,000	$43,022

CITY OF DRIGGS, IDAHO
Schedule of Expenditures of Federal Awards
September 30, 2012

	Federal CFDA Number	Expenditures	Revenues Cash Basis
Environmental Protection Agency:			
* I Capitalization Grants for Clean Water State Revolving Funds	66.458	$ 4,195,818	$ 4,195,818
Department of Housing and Urban Development:			
I Community Development Block Grants	14.228	75,551	75,551
U.S. Department of Transportation:			
From the Federal Aviation Administration:			
* D Airport Improvement Grant	20.106	880,355	805,150
National Endowment for the Humanities:			
I National Endowment of the Arts	45.025	1,306	1,306
TOTAL FEDERAL ASSISTANCE		$ 5,153,030	$ 5,077,825

* Major Programs

I Indirect funds received through the State of Idaho
D Direct funds received directly from Federal Government

See Independent Auditors' Report and Notes to the Schedule of Expenditures of Federal Awards.

1. The accompanying schedule of expenditures of federal awards includes the federal grant activity of City of Driggs, Idaho and is presented in accordance with the requirements of OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of the general-purpose financial statements.

Report On Internal Control over Financial Reporting and On Compliance and Other Matters Based On an Audit of Financial Statements Performed In Accordance With *Government Auditing Standards*

Honorable Mayor and City Council
City of Driggs, Idaho

We have audited the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the City of Driggs, Idaho, as of and for the year ended September 30, 2012, which collectively comprise the City of Driggs, Idaho's basic financial statements and have issued our report thereon dated June 18, 2013. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered City of Driggs, Idaho's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City of Driggs, Idaho's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the City of Driggs, Idaho's internal control over financial reporting.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above. However, we identified certain deficiencies in internal control over financial reporting, described in the accompanying schedule of findings and questioned costs that we consider to be significant deficiencies in internal control over financial reporting as item 2012-1. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

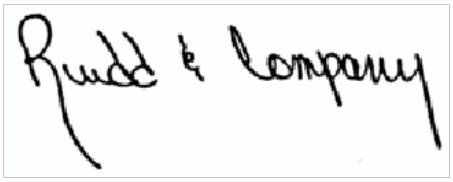
Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City of Driggs, Idaho's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

We noted certain matters that we reported to management of City of Driggs, Idaho, in a separate letter dated June 18, 2013.

City of Driggs, Idaho's response to the findings identified in our audit is described in the accompanying schedule of findings and questioned costs. We did not audit City of Driggs, Idaho's response and, accordingly, we express no opinion on it.

This report is intended solely for the information and use of the audit committee, management, City Council, and federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.



June 18, 2013

Independent Auditors' Report on Compliance with Requirements that could have a Direct and Material Effect on Each Major Program and on Internal Control over Compliance in Accordance with OMB Circular A-133

Honorable Mayor and City Council
City of Driggs, Idaho

Compliance

We have audited City of Driggs, Idaho's compliance with the types of compliance requirements described in the OMB Circular A-133 Compliance Supplement that could have a direct and material effect on each of City of Driggs, Idaho's major federal programs for the year ended September 30, 2012. City of Driggs, Idaho's major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts and grants applicable to each of its major federal programs is the responsibility of City of Driggs, Idaho's management. Our responsibility is to express an opinion on City of Driggs, Idaho's compliance based on our audit.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about City of Driggs, Idaho 's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on City of Driggs, Idaho's compliance with those requirements.

In our opinion, City of Driggs, Idaho complied, in all material respects, with the requirements referred to above that are applicable to each of its major federal programs for the year ended September 30, 2012. However, the results of our auditing procedures disclosed instances of noncompliance with those requirements, which are required to be reported in accordance with OMB Circular A-133 and which are described in the accompanying schedule of findings and questioned costs as item 2012-1.

Internal Control over Compliance

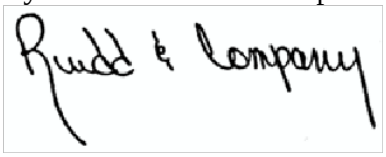
The management of City of Driggs, Idaho is responsible for establishing and maintaining effective internal control over compliance with requirements of laws, regulations, contracts and grants applicable to federal programs. In planning and performing our audit, we considered City of Driggs, Idaho's internal control over compliance with requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with OMB Circular A-133. Accordingly, we do not express an opinion on the effectiveness of City of Driggs, Idaho's internal control over compliance.

A *deficiency in internal control* over compliance exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect non compliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control* over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of federal program will not be prevented, or detected and corrected, on a timely basis.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above.

City of Driggs, Idaho's responses to the findings identified in our audit are described in the accompanying schedule of findings and questioned costs. We did not audit City of Driggs, Idaho's responses and, accordingly, we express no opinion on the responses.

This report is intended for the information of the audit committee, management and federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.



June 18, 2013

CITY OF DRIGGS, IDAHO
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED SEPTEMBER 30, 2012

Section I - Summary of Auditors' Results

(i) Financial Statements

Type of auditors' report issued:	Unqualified
Internal control over financial reporting:	
Material weaknesses identified?	No
Reportable conditions identified that are not considered to be material weaknesses?	Yes
Noncompliance material to financial statements noted?	No

(ii) Federal Awards

Internal control over major programs:	
Material weaknesses identified?	No
Reportable conditions identified that are not considered to be material weaknesses?	Yes
Type of auditors' report issued on compliance for major programs:	Unqualified
Any audit findings disclosed that are required to be reported in accordance with section 510(a) of Circular A-133?	Yes

Identification of major programs:

CFDA Number(s)	Name of Federal Program
20.106	Airport Improvement Grant
66.458	Capitalization Grants for Clean Water State Revolving Funds

Dollar threshold used to distinguish between Type A and Type B programs:	$300,000
Auditee qualified as low-risk auditee?	No

Section II – Financial Statement Finding

2012-1 Capitalization Grants for Clean Water State Revolving Funds – CFDA No. 66.458; Grant Period: Year Ended September 30, 2012.

Condition: An expenditure in relation to the Capitalization Grants for Clean Water State Revolving Funds was paid twice. This was not discovered by the City until after the end of the fiscal year. Once discovered it was immediately resolved with the appropriate Federal Agency. The total amount of the expenditure was $16,074.

Effect: The City used the Federal Loan funds to pay a vendor twice in December of 2011 and was not discovered and resolved until March of 2013. The funds were resolved with the federal agency and in effect paid back in accordance with requirements of the Federal Agency.

Cause: The City has policies and procedures governing the disbursing of funds. The Financial Manager in error paid the invoice twice when the invoice was submitted twice to them by the vendor. The Manager did not review the project for duplicate invoices.

Recommendation: The City should review its policies and procedures and develop written procedures to prevent this from occurring again in the futures

City of Driggs, Idaho's Response: The City agrees with the auditors' findings and will follow up with the review of its policies and procedures and develop written procedures to prevent this happening again.

CITY OF DRIGGS, IDAHO
SCHEDULE OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED SEPTEMBER 30, 2012

Section III – Federal Award Findings and Questioned Costs

2012-1 Capitalization Grants for Clean Water State Revolving Funds – CFDA No. 66.458; Grant Period: Year Ended September 30, 2012.

Condition: An expenditure in relation to the Capitalization Grants for Clean Water State Revolving Funds was paid twice. This was not discovered by the City until after the end of the fiscal year. Once discovered it was immediately resolved with the appropriate Federal Agency. The total amount of the expenditure was $16,074.

Effect: The City used the Federal Loan funds to pay a vendor twice in December of 2011 and was not discovered and resolved until March of 2013. The funds were resolved with the federal agency and in effect paid back in accordance with requirements of the Federal Agency.

Cause: The City has policies and procedures governing the disbursing of funds. The Financial Manager in error paid the invoice twice when the invoice was submitted twice to them by the vendor. The Manager did not review the project for duplicate invoices.

Recommendation: The City should review its policies and procedures and develop written procedures to prevent this from occurring again in the futures

City of Driggs, Idaho's Response: The City agrees with the auditors' findings and will follow up with the review of its policies and procedures and develop written procedures to prevent this happening again.

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CITY OF DRIGGS, IDAHO
SCHEDULE OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED SEPTEMBER 30, 2012

There were no prior year findings or questioned costs.

APPENDIX T

Well Logs and Well Pump Information

Form 238-7
3/95

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ballpoint Pen

061126

Office Use Only
Inspected by _____
Twp____ Rge____ Sec____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1. DRILLING PERMIT NO. 22-97-E-119-
Other IDWR No. D000-4300

2. OWNER:
Name Driggs High School Well
Address 80 N Main
City Driggs State Id Zip 83422

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 5 North ☒ or South ☐
Rge. 45 East ☒ or West ☐
Sec. 25, ____ 1/4 (10 acres) SW 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot ____ County Teton
Lat: : : Long: : :
Address of Well Site _____
_____ City _____
(Give at least name of road + Distance to Road or Landmark)

Lt. _____ Blk. _____ Sub. Name _____

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other _____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other _____

6. DRILL METHOD
☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other _____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	
bentonite	0	40	57	overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 130
Was drive shoe seal tested? ☐ Y ☒ N How? _____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
14	2	130	375	steel	☐	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe _____ Length of Tailpipe _____

9. PERFORATIONS/SCREENS
☐ Perforations Method _____
☒ Screens Screen Type SST 304

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
130	190	.045		10"	SST	☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
83 ft. below ground Artesian pressure _____ lb.
Depth flow encountered _____ ft. Describe access port or control devices: _____

11. WELL TESTS:
☒ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
1100	68	150	24 hrs.

Water Temp. 52° Bottom hole temp. _____
Water Quality test or comments: _____
_____ Depth first Water Encountered _____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
20	2	43	clay & gravel		X
14	43	80	clay & gravel		X
14	80	110	clay & gravel	X	
14	110	112	gravel	X	
14	112	132	gravel & little sand	X	
14	132	170	gravel & trace of sand	X	
14	170	190	gravel & little clay	X	
14	190	196	gravel	X	
14	196	216	clay & trace of gravel		X
			Finished		

RECEIVED
APR 27 1998
Department of Water Resources
MICROFILMED
JUN 24 1998

Completed Depth 216 (Measurable)
Date: Started Nov. 24, 1997 Completed March 30, 1998

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Firm No. 299
Firm Official Marcus Franklin Date 4-25-98
and
~~Supervisor~~ or Operator Danny Franklin Date 4-25-98
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
11/97

DMD

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Office Use Only
Inspected by _____
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0014389
DRILLING PERMIT NO. 766057
Other IDWR No. 22-7814

2. OWNER:
Name Teton Valley Association LLC.
Address 100 S. 200 W.
City Driggs State ID Zip 83422

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

Twp. 05 North ☒ or South ☐
Rge. 45 East ☒ or West ☐
Sec. 23 ____ 1/4 NE 1/4 SW 1/4 (10 acres / 40 acres / 160 acres)
Gov't Lot ____ County Teton County
Lat: : : Long: : :
Address of Well Site Valley Center Subdivision City Driggs
(Give at least name of road + Distance to Road or Landmark)

Lt. ____ Blk. ____ Sub. Name ____

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other ____

6. DRILL METHOD
☐ Air Rotary ☒ Cable ☐ Mud Rotary ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD
Neat Cement	0	18	16 sacks	pull back, pour
3/8 hole plug	18	60	46 sacks	" "

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s) 240'
Was drive shoe seal tested? ☐ Y ☒ N How? ____

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
16	+1	240	.312	steel	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe ____

9. PERFORATIONS/SCREENS
Perforations 366 Method Mills Knife
Screens Screen Type ____

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
180	230	5/8 x 3/2				☐	☐
						☐	☐
						☐	☐

10. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
40 ft. below ground Artesian pressure ____ lb.
Depth flow encountered ____ ft. Describe access port or control devices: 1½ access pipe

11. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Level	Time
2000	@ 165	Air	8hrs

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments: Clean with little sand at that volume
Depth first Water Encounter 80'

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Water Y	Water N
20	0	2	Topsoil, Gravel + Cobble		X
	2	60	Gravel, Large Cobble with Clay		X
16	60	103	Gravel, Large cobble w/clay	X	
	103	108	Brown Clay		X
	108	165	Large Cobble Rock, Gravel Sand, Brown Clay	X	
	165	205	Large Cobble rock, Gravel Sand + less clay, but more compacted Formation	X	
	205	247	same as above but softer Formation clay Color white	X	
	247	250	Silty Clay		X
	250	252	Cobble Rock + Gravel	X	
			Gravel Packed From 240 - 252		

RECEIVED DEC 22 2000 Department of Water Resources

RECEIVED DEC 15 2000 Department of Water Resources Eastern Region

Completed Depth 238 (Measurable)
Date: Started 9-1-00 Completed 11-3-00

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Company Name Findlay Well Drilling Firm No. 062
Firm Official [signature] Date 11-6-00
and
Driller or Operator [signature] Date 11-6-00
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
6/02

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

22

Office Use Only
Well ID No.
Inspected by
Twp ____ Rge ____ Sec ____
____ 1/4 ____ 1/4 ____ 1/4
Lat: : : Long: : :

1. WELL TAG NO. D 0045908
DRILLING PERMIT NO.
Water Right or Injection Well No 22-13589

2. OWNER:
Name Huntsman Springs C/o Rendezvous Eng.
Address P.O. Box 4858
City Jackson Hole State Wyo Zip 83001

3. LOCATION OF WELL by legal description:
You must provide address or Lot, Blk Sub or Directions to well.
Twp 5N North ☐ or South ☐
Rge 45E East ☐ or West ☐
Sec 26 ____ 1/4 (10 acres) NE 1/4 (40 acres) NW 1/4 (160 acres)
Gov't Lot ____ County Teton
Lat: : : Long: : :
Address of Well Site 97 N Hwy 33
(Give at least name of road + Distance to Road or Landmark) City Driggs
Lt ____ Blk ____ Sub Name Huntsman Springs

4. USE:
☐ Domestic ☒ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5. TYPE OF WORK check all that apply (Replacement etc.)
☒ New Well ☐ Modify ☐ Abandonment ☐ Other

6. DRILL METHOD:
☒ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7. SEALING PROCEDURES

Seal Material	From	To	Weight / Volume	Seal Placement Method
NEAT Cement	0	62'	4yds	overbore

Was drive shoe used? ☒ Y ☐ N Shoe Depth(s)
Was drive shoe seal tested? ☐ Y ☒ N How?

8. CASING/LINER:

Diameter	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
10"	+1	244'	.365"	Steel	☒	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐

Length of Headpipe ____ Length of Tailpipe
Packer ☒ Y ☐ N Type Triple K

9. PERFORATIONS/SCREENS PACKER TYPE
Perforation Method
Screen Type & Method of Installation

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
232'	275'	.050"	10"	telescope	Stainless	☐	☒
						☐	☐
						☐	☐

10. FILTER PACK

Filter Material	From	To	Weight / Volume	Placement Method

11. STATIC WATER LEVEL OR ARTESIAN PRESSURE:
45' ft below ground Artesian pressure ____ lb
Depth flow encountered ____ ft Describe access port or control devices:

12. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal /min	Drawdown	Pumping Level	Time

Water Temp. ____ Bottom hole temp. ____
Water Quality test or comments:
Depth first Water Encounter ____

13. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology Water Quality & Temperature	Water Y	Water N
14"	0	34'	Clay		X
14"	34'	41'	Clay Sand Small Gravel		X
14"	41"	62'	Clay Sand Gravel first Water	X	
10"	62'	80'	Sand Gravel	X	
10"	80'	220'	Sand Gravel Lots of Water	X	
10"	220	240'	Sand Gravel Clay Lost Water		X
10"	240'	245'	Cemented Gravels		X
10"	245	262'	Cemented Gravels 50gpm	X	
10"	262	280'	Cemented Gravels Lots of water	X	

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JUN 22 2007
Department of Water Resources
Eastern Region

Completed Depth 280' (Measurable)
Date: Started 5-1-07 Completed 5-18-07

14. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed

Company Name Denning Drilling Firm No 518
Principal Driller Daniel Denning Date 5-21-07
and
Driller or Operator II [signature] Date 5-21-07
Operator I ____ Date

Principal Driller and Rig Operator *Required*
Operator I must have signature of Driller/Operator II

FORWARD WHITE COPY TO WATER RESOURCES

(F 38-7 6/9

701925

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

RECEIVED SEP 13 1993 Department of Water Resources

1. DRILLING PERMIT NO. 22-91-E-0024-000
Other IDWR No. 22-7698

2. OWNER:
Name City of Driggs
Address 80 N. MAIN
City Driggs State Id Zip 83

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

T. 5N North ☐ or South ☐
R. 45E East ☐ or West ☐
Sec. 35 ____ 1/4 NW 1/4 NE 1/4
(10 acres, 40 acres, 160 acres)
Gov't Lot ____ County TETON

Address of Well Site FREMONT AVE
(Give at least Direction + Distance to Road or Landmark)

Lot No. 5 Block No. ____ Subd. Name ____

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK			AMOUNT	METHOD
Material	From	To	Sacks or Pounds	

Was drive shoe seal tested? Y☐ N☐ How? ____

8. CASING/LINER:

Diameter	From	To	Guage	Casting	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

RECEIVED FEB 09 1994

Final location of shoes ____
Top Packer or Headpipe ____ Bottom Tailpipe ____

9. PERFORATIONS/SCREENS
☒ Perforations Method mills Knife
☐ Screens Type ____ Material ____

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casting	Liner
155	170	3/8x3"	120	12	12	☐	☒
230	235	3/8x3"	40	12	12	☐	☒
						☐	☐
						☐	☐

10. WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water ____ Was a water analysis done? Yes ☐ No ☐
By whom? ____
Water Quality (odor, etc.) ____
Bottom Hole Temperature ____

11. STATIC WATER LEVEL:
____ ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port ____
Describe Controlling Devices: ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL

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RECEIVED OCT 01 1993 Department of Water Resources Eastern District Office

Date: Started ____ Completed ____

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Drilling Firm No. 299
Firm Official Marcus Franke Date 9-8-93
and
Supervisor or Operator Marcus Franke Date 9-8-93
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238
11/91

Paid City of Driggs - $200.00

22-916-024 Robin Beck

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of Water Resources within 30 days after the completion or abandonment of the well.

USE TYPEWRITER OR BALLPOINT PEN

RECEIVED SEP 13 1993 Department of Water Resources

1. WELL OWNER

Name: City of Driggs
Address: 80 N Main Driggs 83422
Drilling Permit No. 22-91E-024-000
Water Right Permit No. ~~35~~ 22-07698

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Well diameter increase ☐ Modification
☐ Abandoned (describe abandonment or modification procedures such as liners, screen, materials, plug depths, etc. in lithologic log, section 9.)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Monitor
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☒ Other municipal (specify type)

4. METHOD DRILLED

☐ Rotary ☐ Air ☐ Auger ☐ Reverse rotary
☒ Cable ☐ Mud ☐ Other _____ (backhoe, hydraulic, etc.)

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.375 inches	16 inches	+ 2 feet	362 feet
.312 inches	12 inches	171 feet	375 feet
.280 inches	10 inches	350 feet	505 feet

Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☒ Yes ☐ No
How perforated? ☐ Factory ☒ Knife ☐ Torch ☐ Gun
Size of perforation? 3/8 inches by 3 inches

Number	From	To
104 perforations	377 feet	390 feet
88 perforations	433 feet	443 feet
[redacted] perforations	[redacted] feet	[redacted] feet

209 Well screen installed? ☐ Yes ☐ No 486-505
Manufacturer _____ Type _____
Top Packer or Headpipe _____
Bottom of Tailpipe _____

Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet

Surface seal depth 40 Material used in seal: ☐ Cement grout ☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing ☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld ☐ Cemented between strata

Describe access port 2" pipe to south

6. LOCATION OF WELL – Fremont AVE

Sketch map location **must** agree with written location.

N / W / E / S

Subdivision Name _____
Lot No. 5 Block No. _____
County Teton
NW ¼ NE ¼ Sec. 35 T. 5N (N ☐ S ☐) R. 45E (E ☐ W ☐)

RECEIVED OCT 07 1993 Department of Water Resources

7. WATER LEVEL

Static water level 40 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Packer
Temperature 50 °F. Quality _____
Describe artesian or temperature zones below.

RECEIVED OCT 01 1993 Department of Water Resources Eastern District Office

8. WELL TEST DATA

☐ Pump ☐ Bailer ☒ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped
[redacted]	[redacted]	[redacted]
200	350	4
400	505	2

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
20	0	40	clay + gravel		X
16	40	90	clay + gravel	X	
16	90	95	gravel	X	
16	95	105	gravel + clay		X
16	105	110	clay		X
16	110	120	gravel + thick clay		X
16	120	150	gravel + clay	X	
16	150	155	gravel + clay		X
16	155	170	2" gravel, clay + sand	X	
16	170	190	clay		X
16	190	230	clay + gravel		X
16	230	235	gravel + sand	X	
16	235	250	clay + alittle gravel		X
16	250	255	clay		X
16	255	260	clay + 2" gravel		X
16	260	270	clay + gravel	X	
16	270	285	clay + (gravel alittle)	[redacted]	X
16	285	295	gravel alittle water	X	
16	295	300	clay + sand	[redacted]	X
16	300	315	gravel + clay		X
16	315	325	sand or sandstone		X
16	325	330	clay		X
16	330	335	real hard sandstone		X
16	335	345	real hard clay + gravel		X
16	345	350	gravel + alot of clay	X	
16	350	362	clay + gravel		X
16	362		16" wont go any more		X
12	362	375	real hard cemented gravel		X
12	375	390	real hard fractured clay	X	
12	390	415	hard clay + gravel	X	
12	415	448	gravel + alittle clay	X	
12	448	455	sand		X
12	455	480	mostly clay hard gravel	[redacted]	[redacted]
12	480	505	gravel alittle clay	X	

10.

Work started Oct 1, 1992 finished Dec 30, '92

11. DRILLER'S CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Firm No. 299
Address _____ Date _____
Signed by Drilling Supervisor Marcus Jarber
and
(Operator) _____
(If different than the Drilling Supervisor)

RECEIVED FEB 09 1994 Department of Water Resources

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

(F 38-7 6/93

701925

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT

Use Typewriter or Ball Point Pen

RECEIVED SEP 13 1993 Department of Water Resources

1. DRILLING PERMIT NO. 22-91-E-0024-000
Other IDWR No. 22-7698

2. OWNER:
Name City of Driggs
Address 80 N. MAIN
City Driggs State Id Zip 83

3. LOCATION OF WELL by legal description:
Sketch map location must agree with written location.

N / W / E / S

T. 5 N North ☐ or South ☐
R. 45 E East ☐ or West ☐
Sec. 35 ____ 1/4 NW 1/4 NE 1/4
(10 acres, 40 acres, 160 acres)
Gov't Lot ____ County TETON

Address of Well Site FREMONT AVE
(Give at least Direction + Distance to Road or Landmark)

Lot No. 5 Block No. ____ Subd. Name ____

4. PROPOSED USE:
☐ Domestic ☐ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other ____

5. TYPE OF WORK
☐ New Well ☐ Modify or Repair ☐ Replacement ☐ Abandonment

6. DRILL METHOD
☐ Mud Rotary ☐ Air Rotary ☐ Cable ☐ Other ____

7. SEALING PROCEDURES

SEAL/FILTER PACK Material	From	To	AMOUNT Sacks or Pounds	METHOD

Was drive shoe seal tested? Y☐ N☐ How? ____

8. CASING/LINER:

Diameter	From	To	Guage	Casting	Liner	Steel	Plastic	Welded	Threaded
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐
						☐	☐	☐	☐

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Final location of shoes ____
Top Packer or Headpipe ____ Bottom Tailpipe ____

9. PERFORATIONS/SCREENS
☒ Perforations Method mills knife
☐ Screens Type ____ Material ____

From	To	Slot Size	Number	Diameter	Tele/Pipe Size	Casting	Liner
155	170	3/4x3"	120	12	12	☐	☒
230	235	3/4x3"	40	12	12	☐	☒
						☐	☐
						☐	☐

10. WELL TESTS:
☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal./min.	Drawdown	Pumping Depth	Time

Temperature of water ____ Was a water analysis done? Yes ☐ No ☐
By whom? ____
Water Quality (odor, etc.) ____
Bottom Hole Temperature ____

11. STATIC WATER LEVEL:
____ ft. below surface Depth artesian flow found ____
Artesian pressure ____ lb. Describe access port ____
Describe Controlling Devices: ____

12. LITHOLOGIC LOG: (Describe repairs or abandonment)

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	GPM	SWL

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Date: Started ____ Completed ____

13. DRILLER'S CERTIFICATION
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name High Plains Drilling Firm No. 289
Firm Official Marcus Franke Date 9-8-93
and
Supervisor or Operator Marcus Franke Date 9-8-93
(Sign once if Firm Official & Operator)

FORWARD WHITE COPY TO WATER RESOURCES

Form 238-7
9/82

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

State law requires that this report be filed with the Director, Department of
within 30 days after the completion or abandonment of the w

Location Corrected by IDWR To:
T05N R46E Sec. 19 NENESE
By: mciscell 2012-09-06

1. WELL OWNER

Name City of Driggs

Address Driggs, Idaho 83472

Owner's Permit No. 22 7529
22-88-Z-004

2. NATURE OF WORK

☒ New well ☐ Deepened ☐ Replacement
☐ Abandoned (describe abandonment procedures such as materials, plug depths, etc. in lithologic log)

3. PROPOSED USE

☒ Domestic ☐ Irrigation ☐ Test ☐ Municipal
☐ Industrial ☐ Stock ☐ Waste Disposal or Injection
☐ Other _____ (specify type)

4. METHOD DRILLED

☒ Rotary ☐ Air ☐ Hydraulic ☐ Reverse rotary
☐ Cable ☐ Dug ☐ Other _____

5. WELL CONSTRUCTION

Casing schedule: ☒ Steel ☐ Concrete ☐ Other _____

Thickness	Diameter	From	To
.250 inches	14 inches +	1 feet	166 feet
.250 inches	10 inches	205 feet	255 feet
inches	inches	feet	feet
inches	inches	feet	feet

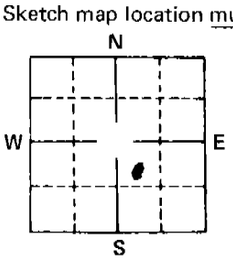
Was casing drive shoe used? ☒ Yes ☐ No
Was a packer or seal used? ☐ Yes ☒ No
Perforated? ☐ Yes ☒ No
How perforated? ☐ Factory ☐ Knife ☐ Torch
Size of perforation _____ inches by _____ inches

Number	From	To
perforations	feet	feet
perforations	feet	feet
perforations	feet	feet

Well screen installed? ☐ Yes ☒ No
Manufacturer's name _____
Type _____ Model No. _____
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Diameter ____ Slot size ____ Set from ____ feet to ____ feet
Gravel packed? ☐ Yes ☒ No ☐ Size of gravel _____
Placed from _____ feet to _____ feet
Surface seal depth 40+ Material used in seal: ☐ Cement grout
☒ Bentonite ☐ Puddling clay ☐ _____
Sealing procedure used: ☐ Slurry pit ☒ Temp. surface casing
☒ Overbore to seal depth
Method of joining casing: ☐ Threaded ☒ Welded ☐ Solvent Weld
☐ Cemented between strata
Describe access port Well Cap

6. LOCATION OF WELL

Sketch map location must agree with written location.



Subdivision Name Targhee Ranch

Lot No. 35 Block No. 2

County Teton

NW ¼ SE ¼ Sec. 19, T. 5 N/S, R. 46 E/W.

7. WATER LEVEL

Department of Water Resources

Static water level 129 feet below land surface.
Flowing? ☐ Yes ☒ No G.P.M. flow _____
Artesian closed-in pressure _____ p.s.i.
Controlled by: ☐ Valve ☐ Cap ☐ Plug
Temperature ____ °F. Quality Good
Describe artesian or temperature zones below.

8. WELL TEST DATA

☐ Pump ☐ Bailer ☐ Air ☐ Other _____

Discharge G.P.M.	Pumping Level	Hours Pumped

9. LITHOLOGIC LOG

Bore Diam.	Depth From	Depth To	Material	Water Yes	Water No
14	0	4	Soil		X
	4	25	Gravel & large boulders		X
	25	112	Clay gravel & large boulders		X
	112	184	Cemented gravel	X	
	184	198	Loose gravel	X	
	198	205	Hard rock formation		X
	205	234	Firm limestone	X	
	234	240	Broken limestone	X	
	240	249	Firm limestone		X
	249	260	Broken limestone	X	

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JUL 29 1988
Department of Water Resources
Eastern District Office

10.

Work started 7/6/87 finished 7/31/87

11. DRILLERS CERTIFICATION

I/We certify that all minimum well construction standards were complied with at the time the rig was removed.

Firm Name Andrew Well Drilling Firm No. 5

Address 1268 E. 17th Street Date 8/20/87
Idaho Falls, Idaho 83404

Signed by (Firm Official) Howard F. Andrew

and

(Operator) Dale Hulse

USE ADDITIONAL SHEETS IF NECESSARY — FORWARD THE WHITE COPY TO THE DEPARTMENT

Form 238-7
11/97
10/01
Andrew

22

IDAHO DEPARTMENT OF WATER RESOURCES
WELL DRILLER'S REPORT
Use Typewriter or Ballpoint pen

Office Use Only
Inspected by:_____
Twp ____ Rge____ Sec____
____1/4 ____1/4 ____1/4
Lat: : : Long: : :

1 WELL TAG NO.
DRILLING PERMIT NO #D0037953
Other IDWR NO.

2 OWNER:
Name: Teton Creek Resort
Address: PO Box 1143
City: Wilson State: WY Zip 83014

3 LOCATION OF WELL by legal description.

N
S

Twp 5 ☑ North ☐ South
Rge 46 ☑ East ☐ West
Sec 20 ____ 1/4 NE 1/4 SW 1/4
10 Acres 40 Acres 160 Acres
Gov't Lot County Teton
Lat: 43:44.482 Long: 111.03.083

Address of Well Site: Approx 250 E 180 N
City: Driggs
(Give at least name of Road + Distance to Road or Landmark)

Lot No. ____ Blk No ____ Subd. Name: Teton Creek Resort

4 USE:
☐ Domestic ☑ Municipal ☐ Monitor ☐ Irrigation
☐ Thermal ☐ Injection ☐ Other

5 TYPE OF WORK:
☑ New Well ☐ Modify ☐ Abondonment ☐ Other

6 DRILL METHOD:
☑ Air Rotary ☐ Cable ☐ Mud Rotary ☐ Other

7 SEALING PROCEDURES:

SEAL/FILTER PACK			AMOUNT	
Material	From	To	Sacks/Pounds	Method
Neat Cement	0	80'	6580 lbs	Tremie
Bentonite	80'	106'	650 lbs	Tremie

Was drive shoe used? ☑ Yes ☐ No Shoe Depth(s) 136'
Was drive shoe seal tested ? ☐ Yes ☑ No How?

8 CASING/LINER:

Dia.	From	To	Gauge	Material	Casing	Liner	Welded	Threaded
12"	+2'	136'	0.375	Steel	☑	☐	☑	☐
10'	134'	140'	0.322	Steel	☑	☐	☑	☐
10"	212'	231'	0.322	Steel	☑	☐	☑	☐

Length of Headpipe: 9' Length of Tailpipe: 19'

9 PERFORATIONS/SCREENS:

From	To	Slot Size	Number	Diameter	Material	Casing	Liner
141'	212'	060		10"	Stainless	☑	☐
						☐	☐
						☐	☐

 # STATIC WATER LEVEL OR ARTESIAN PRESSURE:
87 ft below ground Artesian Pressure: ____ lb
Depth flow encountered: ____ ft
Describe access port or control devices: Sanitary Well Cap

11 WELL TESTS:
☑ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian
Flowing Artesian

Yield	Drawdown	Pumping Level	Time
500 gpm	33'	120'	26.5 hrs

Water Temp ____ Bottom hole temp ____
Water Quality test or comments:
Depth first water encountered: 100'

12 LITHOLOGIC LOG:

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
16"	0	3	Soil		X
	3	60	Cobbles, clay, gravel, boulders		X
	60	80	Boulders. clay, gravel		X
12"	80	100	Cobbles, gravel, boulders		X
	100	104	Gravel, sand, boulders	X	
	104	114	Gravel, sand, boulders	X	
	114	120	Clay, gravel	X	
	120	125	Cobbles, gravel, sand	X	
	125	132	Cobbles, gravel, sand	X	
	132	140	Clay, boulders	X	
	140	146	Cobbles, gravel, sand	X	
	146	156	Cobbles, gravel, sand	X	
	156	162	Sand cinders, gravel	X	
	162	167	Gravel, sand, cobbles	X	
	167	180	Gravel, sand, cobbles	X	
	180	185	Rhyolite	X	

CONTINUED

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MAR 3 1 2006
Department of Water Resources
Eastern Region

Completed Depth: 300 ft
Date Started: 12/10/05
Date Completed: 03/16/06

13 DRILLER'S CERTIFICATION:
I/We certify that all minimum well construction standards were complied with at the time the rig was removed.
Firm: ANDREW WELL DRILLING SERVICES, INC. Firm: #5
Firm Official: Roger P. Bushman Date: 3/28/2006
and
Supervisor/Operator: Miguel Rosales Date: 3/28/2006

n 238-7 1

10/01

Andrew

IDAHO DEPARTMENT OF WATER RESOURCES

WELL DRILLER'S REPORT

Use Typewriter or Ballpoint pen

1 **DRILLING PERMIT NO.** #D0037953

Other IDWR NO.

12 **LITHOLOGIC LOG:**

Bore Dia.	From	To	Remarks: Lithology, Water Quality & Temperature	Y	N
	185	187	Rhyolite	X	
	187	206	Boulders, sand, gravel	X	
	206	214	Boulders	X	
	214	220	Conglomorate	X	
	220	230	Rhyolite		X
	230	300	Rhyolite		X

Completed Depth: 300 ft

Date Started: 12/10/2005

Date Completed: 3/16/2006

RECEIVED

MAR 3 1 2006

Department of Water Resources
Eastern Region

PUMP DATA SHEET Submersible 60 Hz

Company: FERGUSON IDAHO FALLS Customer:

Name: % DOUG MILLER

Date: 03/21/06 Order No: Valley Center Well Pump 60' Setting 75HP VFD 50HP Motor

Pump:

Size: 7THC (3 stages)

Type: Submersible Speed: 3450 rpm
Synch speed: 3600 rpm Dia: 4.96 in

Curve: E6207TFPC2

Specific Speeds: Ns: 3655

Pump Notes for Standard Sizes:
Discharge Sizes-5",6"

Vertical Turbine: Bowl size: 7.13 in
Max lateral: 0.38 in
Thrust K factor: 4.56 lb/ft

Search Criteria:

Flow: 700 US gpm Head: 200 ft

Fluid:

Water Temperature: 60 °F
SG: 1 Vapor pressure: 0.2563 psi a
Viscosity: 1.105 cP Atm pressure: 14.7 psi a

NPSHa: --- ft

Motor:

Standard: NEMA Size: 50 hp
Speed: 3600

Pump Limits for Standard Construction:

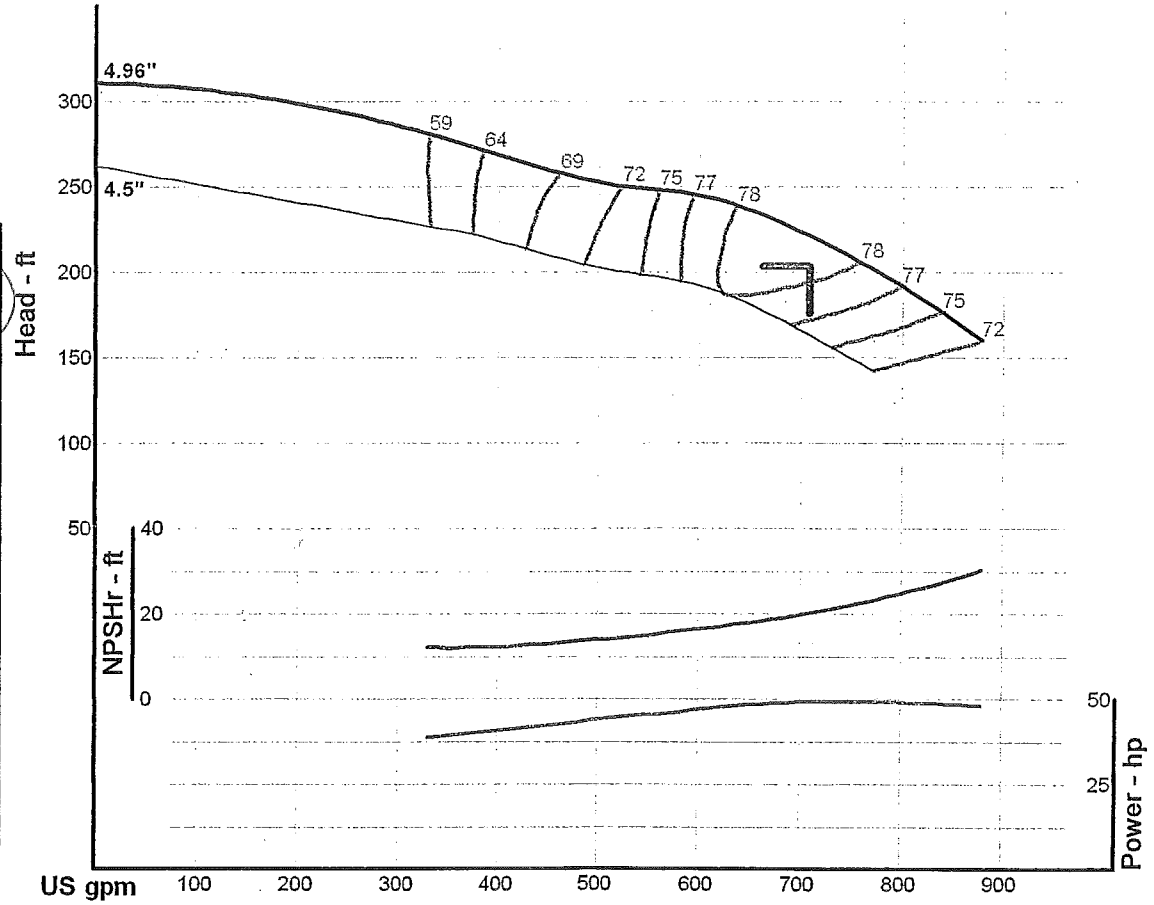
Temperature: 120 °F Pressure: 310 psi g
Sphere size: 0.83 in

Sizing criteria: Max Power on Design Curve

— Data Point —
Flow: 700 US gpm
Head: 217 ft
Eff: 78.5%
Power: 48.9 hp
NPSHr: 19.5 ft

– Design Curve –
Shutoff Head: 306 ft
Shutoff dP: 132 psi
Min Flow: --- US gpm
BEP: 78.5% eff
@ 699 US gpm
NOL Pwr: 49 hp
@ 751 US gpm

– Max Curve –
Max Pwr: 49 hp
@ 751 US gpm



Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Pump %eff	Power hp	NPSHr ft
840	3450	169	74.3	48.2	27.4
700	3450	217	78.5	48.9	19.5
560	3450	243	75.4	45.6	15.1
420	3450	260	66.6	41.2	12.3
280	3450	—	---	---	---

Huntsman Springs 100HP Sub. Well Pump

Pump Data Sheet - Submersible 60 Hz

Company:
Name:
Date: 5/24/2011

5/25/11 Use this pump per Bob Ablondi + $390.00 ordered from 2MCO - 5-25-11

Pump:

Size: 8FDHC (4 stage)

Type: Submersible
Synch speed: 3600 rpm

Speed: 3450 rpm
Dia: 4.8125 in

Curve: E6208FDPC0

Impeller:

Specific Speeds:

Ns: 3850
Nss: ---

Dimensions:

Suction: ---
Discharge: ---

Vertical Turbine:

Bowl size: 7.5 in
Max lateral: 0.56 in
Thrust K factor: 7.9 lb/ft

Search Criteria:

Flow: 950 US gpm

Head: 330 ft

Fluid:

Water
Density: 62.25 lb/ft³
Viscosity: 1.105 cP

Temperature: 60 °F
Vapor pressure: 0.2563 psi a
Atm pressure: 14.7 psi a

NPSHa: ---

Motor:

Standard: NEMA
Enclosure: SUB

Size: 125 hp
Speed: 3600
Frame: 8 inch

Sizing criteria: Max Power on Design Curve

Pump Limits:

Temperature: 120 °F
Pressure: 400 psi g
Sphere size: 0.5 in

Power: ---
Eye area: ---

---- Data Point ----

Flow:	950 US gpm
Head:	333 ft
Eff:	80.8%
Power:	98.9 hp
NPSHr:	37.6 ft

---- Design Curve ----

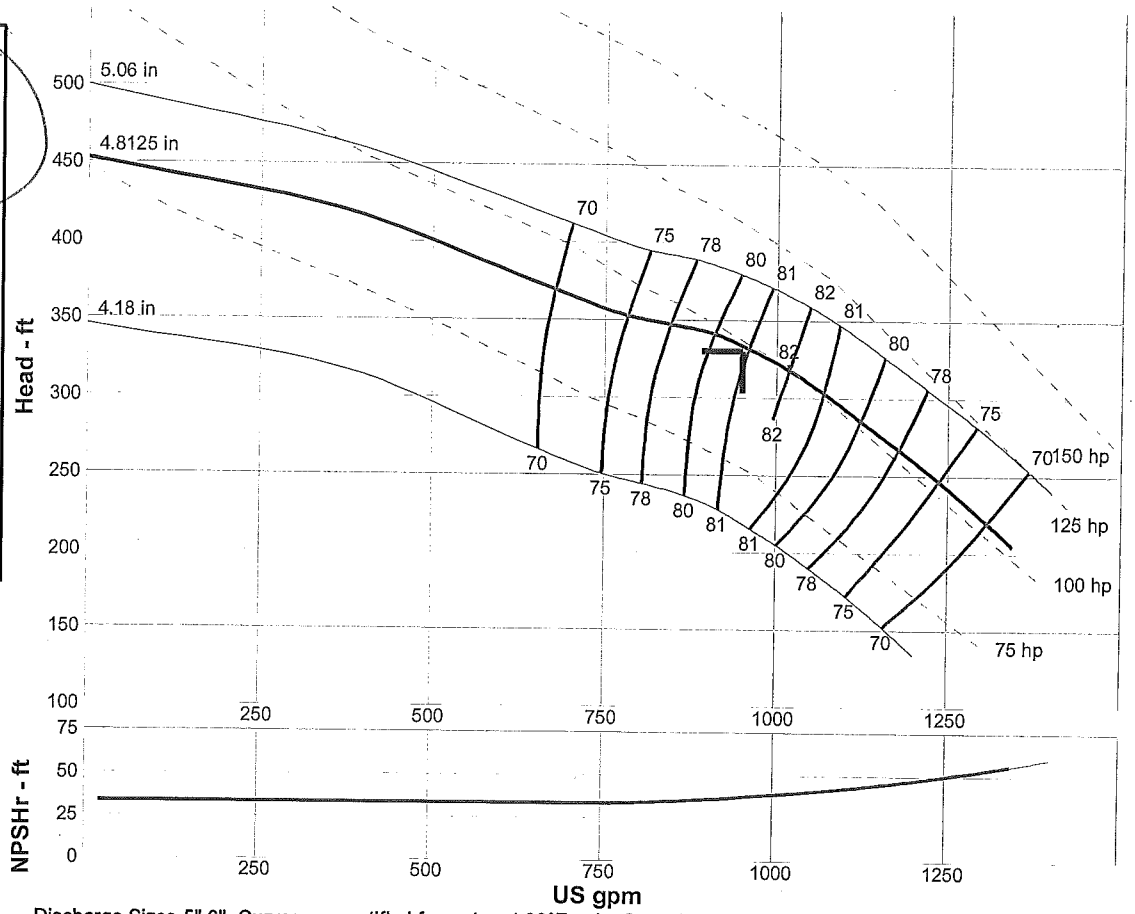
Shutoff head:	453 ft
Shutoff dP:	196 psi
Min flow:	---

BEP: 82% @ 1018 US gpm

NOL power:
104 hp @ 1306 US gpm

-- Max Curve --

Max power:
125 hp @ 1400 US gpm



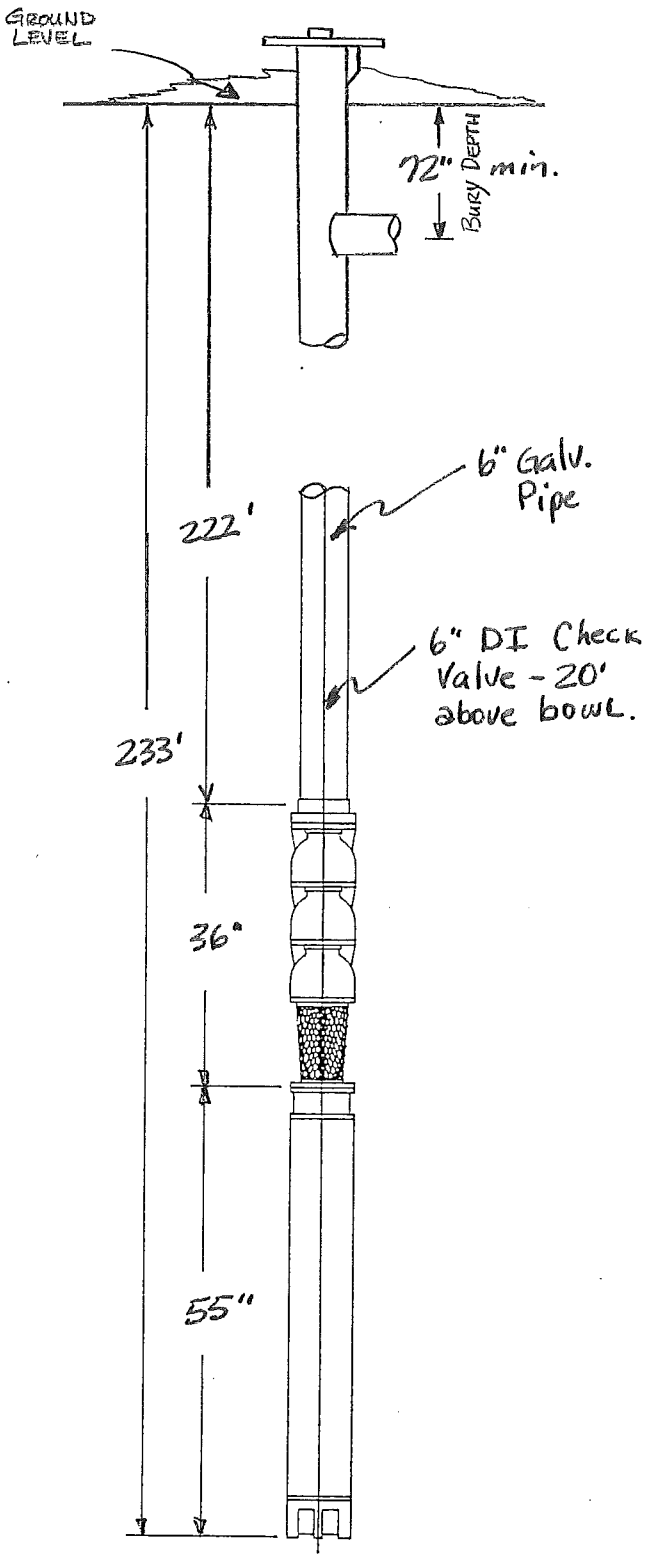
Discharge Sizes-5",6". Curves are certified for water at 60°F only. Consult factory for performance with any other fluid.

Performance Evaluation:

Flow US gpm	Speed rpm	Head ft	Efficiency %	Power hp	NPSHr ft
1140	3450	279	79.3	101	44.6
950	3450	333	80.8	98.9	37.6
760	3450	356	73.9	92.3	34
570	3450	388	61.4	89.3	33.8
380	3450	418	45.5	87.2	33.7

Selected from catalog: goulds sub .60 Vers: 3.35

SUBMERSIBLE PUMP W/PITLESS ADAPTER



125 HP VFD
100HP MOTOR

DATE Jan. 21, 2011
CUSTOMER Huntsman Springs
JOB NAME 100 HP Supply Well

MOTOR

H.P. 100 MFGR. Franklin Electric
R.P.M. 3450 SIZE 8"
PHASE/CYCLE/VOLTS 3ph/60cy/460v

DISCHARGE ELBOW/Pitless

SIZE 6"
MATERIAL Steel

COLUMN ASSEMBLY

PIPE SIZE/LENGTH 6"x21' GALV
PIPE WALL Sch 40

CABLE

SIZE 1/0 - 3 con. w/grd. Flat
MATERIAL PVC/Copper
LENGTH 250'

BOWL ASSEMBLY 8FDHC100-4

MODEL Goulds ~~9RCLC 2stg~~
NO. OF STAGES ~~3~~ 4
G.P.M. ~~1100~~ 950 T.D.H. ~~2140~~ 330'
MATERIAL:
BOWL Cast IMPELLER bronze
SHAFT SS. BEARING bronze
COLLET SS BOLTS SS
BOWL W.R. MATERIAL N/A
IMPELLER W.R. MATERIAL N/A

MOTOR ADAPTER

TYPE 8" - FLG.
SIZE 8"

SHROUD

MATERIAL None
SIZE

COMMENTS:

Dalley Well
40HP
400GPM @ 233' TDH

CROWN

7H-400

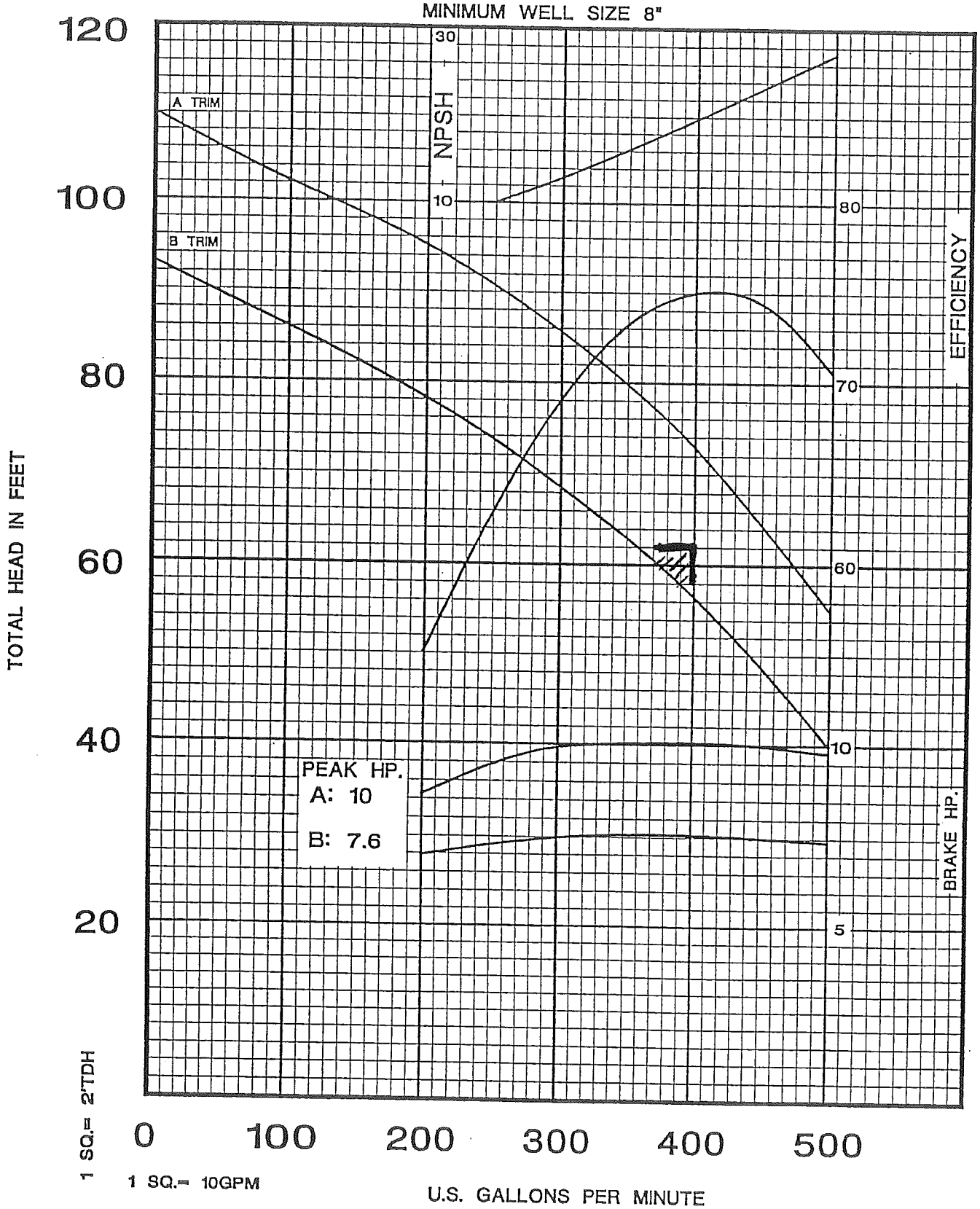
MODEL 7H-400

4 STG.

PERFORMANCE CHARACTERISTICS

150' Setting

MINIMUM WELL SIZE 8"



CROWN CROWN PUMP CORPORATION , HIGHWAY 16 & BIVAR , DE LEON , TEXAS

CROWN

TANK WELL
20HP. - 2 stg.
400 GPM @ 160 TDH

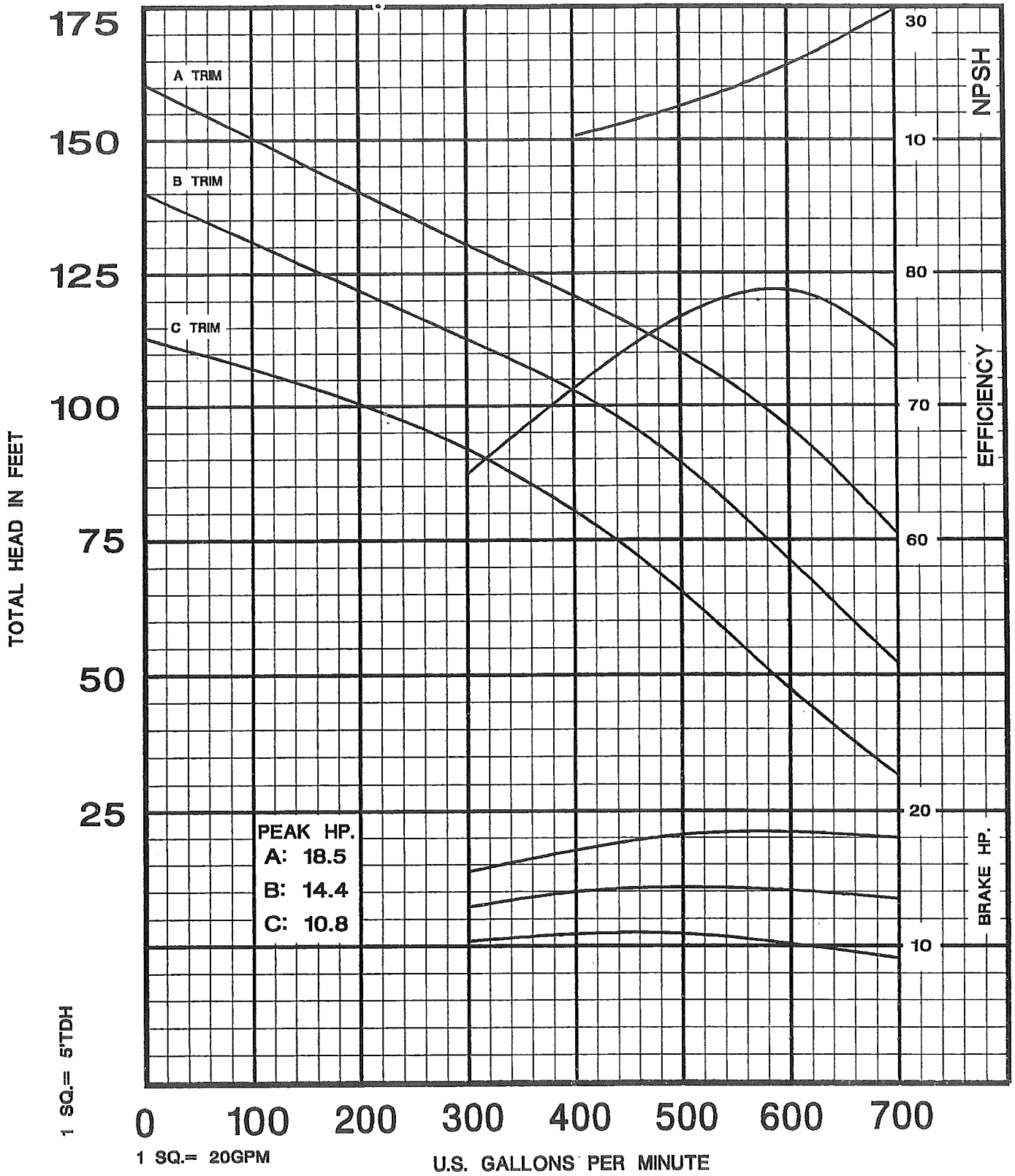
8L-600

MODEL 8L-600

180' pump setting

PERFORMANCE CHARACTERISTICS

MINIMUM WELL SIZE 10"



CROWN CROWN PUMP CORPORATION , HIGHWAY 16 & BIVAR , DE LEON , TEXAS

Prepared For

R&S CONSTRUCTION

DRIGGS HIGH SCHOOL

75 HP Deepwell Pump

March 26, 1998

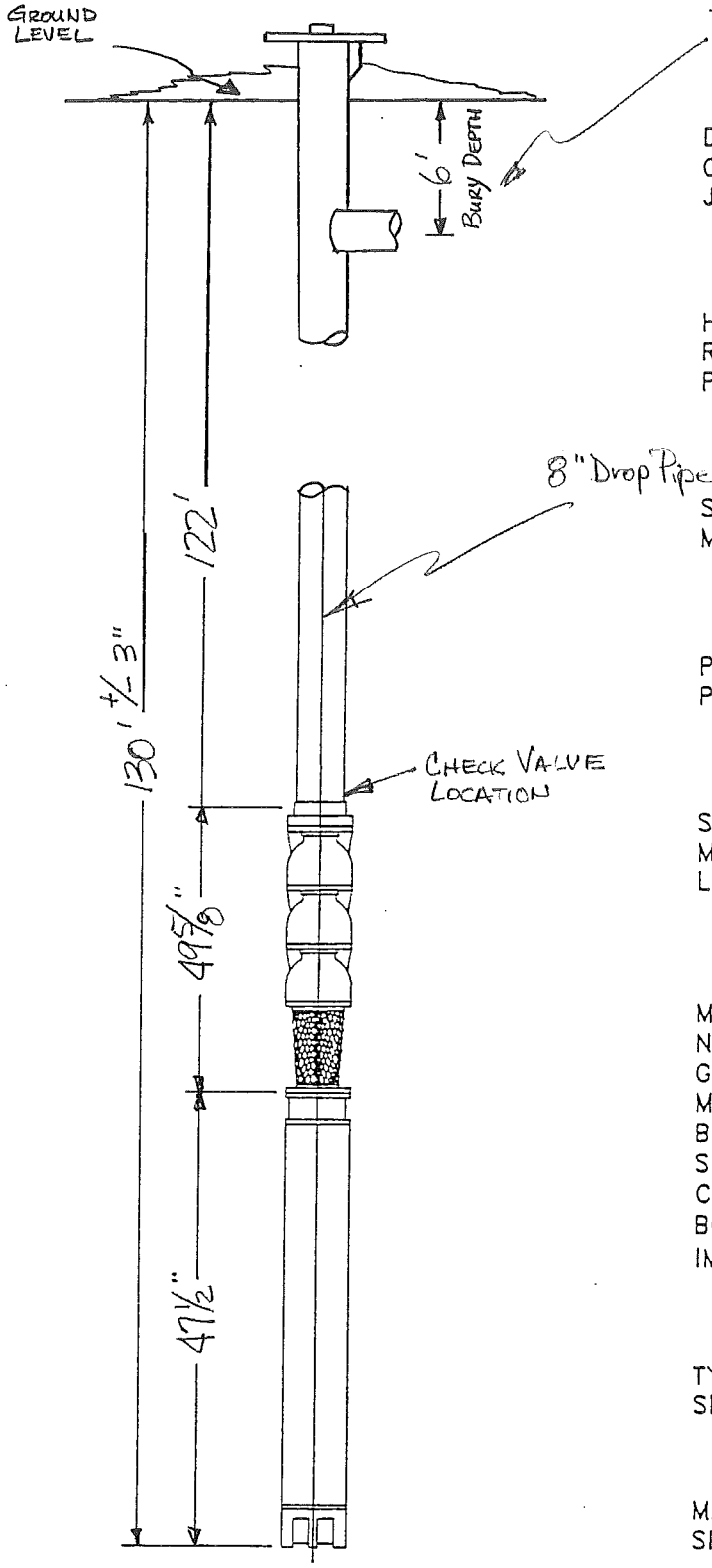
SUBMITTAL

PumpTech Company, Inc.

P.O. Box 51259, Idaho Falls, ID 83405 Phone (208) 529-6868 / Fax (208) 529-4332
Boise Office: P.O. Box 5463 Boise, ID 83705 Phone (208) 384-1321 / Fax (208) 389-9432

"YOUR TOTAL PUMP SUPPLIER"

SUBMERSIBLE PUMP W/PITLESS ADAPTER



BURY DEPTH SUBJECT TO FINAL ELEVATION VERIFICATION

DATE MARCH 26, 1998
CUSTOMER R&S Construction
JOB NAME Driggs High School

MOTOR

H.P. 75 MFGR. Franklin
R.P.M. 3500 SIZE 8"
PHASE/CYCLE/VOLTS 3ph/60cy/460v

DISCHARGE ELBOW

SIZE 8"
MATERIAL STEEL

COLUMN ASSEMBLY

PIPE SIZE/LENGTH 8" - 122'
PIPE WALL 8" .277"

CABLE

SIZE 1-0 - COPPER
MATERIAL 3 WIRE FLAT w/grd.
LENGTH 120'

BOWL ASSEMBLY

MODEL 8H-1000 - CROWN
NO. OF STAGES 3
G.P.M. 825 T.D.H. 285
MATERIAL:
BOWL Cast Iron IMPELLER BRONZE
SHAFT 416ss BEARING RUBBER
COLLET 416ss BOLTS S.S. 300 SERIES
BOWL W.R. MATERIAL N/A
IMPELLER W.R. MATERIAL N/A

MOTOR ADAPTER

TYPE STD. CAST IRON
SIZE 8"

SHROUD

MATERIAL NONE
SIZE NONE

COMMENTS: 1- CHECK VALVE WILL BE supplied. It will be located directly above THE BOWL ASSEMBLY.

DRIGGS HIGH SCHOOL

MAASS MIDWEST MANUFACTURERS OF QUALITY WATER WELL ACCESSORIES

ACKNOWLEDGMENT

We are pleased to ackowlede receipt of your order. To avoid any errors with your order, please review the following. Upon receipt of a signed copy of this page we will begin processing your order as indicated below.

Model No. : MB, HD, S-12,14,8,P-6, NPT-WT

Sold To: PUMP TECH CO., INC
4444 SO. YELLOWSTONE HWY.
IDAHO FALLS , ID.

SHIP TO: Same

Date: 10-23-97

Attention: DOUG

Quote #: NONE

Order # P.O.# 6638

Fax 208-529-4332

Phone: 208-529-6868

Reference :

Project: Driggs High School

Additional Options (Not Reflected in Drawing)

QUANTITY OF 1 UNIT.

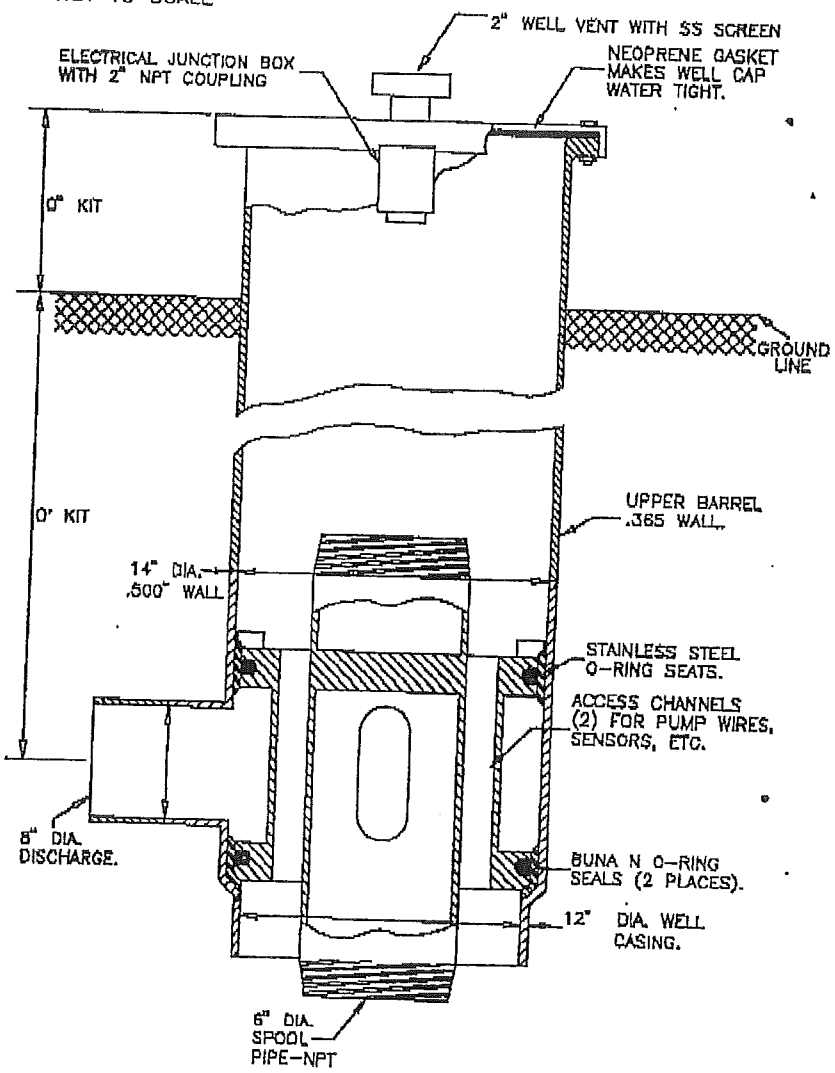
Factory:

Estimated Delivery (A.R.O.):

Terms of Order: 2%/10/net 30

Accepted by: L Douglas Miller

*NOT TO SCALE



P.O. Box 547, 11283 Dundee Road, Huntley, IL 60142-0547 (800) 323-6259 IL AREA (847) 669-5135 FAX (847) 669-3230

national water well association

CROWN

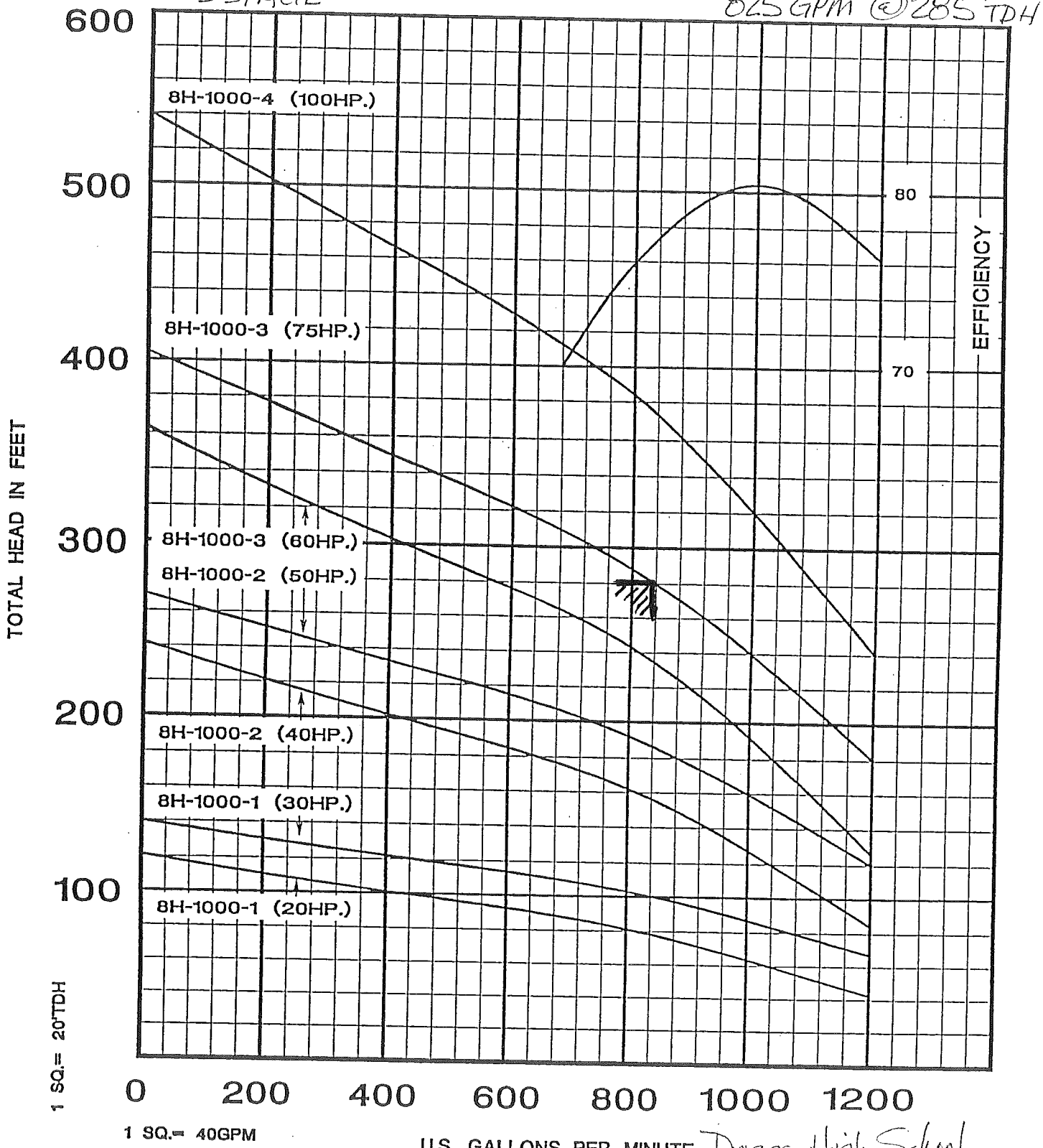
8H-1000

MODEL 8H-1000
PERFORMANCE CHARACTERISTICS 75HP

3STAGE

MINIMUM WELL SIZE 10"

825 GPM @ 285' TDH



Drugg: High School

CROWN CROWN PUMP CORPORATION , HIGHWAY 16 & BIVAR , DE LEON , TEXAS

APPENDIX U

Rate Study

ABOUT
Leadership
OMB Organization Chart
Open Government Plan
RSS Feeds
Intellectual Property
Agency Info
Bulletins
Circulars
Budget
State and Local Governments
Educational and Non-Profit Institutions
Federal Procurement
Federal Financial Management
Federal Information Resources / Data Collection
Other Special Purpose
Memoranda
Privacy Guidance
Reports
Federal Register
FOIA
NDA
No FEAR
OMB Locator

Circular A-94 Appendix C

Revised December 2012

OMB Circular No. A-94

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DISCOUNT RATES FOR COST-EFFECTIVENESS, LEASE PURCHASE, AND RELATED ANALYSES

Effective Dates. This appendix is updated annually. This version of the appendix is valid for calendar year 2013. A copy of the updated appendix can be obtained in electronic form through the OMB home page at http://www.whitehouse.gov/omb/circulars_a094/a94_appx-c/ the text of the main body of the Circular is found at http://whitehouse.gov/omb/circulars_a094/, and a table of past years' rates is located at http://whitehouse.gov/sites/default/files/omb/assets/a94/dischist-2013.pdf. Updates of the appendix are also available upon request from OMB's Office of Economic Policy (202-395-3381).

Nominal Discount Rates. A forecast of nominal or market interest rates for 2013 based on the economic assumptions for the Fiscal Year 2014 Budget are presented below. These nominal rates are to be used for discounting nominal flows, which are often encountered in lease-purchase analysis.

Nominal Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	20-Year	30-Year
0.5	1.1	1.5	2.0	2.7	3.0

Real Discount Rates. A forecast of real interest rates from which the inflation premium has been removed and based on the economic assumptions from the 2014 Budget is presented below. These real rates are to be used for discounting constant-dollar flows, as is often required in cost-effectiveness analysis.

Real Interest Rates on Treasury Notes and Bonds of Specified Maturities (in percent)

3-Year	5-Year	7-Year	10-Year	20-Year	30-Year
-1.4	-0.8	-0.4	0.1	0.8	1.1

Analyses of programs with terms different from those presented above may use a linear interpolation. For example, a four-year project can be evaluated with a rate equal to the average of the three-year and five-year rates. Programs with durations longer than 30 years may use the 30-year interest rate.

Other Documents

Text of OMB Circular No. A-94 in HTML or PDF (22 pages, 78 kb)

Table of Past Years Discount Rates from Appendix C of OMB Circular No. A-94 (2 pages, 28 kb)

Memorandum M-13-04, 2013 Discount Rates for OMB Circular No. A-94 (2 pages, 790 kb)

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2014 City of Driggs Water Improvement Projects

Revenue Bond Payment Calculations

Fiscal Year	Bond Amount Issued toward Project	Beginning Bond Balance	Total Yearly Payment	Bond Interest Payment	Bond Principal Payment	Ending Bond Balance	Bond Year
2012	$ -	$ -	$ -	$ -	$ -	$ -	
2013	$ -	$ -	$ -	$ -	$ -	$ -	
2014	$ 1,381,719.25	$ 1,381,719.25	$ -	$ -	$ -	$ 1,381,719.25	0
2015	$ -	$ 1,381,719.25	$ (90,316.43)	$ (37,306.42)	$ (53,010.01)	$ 1,328,709.24	1
2016	$ -	$ 1,328,709.24	$ (90,316.43)	$ (35,875.15)	$ (54,441.28)	$ 1,274,267.96	2
2017	$ -	$ 1,274,267.96	$ (90,316.43)	$ (34,405.23)	$ (55,911.20)	$ 1,218,356.76	3
2018	$ -	$ 1,218,356.76	$ (90,316.43)	$ (32,895.63)	$ (57,420.80)	$ 1,160,935.96	4
2019	$ -	$ 1,160,935.96	$ (90,316.43)	$ (31,345.27)	$ (58,971.16)	$ 1,101,964.80	5
2020	$ -	$ 1,101,964.80	$ (90,316.43)	$ (29,753.05)	$ (60,563.38)	$ 1,041,401.42	6
2021	$ -	$ 1,041,401.42	$ (90,316.43)	$ (28,117.84)	$ (62,198.59)	$ 979,202.83	7
2022	$ -	$ 979,202.83	$ (90,316.43)	$ (26,438.48)	$ (63,877.95)	$ 915,324.88	8
2023	$ -	$ 915,324.88	$ (90,316.43)	$ (24,713.77)	$ (65,602.66)	$ 849,722.22	9
2024	$ -	$ 849,722.22	$ (90,316.43)	$ (22,942.50)	$ (67,373.93)	$ 782,348.29	10
2025	$ -	$ 782,348.29	$ (90,316.43)	$ (21,123.40)	$ (69,193.03)	$ 713,155.26	11
2026	$ -	$ 713,155.26	$ (90,316.43)	$ (19,255.19)	$ (71,061.24)	$ 642,094.02	12
2027	$ -	$ 642,094.02	$ (90,316.43)	$ (17,336.54)	$ (72,979.89)	$ 569,114.13	13
2028	$ -	$ 569,114.13	$ (90,316.43)	$ (15,366.08)	$ (74,950.35)	$ 494,163.78	14
2029	$ -	$ 494,163.78	$ (90,316.43)	$ (13,342.42)	$ (76,974.01)	$ 417,189.77	15
2030	$ -	$ 417,189.77	$ (90,316.43)	$ (11,264.12)	$ (79,052.31)	$ 338,137.46	16
2031	$ -	$ 338,137.46	$ (90,316.43)	$ (9,129.71)	$ (81,186.72)	$ 256,950.74	17
2032	$ -	$ 256,950.74	$ (90,316.43)	$ (6,937.67)	$ (83,378.76)	$ 173,571.98	18
2033	$ -	$ 173,571.98	$ (90,316.43)	$ (4,686.44)	$ (85,629.99)	$ 87,942.00	19
2034	$ -	$ 87,942.00	$ (90,316.43)	$ (2,374.43)	$ (87,942.00)	$ (0.00)	20
2035	$ -						
2036	$ -						
2037	$ -						
2038	$ -						
2039	$ -						
2040	$ -						
		Totals	**$ (1,806,328.61)**	**$ (424,609.36)**	**$ (1,381,719.25)**		

Series 2015 Revenue Bond Total Project Costs= $ 1,381,719.25

Cost of Insurance (1.5%)= $ 20,725.79

Surety Policy= $ 20,000

Interest Rate= 2.70% (OMB Circular A-94 Appex. C, 2013)

Bond Insurance (0.5%)= $ 6,908.60

Present Value Interest Rate= 2.70% (OMB Circular A-94 Appex. C, 2013)

Par Amount including COI= Total Project Costs + (Total Project Costs x 1.5% Cost of Insurance) + (Total Project Costs x 0.5% Bond Insurance) + ($20,000 for Surety Policy)

Par Amount including COI= $ 1,429,353.64

Interest Expense (3.5% Interest Rate, 20 Years)= $ (424,609.36)

Project Proceeds= $ 1,381,719.25

Debt Service Cost= Par Amount including COI + Interest Expense

Debt Service Cost= $ 1,853,963.00

Bond Issue	Par Amount	Proceeds	Net Debt Service[1]
Series 2014 Revenue Bonds	$ 1,429,353.64	$ 1,381,719.25	$ 1,853,963.00

1.5 MG Water Tank Project

Revenue Bond Payment Calculations

Fiscal Year	Bond Amount Issued toward Project	Beginning Bond Balance	Total Yearly Payment	Bond Interest Payment	Bond Principal Payment	Ending Bond Balance	Bond Year
2012	$ -	$ -	$ -	$ -	$ -	$ -	
2013	$ -	$ -	$ -	$ -	$ -	$ -	
2014	$ -	$ -	$ -	$ -	$ -	$ -	
2015	$ -	$ -	$ -	$ -	$ -	$ -	
2016	$ -	$ -	$ -	$ -	$ -	$ -	
2017	$ -	$ -	$ -	$ -	$ -	$ -	
2018	$ -	$ -	$ -	$ -	$ -	$ -	
2019	$ 1,923,170.48	$ 1,923,170.48	$ -	$ -	$ -	$ 1,923,170.48	0
2020	$ -	$ 1,923,170.48	$ (125,708.53)	$ (51,925.60)	$ (73,782.93)	$ 1,849,387.55	1
2021	$ -	$ 1,849,387.55	$ (125,708.53)	$ (49,933.46)	$ (75,775.06)	$ 1,773,612.49	2
2022	$ -	$ 1,773,612.49	$ (125,708.53)	$ (47,887.54)	$ (77,820.99)	$ 1,695,791.50	3
2023	$ -	$ 1,695,791.50	$ (125,708.53)	$ (45,786.37)	$ (79,922.16)	$ 1,615,869.34	4
2024	$ -	$ 1,615,869.34	$ (125,708.53)	$ (43,628.47)	$ (82,080.06)	$ 1,533,789.29	5
2025	$ -	$ 1,533,789.29	$ (125,708.53)	$ (41,412.31)	$ (84,296.22)	$ 1,449,493.07	6
2026	$ -	$ 1,449,493.07	$ (125,708.53)	$ (39,136.31)	$ (86,572.22)	$ 1,362,920.85	7
2027	$ -	$ 1,362,920.85	$ (125,708.53)	$ (36,798.86)	$ (88,909.67)	$ 1,274,011.19	8
2028	$ -	$ 1,274,011.19	$ (125,708.53)	$ (34,398.30)	$ (91,310.23)	$ 1,182,700.96	9
2029	$ -	$ 1,182,700.96	$ (125,708.53)	$ (31,932.93)	$ (93,775.60)	$ 1,088,925.36	10
2030	$ -	$ 1,088,925.36	$ (125,708.53)	$ (29,400.98)	$ (96,307.54)	$ 992,617.81	11
2031	$ -	$ 992,617.81	$ (125,708.53)	$ (26,800.68)	$ (98,907.85)	$ 893,709.97	12
2032	$ -	$ 893,709.97	$ (125,708.53)	$ (24,130.17)	$ (101,578.36)	$ 792,131.61	13
2033	$ -	$ 792,131.61	$ (125,708.53)	$ (21,387.55)	$ (104,320.97)	$ 687,810.63	14
2034	$ -	$ 687,810.63	$ (125,708.53)	$ (18,570.89)	$ (107,137.64)	$ 580,672.99	15
2035	$ -	$ 580,672.99	$ (125,708.53)	$ (15,678.17)	$ (110,030.36)	$ 470,642.63	16
2036	$ -	$ 470,642.63	$ (125,708.53)	$ (12,707.35)	$ (113,001.18)	$ 357,641.46	17
2037	$ -	$ 357,641.46	$ (125,708.53)	$ (9,656.32)	$ (116,052.21)	$ 241,589.25	18
2038	$ -	$ 241,589.25	$ (125,708.53)	$ (6,522.91)	$ (119,185.62)	$ 122,403.63	19
2039	$ -	$ 122,403.63	$ (125,708.53)	$ (3,304.90)	$ (122,403.63)	$ (0.00)	20
2040	$ -						
		Totals	**$ (2,514,170.57)**	**$ (591,000.09)**	**$ (1,923,170.48)**		

Series 2015 Revenue Bond Total Project Costs= $ 1,923,170.48

Cost of Insurance (1.5%)= $ 28,847.56

Surety Policy= $ 20,000

Interest Rate= 2.70% (OMB Circular A-94 Appex. C, 2013)

Bond Insurance (0.5%)= $ 9,615.85

Present Value Interest Rate= 2.70% (OMB Circular A-94 Appex. C, 2013)

Par Amount including COI= Total Project Costs + (Total Project Costs x 1.5% Cost of Insurance) + (Total Project Costs x 0.5% Bond Insurance) + ($20,000 for Surety Policy)

Par Amount including COI= $ 1,981,633.89

Interest Expense (3.5% Interest Rate, 20 Years)= $ (591,000.09)

Project Proceeds= $ 1,923,170.48

Debt Service Cost= Par Amount including COI + Interest Expense

Debt Service Cost= $ 2,572,633.98

Bond Issue	Par Amount	Proceeds	Net Debt Service[1]
Series 2019 Revenue Bonds	$ 1,981,633.89	$ 1,923,170.48	$ 2,572,633.98

Little Avenue 6-inch Waterline Replacement Project

Revenue Bond Payment Calculations

Fiscal Year	Bond Amount Issued toward Project	Beginning Bond Balance	Total Yearly Payment	Bond Interest Payment	Bond Principal Payment	Ending Bond Balance	Bond Year
2012	$ -	$ -	$ -	$ -	$ -	$ -	
2013	$ -	$ -	$ -	$ -	$ -	$ -	
2014	$ -	$ -	$ -	$ -	$ -	$ -	
2015	$ -	$ -	$ -	$ -	$ -	$ -	
2016	$ -	$ -	$ -	$ -	$ -	$ -	
2017	$ -	$ -	$ -	$ -	$ -	$ -	
2018	$ -	$ -	$ -	$ -	$ -	$ -	
2019	$ -	$ -	$ -	$ -	$ -	$ -	
2020	$ -	$ -	$ -	$ -	$ -	$ -	
2021	$ -	$ -	$ -	$ -	$ -	$ -	
2022	$ -	$ -	$ -	$ -	$ -	$ -	
2023	$ -	$ -	$ -	$ -	$ -	$ -	
2024	$ 609,796.55	$ 609,796.55	$ -	$ -	$ -	$ 609,796.55	0
2025	$ -	$ 609,796.55	$ (39,859.51)	$ (16,464.51)	$ (23,395.00)	$ 586,401.55	1
2026	$ -	$ 586,401.55	$ (39,859.51)	$ (15,832.84)	$ (24,026.66)	$ 562,374.88	2
2027	$ -	$ 562,374.88	$ (39,859.51)	$ (15,184.12)	$ (24,675.38)	$ 537,699.50	3
2028	$ -	$ 537,699.50	$ (39,859.51)	$ (14,517.89)	$ (25,341.62)	$ 512,357.88	4
2029	$ -	$ 512,357.88	$ (39,859.51)	$ (13,833.66)	$ (26,025.84)	$ 486,332.03	5
2030	$ -	$ 486,332.03	$ (39,859.51)	$ (13,130.96)	$ (26,728.54)	$ 459,603.49	6
2031	$ -	$ 459,603.49	$ (39,859.51)	$ (12,409.29)	$ (27,450.21)	$ 432,153.28	7
2032	$ -	$ 432,153.28	$ (39,859.51)	$ (11,668.14)	$ (28,191.37)	$ 403,961.91	8
2033	$ -	$ 403,961.91	$ (39,859.51)	$ (10,906.97)	$ (28,952.54)	$ 375,009.38	9
2034	$ -	$ 375,009.38	$ (39,859.51)	$ (10,125.25)	$ (29,734.25)	$ 345,275.12	10
2035	$ 1.00	$ 345,275.12	$ (39,859.51)	$ (9,322.43)	$ (30,537.08)	$ 314,738.04	11
2036	$ 2.00	$ 314,738.04	$ (39,859.51)	$ (8,497.93)	$ (31,361.58)	$ 283,376.47	12
2037	$ 3.00	$ 283,376.47	$ (39,859.51)	$ (7,651.16)	$ (32,208.34)	$ 251,168.12	13
2038	$ 4.00	$ 251,168.12	$ (39,859.51)	$ (6,781.54)	$ (33,077.97)	$ 218,090.16	14
2039	$ 5.00	$ 218,090.16	$ (39,859.51)	$ (5,888.43)	$ (33,971.07)	$ 184,119.08	15
2040	$ 6.00	$ 184,119.08	$ (39,859.51)	$ (4,971.22)	$ (34,888.29)	$ 149,230.79	16
2041	$ 7.00	$ 149,230.79	$ (39,859.51)	$ (4,029.23)	$ (35,830.28)	$ 113,400.52	17
2042	$ 8.00	$ 113,400.52	$ (39,859.51)	$ (3,061.81)	$ (36,797.69)	$ 76,602.82	18
2043	$ 9.00	$ 76,602.82	$ (39,859.51)	$ (2,068.28)	$ (37,791.23)	$ 38,811.59	19
2044	$ 10.00	$ 38,811.59	$ (39,859.51)	$ (1,047.91)	$ (38,811.59)	$ (0.00)	20
2045							
2046							
2047							
2048							
2049							
2050							
		Totals	**$ (637,752.11)**	**$ (177,186.35)**	**$ (460,565.76)**		

Series 2015 Revenue Bond Total Project Costs= $ 609,796.55

Cost of Insurance (1.5%)= $ 9,146.95

Surety Policy= $ 20,000

Interest Rate= 2.70% (OMB Circular A-94 Appex. C, 2013)

Bond Insurance (0.5%)= $ 3,048.98

Present Value Interest Rate= 2.70% (OMB Circular A-94 Appex. C, 2013)

Par Amount including COI= Total Project Costs + (Total Project Costs x 1.5% Cost of Insurance) + (Total Project Costs x 0.5% Bond Insurance) + ($20,000 for Surety Policy)

Par Amount including COI= $ 641,992.48

Interest Expense (3.5% Interest Rate, 20 Years)= $ (177,186.35)

Project Proceeds= $ 609,796.55

Debt Service Cost= Par Amount including COI + Interest Expense

Debt Service Cost= $ 819,178.83

Bond Issue	Par Amount	Proceeds	Net Debt Service[1]
Series 2014 Revenue Bonds	$ 641,992.48	$ 609,796.55	$ 819,178.83

Driggs - Projected Water Fund Revenues and Expenditures (Increase User Fees using Existing Rate Structure)

Year	Year	Population	Residential, Connections	Commercial, Connections	Total Connections	New Residential Connections	New Commercial Connections	Residential Demand, gallons [2]	Commercial Demand, gallons [2]	Residential Avg. Monthly Base Water Rate, $/10,000 gallons water allowance (Summer) 05/01 - 10/31 [3]	Residential Avg. Monthly Base Water Rate, $/20,000 gallons water allowance (Winter) 11/01 - 4/30 [3]	Commercial Avg. Monthly Base Water Rate, $/45,000 gallons water allowance (Summer) 05/01 - 10/31 [3]	Commercial Avg. Monthly Base Water Rate, $/55,000 gallons water allowance (Winter) 11/01 - 4/30 [3]	Monthly Water Consumption Fee, $ for every 1,000 gallons (above allowance) [3]	Connection Fee Commercial (Avg. Commercial Connection is 2.0 inch)	Connection Fee Residential (Avg. Residential Connection is 3/4 or 1-inch, Min. Connection Fee)	Beginning Water Fund Balance less Impact Fee Balance	Operating Revenues, User Fees [7] (Summer)
0 [1]	2013	1,867	901	202	1,103	0	0	135,821,245	30,450,490	$ 27.00	$ 27.00	$ 121.50	$ 121.50	$ 1.00	$ 7,350.00	$ 1,785.00	$ 475,638.00	$ 255,955.50
1	2014	1,942	937	210	1,147	36	8	141,254,095	31,668,510	$ 28.50	$ 28.50	$ 128.25	$ 128.25	$ 1.50	$ 7,350.00	$ 1,785.00	$ 306,797.49	$ 304,257.00
2	2015	2,019	975	218	1,193	37	8	146,904,259	32,935,250	$ 30.00	$ 30.00	$ 135.00	$ 135.00	$ 2.00	$ 7,350.00	$ 1,785.00	$ 329,049.41	$ 356,013.09
3	2016	2,100	1,014	227	1,241	39	9	152,780,429	34,252,660	$ 31.50	$ 31.50	$ 141.75	$ 141.75	$ 2.00	$ 7,350.00	$ 1,785.00	$ 347,568.01	$ 383,102.16
4	2017	2,184	1,054	236	1,290	41	9	158,891,646	35,622,766	$ 33.00	$ 33.00	$ 148.50	$ 148.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 419,221.31	$ 411,788.73
5	2018	2,271	1,096	246	1,342	42	9	165,247,312	37,047,677	$ 34.50	$ 34.50	$ 155.25	$ 155.25	$ 2.00	$ 7,350.00	$ 1,785.00	$ 211,699.51	$ 442,157.26
6	2019	2,362	1,140	256	1,396	44	10	171,857,204	38,529,584	$ 36.00	$ 36.00	$ 162.00	$ 162.00	$ 2.00	$ 7,350.00	$ 1,785.00	$ 296,764.24	$ 474,296.41
7	2020	2,457	1,186	266	1,451	46	10	178,731,493	40,070,767	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 596,476.73	$ 503,288.91
8	2021	2,555	1,233	276	1,510	47	11	185,880,752	41,673,598	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 525,730.58	$ 523,420.47
9	2022	2,657	1,282	288	1,570	49	11	193,315,982	43,340,542	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 347,270.25	$ 544,357.29
10	2023	2,764	1,334	299	1,633	51	12	201,048,622	45,074,164	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 182,187.26	$ 566,131.58
11	2024	2,874	1,387	311	1,698	53	12	209,090,567	46,877,130	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 4,262.30	$ 588,776.84
12	2025	2,989	1,443	323	1,766	55	12	217,454,189	48,752,216	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 145,560.34	$ 612,327.91
13	2026	3,109	1,500	336	1,837	58	13	226,152,357	50,702,304	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 276,534.31	$ 636,821.03
14	2027	3,233	1,560	350	1,910	60	13	235,198,451	52,730,396	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 462,118.28	$ 662,293.87
15	2028	3,362	1,623	364	1,986	62	14	244,606,389	54,839,612	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 700,878.79	$ 688,785.63
16	2029	3,497	1,688	378	2,066	65	15	254,390,645	57,033,197	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 988,229.01	$ 716,337.05
17	2030	3,637	1,755	393	2,149	68	15	264,566,270	59,314,525	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 1,311,061.52	$ 744,990.53
18	2031	3,782	1,825	409	2,234	70	16	275,148,921	61,687,106	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 1,671,033.23	$ 774,790.16
19	2032	3,933	1,898	426	2,324	73	16	286,154,878	64,154,590	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 2,069,872.36	$ 805,781.76
20	2033	4,091	1,974	443	2,417	76	17	297,601,073	66,720,773	$ 37.00	$ 37.00	$ 166.50	$ 166.50	$ 2.00	$ 7,350.00	$ 1,785.00	$ 2,509,385.64	$ 838,013.03

[1] Initial operating expenses are from actual FY 2011/2012 information and the Water Fund FY 12/13 budget, refer to the June 30, 2012 Basic Financial Statements for additional information. Not included in operating expenses are long term debt, depreciation, and professional services (legal/ engineering). Professional services and long term debt ar factored into each future capital improvement project. Long term debt for existing projects is shown separately.

[2] Average Daily Demand of 413 gpd/ERU was used to calculate annual demand.

[3] Water Rate and Water Consumption Fees increase in order to maintain a positive fund balance. Assumed 3/4 or 1-inch water meter for a typical residential consumer and 2-inch for typical commercial consumer.

[4] Operating revenues assumes 75% of residential and 58% of commercial water users on any given month are under water allowance. This percentage was averaged from consumption data for 2012 provided by the City.

[5] Operating Expenses are estimated to increase 3.0% every year.

[6] Current Bond Expense was obtained from the City of Driggs and is shown in its June 30, 2012 Basic Financial Statements. Future Bond Expense was calculated to keep water rates low.

[7] Non-operating revenues (expenses) include debt service and investment earnings. Investment earnings are not included because they are a small percentage of the total.

[8] The 12-inch Transmission Water Pipeline Replacment Project with a total construction cost of $641.290.88 in year 2014 and 1.5 MG Water Tank Project with a total construction cost of $1,953,021.79 in year 2019 will require revenue bonds to construct; therefore, the costs for these projects do not show in the Capital Improvement Project Expense column. Costs for these projects show up in the future bond expense columns.

Driggs - Projected Water Fund Revenues and Expenditures (Increase User Fees using Existing Rate Structure)

Operating Revenues, User Fees [7] (Winter)	Operating Revenues, Connection Fees	Total Operating Revenues	Operating Expenses [5]	Future Capital Improvement Project Expense	Current Bond Debt Interest Expense [6]	Current Bond Debt Principal Expense [6]	Current Bond Debt Expenses [6]	Future Bond Debt Interest Expense [5]	Future Bond Debt Principal Expense [6]	Total Future Bond Debt Expense [6]	Depreciation (From Previous Water Budgets)	Total Revenues	Total Expenses [9]	Excess / Shortfall	Ending Fund Balance	Year
$ 243,838.93	$ -	$ 499,794.43	$ (285,000.00)	$ (164,750.00)	$ (55,553.47)	$ (47,331.47)	$ (102,884.94)	$ -	$ -	$ -	$ (116,000.00)	$ 499,794.43	$ (668,634.94)	$ (168,840.51)	$ 306,797.49	2013
$ 285,355.15	$ 83,488.82	$ 673,100.97	$ (293,550.00)	$ (138,414.10)	$ (54,379.27)	$ (48,505.67)	$ (102,884.94)	$ -	$ -	$ -	$ (116,000.00)	$ 673,100.97	$ (650,849.05)	$ 22,251.93	$ 329,049.41	2014
$ 329,802.53	$ 86,828.37	$ 772,644.00	$ (302,356.50)	$ (142,566.53)	$ (53,172.60)	$ (49,713.34)	$ (102,885.94)	$ (37,306.42)	$ (53,010.01)	$ (90,316.43)	$ (116,000.00)	$ 772,644.00	$ (754,125.40)	$ 18,518.60	$ 347,568.01	2015
$ 355,843.17	$ 90,301.51	$ 829,246.84	$ (311,427.20)	$ (146,843.52)	$ (41,843.33)	$ (51,163.06)	$ (93,006.39)	$ (35,875.15)	$ (54,441.28)	$ (90,316.43)	$ (116,000.00)	$ 829,246.84	$ (757,593.54)	$ 71,653.30	$ 419,221.31	2016
$ 383,439.38	$ 93,913.57	$ 889,141.67	$ (320,770.01)	$ (479,699.03)	$ (36,604.50)	$ (53,273.50)	$ (89,878.00)	$ (34,405.23)	$ (55,911.20)	$ (90,316.43)	$ (116,000.00)	$ 889,141.67	$ (1,096,663.47)	$ (207,521.80)	$ 211,699.51	2017
$ 412,673.94	$ 97,670.11	$ 952,501.30	$ (330,393.11)	$ (240,848.03)	$ (34,378.00)	$ (55,501.00)	$ (89,879.00)	$ (32,895.63)	$ (57,420.80)	$ (90,316.43)	$ (116,000.00)	$ 952,501.30	$ (867,436.57)	$ 85,064.73	$ 296,764.24	2018
$ 443,633.75	$ 101,576.91	$ 1,019,507.07	$ (340,304.90)	$ (83,294.25)	$ (32,055.50)	$ (57,823.50)	$ (89,879.00)	$ (31,345.27)	$ (58,971.16)	$ (90,316.43)	$ (116,000.00)	$1,019,507.07	$ (719,794.59)	$ 299,712.48	$ 596,476.73	2019
$ 471,399.75	$ 105,639.99	$ 1,080,328.65	$ (350,514.05)	$ (378,656.79)	$ (29,635.00)	$ (60,244.00)	$ (89,879.00)	$ (81,678.65)	$(134,346.31)	$ (216,024.96)	$ (116,000.00)	$1,080,328.65	$ (1,151,074.80)	$ (70,746.15)	$ 525,730.58	2020
$ 490,255.74	$ 109,865.59	$ 1,123,541.80	$ (361,029.47)	$ (519,068.70)	$ (27,113.00)	$ (62,766.00)	$ (89,879.00)	$ (78,051.30)	$(137,973.66)	$ (216,024.96)	$ (116,000.00)	$1,123,541.80	$ (1,302,002.13)	$ (178,460.33)	$ 347,270.25	2021
$ 509,865.97	$ 114,260.21	$ 1,168,483.47	$ (371,860.36)	$ (539,801.14)	$ (24,483.50)	$ (65,396.50)	$ (89,880.00)	$ (74,326.01)	$(141,698.95)	$ (216,024.96)	$ (116,000.00)	$1,168,483.47	$ (1,333,566.46)	$ (165,082.98)	$ 182,187.26	2022
$ 530,260.61	$ 118,830.62	$ 1,215,222.81	$ (383,016.17)	$ (588,225.65)	$ (21,742.00)	$ (68,139.00)	$ (89,881.00)	$ (70,500.14)	$(145,524.82)	$ (216,024.96)	$ (116,000.00)	$1,215,222.81	$ (1,393,147.77)	$ (177,924.96)	$ 4,262.30	2023
$ 551,471.04	$ 123,583.85	$ 1,263,831.72	$ (394,506.65)	$ (306,121.07)	$ (18,884.50)	$ (70,996.50)	$ (89,881.00)	$ (66,570.97)	$(149,453.99)	$ (216,024.96)	$ (116,000.00)	$1,263,831.72	$ (1,122,533.68)	$ 141,298.04	$ 145,560.34	2024
$ 573,529.88	$ 128,527.20	$ 1,314,384.99	$ (406,341.85)	$ (315,304.70)	$ (15,904.50)	$ (73,975.50)	$ (89,880.00)	$ (79,000.22)	$(176,884.24)	$ (255,884.47)	$ (116,000.00)	$1,314,384.99	$ (1,183,411.02)	$ 130,973.97	$ 276,534.31	2025
$ 596,471.07	$ 133,668.29	$ 1,366,960.39	$ (418,532.11)	$ (324,763.84)	$ (12,799.00)	$ (53,397.00)	$ (66,196.00)	$ (74,224.35)	$(181,660.12)	$ (255,884.47)	$ (116,000.00)	$1,366,960.39	$ (1,181,376.42)	$ 185,583.97	$ 462,118.28	2026
$ 620,329.91	$ 139,015.02	$ 1,421,638.81	$ (431,088.07)	$ (334,506.76)	$ (10,040.00)	$ (35,359.00)	$ (45,399.00)	$ (69,319.52)	$(186,564.94)	$ (255,884.47)	$ (116,000.00)	$1,421,638.81	$ (1,182,878.30)	$ 238,760.51	$ 700,878.79	2027
$ 645,143.11	$ 144,575.62	$ 1,478,504.36	$ (444,020.71)	$ (344,541.96)	$ (9,111.00)	$ (21,596.00)	$ (30,707.00)	$ (64,282.27)	$(191,602.20)	$ (255,884.47)	$ (116,000.00)	$1,478,504.36	$ (1,191,154.14)	$ 287,350.22	$ 988,229.01	2028
$ 670,948.84	$ 150,358.65	$ 1,537,644.53	$ (457,341.34)	$ (354,878.22)	$ (8,140.00)	$ (22,568.00)	$ (30,708.00)	$ (59,109.01)	$(196,775.45)	$ (255,884.47)	$ (116,000.00)	$1,537,644.53	$ (1,214,812.02)	$ 322,832.51	$ 1,311,061.52	2029
$ 697,786.79	$ 156,372.99	$ 1,599,150.32	$ (471,061.58)	$ (365,524.57)	$ (7,125.00)	$ (23,583.00)	$ (30,708.00)	$ (53,796.07)	$(202,088.39)	$ (255,884.47)	$ (116,000.00)	$1,599,150.32	$ (1,239,178.61)	$ 359,971.71	$ 1,671,033.23	2030
$ 725,698.26	$ 162,627.91	$ 1,663,116.33	$ (485,193.42)	$ (376,490.31)	$ (6,064.00)	$ (24,645.00)	$ (30,709.00)	$ (48,339.69)	$(207,544.78)	$ (255,884.47)	$ (116,000.00)	$1,663,116.33	$ (1,264,277.19)	$ 398,839.14	$ 2,069,872.36	2031
$ 754,726.19	$ 169,133.03	$ 1,729,640.98	$ (499,749.23)	$ (387,785.01)	$ (4,955.00)	$ (25,754.00)	$ (30,709.00)	$ (42,735.98)	$(213,148.49)	$ (255,884.47)	$ (116,000.00)	$1,729,640.98	$ (1,290,127.70)	$ 439,513.28	$ 2,509,385.64	2032
$ 784,915.24	$ 175,898.35	$ 1,798,826.62	$ (514,741.70)	$ (689,750.95)	$ (3,797.00)	$ (26,912.00)	$ (30,709.00)	$ (36,980.97)	$(218,903.50)	$ (255,884.47)	$ (116,000.00)	$1,798,826.62	$ (1,607,086.11)	$ 191,740.51	$ 2,701,126.15	2033

[1] Initial operating expenses are from actual FY 2011/2012 information and the Water Fund FY 12/13 budget, refer to the June 30, 2012 Basic Financial Statements for additional information. Not included in operating expenses are long term debt, depreciation, and professional services (legal/ engineering). Professional services and long term debt are factored into each future capital improvement project. Long term debt for existing projects is shown separately.

[2] Average Daily Demand of 413 gpd/ERU was used to calculate annual demand.

[3] Water Rate and Water Consumption Fees increase in order to maintain a positive fund balance. Assumed 3/4 or 1-inch water meter for a typical residential consumer and 2-inch for typical commercial consumer.

[4] Operating revenues assumes 75% of residential and 58% of commercial water users on any given month are under water allowance. This percentage was averaged from consumption data for 2012 provided by the City.

[5] Operating Expenses are estimated to increase 3.0% every year.

[6] Current Bond Expense was obtained from the City of Driggs and is shown in its June 30, 2012 Basic Financial Statements. Future Bond Expense was calculated to keep water rates low.

[7] Non-operating revenues (expenses) include debt service and investment earnings. Investment earnings are not included because they are a small percentage of the total.

[8] The 12-inch Transmission Water Pipeline Replacment Project with a total construction cost of $641.290.88 in year 2014 and 1.5 MG Water Tank Project with a total construction cost of $1,953,021.79 in year 2019 will require revenue bonds to construct; therefore, the costs for these projects do not show in the Capital Improvement Project Expense column. Costs for these projects show up in the future bond expense columns.

Driggs - Projected Water Fund Revenues and Expenditures (Increase User Fees using Tiered Rate Structure)

Year	Year	Population	Residential, Connections	Commercial, Connections	Total Connections	New Residential Connections	New Commercial Connections	Residential Demand, gallons [2]	Commercial Demand, gallons [2]	1st Tier - Residential Avg. Monthly Base Water Rate, $ under 7,000 gallons (Summer) 05/01 - 10/31 [3]	2nd Tier - Residential Avg. Monthly Base Water Rate, $ between 7,000 gallons and 13,000 gallons (Summer) 05/01 - 10/31 [3]	1st Tier - Residential Avg. Monthly Base Water Rate, $ under 17,000 gallons (Winter) 11/01 - 4/30 [3]	2nd Tier - Residential Avg. Monthly Base Water Rate, $ between 17,000 gallons and 23,000 gallons (Winter) 11/01 - 4/30 [3]	1st Tier - Commercial Avg. Monthly Base Water Rate, $ under 31,500 gallons (Summer) 05/01 - 10/31 [3]	2nd Tier - Commercial Avg. Monthly Base Water Rate, $ between 31,500 gallons and 58,500 gallons (Summer) 05/01 - 10/31 [3]	1st Tier - Commercial Avg. Monthly Base Water Rate, $ under 41,500 gallons (Winter) 11/01 - 4/30 [3]	2nd Tier - Commercial Avg. Monthly Base Water Rate, $ between 41,500 gallons and 68,500 gallons (Winter) 11/01 - 4/30 [3]	Monthly Water Consumption Fee, $ for every 1,000 gallons (above 2nd Tier) [3]	Connection Fee Commercial (Avg. Commercial Connection is 2.0 inch)
0 [1]	2013	1,867	901	202	1,103	0	0	135,821,245	30,450,490	$ 18.90	$ 8.10	$ 18.90	$ 8.10	$ 85.05	$ 36.45	$ 85.05	$ 36.45	$ 1.00	$ 7,350.00
1	2014	1,942	937	210	1,147	36	8	141,254,095	31,668,510	$ 19.47	$ 8.59	$ 19.47	$ 8.59	$ 87.60	$ 38.64	$ 87.60	$ 38.64	$ 1.06	$ 7,350.00
2	2015	2,019	975	218	1,193	37	8	146,904,259	32,935,250	$ 20.05	$ 9.10	$ 20.05	$ 9.10	$ 90.23	$ 40.96	$ 90.23	$ 40.96	$ 1.12	$ 7,350.00
3	2016	2,100	1,014	227	1,241	39	9	152,780,429	34,252,660	$ 20.65	$ 9.65	$ 20.65	$ 9.65	$ 92.94	$ 43.41	$ 92.94	$ 43.41	$ 1.19	$ 7,350.00
4	2017	2,184	1,054	236	1,290	41	9	158,891,646	35,622,766	$ 21.27	$ 10.23	$ 21.27	$ 10.23	$ 95.72	$ 46.02	$ 95.72	$ 46.02	$ 1.26	$ 7,350.00
5	2018	2,271	1,096	246	1,342	42	9	165,247,312	37,047,677	$ 21.91	$ 10.84	$ 21.91	$ 10.84	$ 98.60	$ 48.78	$ 98.60	$ 48.78	$ 1.34	$ 7,350.00
6	2019	2,362	1,140	256	1,396	44	10	171,857,204	38,529,584	$ 22.57	$ 11.49	$ 22.57	$ 11.49	$ 101.55	$ 51.71	$ 101.55	$ 51.71	$ 1.42	$ 7,350.00
7	2020	2,457	1,186	266	1,451	46	10	178,731,493	40,070,767	$ 23.24	$ 12.18	$ 23.24	$ 12.18	$ 104.60	$ 54.81	$ 104.60	$ 54.81	$ 1.50	$ 7,350.00
8	2021	2,555	1,233	276	1,510	47	11	185,880,752	41,673,598	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
9	2022	2,657	1,282	288	1,570	49	11	193,315,982	43,340,542	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
10	2023	2,764	1,334	299	1,633	51	12	201,048,622	45,074,164	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
11	2024	2,874	1,387	311	1,698	53	12	209,090,567	46,877,130	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
12	2025	2,989	1,443	323	1,766	55	12	217,454,189	48,752,216	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
13	2026	3,109	1,500	336	1,837	58	13	226,152,357	50,702,304	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
14	2027	3,233	1,560	350	1,910	60	13	235,198,451	52,730,396	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
15	2028	3,362	1,623	364	1,986	62	14	244,606,389	54,839,612	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
16	2029	3,497	1,688	378	2,066	65	15	254,390,645	57,033,197	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
17	2030	3,637	1,755	393	2,149	68	15	264,566,270	59,314,525	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
18	2031	3,782	1,825	409	2,234	70	16	275,148,921	61,687,106	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
19	2032	3,933	1,898	426	2,324	73	16	286,154,878	64,154,590	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00
20	2033	4,091	1,974	443	2,417	76	17	297,601,073	66,720,773	$ 23.94	$ 12.91	$ 23.94	$ 12.91	$ 107.74	$ 58.10	$ 107.74	$ 58.10	$ 1.59	$ 7,350.00

[1] Initial operating expenses are from actual FY 2011/2012 information and the Water Fund FY 12/13 budget, refer to the June 30, 2012 Basic Financial Statements for additional information. Not included in operating expenses are long term debt, depreciation, and professional services (legal/ engineering). Professional services and long term debt are factored into each future capital improvement project. Long term debt for existing projects is shown separately.

[2] Average Daily Demand of 413 gpd/ERU was used to calculate annual demand.

[3] Water Rate and Water Consumption Fees increase in order to maintain a positive fund balance. Assumed 3/4 or 1-inch water meter for a typical residential consumer and 2-inch for typical commercial consumer.

[4] Operating revenues assumes 33% of residential and 33% of commercial water users on any given month also fall within the 2nd Tier. This percentage was averaged from consumption data for 2012 provided by the City.

[5] Operating Expenses are estimated to increase 3.0% every year.

[6] Current Bond Expense was obtained from the City of Driggs and is shown in its June 30, 2012 Basic Financial Statements. Future Bond Expense was calculated to keep water rates low.

[7] Non-operating revenues (expenses) include debt service and investment earnings. Investment earnings are not included because they are a small percentage of the total.

[8] The 12-inch Transmission Water Pipeline Replacment Project with a total construction cost of $641.290.88 in year 2014 and 1.5 MG Water Tank Project with a total construction cost of $1,953,021.79 in year 2019 will require revenue bonds to construct; therefore, the costs for these projects do not show in the Capital Improvement Project Expense column. Costs for these projects show up in the future bond expense columns.

Driggs - Projected Water Fund Revenues and Expenditures (Increase User Fees using Tiered Rate Structure)

Connection Fee Residential (Avg. Residential Connection is 3/4 or 1-inch, Min. Connection Fee)	Beginning Water Fund Balance less Impact Fee Balance	Operating Revenues, User Fees [7] (Summer)	Operating Revenues, User Fees [7] (Winter)	Operating Revenues, Connection Fees	Total Operating Revenues	Operating Expenses [5]	Future Capital Improvement Project Expense	Current Bond Debt Interest Expense [6]	Current Bond Debt Principal Expense [6]	Current Bond Debt Expenses [6]	Future Bond Debt Interest Expense [5]	Future Bond Debt Principal Expense [6]	Total Future Bond Debt Expense [6]	Depreciation (From Previous Water Budgets)	Total Revenues	Total Expenses [9]	Excess / Shortfall	Ending Fund Balance	Year
$ 1,785.00	$ 475,638.00	$ 286,482.99	$ 275,452.99	$ -	$ 561,935.98	$ (285,000.00)	$ (164,750.00)	$ (55,553.47)	$ (47,331.47)	$ (102,884.94)	$ -	$ -	$ -	$ (116,000.00)	$ 561,935.98	$ (668,634.94)	$ (106,698.96)	$ 368,939.04	2013
$ 1,785.00	$ 368,939.04	$ 309,414.92	$ 297,255.45	$ 83,488.82	$ 690,159.19	$ (293,550.00)	$ (138,414.10)	$ (54,379.27)	$ (48,505.67)	$ (102,884.94)	$ -	$ -	$ -	$ (116,000.00)	$ 690,159.19	$ (650,849.05)	$ 39,310.15	$ 408,249.18	2014
$ 1,785.00	$ 408,249.18	$ 334,239.13	$ 320,834.52	$ 86,828.37	$ 741,902.02	$ (302,356.50)	$ (142,566.53)	$ (53,172.60)	$ (49,713.34)	$ (102,885.94)	$ (37,306.42)	$ (53,010.01)	$ (90,316.43)	$ (116,000.00)	$ 741,902.02	$ (754,125.40)	$ (12,223.37)	$ 396,025.81	2015
$ 1,785.00	$ 396,025.81	$ 361,116.90	$ 346,339.67	$ 90,301.51	$ 797,758.08	$ (311,427.20)	$ (146,843.52)	$ (41,843.33)	$ (51,163.06)	$ (93,006.39)	$ (35,875.15)	$ (54,441.28)	$ (90,316.43)	$ (116,000.00)	$ 797,758.08	$ (757,593.54)	$ 40,164.55	$ 436,190.36	2016
$ 1,785.00	$ 436,190.36	$ 390,223.77	$ 373,933.35	$ 93,913.57	$ 858,070.68	$ (320,770.01)	$ (479,699.03)	$ (36,604.50)	$ (53,273.50)	$ (89,878.00)	$ (34,405.23)	$ (55,911.20)	$ (90,316.43)	$ (116,000.00)	$ 858,070.68	$ (1,096,663.47)	$ (238,592.79)	$ 197,597.57	2017
$ 1,785.00	$ 197,597.57	$ 421,750.72	$ 403,792.16	$ 97,670.11	$ 923,213.00	$ (330,393.11)	$ (240,848.03)	$ (34,378.00)	$ (55,501.00)	$ (89,879.00)	$ (32,895.63)	$ (57,420.80)	$ (90,316.43)	$ (116,000.00)	$ 923,213.00	$ (867,436.57)	$ 55,776.43	$ 253,373.99	2018
$ 1,785.00	$ 253,373.99	$ 455,905.68	$ 436,108.17	$ 101,576.91	$ 993,590.76	$ (340,304.90)	$ (83,294.25)	$ (32,055.50)	$ (57,823.50)	$ (89,879.00)	$ (31,345.27)	$ (58,971.16)	$ (90,316.43)	$ (116,000.00)	$ 993,590.76	$ (719,794.59)	$ 273,796.18	$ 527,170.17	2019
$ 1,785.00	$ 527,170.17	$ 492,915.01	$ 471,090.23	$ 105,639.99	$ 1,069,645.23	$ (350,514.05)	$ (378,656.79)	$ (29,635.00)	$ (60,244.00)	$ (89,879.00)	$ (81,678.65)	$(134,346.31)	$ (216,024.96)	$ (116,000.00)	$1,069,645.23	$ (1,151,074.80)	$ (81,429.58)	$ 445,740.59	2020
$ 1,785.00	$ 445,740.59	$ 533,025.20	$ 508,965.56	$ 109,865.59	$ 1,151,856.35	$ (361,029.47)	$ (519,068.70)	$ (27,113.00)	$ (62,766.00)	$ (89,879.00)	$ (78,051.30)	$(137,973.66)	$ (216,024.96)	$ (116,000.00)	$1,151,856.35	$ (1,302,002.13)	$ (150,145.78)	$ 295,594.81	2021
$ 1,785.00	$ 295,594.81	$ 554,346.21	$ 529,324.18	$ 114,260.21	$ 1,197,930.61	$ (371,860.36)	$ (539,801.14)	$ (24,483.50)	$ (65,396.50)	$ (89,880.00)	$ (74,326.01)	$(141,698.95)	$ (216,024.96)	$ (116,000.00)	$1,197,930.61	$ (1,333,566.46)	$ (135,635.85)	$ 159,958.97	2022
$ 1,785.00	$ 159,958.97	$ 576,520.06	$ 550,497.15	$ 118,830.62	$ 1,245,847.83	$ (383,016.17)	$ (588,225.65)	$ (21,742.00)	$ (68,139.00)	$ (89,881.00)	$ (70,500.14)	$(145,524.82)	$ (216,024.96)	$ (116,000.00)	$1,245,847.83	$ (1,393,147.77)	$ (147,299.94)	$ 12,659.02	2023
$ 1,785.00	$ 12,659.02	$ 599,580.86	$ 572,517.04	$ 123,583.85	$ 1,295,681.75	$ (394,506.65)	$ (306,121.07)	$ (18,884.50)	$ (70,996.50)	$ (89,881.00)	$ (66,570.97)	$(149,453.99)	$ (216,024.96)	$ (116,000.00)	$1,295,681.75	$ (1,122,533.68)	$ 173,148.06	$ 185,807.09	2024
$ 1,785.00	$ 185,807.09	$ 623,564.10	$ 595,417.72	$ 128,527.20	$ 1,347,509.02	$ (406,341.85)	$ (315,304.70)	$ (15,904.50)	$ (73,975.50)	$ (89,880.00)	$ (79,000.22)	$(176,884.24)	$ (255,884.47)	$ (116,000.00)	$1,347,509.02	$ (1,183,411.02)	$ 164,097.99	$ 349,905.08	2025
$ 1,785.00	$ 349,905.08	$ 648,506.66	$ 619,234.43	$ 133,668.29	$ 1,401,409.38	$ (418,532.11)	$ (324,763.84)	$ (12,799.00)	$ (53,397.00)	$ (66,196.00)	$ (74,224.35)	$(181,660.12)	$ (255,884.47)	$ (116,000.00)	$1,401,409.38	$ (1,181,376.42)	$ 220,032.96	$ 569,938.04	2026
$ 1,785.00	$ 569,938.04	$ 674,446.93	$ 644,003.80	$ 139,015.02	$ 1,457,465.75	$ (431,088.07)	$ (334,506.76)	$ (10,040.00)	$ (35,359.00)	$ (45,399.00)	$ (69,319.52)	$(186,564.94)	$ (255,884.47)	$ (116,000.00)	$1,457,465.75	$ (1,182,878.30)	$ 274,587.45	$ 844,525.49	2027
$ 1,785.00	$ 844,525.49	$ 701,424.80	$ 669,763.96	$ 144,575.62	$ 1,515,764.38	$ (444,020.71)	$ (344,541.96)	$ (9,111.00)	$ (21,596.00)	$ (30,707.00)	$ (64,282.27)	$(191,602.20)	$ (255,884.47)	$ (116,000.00)	$1,515,764.38	$ (1,191,154.14)	$ 324,610.24	$ 1,169,135.73	2028
$ 1,785.00	$ 1,169,135.73	$ 729,481.80	$ 696,554.51	$ 150,358.65	$ 1,576,394.96	$ (457,341.34)	$ (354,878.22)	$ (8,140.00)	$ (22,568.00)	$ (30,708.00)	$ (59,109.01)	$(196,775.45)	$ (255,884.47)	$ (116,000.00)	$1,576,394.96	$ (1,214,812.02)	$ 361,582.93	$ 1,530,718.67	2029
$ 1,785.00	$ 1,530,718.67	$ 758,661.07	$ 724,416.70	$ 156,372.99	$ 1,639,450.76	$ (471,061.58)	$ (365,524.57)	$ (7,125.00)	$ (23,583.00)	$ (30,708.00)	$ (53,796.07)	$(202,088.39)	$ (255,884.47)	$ (116,000.00)	$1,639,450.76	$ (1,239,178.61)	$ 400,272.15	$ 1,930,990.81	2030
$ 1,785.00	$ 1,930,990.81	$ 789,007.51	$ 753,393.36	$ 162,627.91	$ 1,705,028.79	$ (485,193.42)	$ (376,490.31)	$ (6,064.00)	$ (24,645.00)	$ (30,709.00)	$ (48,339.69)	$(207,544.78)	$ (255,884.47)	$ (116,000.00)	$1,705,028.79	$ (1,264,277.19)	$ 440,751.59	$ 2,371,742.41	2031
$ 1,785.00	$ 2,371,742.41	$ 820,567.81	$ 783,529.10	$ 169,133.03	$ 1,773,229.94	$ (499,749.23)	$ (387,785.01)	$ (4,955.00)	$ (25,754.00)	$ (30,709.00)	$ (42,735.98)	$(213,148.49)	$ (255,884.47)	$ (116,000.00)	$1,773,229.94	$ (1,290,127.70)	$ 483,102.23	$ 2,854,844.64	2032
$ 1,785.00	$ 2,854,844.64	$ 853,390.52	$ 814,870.26	$ 175,898.35	$ 1,844,159.13	$ (514,741.70)	$ (689,750.95)	$ (3,797.00)	$ (26,912.00)	$ (30,709.00)	$ (36,980.97)	$(218,903.50)	$ (255,884.47)	$ (116,000.00)	$1,844,159.13	$ (1,607,086.11)	$ 237,073.02	$ 3,091,917.66	2033

[1] Initial operating expenses are from actual FY 2011/2012 information and the Water Fund FY 12/13 budget, refer to the June 30, 2012 Basic Financial Statements for additional information. Not included in operating expenses are long term debt, depreciation, and professional services (legal/ engineering). Professional services and long term debt are factored into each future capital improvement project. Long term debt for existing projects is shown separately.

[2] Average Daily Demand of 413 gpd/ERU was used to calculate annual demand.

[3] Water Rate and Water Consumption Fees increase in order to maintain a positive fund balance. Assumed 3/4 or 1-inch water meter for a typical residential consumer and 2-inch for typical commercial consumer.

[4] Operating revenues assumes 33% of residential and 33% of commercial water users on any given month also fall within the 2nd Tier. This percentage was averaged from consumption data for 2012 provided by the City.

[5] Operating Expenses are estimated to increase 3.0% every year.

[6] Current Bond Expense was obtained from the City of Driggs and is shown in its June 30, 2012 Basic Financial Statements. Future Bond Expense was calculated to keep water rates low.

[7] Non-operating revenues (expenses) include debt service and investment earnings. Investment earnings are not included because they are a small percentage of the total.

[8] The 12-inch Transmission Water Pipeline Replacment Project with a total construction cost of $641.290.88 in year 2014 and 1.5 MG Water Tank Project with a total construction cost of $1,953,021.79 in year 2019 will require revenue bonds to construct; therefore, the costs for these projects do not show in the Capital Improvement Project Expense column. Costs for these projects show up in the future bond expense columns.

APPENDIX V

IDEQ Drinking Water State Revolving Fund
Engineerings Report/Facility Plan (Form 5-A) Checklist and
Environmental Information Documents (Form 5-B) Checklist

Form 5-A
Outline and Checklist for Engineering Report/Facility Plan

Borrower	CITY OF DRIGGS	Project	CITY OF DRIGGS, IDAHO WATER SYSTEM FACILITY PLAN
Reviewer		Date	AUGUST 27, 2013

The Department of Environmental Quality (DEQ) recommends that an engineering report or facility plan, prepared for projects which will receive state planning grant (SPG) and state revolving fund (SRF) loan funding for design and construction, be done substantially in accordance with the following outline. The engineering report or facility plan should address the following issues:

Y=yes N=no N/A=not applicable

A. INTRODUCTION

1. Does the introduction include the following:

a) A discussion of the purpose and need of the project and a brief description of the plan of study? ☒Y ☐N

b) A discussion of the report organization (table of contents, figures, and tables can be included)? ☒Y ☐N

c) A brief discussion of how the system owner has accepted project responsibility including: ☒Y ☐N

i) what the owner has obtained or can obtain for financial resources, technical qualifications, experience, organization, and adequate facilities to carry out the project according to the project schedule, and ☒Y ☐N

ii) the system owner's performance record for completion of projects and contracts, and ☒Y ☐N

iii) the appropriate procedures required by law for acquiring, maintaining, safeguarding and disposing of property. ☒Y ☐N

B. EXISTING CONDITIONS

The report should adequately describe and document the following existing conditions for the proposed project area including maps, site plans, schematics, and tables, as needed:

1. Boundaries of both the planning areas and the footprint of the actual project site are clearly identified. ☑

2. The existing environmental conditions in the planning area and proximity to the proposed project, including the following descriptions:

a) Physiography, topography, geology, and soils ☑

b) Surface and ground water hydrology (quantity, quality and uses) ☑

c) Fauna, flora, and natural communities ☑ Y

d) Housing, industrial, and commercial development ☑ Y

e) Cultural resources (historical and archaeological) ☑ Y

f) Utility use ☑ Y

g) Floodplains/wetlands ☑ Y

h) Wild and scenic rivers ☑ Y

i) Public health and water quality considerations ☑ Y

j) Important farmlands protection (include maps) N/A ☐

k) Proximity to a sole source aquifer N/A ☐

l) Land use and development Y ☐

m) Precipitation, temperature and prevailing winds Y ☐

n) Air quality and noise N/A ☐

o) Energy production and consumption Y ☐

p) Socioeconomic profile of the affected community including population statistics N/A ☐

q) Maps, site plans, schematics, tables, and letters from consulted agencies as needed Y ☐

3. A description of the existing sources, distribution system, and treatment facility, including a discussion of each of the following topics:

a) The water source, location, pumping facilities, and appurtenances (include a well log if available) Y ☐

b) The storage and distribution system, including operation, maintenance, and maps Y ☐

c) The treatment facilities, including the condition of the facilities, operation, and maintenance Y ☐

d) The drinking water system (distribution and treatment), its condition, and operations and maintenance records (include a map of the water system) Y ☐

e) Existing hour use for winter and summer seasons Y ☐

f) Cross-connection control program Y ☐

g) Copy of last sanitary survey Y ☐

4. Drinking water quality, including laboratory analyses for bacteria, chemicals, and radiation, especially as compared to unreasonable risks to health and maximum contaminant levels Y ☐

5. Computerized hydraulic analysis to support water pressure data and fire protection capabilities Y ☐

6. Any violations of the Safe Drinking Water Act and the Rules for Public Drinking Water Systems (IDAPA 58.01.08), including persistent customer complaints (unusual discharges, odor, etc.) Y ☐

7. User charges, and operations and maintenance budget Y ☐

8. Pressure zone problems, including existing population and households affected Y ☐

9. List and status of defects or deficiencies Y ☐

10. Other appropriate information Y ☐

C. FUTURE CONDITIONS

The engineering report or facility plan should discuss the following topics relating to future conditions. (Use maps, site plans, figures, and tables as appropriate to complete this section.)

1. Future growth for a 20-year population projection. Growth should be consistent with the most recent U.S. Bureau of Census Data or comparable source(s) of data. (Reference the source of information.) Y ☐
2. Forecast of demand (20-year period), including residential, commercial, industrial, and fire flows. (Include a letter from the State Fire Marshall.) Include data on average and peak use, expected reduction after metering, and appropriate rate structure. Y ☐
   NOTE: TALKED TO COUNTY FIRE MARSHALL AND INCLUDED CORRESPONDENCE.
3. Drinking water treatment facilities needed for a minimum 20-year period. (Note: a minimum 40-year period may be used for collection and transmission systems per IDAPA 58.01.22.030.01.c.) Y ☐
4. Future conditions without the proposed project(s). Y ☐
5. Land use plans for the area served by existing and future drinking water facilities. Y ☐
6. Computerized hydraulic analysis to model flow demands and pressure requirements. Y ☐

D. DEVELOPMENT AND INITIAL SCREENING OF ALTERNATIVES

The engineering report or facility plan should include the following topics related to the development and screening of alternatives:

1. Description of problems/deficiencies with the existing water system to be corrected by the project. Y ☐

2. Development of alternatives that incorporates the following:

   a) Discussion of reasonable alternatives to upgrade and/or construct new facilities. Y ☐

   b) Discussion of the "No Action" alternative. Y ☐

   c) Discussion of optimum operation of existing facilities. Y ☐

   d) Discussion of regionalization including regional management and physical consolidation of systems. Y ☐

   e) Discussion of environmental impacts associated with all alternatives, including letters to and from consulted agencies as appropriate. This discussion should build on the broad-spectrum environmental information generated for Item B.2 in this checklist. Indicate the alternatives with environmental conditions similar to the existing planning area and describe any different environmental effects associated with any of the alternatives. (NOTE: This item corresponds to Item C.3 in the environmental information document outline and checklist.) Y ☐

3. Description of how isolated areas in and around the community will be served. Y ☐

   Will new wells, reservoirs, and distribution lines be needed for these areas? ☒ Y ○ N ○ N/A

4. Description of how new sources (wells or surface water) can be developed. N/A ☐

5. Discussion of treatment requirements for new or upgraded facilities. Y ☐

6. Discussion of storage requirements Y ☐

7. Discussion of pumping requirements. Y ☐

8. Discussion of pressure maintenance Y ☐

9. Description of any separate irrigation facilities. N/A ☐

10. Discussion of staged distribution Y ☐

11. Discussion of public input. Y ☐

12. Discussion of what, if any, changes occur to system classification and operator licensure for each alternative. N/A ☐

13. Other (describe).

E. FINAL SCREENING OF PRINCIPAL ALTERNATIVES AND FACILITY PLAN ADOPTION

Final screening of alternatives and the engineering report or facility plan adoption should include the following areas:

1. Evaluation of costs:
   - a) Present worth analysis (i.e., total project costs over time discounted to current values as a lump sum) ✓ ☐
   - b) Capital costs and financing plan ✓ ☐
   - c) Operations and maintenance costs ✓ ☐
   - d) Cost escalation factors for energy use ✓ ☐
   - e) Comparison of costs of alternatives ✓ ☐
2. Evaluation of environmental impacts in accordance with Idaho State NEPA-like process, federal cross-cutting authorities, and IDAPA 58.01.20 ✓ ☐
3. Consideration of any impacts to water supply systems ✓ ☐
4. Consideration of EPA reliability criteria (refers to whether the source of water for the drinking water system will be reliable) ✓ ☐
5. Comparison of alternatives, including comparison of environmental effects and costs of mitigation ✓ ☐
6. Evaluation of final public input, per 40 CFR Part 25, IDAPA 58.01.20 and DEQ Guidance including the following: ✓ ☐
   - a) Role that public participation has in the facility planning process ✓ ☐
   - b) Evaluation that the three key public review activities were incorporated, (i.e., information, consultation and notification) ✓ ☐
   - c) Describe the public meetings and public hearings held for this project ✓ ☐
   - d) Adequate notice provided prior to public meetings/public hearings ✓ ☐
   - e) Documentation of public meeting being held for the affected community before the facility plan or engineering report and environmental review were formally adopted ✓ ☐
   - f) Summary of the responsiveness to public meetings or public hearings should be included in the final facility plan or engineering report. ✓ ☐
7. Description of cost effectiveness analysis and how it was conducted in accordance with 40 CFR 35.2030 (b.)(3.) ✓ ☐

F. SELECTED ALTERNATIVE DESCRIPTION AND IMPLEMENTATION ARRANGEMENTS

This section should consist of those activities that normally follow selection of the best alternative. At a minimum, the following information is included in the facility plan or engineering report:

1. Justification and a detailed description of the selected alternative. Y ☐

2. Preliminary design of the selected alternative including:

   a) Description of the major features Y ☐

   b) Unit processes and sizes Y ☐

   c) A schematic flow diagram for treatment N/A ☐

   d) Distribution length and sizes Y ☐

   e) Proposed design criteria Y ☐

   f) Design and construction completion schedule Y ☐

   g) Maps Y ☐

3. Justification that the selected alternative is the most cost effective means of meeting applicable public health requirements while recognizing environmental and other nonmonetary considerations. If the most cost effective and environmentally sound alternative was not selected explain and give reasons. Y ☐

4. Total project cost estimates (capital, debt service and O&M) for the selected alternative, including monthly charges. Y ☐

What will be the added cost to the customer? INCREASE IN BASE RATE AND CONSUMPTION FEE, SEE TABLE 25 & 26 IN REPORT.

5. The system owner has certified they have the capability to finance and manage the building and operation of the proposed project. N/A ☐ THE RATE STUDY SHOWS THE CITY IS CAPABLE OF FUNDING PROJECTS.

6. Facility plan or engineering report addresses the availability of the most suitable land for the project and an appropriate means to secure rights to the land. Y ☐

7. Development of a separate chapter or separate document for the environmental information that includes an in-depth discussion of the environmental impacts of the selected alternative, including direct, indirect, short-term, long-term, and cumulative effects. The appropriate environmental document must be prepared in accordance with Form 5-B and 5-C. N/A ☐ THE REPORT DOES INCLUDE A DISCUSSION OF GENERAL ENVIRONMENTAL IMPACTS.

NOTE #1: Append to the EID chapter any maps, figures, tables, mailing lists, and correspondence relevant to the EID, such as letters and documented contacts from agencies regarding impacts on fauna and flora, wetlands, floodplains, etc. unless otherwise provided in the facility plan. N/A ☐

NOTE #2: Responses and recommendations for additional information or mitigation from consulted agencies should be included for the selected alternative, as well as a description of how follow-up on consulted agency recommendations will be achieved. N/A ☐

8. Any of the following elements for implementation that are applicable should be included:

   a) Intermunicipal service agreements including adequate demonstration that each party has the necessary legal, institutional and managerial resources to ensure the building, operation and maintenance of the project and that an agreement between agencies has been or will be executed prior to the loan application. N/A ☐

   b) Financing arrangements N/A ☐

   c) Operations and maintenance requirements including a discussion about the O&M budget, staffing, training, laboratory requirements, special maintenance requirements, special operating requirements, residuals disposal, etc.). N/A ☐

   d) Project schedule including specific actions to implement the plan and to meet its objectives on schedule, and any dates in this schedule that correspond to compliance dates. N/A ☐

   e) Operator(s) licensed appropriately for type and class of system according to IDAPA 58.01.08. Y ☐

G. APPENDICES

Any of the following items that are applicable should be appended to the engineering report or facility plan:

1. Relevant engineering data. Y ☐
2. User charge ordinance and latest operations and maintenance budget. Y ☐
3. Additional maps, charts, figures, and tables as needed. Y ☐
4. Mailing list and correspondence relevant to the engineering report or facility plan, such as letters and documented contacts from agencies regarding impacts on wetlands, floodplains, etc. (See note #1 in Section F.7 of this checklist.) Y ☐
5. Hydraulic analysis of distribution system (current and proposed). Y ☐
6. Public participation information. Y ☐
7. Reference documents consulted. Y ☐
8. Water quality test results. Y ☐
9. DEQ sanitary survey. Y ☐