PROVIDENCE CITY
CULINARY WATER MASTER PLAN

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PROVIDENCE CITY
CULINARY WATER MASTER PLAN

Providence City, Utah

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EXECUTIVE SUMMARY

Sunrise Engineering, Inc. has completed a Culinary Water System Master Plan for Providence City in Cache County, Utah. A typical 20-year planning period was used in the development of this master plan. The current culinary water system is clean and reliable. Improvements were recommended to further improve operational efficiency, maintenance, and overall health of the culinary water system for existing conditions and future development. All future improvement sizing for Providence City was based on the projected 2041 population of the current zoning and city boundary with proposed annexation areas. This Master Plan has been developed with considerations from the City Council and City Staff.

The existing system consists of Broad Hollow Spring and supplementary underground wells to supply the culinary water for Providence City. Key infrastructure consists of varying diameter pipes made of a various material, Pressure Reducing Valve (PRV) stations, production wells, storage tanks, pump stations, Broad Hollow Spring, fire flow PRV stations, and fire hydrants. The system has undergone improvements and expanded with the additional residential developments.

Historic Census data, Providence City's General Plan, and input from the City were used to estimate the planning growth rate for Providence in connection with the existing Providence City General Plan. Current trends in building permits and future land use data were also used to estimate the number of equivalent residential units (ERUs), equivalent population, and culinary water flow rates. A projected population growth rate of 2.48% was used to model and analyze the current and future impact on the culinary water system.

A five-point analysis method was used to analyze the current and future demands on the Providence City culinary water system. The population growth estimates were used to model the current and future impact on water source, water rights, and water storage for the city-wide system and each zone. Sunrise found the current average day water source existing and future demands are met. However, the peak-day water source existing demand is not met and will worsen as there is new growth and additional demand on the system. The five-point analysis is further discussed in **Section 4.0** and can be found in **Appendix E**.

InfoWater, a GIS based hydrologic closed conduit distribution network software provided by Autodesk, was used to model the current and projected water system pressure and fire flow data during the peak month. Pipe size and materials were used to model the system and calibrated using fire hydrant flow data from 5% of city fire hydrants. The model was projected into the future with added growth according to land use data and zoning to determine the capacities and deficiencies for fire flows. Then the model was used to show the impact of capital improvement projects where applicable. The data and model are further detailed in **Section 5.0**.

Sunrise Engineering, Inc. has identified 24 capital improvement projects. Each project is crucial to meet the current water demand and prepare for future growth and increased water demand. The types of projects include water main replacements, water tank repair or construction, PRV station improvement, and well construction or upgrades. These projects will improve safety, increase efficiency, improve fire flow availability, reduce or prevent contamination, reduce or prevent water loss, and increase pipe capacity. All these projects are necessary to repair, upgrade, or construct and further improve the operational efficiency and health of the system.

The 24 capital improvement projects are separated into time periods within the 20-year planning period based on importance and impact. Preliminary cost estimates for each project and period were developed to assist in Providence's cash flow, user rate, and impact fee analysis. Total estimated costs for each time-period are as follows:

- Period 1, 2021-2026 - $ 14,380,600
- Period 2, 2026-2031 - $ 1,865,000
- Period 3, 2031-2041 - $ 7,437,000

Cost breakdowns for each of these project cost estimates can be found in **Appendix D.** The recommended improvements may be paid for in part with the proposed impact fee, as described in **Section 7.1**, that will be collected during each time-period between now and the end of the 20-year planning period. The remaining portion of the recommended projects may be funded through reserve funds that will be collected for this purpose through the proposed user rate and grants and loans from the various funding agencies.

TABLE OF CONTENTS

PAGE NO.

SUNRISE ENGINEERING

LIST OF EXHIBITS

LIST OF APPENDICES

LIST OF FIGURES AND TABLES

1.0 INTRODUCTION

1.1 Background

Providence City is located in Cache County, Utah. The City has been growing at a moderate rate since the culinary water system was installed in 1938 (with major improvements happening in 1942). Sunrise Engineering, Inc. (Sunrise) has been retained by Providence City to update the culinary water model and master plan to establish the current level of service in the city. These updates will help establish a baseline for future development and identify possible deficiencies during the 20-year planning period. This updated plan has been prepared in accordance with the agreement signed between Providence City and Sunrise Engineering.

1.2 Study Area

The study area for this master plan includes the Providence City culinary water system service area, including anticipated future annexation areas. The study area is shown in **Exhibit 1.1** "*Area Map*."

1.3 Objective

The primary objective of this master plan is to provide the City with the information needed to make informed decisions on culinary water system improvements over the 20-year planning period. Improvements to address culinary water system deficiencies will be master-planned and prioritized. Estimates of probable costs will be produced for the proposed improvements. These costs will be mapped out in a cash flow analysis along with proposed impact fees, user rates, and hook-up fees to help the City plan financially for the 20-year planning period.

The accuracy of this report is, by nature, limited by the accuracy of the included assumptions and projections. The City should review and update this master plan every five to ten years to verify how the City is growing with relationship to the assumptions included in this report.

1.4 Scope

The scope of the Providence City Culinary Water Master Plan includes the following:

- Gather and analyze existing system parameters including flow, distribution system size, storage facilities, pumping facilities, water sources (wells and spring), zoning, land use, and annexation data,
- Test and exercise 23 (~5% of system) fire hydrants to measure pressures and flow capabilities,
- Build and calibrate a distribution system model for existing conditions,
- Apply future flow projections to the calibrated model,
- Identify and prioritize existing and future system deficiencies,
- Develop opinions of probable cost for proposed improvements, and
- Prepare a master plan report.

1.5 Related Studies

Other studies related to wastewater collection and treatment for Providence City include the following:

- Providence City General Plan, CRSA, April 2020,
- Providence City Water System Master Plan, Knighton and Crow, P.C., March 2000
- Providence City Corporation 40-Year Water Rights Plan, CRS Engineers, May 2019

2.0 SYSTEM USER ANALYSIS

2.1 Length of Planning Period

In development of this culinary water system master plan, Sunrise Engineering used a 20-year planning period, beginning in the year 2021 and running through the year 2041. It is recommended that throughout the 20-year plan implementation period, Providence City and its engineering consultant further evaluate the system for potential infrastructure improvements or other needs. If growth occurs faster than projected, the resulting projects will need to be completed sooner. Likewise, if growth occurs slower than projected, the resulting projects will need to be postponed until appropriate.

2.2 Projected Growth

The projection of a city's population is an integral part of a master plan study. With an appropriately determined growth rate, it is possible to estimate the future population and subsequent culinary water flow rates, supply needs, storage capacities, water right limits, and additional key elements that need to be accommodated by the city's culinary water system.

Historic census data and the Providence City General Plan were initially used to determine a proper growth rate for Providence City. From 2000 to 2010, the city experienced a 4.9% growth rate. From 2010 to 2020, the city experienced a 1.51% growth rate. In the General Plan adopted in 2020, a growth rate of 1.0058% was utilized in connection with the Utah Governor's Office of Management and Budget. After comparing these growth rates to the current trend in building permits of an average growth rate of 3.2% over the last three years, it was recommended that a higher growth rate be used for this study than the General Plan. After coordination with the City's planning and zoning commission and other city personnel, a 2.48% growth rate was utilized to project the population over the 20-year planning period for Providence City Culinary Water Master Plan. This is the same growth rate that was utilized in the Wastewater Master Plan that was completed in 2021.

With data from the most recent census, completed in April 2020, it has been estimated that Providence City has an average household size of 3.3 people. According to QuickFacts from the U.S. Census Bureau, the population of Providence City in 2020 was 8,218. **Table 2.1** provides the census data over the past six decades and their associated growth rates forward. **Table 2.2** illustrates the projected population for Providence City along with the anticipated growth within the 3 tank zones that service the city. The tank zones can be seen in **Exhibit 2.1** *"2021 Key Infrastructure Map"* and are described later in the plan.

Table 2.1 Census Population Data

Year	1970	1980	1990	2000	2010	2020
Pop	1,608	2,675	3,344	4,377	7,075	8,218
Growth Rate Forward	5.22 %	2.26%	2.73 %	4.92 %	1.51%	N/A

Table 2.2 Population Projection Data

Year	2020	2021	2026	2031	2036	2041
Tank Zone 1 Pop	4,175	4,243	4,806	5,442	6,157	6,967
Tank Zone 2 Pop	3,082	3,132	3,533	3,984	4,496	5,075
Tank Zone 3 Pop	962	977	1,103	1,246	1,409	1,593
City Total Pop	8,218	8,353	9,442	10,672	12,063	13,635

In addition to the census data, it is important to note the rate at which homes and businesses are being built. The total number of building permits issued over the last 4 years is shown in **Table 2.3**.

Table 2.3 2018-2021 Building Permits Issued

Year	*Commercial*	*Single Family*	*Townhouse*	*Growth Rate Forward*
2018	4	45	4	2.3 %
2019	4	47	11	4.0 %
2020	15	83	14	3.3%
2021	15	71	8	N/A
Total	**38**	**246**	**37**	

It should be understood that if the number of projected system connections associated with the projected population is reached earlier or later than projected, future improvements to support growth will need to be adjusted accordingly.

2.3 Land Use

Using the 2021 Land Use Map provided by Providence City, future water demand projections were conducted based on land use zones with input from the City's planning and zoning commission and other city personnel. Future annexation areas have been identified by the city and were included in the planning of future water demands. A map of the existing and future land use is shown in **Exhibit 3.1** *"Providence City Zoning."*

2.4 Equivalent Residential Units & Equivalent Population

An Equivalent Residential Unit (ERU) is defined as the average monthly culinary water demand by a residential unit or single-family dwelling. This unit is commonly used as an index to compare the water demand of non-residential connections to that of residential connections. There are multiple types of ERU's for a culinary water system:

- Annual Average ERU: This ERU evaluates all connections on an annual water consumption average. This combines the effects of irrigation and outdoor usage with indoor usage.
- Winter Average ERU: This ERU evaluates all connections on their winter usage only (November to March). This is often called the Indoor Average ERU as only indoor water uses are typically active during the winter.
- Summer Average ERU: This ERU evaluates all connections on their summer usage only (May to September).

- Irrigation Average ERU: This ERU is the difference between the Winter Average ERU and the Summer Average ERU, thus representing the water that is used typically outside of a building or residence. This is often called the Outdoor Average ERU.

The three primary ERU's used to determine capacities and demands on culinary water systems are the Annual Average ERU, the Indoor Average ERU, and the Outdoor Average ERU. In general, when speaking about an ERU, it is referring to the Annual Average ERU. This ERU is used to evaluate business and other non-residential water demands to determine their impact on the culinary water system. When the term ERU is used throughout this water master plan, it is referring to the Annual Average ERU unless another ERU measure is specified.

Equivalent population is a metric that is determined by multiplying ERUs by average household size to calculate a population that is representative of the flows being produced. It is important to note that this equivalent population is generally higher than the actual population due to industrial and commercial connections that translate into a higher number of ERUs.

2.4.1 Existing Equivalent Residential Units and Population

Existing connections in Providence City consist of seven classifications of water connections: Residential, Multi-Family, Commercial, City, Cemetery, Educational, and Religious. Water connections are assigned a classification and are then further divided by their connection type: Water-City (3/4" or 1" connection), Water – 1 ½ Inch Line, Water – 2 Inch Line, Water – 4 Inch Line, and Water – No Bill Rate. **Table 2.4** provides the various classifications of the currently existing connections with Providence City along with their associating ERU values. These values are based on the past four years of water data.

Table 2.4 Existing Connections and Average Water Demands

Water User Type	Water Connection Type	# of Connections	Annual Average (gal/day)	Indoor Average (gal/day)	Outdoor Average (gal/day)
Residential	¾- or 1-inch	2257	931	209	1,095
Residential	1 ½-inch	3	2,783	59	3,795
Residential	2-inch	3	5,825	2,854	6,884
Multi-Family	¾- or 1-inch	8	5,804	593	6,739
Multi-Family	1 ½-inch	7	3,654	1,928	3,347
Multi-Family	2-inch	6	8,593	2,444	10,282
Multi-Family	4-inch	6	19,107	9,590	12,700
Commercial	¾- or 1-inch	52	1,532	1,349	1,479
Commercial	1 ½-inch	9	4,371	1,154	4,155
Commercial	2-inch	13	4,090	1,757	3,424
City	¾- or 1-inch	19	1,032	239	1,131
City	2-inch	6	7,611	286	16,462
City	Non-Billing	3	7,282	0	8,163
Cemetery	4-inch	1	14,502	90	19,091
Educational	¾- or 1-inch	4	3,998	433	4,745
Educational	2-inch	1	11,454	1,150	14,202
Educational	4-inch	1	6,017	3,135	3,832
Religious	2-inch	9	10,146	13,033	237
Total		**2,408**			

The typical residential home in Providence City has an indoor use of 209 gallons/day with an outdoor use of 1,095 gallons/day. For comparison, the average for the state of Utah for indoor usage is about 400 gallons/day and the average for outdoor use is 1,008 gallons /day (assuming a ¼ acre of irrigated ground) per water connection.

With the establishment of the average demand of a typical residential house (ERU), the other types of connections can then be compared to a typical ERU to determine the impact of non-residential water users and larger connections. The annual averages are used to determine the ERU value for the various connection types. Presented in **Table 2.5** is the resulting ERU Evaluation of the various types of connections and their corresponding sizes.

Table 2.5 Existing Connections and Average Water Demands

Type of Existing Connection	Number of Connections	Number of ERUs	ERU Value
Residential - City	2,257	2,257	1
Residential – 1 ½-inch	3	9	3
Residential - 2 inch	3	19	6.3
Multi-Family - City	8	51	6.3
Multi-Family – 1 ½-inch	7	28	4
Multi-Family - 2 inch	6	56	9.3
Multi-Family - 4 inch	6	124	20.6
Commercial - City	52	89	1.7
Commercial - 1 ½-inch	9	43	4.7
Commercial - 2 inch	13	58	4.4
City - City	19	23	1.2
City - 2 inch	6	50	8.2
City - non billing	3	24	7.8
Cemetery - 4 inch	1	16	15.6
Educational - City	4	18	4.3
Educational - 2 inch	1	13	12.4
Educational - 4 inch	1	7	6.5
Religious - 2 inch	9	99	10.9
Total	**2,408**	**2,984**	

Essentially an ERU value equates a non-typical water connection to how many typical residential homes it appears as, for example, a Commercial 2-inch water connection will use the same amount of water as 4.4 typical residential homes on average.

ERU's can be broken down into two categories, residential (single family homes and multi-family units) and commercial (anything non-residential). Multi-family units are included with the single-family homes to help determine a community's indoor usage. Their respective outdoor water usage will vary dramatically, but their indoor water usage based on how many units will be very similar. A three-person family in a single-family home will use approximately the same amount of water indoors as a three-person family in an apartment. The existing number of ERUs, average household size, and equivalent population are given in **Table 2.6.**

Table 2.6 Existing ERUs

Residential	Commercial	Total	Average Household Size	Equivalent Population
2,544	440	2,984	3.23	9,638

* The average household size has been updated from recent studies due to the results of the 2020 census.

2.4.2 Projected Equivalent Residential Units and Population

Future culinary water connections are anticipated to closely follow the population growth rate over the next 20 years. Using the respective growth rates determined for Providence, future ERU totals for the planning period were calculated with exponential growth equations. Equivalent populations for these years were subsequently calculated using the projected ERUs and average household size.

These metrics for projected ERUs and equivalent population for the planning period are summarized in **Table 2.7. Figure 2.1** provides a comparison illustration of the various growth projections for Providence City and their impact on the ERU count for the city. The selected growth project is the 2.48% growth as described in **Section 2.2**.

Table 2.7 Existing ERUs

Year	2020	2021	2026	2031	2036	2041
Tank Zone 1	1,468	1,516	1,717	1,944	2,200	2,489
Tank Zone 2	1,084	1,119	1,262	1,423	1,606	1,813
Tank Zone 3	338	349	394	445	503	569
Total Residential	**2,465**	**2,544**	**2,875**	**3,250**	**3,674**	**4,152**
Total Commercial	**425**	**440**	**497**	**562**	**635**	**718**
City Total	**2,890**	**2,984**	**3,373**	**3,812**	**4,309**	**4,871**
Equivalent Population	9,335	9,638	10,894	12,314	13,918	15,732

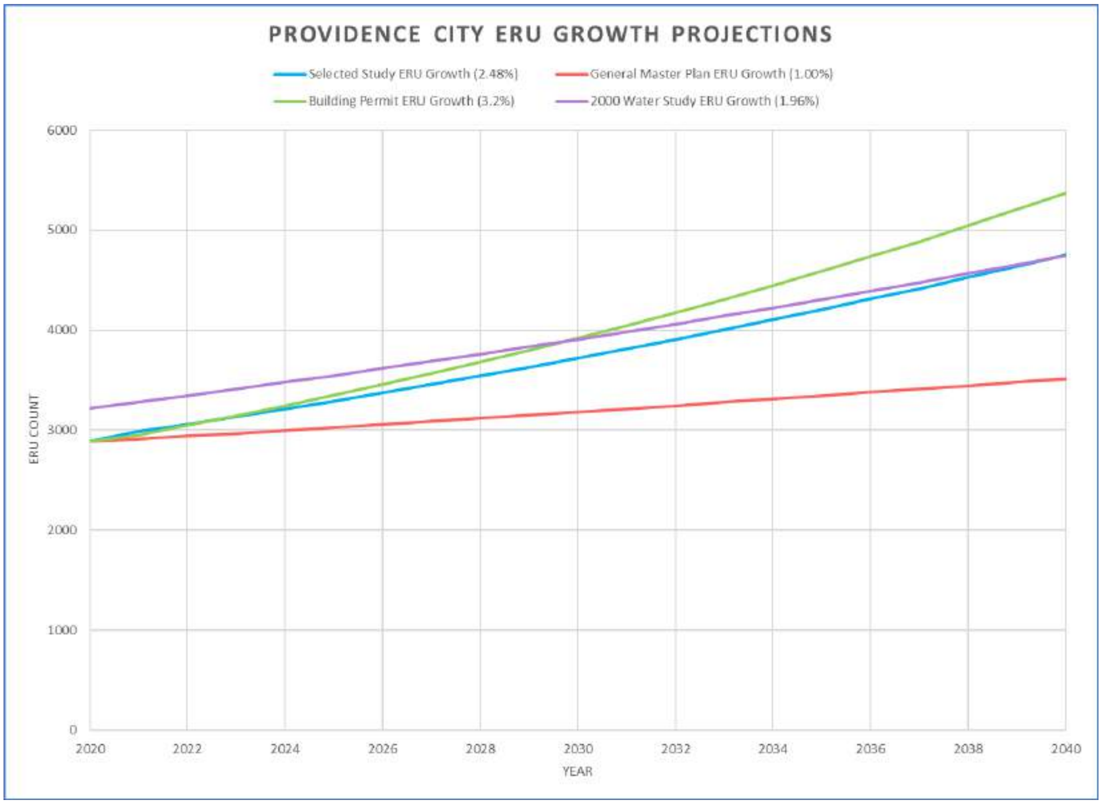


Figure 2.1 Providence City ERU Growth Projections

3.0 EXISTING WATER SYSTEM

Section 3.0 describes and quantifies the existing water distribution system including usage, sources, water rights, storage facilities, treatment, and distribution. A subsequent section, Water System Capacity Analysis, will compare these existing system parameters against the Minimum Sizing Standards provided by DDW.

3.1 Existing Water Demands

An average home in Providence City uses 931 gallons per day throughout the year and represents the water consumption of a single ERU. Providence City currently has 2,984 ERU's which equates to an average day demand of 2,778,104 gallons per day. Illustrated in Figure 3.1 is the monthly average water consumption in gallons per day. This figure has data from the past four years represented by color-coded vertical bars. The red horizontal line represents the yearly average of 2.8 million gallons per day. This figure shows a clear seasonal trend in consumption with high summer peaks attributed to outdoor use, primarily for landscape irrigation.

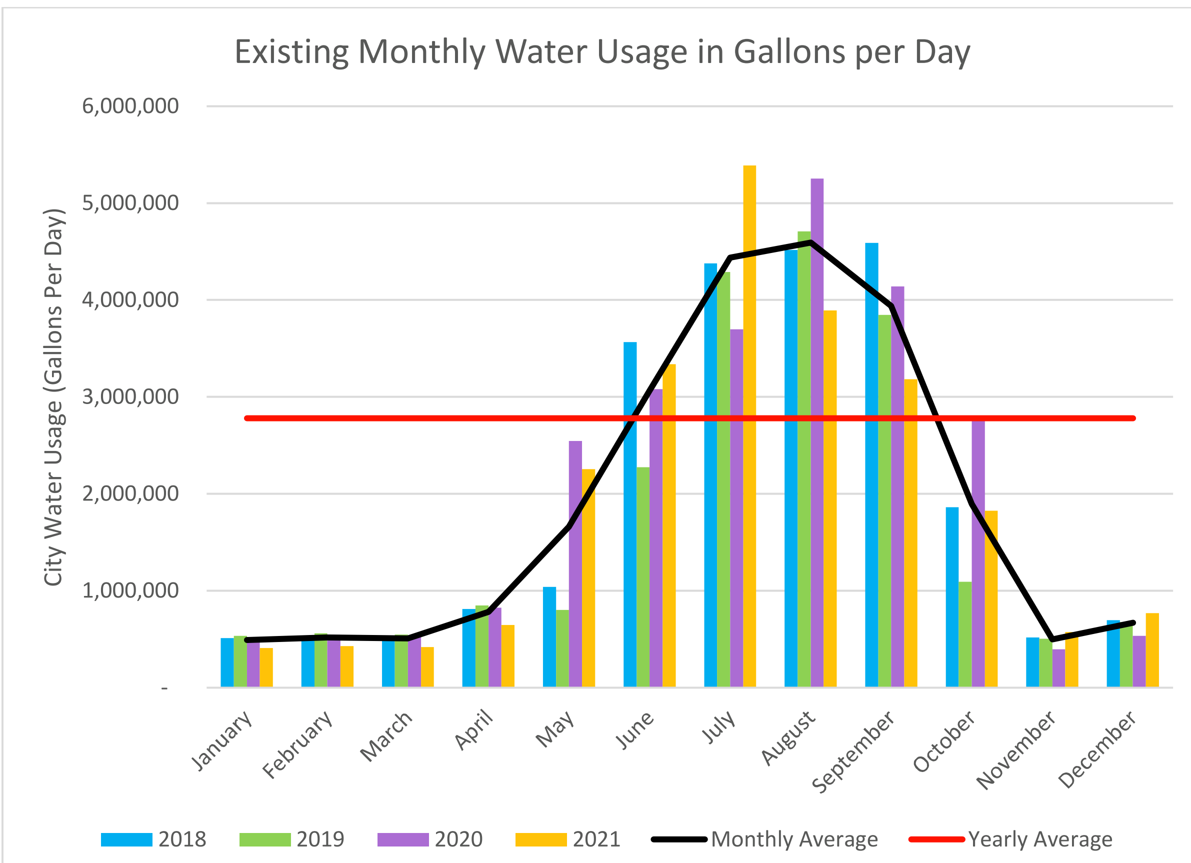


Figure 3.1 Existing Monthly Water Usage

The Division of Drinking Water (DDW)of the Utah Department of Environmental Quality is the regulatory agency that oversees the culinary water systems throughout the state. To establish minimum capacity and sizing requirements, this agency has historically used a statewide base-usage value for indoor and outdoor consumption based on region and irrigated acreage. This methodology provided a generalized approach that has often resulted in either under- or over-sized systems.

Recently, the DDW has changed how they evaluate minimum sizing requirements for these systems. Culinary water systems are now evaluated based on their own historical water usage. Providence City has provided annual water usage data to the DDW. From this data, DDW has derived the minimum sizing requirements presented in **Table 3.1**. The full document provided by the DDW has been included in **Appendix F**. It is important to note the difference in the value determined for the water demand for a single ERU as defined previously (931 gal/day) and the Average Day Source Demand for a single ERU as defined by the DDW (1091 gal/day). The 17% increase is due to the variation in water usage from year to year. For determining minimum sizing for sources, water rights, and storage facilities the standards set forth by the DDW will be used.

Table 3.1 Current DDW Minimum Sizing Standards

Utah DEQ Division of Drinking Water Minimum Sizing Standards for Providence City	
Effective Date	3/22/2021
Average Day Source Demand / ERU (gal/day)	1,091
Peak Day Source Demand / ERU (gal/day)	2,573
Average Annual Demand per ERU (gal/year)	398,057
Average Day Demand per ERU (gpm)	0.757
Equalization Storage per ERC (gal/day)	1,091
Fire Flow per Tank (gpm)	1,500
Fire Duration Per Tank (min)	120
Fire Storage Required per Tank (gal)	180,000

3.2 Existing Water Sources

Providence City owns four wells (Alder Well, Dale's Well, Jay's Well, and the Cemetery Well) and has rights to a spring, Broad Hollow Spring, located in Providence Canyon. The Cemetery Well is not presently used for culinary water purposes and is used for irrigation water for the cemetery. The well is not used for culinary water primarily due to the high sand content in the well.

The primary source of water for Providence City is the Broad Hollow Spring. The system is designed and operated to use this source preferentially. Because the high-elevation spring can deliver water without pumping, the energy cost of water delivered from the spring is low compared to other sources. The spring has the capacity to provide for the whole city during the winter months and is supplemented using well water during late spring, summer, and early fall. The spring is shared with the Spring Creek Water Company.

The spring is in Providence Canyon, approximately 7,000 ft East of the Coombes Tank. The spring has an overflow pipe located at the spring collection area. The water is conveyed from the spring collection area in a 12" transmission line to the Coombe's Tank, passing first through a metering station and air box.

The metering station measures the flow conveyed from the collection area; However, this value does not represent the full capacity of the Broad Hollow Spring because only a portion of the full flow is collected, the remainder being discharged into Spring Creek. Historic data suggests that the spring can produce up to 2,300 gpm. The meter was installed in December of 2021 and has reported flows of 1,350 gpm. The spring has not been redeveloped since its construction and is completely fenced off for protection.

The three wells used to supplement the spring water are used interchangeably. The Alder Well is located in the Meadow Ridge Park at 225 South 325 West and pumps directly into the distribution system. Currently the Alder Well produces 275 gpm, however the 2000 Water Master Plan reported the well is capable of 550 gpm. The well is an 8 inch well, approximately 220 feet deep and was drilled in 1978. The Alder Well was originally drilled for irrigation and was not connected to the culinary system until 1989.

Dale's Well is located at Cattle Corral Park on the corner of 100 E and 200 S. The well diameter is 16" and was drilled to a depth of 366 feet in 1965. The well pumps into a dedicated transmission line to the Eck Tanks. This line is shared with Jay's Well. The well was test pumped at 2,018 gpm at the time of construction and is currently producing 1,850 gpm.

Jay's Well is located on the corner of Main Street and 400 South. Water pumped from Jay's Well is conveyed through a 12" transmission, until that line intersects with the line from Dale's Well, at which point water from both wells is conveyed through a single 16" transmission line to the Eck Tanks. Jay's Well was drilled in 1999 to a total depth of 423 feet and is cased using 16" pipe. The well produced 1,800 gpm at the time of construction and currently produces 1,220 gpm.

Table 3.2 provides a summary of the various sources and their key attributes. The well logs for these wells can be found in **Appendix B** and their location can be found on **Exhibit 2.1** *"2021 Key Infrastructure Map"*.

Table 3.2 Water Source Summary

Source Name	Source Type	Date Constructed	Max Documented Flow Rate (gpm)	Current Flow Rate (gpm)
Broad Hollow Spring	Canyon Spring	1938	2,300	*1,350
Alder Well	Underground Well	1978	550	275
Dale's Well	Underground Well	1965	2,018	1,850
Jay's Well	Underground Well	1999	1,800	1,220

* This is measured at the air box, the full capacity of the spring is currently un-known

3.3 Existing Water Rights

Every source of water has two key elements, how much water the source can produce (Source Capacity) and how much an entity can legally take from the source (Water Rights). Often the two amounts do not match. All water in the State of Utah is owned by the State. The State then issues a Water Right to grant the right for an individual to use a set amount of water for a beneficial use. A Water Right has six key elements:

1. Water Source – from what type and name of water body the water can come from e.g., Bear Lake, Underground Well, Logan River, Broad Hollow Spring. Etc.
2. Volume Restriction – a set volume of water that can be used on a yearly basis, typically measured in acre/ft.
3. Flow Restriction – a set maximum flow rate the water can be pulled from the source, typically measured in gpm or cfs.
4. Diversion Point – the location the water can be pulled from the specified water source.
5. Period of Use – when in the year the water can be used
6. Approved Use – What the water can be used for: e.g., municipal, irrigation, industrial, etc.

Sometimes a water right may have only a volume restriction or only a flow restriction. In these instances, the missing value has been calculated from the one that is provided.

Providence City has worked diligently to gather water rights and water shares with the various local irrigation companies to provide for its water demands. Presently, Providence City owns 23 water rights along with 230.83 shares of the Spring Creek Irrigation Company, 418.8 shares of the Providence Blacksmith Fork Irrigation Company, and 1.5 shares of the Providence Pioneer Irrigation Company. Provided in **Appendix A** are the full water rights belonging to Providence City. Presented in **Table 3.3** is a summary of those 23 water rights. The blue text indicates a value that is the documented value on the water right. The red text indicates that value is not documented but is calculated from the documented value. On the Period of Use column, there is an "S", "Y", or "W" printed next to the date of usage. These indicate whether the right is a Year-Round Right (Y), Summer Right (S), or Winter Right (W).

Table 3.3 Summary of Existing Water Rights

Water Right	Volume (ac-ft)	Flow (gpm)	Assigned Source	Period of Use
WR25-11417	620.6655	659	Broad Hollow Spring	4/1 to 10/31 (S)
WR25-11591	52.3887	56	Broad Hollow Spring	4/1 to 10/31 (S)
WR25-3451	83.6	52	Future Well	1/1 to 12/31 (Y)
WR25-4150	20	12	Future Well	1/1 to 12/31 (Y)
WR25-4147	250	155	Future Well	1/1 to 12/31 (Y)
WR25-4462	60	75	Future Well	1/1 to 12/31 (Y)
WR25-7121	20	12	Future Well	1/1 to 12/31 (Y)
WR25-10510	72	45	Future Well	1/1 to 12/31 (Y)
WR25-10511	38.8	24	Future Well	1/1 to 12/31 (Y)
WR25-10512	50	31	Future Well	1/1 to 12/31 (Y)
WR25-10513	60	37	Future Well	1/1 to 12/31 (Y)
WR25-10514	90.8	56	Future Well	1/1 to 12/31 (Y)
WR25-10524	40.4	25	Future Well	1/1 to 12/31 (Y)
WR25-4153	1085.95	673	Dale's Well	1/1 to 12/31 (Y)
WR25-5055	1180.07	732	Dale's Well	1/1 to 12/31 (Y)
WR25-8706	962.88	597	Dale's Well	1/1 to 12/31 (Y)
WR25-9269	2294.98	1423	Jay's Well, Last Chance Spring, Unnamed Well	1/1 to 12/31 (Y)
WR25-3426	904.46	1346	Broad Hollow Spring	11/1 to 4/1 (W)
WR25-10509	25	15	Cemetery Well / Future	1/1 to 12/31 (Y)
WR25-6853	5.97	4	Cemetery Well - Irrigation	1/1 to 12/31 (Y)
WR25-3374	12	7	Cemetery Well	1/1 to 12/31 (Y)
WR25-8859	886.86	550	Alder Well	1/1 to 12/31 (Y)
WR25-9341	544.46	673	Broad Hollow Spring	4/1 to 9/30 (S)
Summer Total	**8,457**	**5,914**		
Winter Total	**8,144**	**5,873**		

*Blue represents documented values and red represents calculated values

In addition to the water rights, Providence city has access to the irrigation water of three irrigation companies, Spring Creek Irrigation Company, Providence Blacksmith Fork Irrigation Company, and Providence Pioneer Irrigation Company. Provided in **Table 3.4** is the number of shares in the respective companies, and the volume of water permitted by each.

Table 3.4 Summary of Existing Shares with Irrigation Companies

Irrigation Company	Number of Shares	Share Diversion (Ac-Ft)	Period of Use	Yearly Vol. (Ac-Ft)	City Use	Water Right
Spring Creek	264.54	2.73	4/1 to 10/31	673.05	Potable Water	WR25-11591 & WR25-11417
Providence Blacksmith Fork	420.8	2.63	4/1 to 9/30	1,106.70	Exchange for Potable Water and Irrigation	E844 (WR25-9341)
Providence Pioneer	1.5	2.77	4/1 to 10/31	4.16	Irrigation	N/A

Providence City currently has filed water rights that allow the water to be used in their culinary system instead of being used in the Spring Creek Irrigation System. These water rights are new, and the summer of 2022 will be the first year that these shares will be used in this manner. This use of irrigation shares for potable water is documented in WR25-11591 & WR25-11417 provided in **Appendix A**.

Providence City also uses their Providence Blacksmith Fork Irrigation shares to help provide more potable water. Water is removed from the Providence Blacksmith Fork system with a pump and placed in the Spring Creek system. In exchange for this water, Spring Creek Irrigation Company allows Providence City to take an equivalent volume of additional water from the Spring. This exchange is documented in E844 provided in **Appendix A**.

All the shares currently owned in the Spring Creek Irrigation Company are used for potable water. Only 207.02 of the 420.8 shares on the Providence Blacksmith Fork Irrigation System are used in the exchange agreement. This leaves 213.78 shares to be leased out or utilized to irrigate city parks or other city facilities. Presently, the shares in the Providence Pioneer Irrigation Company can only be used to irrigate city facilities or be leased to others for use. **Table 3.5** provides a summary of the use of irrigation shares for culinary water use.

Table 3.5 Summary of Irrigation Shares Used for Potable Water

Irrigation Company	Total Shares	Shares Used for Potable Water	Remaining Shares	Period of Use	Yearly Volume (Ac Ft)	Equivalent Flow Rate (cfs)
Spring Creek	264.54	264.54	0	4/1 to 10/31	673.0542	1.59
Providence Blacksmith Fork	420.8	207.02	213.78	4/1 to 9/30	544.4626	1.50

In 2019 CRS Engineers provided Providence City with a comprehensive 40-Year Water Rights Plan. This Water Right Plan is an excellent resource and should be reviewed in connection with this Culinary Water Master Plan.

3.4 Existing Storage Facilities

Providence City currently has five operational storage tanks: Eck Tank 1, Eck Tank 2, Redds Tank 1, Redds Tank 2, and Coombs Tank. One additional tank, Dew Tank, is under construction with expected completion in July of 2022. **Table 3.6** details storage capacity and the different Tank Zones that each tank serves. These storage tanks provide flexibility for water consumption and are a critical piece of the water system. The storage facilities provide three vital services for Providence City:

- **Fire Suppression Storage.** Water is reserved for fire suppression throughout the city. Each Tank Zone is required to hold a volume equal to 120 minutes for fire suppression usage at a rate of 1,500 gpm. This equates to 180,000 gallons, which Providence City stores in each Tank Zone.

- **Equalization or Operational Storage.** Rarely do the rates of source supply and user demand perfectly match. During periods of high use, water is drawn down in the tanks. If this demand peak is of brief duration, the tank will be refilled when demand is reduced, otherwise, additional sources will be brought online. In this way the tanks attenuate, or buffer, the natural spikes in demand.

  These demand spikes often have seasonal and daily patterns. For example, in the morning, sprinkler systems are active, and residents are showering and getting ready for the day. This creates a large demand on the water system which may exceed the inflow from water sources. In the afternoon, city-wide demands are greatly reduced, and the tanks can refill.

- **Emergency Storage.** Stored water volume must also be available for unforeseen situations, extended fire suppression, extreme water demands, pipeline breaks, source, contamination, etc.

Storage tanks are separated into tank zones. A Tank Zone is an area of the city that is served by one or more tanks working together, for example Redds Tank 1, Redds Tank 2, and the new Dew Tank will effectively operate as a single storage tank to provide required water for Tank Zone 2. Each zone is evaluated for current capacity and future capacity in order to properly serve citizens as Providence City continues to grow. Predictive models have been run to determine amounts of storage capacity needed for each Tank Zone within the city.

While Tank Zones and Pressure Zones have similar boundaries, they are independent of each other. Tank Zone 1 supplies water storage for all of Pressure Zone 1. Tank Zone 2 supplies storage for Pressure Zones 2A, 2B, 2C, and 2D. Tank Zone 3 supplies storage for Pressure Zones 3 & 4.

Within Tank Zone 1 there are two tanks, Eck Tank 1 and Eck Tank 2, that serve this zone. Combined, they provide 2 million gallons of water storage. Both tanks are buried. Eck Tank 1 is an Oval Concrete and Bladder storage tank built in 1962. Eck Tank 2 is a Cylindrical Concrete storage tank built in 2001 with a 500,000-gallon capacity.

Tank Zone 2 has two operating storage tanks, Redds Tank 1 and Redds Tank 2, with an additional storage tank under construction, Dew Tank. With the completion of Dew Tank in July 2022, Tank Zone 2 storage capacity will be 2.63-million gallons. Redds Tank 1 is the smallest tank operating in the water system with 130,000 gallons of storage and was built in 1940. Redds Tank 2 is a 1-million-gallon tank built in the 1960s.

Tank Zone 3 is served by the cylindrical concrete Coombs Tank, built in 1996, with a storage capacity of 1-million gallons.

Table 3.6 Storage Facilities Summary

Tank Name	Capacity (gallons)	Construction Date	Type	Tank Zone
Eck Tank 1	1.5 million	1962	Oval Concrete and Bladder - Buried	1
Eck Tank 2	500,000	2001	Cylindrical Concrete - Buried	1
Redds Tank 1	130,000	1940	Cylindrical Concrete - Buried	2
Redds Tank 2	1 million	1960	Cylindrical Concrete - Buried	2
Dew Tank	1.5 million	2022	Cylindrical Concrete - ½ Buried	2
Coombs Tank	1 million	1996	Cylindrical Concrete - ½ Buried	3

3.5 Existing Treatment Facilities

Water sourced from Broad Hollow Spring is treated with chlorine gas at the Coombes Tank. Dales Well and Jay's Well are both treated at their respective well houses using liquid chlorine. The Alder Well is not directly chlorinated but is treated with residual chlorine levels in the distribution system. All four sources are clean sources and require no additional treatment.

3.6 Existing Distribution System

The existing distribution system service Providence City was originally installed in 1938 as far as documentation can provide. It appears there was a significant upgrade in 1942 with systematic repairs and upgrades since then. Large sections of the culinary distribution system have been installed by developers as the city has grown. The current system is made up of a combination of ductile iron pipe, PVC pipe, cast iron pipe, HDPE pipe, asbestos concrete pipe, and small variety of other pipes. The cast iron pipe and the asbestos concrete pipe are remnants of the original system and are being removed and replaced on a regular basis. New additions to the system are PVC pipe or ductile iron pipe.

Fire hydrants are a critical part of the distribution system. Fire hydrants are installed at frequent intervals to provide proper fire protection to the community. The International Building Code states that any portion of a building or facility is required to be within 400 feet from a fire hydrant and 600 feet for residential buildings classified as Group R-3. This distance is measured as the hose is laid. **Exhibit 4.1** *"Existing Fire Hydrant Service Area"* provides a map of the existing fire hydrants and a 500' residential fire protection area for each hydrant. **Table 3.7** provides a summary of the distribution system including pipe sizes, fire hydrants, and a summary of pipe materials.

Table 3.7 Distribution System Summary

Pipe Size	Total Length of Pipes in System	Percentage of System
2-inch	6,041	2.13%
4-inch	6,061	2.14%
5-inch	5,380	1.90%
6-inch	56,154	19.80%
8-inch	139,275	49.12%
10-inch	26,802	9.45%
12-inch	41,054	14.48%
16-inch	2,800	0.99%
Total	**283,568**	

Pipe Material	Total Length of Pipes in System	Percentage of System
Asbestos Concrete Pipe	2,644	0.93%
Cast Iron Pipe	12,255	4.32%
Ductile Iron Pipe	244,155	86.10%
HDPE Pipe	607	0.21%
PVC Pipe	20,900	7.37%
Other	3,007	1.06%
Total	**283,568**	

# of Fire Hydrants	418

The distribution pipe needs to be adequately sized to provide the peak flows of the city in addition to the appropriate fire protection flows. This is accomplished using a computer modeling software called InfoWater, produced by Autodesk. The model and the results derived from it are discussed in **Section 5** of this document.

4.0 WATER SYSTEM CAPACITY ANALYSIS

Based on Utah DEQ Division of Drinking Water Minimum Sizing Standards and projected growth, the Providence water system is analyzed for Capacity relative to projected need. Four system parameters are analyzed independently: source capacity, water rights, storage capacity, and treatment capacity. Distribution is also analyzed but will be covered in more depth in **Section 5**. The evaluation of these five elements is summarized in the five-point analysis located in **Appendix E**.

4.1 Water Source Capacity Analysis

Source capacity is compared to Average Day Demand and Peak Day Demand for both existing and future conditions. This analysis is summarized in **Table 4.1** for the overall system. The same analysis is performed for Tank Pressure Zones 1, 2, and 3 and summarized in **Table 4.2**, **Table 4.3**, and **Table 4.4** respectively.

Table 4.1 Source Capacity Analysis for Overall System

Average Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	2,984	209	433		
Existing Outdoor Need	2,984	882	1,827		
Existing Total WS Need	2,984	**1,091**	**2,260**	**4,691**	**2,432**
Projected Indoor Need	4,871	209	707		
Projected Outdoor Need	4,871	882	2,982		
Projected Total WS Need	4,871	**1,091**	**3,689**	**4,691**	**1,003**
Peak Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	2,984	784	1,625		
Existing Outdoor Need	2,984	1,789	3,707		
Existing Total WS Need	2,984	**2,573**	**5,332**	**4,691**	**(640)**
Projected Indoor Need	4,871	784	2,652		
Projected Outdoor Need	4,871	1,789	2,982		
Projected Total WS Need	4,871	**2,573**	**8,703**	**4,691**	**(4,011)**

Providence City has a Source Capacity surplus of 2,432 gpm for Average day demand; However, for Peak Day Demand, the Providence system has a deficit of 640 gpm, and over the 20-year planning period, this Peak Day deficit is projected to grow to 4,011gpm. During periods of high consumption, the available source capacity alone is not sufficient to balance demand. In such situations, the city's storage tanks act as buffers by allowing the system to draw down stored water during demand peaks. For this reason, the source capacity and demand are analyzed for zones 1, 2, and 3 independently.

Table 4.2 Source Capacity Analysis for Tank Zone 1

Average Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	1,516	209	220		
Existing Outdoor Need	1,516	882	928		
Existing Total WS Need	1,516	**1,091**	**1,148**	**3,345**	**2,197**
Projected Indoor Need	2,489	209	361		
Projected Outdoor Need	2,489	882	1,524		
Projected Total WS Need	2,489	**1,091**	**1,885**	**3,345**	**1,460**
Peak Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	1,516	784	825		
Existing Outdoor Need	1,516	1,789	1,883		
Existing Total WS Need	1,516	**2,573**	**2,709**	**3,345**	**636**
Projected Indoor Need	2,489	784	1,355		
Projected Outdoor Need	2,489	1,789	3,092		
Projected Total WS Need	2,489	**2,573**	**4,447**	**3,345**	**(1,102)**

For Tank Zone 1, a surplus exists currently for both average day and peak day demand. Over the 20-year planning period, growth in peak day demand is projected to result in a deficit of 1,102 gpm.

Table 4.3 Source Capacity Analysis for Tank Zone 2

Average Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	1,119	209	162		
Existing Outdoor Need	1,119	882	685		
Existing Total WS Need	1,119	**1,091**	**847**	**3,279**	**2,432**
Projected Indoor Need	1,813	209	263		
Projected Outdoor Need	1,813	882	1,110		
Projected Total WS Need	1,813	**1,091**	**1,373**	**2,376**	**1,002**
Peak Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	1,119	784	609		
Existing Outdoor Need	1,119	1,789	1,390		
Existing Total WS Need	1,119	**2,573**	**1,999**	**1,359**	**(640)**
Projected Indoor Need	1,813	784	987		
Projected Outdoor Need	1,813	1,789	2,252		
Projected Total WS Need	1,813	**2,573**	**3,239**	**(773)**	**(4,012)**

For Tank Zone 2, a surplus exists for average day demand; However, peak day demand shows a deficit for existing conditions that grows over the 20-year planning period.

Table 4.4 Source Capacity Analysis for Tank Zone 3

Average Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	349	209	51		
Existing Outdoor Need	349	882	214		
Existing Total WS Need	349	**1,091**	**264**	**1,346**	**1,082**
Projected Indoor Need	569	209	83		
Projected Outdoor Need	569	882	348		
Projected Total WS Need	569	**1,091**	**431**	**1,346**	**916**
Peak Day Demand					
Water Source	**Number of ERUs**	**DDW Factor (gal/day/conn)**	**Total Need (gpm)**	**Existing Capacity (gpm)**	**Surplus (deficit) (gpm)**
Existing Indoor Need	349	784	190		
Existing Outdoor Need	349	1,789	434		
Existing Total WS Need	349	**2,573**	**624**	**1,346**	**723**
Projected Indoor Need	569	784	310		
Projected Outdoor Need	569	1,789	707		
Projected Total WS Need	569	**2,573**	**1,017**	**1,346**	**330**

For Tank Zone 3, Source Capacity is sufficient to meet demand in all scenarios currently, and over the 20-year planning period.

4.2 Water Rights Capacity Analysis

The annual volume of water for which Providence owns water rights is compared to existing and future demand. This analysis is summarized in **Table 4.5** for the overall system.

Table 4.5 Water Right Capacity Analysis for Overall System

Water Right	Number of ERUs	DDW Factor (ac-ft/yr/conn)	Total Need (ac-ft/yr)	Existing Capacity (ac-ft/yr)	Surplus (deficit) (ac-ft/yr)
Existing Indoor Need	2,984	0.234	699		
Existing Outdoor Need	2,984	.987	2,947		
Existing Total WS Need	2,984	**1.222**	**3,645**	**8,457**	**4,812**
Projected Indoor Need	4,871	0.234	1,140		
Projected Outdoor Need	4,871	0.987	4,810		
Projected Total WS Need	4,871	**1.222**	**5,950**	**8,457**	**2,507**

Providence City has sufficient water rights for both current and 20-year projected demand.

4.3 Water Storage Capacity Analysis

The total water storage volume available is compared to existing and future minimum requirements. This is shown for city-wide totals in **Table 4.6**. To run the system efficiently in terms of pumping, the city operates tank zones semi-independently. To ensure adequate water supply for fire protection, each tank-zone must have storage capacity sufficient to provide water at a rate of 1,500 gpm for 120 minutes. This is in addition to the volume required for indoor and outdoor use.

Due to the semi-independent operability of each zone and to accurately account for fire protection storage requirements, each zone's storage capacity is considered separately. Water storage capacity analysis is summarized for Tank Zones 1, 2, and 3 in **Table 4.7**, **Table 4.8**, and **Table 4.9** respectively.

Table 4.6 Water Storage Volume Analysis for Overall System

Water Storage	Number of ERUs	DDW Factor	Total Need (gal)	Existing Capacity (gal)	Surplus (deficit) (gal)
Existing Indoor Need	2,984	209 g/d/conn	623,656		
Existing Outdoor Need	2,984	882 g/d/conn	2,947		
Fire Protection	1,500 gpm * 120 min * 3 tank zones		540,000		
Existing Total WS Need			**3,794,252**	**5,630,000**	**1,835,748**
Projected Indoor Need	4,871	209 g/d/conn	1,017,952		
Projected Outdoor Need	4,871	882 g/d/conn	4,293,748		
Fire Protection	1,500 gpm * 120 min * 3 tank zones		540,000		
Projected Total WS Need			**5,851,700**	**5,630,000**	**(221,700)**

Providence City has a water storage surplus of 1.8 million gallons in the overall system; However, with 20-year projected growth, the city will face a deficit of 221,700 gallons.

Table 4.7 Water Storage Volume Analysis for Tank Zone 1

Water Storage	Number of ERUs	DDW Factor	Total Need (gal)	Existing Capacity (gal)	Surplus (deficit) (gal)
Existing Indoor Need	1,516	209 g/d/conn	316,844		
Existing Outdoor Need	1,516	882 g/d/conn	1,336,456		
Fire Protection	1,500 gpm * 120 min		180,000		
Existing Total WS Need			**1,833,300**	**2,000,000**	**166,700**
Projected Indoor Need	2,489	209 g/d/conn	520,201		
Projected Outdoor Need	2,489	882 g/d/conn	2,194,221		
Fire Protection	1,500 gpm * 120 min		180,000		
Projected Total WS Need			**2,894,422**	**2,000,000**	**(894,422)**

Zone 1 faces the most pressing need for additional storage. Currently this zone has a small storage surplus, but projected need will surpass the available capacity within the 20-year planning period. Zones 2 and 3 have surplus storage capacity in both the short term and the 20-year planning period.

Table 4.8 Water Storage Volume Analysis for Tank Zone 2

Water Storage	Number of ERUs	DDW Factor	Total Need (gal)	Existing Capacity (gal)	Surplus (deficit) (gal)
Existing Indoor Need	1,119	209 g/d/conn	233,871		
Existing Outdoor Need	1,119	882 g/d/conn	986,474		
Fire Protection	1,500 gpm * 120 min		180,000		
Existing Total WS Need			**1,400,345**	**2,630,000**	**1,229,655**
Projected Indoor Need	1,813	209 g/d/conn	378,917		
Projected Outdoor Need	1,813	882 g/d/conn	1,598,281		
Fire Protection	1,500 gpm * 120 min		180,000		
Projected Total WS Need			**2,157,198**	**2,630,000**	**472,802**

Table 4.9 Water Storage Volume Analysis for Tank Zone 3

Water Storage	Number of ERUs	DDW Factor	Total Need (gal)	Existing Capacity (gal)	Surplus (deficit) (gal)
Existing Indoor Need	349	209 g/d/conn	72,941		
Existing Outdoor Need	349	882 g/d/conn	307,667		
Fire Protection	1,500 gpm * 120 min		180,000		
Existing Total WS Need			**560,608**	**1,000,000**	**439,392**
Projected Indoor Need	1,813	209 g/d/conn	118,921		
Projected Outdoor Need	1,813	882 g/d/conn	501,612		
Fire Protection	1,500 gpm * 120 min		180,000		
Projected Total WS Need			**800,533**	**1,000,000**	**199,467**

4.4 Water Treatment Capacity Analysis

Providence City currently treats water using a combination of liquid chlorine and chlorine gas. This treatment is sufficient for existing demand. Providence City typically designs chlorine treatment in conjunction with new source development projects, and treatment capacity is easily scaled to match demand.

5.0 SYSTEM MODELING

5.1 Model Selection

Sunrise developed the distribution system models in Autodesk® InfoWater, a Geographic Information System (GIS) based software. This software models both simple and complex collection systems created in a GIS geodatabase. Flow projections for 2026, 2031, and 2041 were developed by using the projected ERU count growth and the current and projected land use maps as directed by the city.

5.2 System Model and Calibration

The City supplied Sunrise with various maps of the system, construction drawings, and GIS information for the existing distribution system. This data was then augmented using site visit data collected form the fire hydrant flow and pressure testing. The tested hydrants have been identified in **Exhibit 2.1** *"2021 Key Infrastructure"*. The model created includes all pipes, fire hydrants, tanks, wells, PRV stations, and other key elements that were able to be identified by Sunrise and the City.

For the fire hydrants tested, a static pressure and a free-flowing dynamic pressure with flow rate data was collected. Pipe data was collected from measured lengths using the GIS software and attribution of the pipes was performed manually and with the assistance from the city. The model does not contain isolation valves and pipe depths. The model was built on the projected surface using a state digital elevation model (DEM). The model used was provided by the Utah Geospatial Resource Center (UGRC) and has a resolution of 0.5 meters and an accuracy of 10.0 cm. This accuracy in elevation provides the accuracy for the model and results in a +/- 0.7 psi range accuracy due to elevation data.

Outside of the main transmission lines, the industry minimum standard of 8" pipe is sufficient for distribution and fire flow needs if properly looped. wastewater flows. Providence City does have a significant amount of 6" with some 4" and 2" lines. If the 6" pipes are properly looped that can service a small area. However, the 4" and 2" pipes are detrimental to flows in the system. **Exhibit 2.1** *"2021 Key Infrastructure"* illustrates the culinary water distribution system with pipe sizing and key elements.

The model was initially loaded with demands taken from the meter readings from 2018, 2019, 2020, and 2021. This was accomplished by using the addresses of the homes and their associating water usage. The addresses where geo-located and the demands then routed to the nearest hydraulic loading node in the model. Water data across the four years were averaged together based on month and then loaded into the model.

Prior to the geo-locating, like addresses were connected to eliminate the issues resulting from people moving in and out during the four years of collected water data. The model was then run with only the loading data from the historic meter usage, which was compared to data collected by the Providence SCADA system. The Providence SCADA system collects data on key water flows on a daily basis. This data includes how much water is pulled from each source, as well as how much water is moved from tank to tank through the booster pumps. Comparing the model results to the SCADA data, a global correction factor can be used to calibrate the model to match current conditions. The fire flow data collected is then used to calibrate the model in local areas to ensure pressures are being reported as measured. Any new connections were modeled using the Division of Drinking Water Minimum Sizing Standards as described in **Appendix F**. The modeling criteria and values adopted for this study are summarized in **Table 5.1**.

Table 5.1 Modeling Criteria

Criteria	Values or Assumption
Current Residents Average Monthly Demand	Data pulled from water meter readings and geo-located based on address for existing water connections at the end of 2021.
New Water Connections	Flows for new water connections was based on projected ERU's using the Zoning Map and Division of Drinking Water's Minimum Sizing Standards.
Planning Period	Study Period – (Existing = 2021/ Future = 2026, 2031, & 2041)
Recommendations	Key Elements Sized to 2071 conditions
Land Use & Population Projections	2021 Providence City study area – Existing zoning map and 2020 Census Bureau data with growth factor 2041 Providence City study area – Land use according to future land use plan with input from City and population as estimated by growth factor
Input Pipe Characteristics	New Ductile Iron Pipe Roughness Coefficient – 140 New PVC Pipe Roughness Coefficient – 140 Existing Ductile Iron Pipe Roughness Coefficient – 130 Existing PVC Pipe Roughness Coefficient – 130 Existing Cast Iron Pipe Roughness Coefficient – 105 or 100 Diameters according to Existing Maps and Staff Knowledge Velocity = As hydraulically modeled Flow = As hydraulically modeled
Input Pressure Reducing Valve Characteristics	Pressure settings set are current recorded settings as provided by Providence City. Settings then adjusted to reflect pressure tests at fire hydrants
Input Tank Characteristics	As-built data used to provide for tank floor elevations, height, diameter, and overflow conditions.
Input Well and Spring Characteristics	Flow of Wells and Springs limited to current production capacities using flow limiting valve structures. Elevation of sources input using as built elevation conditions.
Input Booster Pumps Characteristics	Control strategies taken from current SCADA operations and flows limited using flow limiting valve structures to math current capabilities of the booster pumps.

The data collected from the fire hydrant testing was compared against the model data at their locations. **Table 5.2** lists the calibration results using the measured static pressures and the modeled static pressures. Generally, the model will produce a higher static pressure which will result in a negative percent difference. This is a result from the model projecting no usage in the system to determine the static pressure, whereas during the fire hydrant testing, the city was active, and residents were using water.

Table 5.2 Model Calibration for the Existing Distribution System

Hydrant ID	Model ID	Static Pressure Measured (psi)	Static Pressure Modeled (psi)	Percent Difference
460	WDNJ_ID_327	138	141.7	-2.6%
267	WDNJ_ID_241	136	136.9	-0.6%
480	WDNJ_ID_549	116	124.8	-7.6%
512	WDNJ_ID_276	112	99.8	10.9%
514	WDNJ_ID_554	102	99.9	2.0%
234	WDNJ_ID_576	118	122.9	-4.1%
449	WDNJ_ID_185	102	106.1	-4.0%
455	WDNJ_ID_173	110	111.8	-1.6%
504	WDNJ_ID_423	52	50.0	3.8%
446	WDNJ_ID_184	86	97.4	-13.3%
444	WDNJ_ID_573	94	93.8	0.2%
115	WDNJ_ID_98	108	108.9	-0.9%
147	WDNJ_ID_553	73	85.4	-17.0%
146	WDNJ_ID_128	88	86.5	1.7%
172	WDNJ_ID_271	108	100.8	6.7%
472	WDNJ_ID_547	90	90.8	-0.8%
151	WDNJ_ID_459	48	49.9	-3.9%
141	WDNJ_ID_575	130	128.0	1.5%
465	WDNJ_ID_288	68	71.7	-5.5%
526	WDNJ_ID_310	172	172.6	-0.3%
494	WDNJ_ID_574	98	93.3	4.8%
382	WDNJ_ID_270	130	130.3	-0.3%
			Average % Difference:	**-1.4%**

Estimated 2026, 2031, and 2041 flows were then accomplished by taking the now calibrated 2021 model and then adding ERU counts to growth areas. The ERU count was taken from the population projects and was then distributed across the City based on current zoning areas and projected growth areas as indicated by the City. As discussed in **Section 4.0**, each ERU is equivalent to 1,091 gpd on an average day and 2,573 gpd on a peak day.

The results of the existing and future models can be found in later in this section. Model results for 2021, 2026, 2031, and 2041 can be seen in **Appendix C**.

5.3 Deficiency Criteria

Culinary water distribution systems have two primary goals typically, delivering water to end users on a continual basis and delivering water to emergency personal for fire protection services. The flows required for these two demands vary dramatically. The ends users typically need low flows, in the range of 20 gpm to 50 gpm. Whereas a fire flow demand can be from 1,000 gpm to 2,500 gpm. However, the accumulation of all the ends users will result in a higher initial demand than a fire flow demand but is quickly dispersed across the city. When evaluating the capacity of a distribution system the two conditions that are evaluated to ensure that the system can meet the water usage demands and the fire flow demands are available pressures at typical daily flows and available fire flows during a fire event.

5.3.1 Pressure Deficiency

Pressure deficiency is determined by evaluating the available pressures throughout the distribution system. State code states that a distribution system is required to provide 40 psi at each service connection under peak day demand conditions (R309-105-9). State code does regulate a maximum pressure. Most communities will try to operate between 45 psi and 95 psi. The criteria for evaluating the pressure deficiency of culinary water distribution system are listed in **Table 5.3**.

Table 5.3 Pressure Deficiency Criteria

Pressure Range (PSI)	Assessment Code	Assumption
> 150	"Dangerous Pressure"	Deficient
120 - 150	"Extreme Pressure"	Non-Deficient
100 - 120	"High Pressure"	Non-Deficient
60 - 100	"Good Pressure	Non-Deficient
40 - 60	"Fair Pressure"	Non-Deficient
< 40	"Poor Pressure"	Deficient

5.3.2 Fire Flow Deficiency

Fire flow deficiencies are determined by the ability of the culinary water distribution system to provide proper fire flows at fire hydrants. Minimum fire flow per International Building Code is 1,000 gpm for homes under 3,600 ft^2 as measured by all space under a roof (multiple levels and garages space). Minimum fire flow per Drinking Water Standards for Providence is 1,500 gpm. Utah Code does state that the pressure at a service connection cannot drop below 20 psi during a fire flow event and peak day flows(R309-105-9). The criteria for evaluating the fire flow deficiency of a culinary water distribution system are listed in **Table 5.4.**

Table 5.4 Fire Flow Deficiency Criteria

Flow Range (gpm)	Assessment Codes	Assumptions
> 2,500	"Excellent Fire Flow"	Non-Deficient
2,000 – 2,500	"Great Fire Flow"	Non-Deficient
1,500 – 2,000	"Good Fire Flow"	Non-Deficient
1,000 – 1,500	"Fair Fire Flow"	Non-Deficient
< 1,000	"Poor Fire Flow"	Deficient

5.4 System Deficiency Assessment

Using the Providence City system model, the existing culinary water distribution network was assessed for deficiencies in both pressure and rate-of-flow during a fire event. This same simulation was run for years 2026, 2031, and 2041. Output from these models is analyzed, and each service node in the system is categorized according to the deficiency criteria described in **Section 5.3**. The number of service nodes in each category are presented for available pressure in **Table 5.5** and for fire-flows in **Table 5.6**. These tables also show how many nodes are deficient under the relevant criteria. As growth continues a general downward shift in pressures and fire flow can be seen. **Exhibit 5.1** *"2021 Existing Conditions – Available Fire Flow"* illustrates the existing conditions in terms of available fire flow and **Exhibit 5.2** *"2021 Existing Conditions – Static Pressure"* provides the existing pressure condition. The following exhibits provide visual representation of the impacts of growth and accompany this evaluation:

- **Exhibit 5.3** *"2026 Projected Growth – Available Fire Flow without Completed Capital Improvement Projects"*
- **Exhibit 5.4** *"2026 Projected Growth – Static Pressure without Completed Capital Improvement Projects"*
- **Exhibit 5.5** *"2031 Projected Growth – Available Fire Flow without Completed Capital Improvement Projects"*
- **Exhibit 5.6** *"2031 Projected Growth – Static Pressure without Completed Capital Improvement Projects"*
- **Exhibit 5.7** *"2041 Projected Growth – Available Fire Flow without Completed Capital Improvement Projects"*
- **Exhibit 5.8** *"2041 Projected Growth – Static Pressure without Completed Capital Improvement Projects"*

Table 5.5 Number of Service Nodes by Pressure Assessment Group

Assessment Code	Assumption	Year 2021	Year 2026	Year 2031	Year 2041	% 2041
"Dangerous Pressure"	Deficient	16	9	9	8	1.5%
"Extreme Pressure"	Non-Deficient	164	107	92	57	10.4%
"High Pressure"	Non-Deficient	145	169	174	177	32.4%
"Good Pressure	Non-Deficient	197	233	243	266	48.7%
"Fair Pressure"	Non-Deficient	21	28	28	36	6.6%
"Poor Pressure"	Deficient	0	1	1	2	0.4%
	Total Deficient	**18**	**10**	**10**	**10**	1.8%
	Total Non-Deficient	**527**	**537**	**537**	**536**	98.2%
	Total	**543**	**547**	**547**	**546**	

Table 5.6 Number of Service Nodes by Fire Flow Assessment Group

Assessment Code	Assumption	Year 2021	Year 2026	Year 2031	Year 2041	% 2041
"Excellent Fire Flow"	Non-Deficient	319	302	290	151	35.4%
"Great Fire Flow"	Non-Deficient	55	42	43	159	37.3%
"Good Fire Flow"	Non-Deficient	22	51	55	42	9.9%
"Fair Fire Flow"	Non-Deficient	22	26	32	64	15.0%
"Poor Fire Flow"	Deficient	4	5	6	10	2.3%
	Total Deficient	**4**	**5**	**6**	**10**	2.3%
	Total Non-Deficient	**418**	**421**	**420**	**416**	97.7%
	Total	**422**	**426**	**426**	**426**	

5.5 System Deficiency Assessment with Capital Improvements

Using the same Providence City system model, the existing culinary water distribution network was evaluated and to determine which pipes could be upsized or which new routes of pipes could be added to help reduce the negative impact the continual growth will have on the capacities of the distribution system. Various distribution improvements were identified to help mitigate the increased water demand. The projects are described in detail in **Section 6**. The projects have been phased into the system as finances allow. Presented in **Table 5.7** and **Table 5.8** are the new values for the service nodes in relation to pressures and fire flows respectively. Overall the distribution system is already performing very well and the projects identified are locations that could benefit from up sized pipe as well as routine service such as service connection replacement. The following exhibits illustrate the benefits of the proposed capital improvement projects described in **Section 6** and accompany this evaluation:

- **Exhibit 5.9** *"2026 Projected Growth – Available Fire Flow with Completed Capital Improvement Projects"*
- **Exhibit 5.10** *"2026 Projected Growth – Static Pressure with Completed Capital Improvement Projects"*
- **Exhibit 5.11** *"2031 Projected Growth – Available Fire Flow with Completed Capital Improvement Projects"*
- **Exhibit 5.12** *"2031 Projected Growth – Static Pressure with Completed Capital Improvement Projects"*
- **Exhibit 5.13** *"2041 Projected Growth – Available Fire Flow with Completed Capital Improvement Projects"*
- **Exhibit 5.14** *"2041 Projected Growth – Static Pressure with Completed Capital Improvement Projects"*

Table 5.7 Number of Service Nodes by Pressure Assessment Group

Assessment Code	Assumption	Year 2021	Year 2026	Year 2031	Year 2041	% 2041
"Dangerous Pressure"	Deficient	16	9	9	10	1.8%
"Extreme Pressure"	Non-Deficient	164	107	96	66	11.8%
"High Pressure"	Non-Deficient	145	171	174	183	32.7%
"Good Pressure	Non-Deficient	197	231	243	264	47.2%
"Fair Pressure"	Non-Deficient	21	28	28	34	6.1%
"Poor Pressure"	Deficient	2	1	1	2	0.4%
Total Deficient		**18**	**10**	**10**	**12**	2.1%
Total Non-Deficient		**527**	**537**	**541**	**547**	97.9%
Total		**545**	**547**	**551**	**559**	

Table 5.8 Number of Service Nodes by Fire Flow Assessment Group

Assessment Code	Assumption	Year 2021	Year 2026	Year 2031	Year 2041	% 2041
"Excellent Fire Flow"	Non-Deficient	319	313	296	186	43.7%
"Great Fire Flow"	Non-Deficient	55	37	47	140	32.9%
"Good Fire Flow"	Non-Deficient	22	45	51	40	9.4%
"Fair Fire Flow"	Non-Deficient	22	27	28	58	13.6%
"Poor Fire Flow"	Deficient	4	4	2	2	0.5%
	Total Deficient	**4**	**4**	**2**	**2**	0.5%
	Total Non-Deficient	**418**	**422**	**422**	**424**	99.5%
	Total	**422**	**426**	**424**	**426**	

6.0 CAPITAL IMPROVEMENTS AND COST ESTIMATES

In the sections that follow, capital improvement projects and their associated cost estimates are discussed. The primary objective for each project is to alleviate existing and future system deficiencies in the Providence City culinary water system as shown in **Exhibits 6.1-6.3** "*Capital Improvement Projects 2021-2026", "Capital Improvement Projects 2026-2031", "Capital Improvement Projects 2031-2041"***.**

Providence City is well served by its current culinary water distribution system, which provides reliable, clean water to its existing population. The capital improvements proposed here are recommended primarily to address population growth which will lead to deficiencies in source, storage, and distribution capacity. Other improvements are recommended as part of general maintenance and upkeep of the system.

Commonly, Culinary Water Master Plans, such as this, provide a set of capital improvement alternatives. Often these will include several approaches to addressing issues in a system, each with different costs and benefits associated. However, due to existing limitations and redundancies built into the Providence system, and the nature of the improvements needed, many of which have no viable alternative, this report presents these Capital Improvement projects without alternative, other than that of taking no action.

If Providence City were to choose the "do-nothing" alternative on these development projects, the City would experience reduced reliability and increasing energy costs in the short term. In the long term, taking no action would result in water shortages or population growth limitations.

Each project has been assigned to one of three time periods for completion based on need and financial allowances:

- Time Period 1: 2021-2026
- Time Period 2: 2026-2031
- Time Period 3: 2031-2041

Each project is also assigned a priority level to represent the priority of the project within its given time-period (1 being low priority and 5 being high priority). Additionally, a magnitude level is assigned to demonstrate how wide-reaching the impact of the improvement is to the city and its residents (1 being localized impact and 5 being city-wide impact).

The total engineer's cost estimate for each time-period is listed below. These values do not include the zone 1 tank project, which can be completed in any time-period:

- Time Period 1 - $ 11,915,600
- Time Period 2 - $ 1,865,000
- Time Period 3 - $ 7,437,000

An essential part of infrastructure investment is early long-term planning in which financial factors are carefully considered. It is, therefore, important to project city needs and costs 20-years into the future, despite the fact that cost estimates for such distant projects are imprecise. Considerable effort has gone into the accuracy of the cost estimates provided in this plan, with the goal of providing estimates that are no more than 25% different from actual costs. While a higher degree of precision would provide obvious benefit, such precision is likely impossible over a 20-year planning period. For this reason, these cost estimates should be re-evaluated on a regular basis to provide a clear financial picture.

Sunrise anticipates that culinary water improvements will be completed using conventional construction techniques. Unit costs for cost estimates were compiled from extensive records of Sunrise project bid tabulations. All costs associated with the estimates are in 2021 dollars. To account for inflation, Providence City should adjust cost estimates according to the cost of living and Heavy Construction Cost Index factors.

As capital improvement projects advance through conceptual and design phases, Providence will work closely with their consultants to develop refined cost estimates with increasing levels of accuracy. By combining this long-term capital improvement plan, with more accurate short-term projected costs, Providence City will be able to maintain a clear outlook of capital expenditures related to the water system, and how such expenditures fit with the financial goals and policies of the city.

It is important to note, that some of the proposed culinary water capital improvement projects may intersect with other capital improvement projects, primarily roads. It is important to review each master plan in preparation for completing a capital improvement project. Specifically, it is recommended that the Transportation Master Plan is referenced prior to the completion of any culinary water project – specifically Figure 35 and its accompanying table in the Transportation Master Plan.

6.1 Time Period #1 [2021-2026]

6.1.1 Project #1 – New Well Development Project

This project is the highest level of priority and will provide city-wide benefit. Current sources are not capable of meeting the peak day demand requirements stipulated by DDW. Additionally, if any current source were lost, the remining sources could not supplement the loss.

This project consists of developing a new well. The project will include locating and drilling a new production well, transferring water rights to the well location, building a new well house, equipping the well, and constructing a transmission line to connect the new source to the existing network.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled *"New Well Development Project"* that can be found within **Appendix D**. The new well development system has an estimated overall cost of $2,866,000.

6.1.2 Project #2 – Redds Tank #2 Roof Restoration

This project is the highest level of priority and is magnitude 4 level impact. If not completed the impact is felt throughout most of the city. This project is necessary because during the last tank inspection it was noticed that the roof to the Redds Tank #2 was showing signs of deterioration which is potentially allowing contamination to leak through the roof.

This project consists of cleaning and installing a bladder protection system on the roof of Redds Tanks #2 (1.0 Mg capacity).

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled *"Redds Tank #2 Roof Restoration"* that can be found within **Appendix D**. The Redds Tank #2 roof restoration has an estimated overall cost of $201,000.

6.1.3 Project #3 – Fire Hydrant Valve Installation Project

This project is second highest level of priority and if not completed the impact is city wide. This project is necessary because fire hydrants without isolation valves present a risk to the main lines in the event of high-pressure water surges from hydrant operation. If fire hydrants are not carefully operated, they can create large pressure waves in the system that can rupture pipes. The isolation valves help prevent large damage.

This project consists of installing two inline valves on two hydrants located near the mouth of Providence Canyon that do not have isolation valves.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled *"Fire Hydrant Valve Installation Project"* that can be found within **Appendix D**. The fire hydrant valve installation project has an estimated overall cost of $25,000.

6.1.4 Project #4 – Stonehenge Service Replacement Project

This project is second highest level of priority and is magnitude 4 level impact. This project is necessary because the services are galvanized steel and are corroding resulting in lost water, lower service pressures, and contamination risks.

This project consists of Replacing Services along Stonehenge from Foxridge Dr to Sherwood Ave.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Stonehenge Service Replacement Project*" that can be found within **Appendix D**. The Stonehenge service replacement project has an estimated overall cost of $333,000.

6.1.5 Project #5 – Alder Well Upgrade Project

This project is second highest level of priority and mid-level impact. This project is necessary because over the past decade or more the Alder well has decreased in flow capabilities. This can be due to impeller damage, casing damage, closure of water bearing formations, mineral build up on well perforations, or additional items. This project will evaluate the well and replace and or clean the failing parts.

This project consists of performing pumping tests on Alder Well and developing the well if necessary. Evaluating well components (pump, motor, casing, etc.) and replacing as needed.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Alders Well Upgrade Project"* that can be found within **Appendix D**. The Alders well upgrade project has an estimated overall cost of $161,000.

6.1.6 Project #6 – Von's Way Water Main Replacement Project

This project is second highest level of priority and mid-level impact. This project is necessary because the pipes are undersized, made from corroding cast iron, and the services are made from corroding galvanized steel. This is resulting in lost water, lower service pressures, lower fire flows and contamination risks.

This project consists of replacing main lines and services along Vons Way, 500 East between Vons Way and Center Street, Satsuma Rd between Vons Way and Center Street, and Sarah Street between Vons Way and Center Street. New pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Von's Way Water Main Replacement Project"* that can be found within **Appendix D**. The Von's Way water main replacement project has an estimated overall cost of $614,000.

6.1.7 Project #7 – Water Meter System Upgrade Project

This project is mid-level priority and if not completed the impact is city wide. This project is necessary because the current meters are approaching the end of their life and need to be replaced soon. The new meters will be equipped with cellular capabilities which can save money and increase leak detection capabilities.

This project consists of replacing the existing culinary water meters with new meters capable of cellular reading.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Water Meter System Upgrade Project"* that can be found within **Appendix D**. The water meter system upgrade project has an estimated overall cost of $7,174,000.

6.1.8 Project #8 – Von's Park Water Main Replacement Project

Project Need: This project is mid-level priority and level four impact magnitude. This project is necessary because the current pipeline is a main transmission line in the filling of Dew Tank from lower sources as well as it is a main transmission line for fire flow events on the north side within Zone 2.

Project Description: This project consists of replacing main lines through Von Baer Park and services from 200 South to Center Street. New pipe will be 10" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Von's Park Water Main Replacement Project*" that can be found within **Appendix D**. The Von's Park water main replacement project has an estimated overall cost of $362,000.

6.1.9 Project #9 – 100 South Water Main Replacement Project

This project is second lowest priority and has a small residential impact. This project is necessary because this line is extremely shallow and small. This is resulting in low fire flows and freezing risks.

This project does intersect with a roads capital improvement project planned along 100 South between 300 East and 200 West and is planned to occur between 2025 and 2030.

This project consists of replacing main lines and services along 100 South between 200 East and 300 East. New pipe will be 8" PVC or Ductile Iron

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*100 South Water Main Replacement Project*" that can be found within **Appendix D**. The 100 south water main replacement project has an estimated overall cost of $179,600.

6.1.10 Project #10 – Zone 1 Tank Project

This project has a city-wide impact but can be completed in any time period but will have variable priority from least in period 1 to highest in period 3. This project is necessary because as projected by the city's growth rate, a new tank will be needed to properly serve the residents. This tank should be located in Zone 1 to prevent excessive pumping. To prevent excessive pumping, the tank should be built within the first time period. However, the city can wait until time period 3 to build the tank if high pumping costs are acceptable until the tank is complete.

This project consists of building a new 1.0 MG (minimum) tank to service Tank Zone #1

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Zone 1 Tank Project*" that can be found within **Appendix D**. The zone 1 tank project has an estimated overall cost of $2,465,000.

6.2 Time Period #2 [2026-2031]

6.2.1 Project #11 - Canyon PRV Upgrade and Rebuild Project

This project is highest priority and has a city-wide impact. This project is necessary because the Canyon PRV is a primary PRV and experiences a lot of wear from high flows and high pressures. The vault is old and in need of servicing. The PRV may need to be relocated closer to town.

This project consists of rebuilding the PRV Station in Providence Canyon, replace entire station if necessary.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Canyon PRV Upgrade and Rebuild Project*" that can be found within **Appendix D**. The canyon PRV upgrade and rebuild project has an estimated overall cost of $191,000.

6.2.2 Project #12 – Dales Well Upgrade Project

This project is highest priority and has a city-wide impact. This project is necessary because over the past decade or more the Dales Well has decreased in flow capabilities. This can be due to impeller damage, casing damage, closure of water bearing formations, mineral build up on well perforations, or additional items. This project will evaluate the well and replace and or clean the failing parts.

This project consists of performing pumping tests on Dales Well and developing the well if necessary. Evaluating the well components (pump, motor, casing, etc.) and replacing as needed.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Dales Well Upgrade Project*" that can be found within **Appendix D**. The Dales well upgrade project has an estimated overall cost of $291,000.

6.2.3 Project #13 – Edgewood Water Main Replacement Project

This project is second highest priority and has a minimal residential impact. This project is necessary because the current pipe is transite pipe with galvanized steel services. This section is leaking and is a high-risk area for failures. This is resulting in lost water, lower service pressures, and contamination risks.

This project consists of replacing main lines and services along Edgewood Dr between Edgewood Place and Sego Lilly Lane along with the circle along Edgewood Dr. New pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Edgewood Water Main Replacement Project*" that can be found within **Appendix D**. The Edgewood water main replacement project has an estimated overall cost of $592,000.

6.2.4 Project #14 – 400 East Water Main Replacement Project

This project is second highest priority and has a minimal residential impact. This project is necessary because the current pipes are undersized and made from cast iron that is corroding heavily. This section is experiencing leaks and the services are galvanized steel. This is resulting in lost water, lower service pressures, lower fire flows and contamination risks.

This project does intersect with a roads capital improvement project planned along 400 East between Center Street and 200 North and is planned to occur between 2025 and 2030.

This project consists of replacing main lines and services along 400 East between 100 North and 300 North. The new pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*400 East Water Main Replacement Project*" that can be found within **Appendix D**. The 400 East water main replacement project has an estimated overall cost of $314,000.

6.2.5 Project #15 – Cottonwood Water Main Replacement Project

This project is mid-level priority and has a minimal residential impact. This project is necessary because the current pipes are undersized and made from cast iron which is corroding heavily. This section is experiencing leaks and the services are galvanized steel. This is resulting in lost water, lower service pressures, lower fire flows and contamination risks.

This project consists of replacing main lines and services along 75 West between 500 South and 580 South, 540 South between 75 West and 200 West, 580 South between 75 West and 200 West. New pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Cottonwood Water Main Replacement Project*" that can be found within **Appendix D**. The Cottonwood water main replacement project has an estimated overall cost of $477,000.

6.3 Time Period #3 [2031-2041]

6.3.1 Project # 16 – Jays Well Upgrade Project

This project is highest priority and has a city-wide impact. This project is necessary because over the past decade or more the Jays Well has decreased in flow capabilities. This can be due to impeller damage, casing damage, closure of water bearing formations, mineral build up on well perforations, or additional items. This project will evaluate the well and replace and or clean the failing parts.

This project consists of performing pumping tests on Jays Well and developing a well if necessary. Evaluating well components (pump, motor, casing, etc.) and replacing as needed.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Jays Well Upgrade Project"* that can be found within **Appendix D**. The Jays well upgrade project has an estimated overall cost of $291,000.

6.3.2 Project #17 – 200 West Water Main Replacement Project

This project is the highest level of priority and is magnitude 4 level impact. If not completed the impact is felt throughout most of the city. This project is necessary because the current pipes are undersized and made from cast iron which is corroding heavily. This section is experiencing leaks and the services are galvanized steel. This is resulting in lost water, lower service pressures, lower fire flows and contamination risks.

This project does intersect with several road capital improvement projects planned along 200 West. The intersections of 100 North and 200 West, 100 South and 200 West, 300 South and 200 West, and 500 South and 200 West are all planned for re-development and are scheduled for completion throughout the next 40 years.

This project consists of replacing main lines and services along 200 West between 100 North and 500 South. New pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*200 West Water Main Replacement Project"* that can be found within **Appendix D**. The 200 West water main replacement project has an estimated overall cost of $902,000.

6.3.3 Project #18 – Intercity PRV Upgrade and Rebuild Project

This project is the second highest level priority and the second lowest impact magnitude. This project is necessary because these 6 PRVs are the oldest PRVs and experience a lot of wear from large pressure drops. The valves are old with various repair kits in place. Each PRV needs to be torn apart and rebuilt with new valves and SCADA connections.

This project consists of rebuilding the 6 PRV Stations throughout the City, replace entire station if necessary.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Intercity PRV Upgrade and Rebuild Project"* that can be found within **Appendix D**. The intercity PRV upgrade and rebuild project has an estimated overall cost of $944,000.

6.3.4 Project #19 – 300 West Hot Soils Project

This project is the second highest level priority and has a small residential impact. This project is necessary because this area of town has very corrosive soils that are destroying the fittings and services. The pipe itself appears to be in good condition and may not need to be replaced.

This project consists of replacing the fittings and services as need along 300 West between 100 North and 200 North, along 150 North, and along 200 North from 300 West to Bluff Street.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*300 West Hot Soils Project"* that can be found within **Appendix D**. The 300 West hot soils project has an estimated overall cost of $648,000.

6.3.5 Project #20 – 100 North Water Main Replacement Project

This project is mid-level priority and second highest impact magnitude. This project is necessary because the current pipes are undersized and made from cast iron which is corroding heavily. This section is experiencing leaks and the services are galvanized steel. This is resulting in lost water, lower service pressures, lower fire flows and contamination risks

This project does intersect with several road capital improvement projects planned along 100 North. The intersections of Gateway Dr. and 100 North, 200 West and 100 North, 100 West and 100 North, 100 East and 100 North, and 300 East and 100 North are all planned for re-development and are scheduled for completion throughout the next 40 years.

This project consists of replacing the main lines and services along 100 North between 200 West and 400 East. The new pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "100 North Water Main Replacement Project" that can be found within **Appendix D**. The 100 North water main project has an estimated overall cost of $990,000.

6.3.6 Project #21 – Deer Fence/ Zone 4 Mainline Project

This project is second lowest priority and has a city-wide impact magnitude. This project is necessary because this line will bring higher pressure water to the north to help support lower zones in fire events and other emergency situations. This pipe would also help supply the Dew Tank. Additionally, this pipeline would support development of the zone 4 pressure area.

The Transportation Master Plan does identify that the Canyon Road is scheduled to be upgraded in 2030 to 2050. Like wish the Transportation Master Plan identifies a new road connecting Canyon Road to Sherwood Ave. in 2050. Both of these roads are in line with the proposed Dear Fence / Zone 4 Mainline Project. It is recommended that the culinary water be installed along with the road along these corridors to help save on costs and to help reduce impact to the public.

This project consists of installing a new main line that extends from the high-pressure side of the Canyon PRV Station to the north side of the new Dew Tank. New pipe will be 12" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Deer Fence/Zone 4 Mainline Project*" that can be found within **Appendix D**. The deer fence/zone 4 mainline project has an estimated overall cost of $1,944,000.

6.3.7 Project #22 – Zone 3 Looping Project

This project is second lowest priority and has a mid-level city impact magnitude. This project is necessary because there are some areas within zone 3 that cannot produce the desired fire flows. This project is to help increase the available fire flow within zone 3.

This project consists of provide key looping in Pressure Zone 3 for fire flow and redundancy. Connect 900 East to the end of Shoreline Drive. Connect Sherwood Dr to Spring Creek Parkway. Connect 850 East to Eagle View Dr. Connect Deer Fence Line to Eagle View Dr. The new pipe will be 8" PVC or Ductile Iron.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Zone 3 Looping Project*" that can be found within **Appendix D**. The zone 3 looping project has an estimated overall cost of $837,000.

6.3.8 Project #23 – City Well Drain Line Installation Project

This project is second lowest priority and has a mid-level city impact magnitude. This project is necessary because presently the wells are discharged into the local irrigation systems. During winter use, this discharge can be damaging to the irrigation systems. This new pipe will convey the water out of town without the usage of the local irrigation systems.

This project does intersect with several road capital improvement projects planned along 200 West. The road ways along 100 South, 200 South, and 300 South are all planned for re-development. 100 South will be done in 2025 to 2030, 200 South will be done in 2025 to 2030 and 300 South will be done in 2030 to 2050.

This project consists of installing a pump to waste/ storm water drain from Dale's Well and Jay's Well to the existing line along 100 South.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*City Well Drain Line Installation Project*" that can be found within **Appendix D**. The city well drain line installation project has an estimated overall cost of $744,000.

6.3.9 Project #24 – Water Master Plan

This project is highest priority and has a city-wide impact. This project is necessary to address growth, new rules, change in watering practices and other items that can impact the health and operation of the city water system.

This project consists of updating the current water plan with new population data, water demand data, connection data, ERU counts, operational changes, to better plan for the future.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Costs (EOPC) entitled "*Water Master Plan*" that can be found within **Appendix D**. The water master plan has an estimated overall cost of $137,000.

7.0 USER RATE AND IMPACT FEE ANALYSIS

This section discusses the process of determining impact fees and user rates for the culinary water system. Impact fees are to be used to pay for improvements to the system that are necessary for new development. It is recommended that an impact fee be charged on all new connections at the time of plat approval to help with necessary capital improvements that Providence will be taking on. Three sub-planning periods, within the 20-year planning period, were considered individually to determine the impact fee.

7.1 Impact Fee Analysis

This section discusses the method of implementing an impact fee and what the impact fee can cover. The impact fee in this analysis is based on the portion of a project that is available for new ERUs. While this section calculates the maximum impact fee, Providence City may charge an amount equal to or less than the maximum.

7.1.1 Impact Fee Eligibility

An impact fee can only cover the cost of system improvements that are necessary for future growth and new development. Impact fee funds cannot be used to fix current system deficiencies. Improvements from the three periods were reviewed to determine which portions of these projects are for future growth and therefore impact fee eligible.

Each period is eligible for a different impact fee amount due to the variety of projects within each period. Period 1 has an estimated cost of $ 11,915,600 and 19% of which is impact fee eligible. Period 2 has an estimated cost of $ 1,865,000 and 39% of which is impact fee eligible. Period 3 has an estimated cost of $ 7,437,000 and 52% of which is impact fee eligible. The total impact fee eligibility costs are listed below:

- Period 1, 2021-2026 - $ 4,727,224
- Period 2, 2026-2031 - $ 3,592,530
- Period 3, 2031-2041 - $ 6,712,420

The grand total for these improvements is $23,682,600. The zone 1 tank project can be completed at any point in the 20-year planning period and is included in the grand total. The improvements were based on the 20-year planning period and will be assessed to new growth in Providence City over the next 20 years. **Table 7.1, Table 7.2,** and **Table 7.3** detail the maximum impact fee breakdown for each time project within each period and the corresponding period totals.

Table 7.1 Impact Fee Analysis Summary for Period 1

Project	Engineer's Cost Estimate	Share of Future Development	Impact Fee Eligible Cost	Impact Fee per ERU
New Well Development Project	$2,866,000	52%	$1,490,320	$3,831.16
Redds Tank #2 Roof Restoration	$201,000	0%	$0	$0.00
Fire Hydrant Valve Installation Project	$25,000	0%	$0	$0.00
Stonehenge Service Replacement Project	$333,000	36%	$119,880	$308.17
Alder Well Upgrade Project	$161,000	52%	$83,720	$215.22
Von Way Meter & Main Replacement Project	$614,000	57%	$349,980	$899.69
Water Meter System Upgrade Project	$7,174,000	0%	$0	$0.00
Von Park Water Main Replacement Project	$362,000	36%	$130,320	$335.01
100 South Water Main Replacement	$179,600	49%	$88,004	$226.23
Total	**$11,915,600**	**33%**	**$2,262,224**	**$5,815.49**

* Based on projected development of 389 new ERUs during 2021-2026

Table 7.2 Impact Fee Analysis Summary for Period 2

Project	Engineers Cost Estimate	Future Development Share	Impact Fee Eligible Cost	Impact Fee per ERU
Canyon PRV Upgrade Project	$191,000	0%	$0	$0.00
Dales Well Upgrade Project	$291,000	70%	$203,700	$464.01
Edgewood Water Main Replacement Project	$592,000	44%	$260,480	$593.35
400 East Water Main Replacement	$314,000	0%	$0	$0.00
Cottonwood Water Main Replacement Project	$477,000	55%	$262,350	$597.61
Total	**$1,865,000**	**39%**	**$726,530**	**$1,654.97**

* Based on projected development of 439 new ERUs during 2026-2031

Table 7.3 Impact Fee Analysis Summary for Period 3

Project	Engineers Cost Estimate	Future Development Share	Impact Fee Eligible Cost	Impact Fee per ERU
Jay's Well Upgrade Project	$291,000	84%	$244,440	$230.82
200 West Water Main Replacement Project	$902,000	44%	$396,880	$374.77
Intercity PRV Upgrade Project	$944,000	0%	$0	$0.00
300 West Hot Soils Project	$648,000	0%	$0	$0.00
100 North Water Main Replacement Project	$990,000	29%	$287,100	$271.10
Deer Fence/Zone 4 Mainline Project	$1,944,000	100%	$1,944,000	$1,835.69
Zone 3 Looping Project	$837,000	100%	$837,000	$790.37
City Well Drain Line Installation Project	$744,000	0%	$0	$0.00
Water Master Plan	$137,000	100%	$137,000	$129.37
Total	**$7,437,000**	**52%**	**$3,846,420**	**$3,632.12**

* Based on projected development of 1,059 new ERUs during 2031-2041

7.1.2 Impact Fee Assessment Method

The Providence City impact fee is assessed based on the share of a project that is available for future development and the number of equivalent residential units (ERU) that a connection is equal to. An impact fee also relies upon the estimated new ERUs. New ERUs are determined by the difference between the total projected ERUs for a given time period and the total current ERUs. See **Section 2.2** for further information about projected growth.

If a project increases the capacity of water supply beyond the current demand, it becomes eligible for an impact fee. The future development share is represented as a percentage and varies with each project. See **Tables 7.1, 7.2, and 7.3** for future development share breakdown for each project.

7.1.3 Impact Fee Calculation

To compute the impact fee, the projected ERUs for each planning period are estimated. Based on the ERU projections, it is estimated there will be an additional 389 ERUs in period 1 [2021-2026], 439 ERUs in period 2 [2026-2031], and 1,059 ERUs in period 3 [2031-2041].

The impact fee was calculated by first determining the future development share by the assessment method discussed in **Section 7.1.2**. Once the future development share is calculated as a percentage, the share is then applied to the estimated cost of the project to determine the impact fee eligibility cost. The impact fee for residential users is calculated by dividing the impact fee eligibility cost by the new ERUs within the given period. The following list contains the calculated residential user maximum impact fee for each period:

- Period 1, 2021-2026 - $ 5,815
- Period 2, 2026-2031 - $ 1,655
- Period 3, 2031-2041 - $ 3,632

While Providence City is free to charge less than the maximums listed above, but it is recommended that the impact fees collected are sufficient to cover the needs of the culinary water system.

7.1.4 Impact Fee adjustment for Zone 1 Tank Project

The Zone 1 Tank Project is 100% impact fee eligible for the entire 20-year period. A separate analysis was used to calculate the impact fee because construction can be completed in any period. Period one represents 21% of the new ERU growth within the 20-year period. Period two represents 23% of the new ERU growth within the 20-year period. Period three represents 56% of the new ERU growth within the 20-year period. Each period has a different impact fee eligibility cost. The impact fee, in each period, for the zone 1 tank project is $1,306. **Table 7.4** show the impact fee analysis for the zone 1 tank project.

Table 7.4 Zone 1 Tank Project Impact Fee by Time Period

Time Period	Cost of Project	New ERU growth	% New ERU Growth	Impact Fee Eligible Cost	Impact Fee
1	$2,465,000	389	21%	$508,153	$1,306.31
2	$2,465,000	439	23%	$573,468	$1,306.31
3	$2,465,000	1059	56%	$1,383,378	$1,306.31
Total	**$2,465,000**	**1887**	**100%**	**$2,465,000**	**$1,306.31**

The adjusted impact fee consists of the zone 1 tank project added to the impact fee calculated in **Section 7.1.3**. The total adjusted impact fees for each period are listed below:

- Period 1, 2021-2026 - $ 7,122
- Period 2, 2026-2031 - $ 2,961
- Period 3, 2031-2041 - $ 4,938

The impact fee adjusted total summary for each period is detailed in **Table 7.5:**

Table 7.5 Summary of Adjusted Impact Fee

Time Period	Period Specific CIP Impact Fee	Zone 1 Tank Impact Fee	Total Recommended Impact Fee
1	$5,815	$1,306	$7,121.79
2	$1,655	$1,306	$2,961.27
3	$3,632	$1,306	$4,938.43

7.1.5 Impact Fee Related Items

City staff should be made aware that, in conformance with Utah Code 11-36a-602, impact fees can generally only be expended for a system improvement that is identified in the Impact Fee Facilities Plan and that is for the specific public facility type for which the fee was collected (i.e. transportation impact fees cannot be used for water or sewer projects). Also, impact fees in Utah must be expended or encumbered for a permissible use within six years of their receipt unless 11-36a-602(2)(b) applies.

City staff should also ensure that proper accounting of the Impact Fees occurs (track each fee in and out). See Utah Code 11-36a-601, provided in **Appendix H**.

7.2 Impact Fee Structures

This section discusses the three structures for assessing the culinary water impact fees. The three impact fee structures considered in the analysis were:

1. Water service,
2. Equivalent residential unit (ERU), and
3. Water service capacity.

7.2.1 Impact Fee – Water Service Diameter

A water service diameter method is based on the diameter of their water service connection. The water service connection, also known as a meter connection, is a linear method. The base impact fee is for a 1-inch water service. For water service connections greater than 1-inch, the base impact fee is multiplied by the water service diameter to get the impact fee for that connection size. For example, a user with a 4-inch water service connection would pay four times the base rate for their water impact fee. For each period the following list states the 4" water service diameter total price:

- Period 1, 2021-2026 - $ 28,487
- Period 2, 2026-2031 - $ 11,845
- Period 3, 2031-2041 - $ 19,753

Table 7.6, **Table 7.7**, and **Table 7.8** show the cost breakdown and totals for each period as the water service diameters increases. These tables also include the cost of each project and the corresponding service diameter fee.

Table 7.6 Impact Fee Analysis by Water Service Diameter for Period 1

Water Service Diameter	1"	1 ½"	2"	3"	4"	6"
Multiplication Factor	1	1.5	2	3	4	6
Project	Impact Fee					
New Well Development Project	$3,831.16	$5,746.74	$7,662.31	$11,493.47	$15,324.63	$22,986.94
Redds Tank #2 Roof Restoration	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Fire Hydrant Valve Installation Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Stonehenge Service Replacement Project	$308.17	$462.26	$616.35	$924.52	$1,232.70	$1,849.05
Alder Well Upgrade Project	$215.22	$322.83	$430.44	$645.66	$860.87	$1,291.31
Von Way Meter & **Main Replacement Project**	$899.69	$1,349.54	$1,799.38	$2,699.07	$3,598.77	$5,398.15
Water Meter System Upgrade Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Von Park Water Main Replacement Project	$335.01	$502.52	$670.03	$1,005.04	$1,340.05	$2,010.08
100 South Water Main Replacement	$226.23	$339.35	$452.46	$678.69	$904.93	$1,357.39
Zone 1 Tank Project	$1,306.31	$1,959.46	$2,612.61	$3,918.92	$5,225.23	$7,837.84
Total	**$7,121.79**	**$10,682.69**	**$14,243.58**	**$21,365.38**	**$28,487.17**	**$42,730.75**

Table 7.7 Impact Fee Analysis by Water Service Diameter for Period 2

Water Service Diameter	1"	1 ½"	2"	3"	4"	6"
Multiplication Factor	1	1.5	2	3	4	6
Project	Impact Fee					
Zone 1 Tank Project	$1,306.31	$1,959.46	$2,612.61	$3,918.92	$5,225.23	$7,837.84
Canyon PRV Upgrade Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Dales Well Upgrade Project	$464.01	$696.01	$928.02	$1,392.03	$1,856.04	$2,784.05
Edgewood Water Main **Replacement Project**	$593.35	$890.02	$1,186.70	$1,780.05	$2,373.39	$3,560.09
400 E**ast Water Main Replacement**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Cottonwood Water **Main Replacement Project**	$597.61	$896.41	$1,195.22	$1,792.82	$2,390.43	$3,585.65
Total	**$2,961.27**	**$4,441.91**	**$5,922.54**	**$8,883.82**	**$11,845.09**	**$17,767.63**

Table 7.8 Impact Fee Analysis by Water Service Diameter for Period 3

Water Service Diameter	1"	1 ½"	2"	3"	4"	6"
Multiplication Factor	1	1.5	2	3	4	6
Project	**Impact Fee**					
Zone 1 Tank Project	$1,306.31	$1,959.46	$2,612.61	$3,918.92	$5,225.23	$7,837.84
Jay's Well **Upgrade Project**	$230.82	$346.23	$461.64	$692.46	$923.29	$1,384.93
200 West Water Main Replacement Project	$374.77	$562.15	$749.54	$1,124.31	$1,499.07	$2,248.61
Intercity PRV Upgrade Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
300 West Hot Soils Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
100 North Water Main Replacement Project	$271.10	$406.66	$542.21	$813.31	$1,084.42	$1,626.63
Deer Fence/Zone 4 Mainline Project	$1,835.69	$2,753.54	$3,671.39	$5,507.08	$7,342.78	$11,014.16
Zone 3 Looping Project	$790.37	$1,185.55	$1,580.74	$2,371.10	$3,161.47	$4,742.21
City Well Drain Line Installation Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Water Master Plan	$129.37	$194.05	$258.73	$388.10	$517.47	$776.20
Total	**$4,938.43**	**$7,407.65**	**$9,876.86**	**$14,815.29**	**$19,753.72**	**$29,630.59**

7.2.2 Impact Fee – Equivalent Residential Unit (ERU)

An ERU based impact fee is charged by the total number of ERUs for a given connection. All residential connections and individual units in multi-family areas would be counted as one ERU. All commercial connections and high usage residential connections would be assigned ERUs based on winter water metered flow rates. For commercial users with high flows, it is recommended that this assigned ERU value be reassessed on an annual basis. For other commercial users, it is recommended that this ERU value be reassessed every three years.

7.2.3 Impact Fee – Water Service Capacity

A water service capacity method is applied similarly to the water service diameter method. The base impact fee is for a 1-inch water service. For water service connections greater than 1-inch, the base impact fee is multiplied by the potential flow that can pass through the larger water service area compared to the 1-inch water service. Since the base residential water service is 1-inch in diameter, this impact fee factor for larger water services is equal to the water service diameter squared. For example, a user with a 4-inch water service connection would pay sixteen times the base rate for their water impact fee. For each period the following list states the 4" water service capacity total price:

- Period 1, 2021-2026 - $ 113,949
- Period 2, 2026-2031 - $ 47,380
- Period 3, 2031-2041 - $ 79,015

This impact fee charges users based on their potential for their flow potential rather than actual flows. A larger service size means that a user could potentially use water at a higher rate and thus have higher flows, but this does not account for users with oversized water service lines. **Table 7.9**, **Table 7.10**, and **Table 7.11** represent the cost breakdown during each period as the inflow rate increases.

Table 7.9 Impact Fee Analysis by Water Service Capacity for Period 1

Water Service Diameter	**1"**	**1 ½"**	**2"**	**3"**	**4"**	**6"**
Multiplication Factor	**1**	**2.25**	**4**	**9**	**16**	**36**
Project	**Impact Fee**					
Zone 1 Tank Project	$3,831.16	$8,620.10	$15,324.63	$34,480.41	$61,298.51	$137,921.65
Jay's Well Upgrade Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
200 West Water Main Replacement Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Intercity PRV Upgrade Project	$308.17	$693.39	$1,232.70	$2,773.57	$4,930.80	$11,094.29
300 West Hot Soils Project	$215.22	$484.24	$860.87	$1,936.97	$3,443.50	$7,747.87
100 North Water Main Replacement Project	$899.69	$2,024.31	$3,598.77	$8,097.22	$14,395.06	$32,388.89
Deer Fence/Zone 4 Mainline Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Zone 3 Looping Project	$335.01	$753.78	$1,340.05	$3,015.12	$5,360.21	$12,060.46
City Well Drain Line Installation Project	$226.23	$509.02	$904.93	$2,036.08	$3,619.70	$8,144.33
Water Master Plan	$1,306.31	$2,939.19	$5,225.23	$11,756.76	$20,900.90	$47,027.03
Total	**$7,121.79**	**$16,024.03**	**$28,487.17**	**$64,096.13**	**$113,948.67**	**$256,384.52**

Table 7.10 Impact Fee Analysis by Water Service Capacity for Period 2

Water Service Diameter	1"	1 ½"	2"	3"	4"	6"
Multiplication Factor	**1**	**2.25**	**4**	**9**	**16**	**36**
Project	Impact Fee					
Zone 1 Tank Project	$1,306.31	$2,939.19	$5,225.23	$11,756.76	$20,900.90	$47,027.03
Jay's Well Upgrade Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
200 West Water Main Replacement Project	$464.01	$1,044.02	$1,856.04	$4,176.08	$7,424.15	$16,704.33
Intercity PRV Upgrade Project	$593.35	$1,335.03	$2,373.39	$5,340.14	$9,493.58	$21,360.55
300 **West Hot Soils Project**	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
100 North Water Main Replacement Project	$597.61	$1,344.62	$2,390.43	$5,378.47	$9,561.73	$21,513.90
Total	**$2,961.27**	**$6,662.86**	**$11,845.09**	**$26,651.45**	**$47,380.35**	**$106,605.80**

Table 7.11 Impact Fee Analysis by Water Service Capacity for Period 3

Water Service Diameter	1"	1 ½"	2"	3"	4"	6"
Multiplication Factor	**1**	**2.25**	**4**	**9**	**16**	**36**
Project	Impact Fee					
Zone 1 Tank Project	$1,306.31	$2,939.19	$5,225.23	$11,756.76	$20,900.90	$47,027.03
Jay's Well Upgrade Project	$230.82	$519.35	$923.29	$2,077.39	$3,693.14	$8,309.58
200 West Water Main Replacement Project	$374.77	$843.23	$1,499.07	$3,372.92	$5,996.30	$13,491.67
Intercity PRV Upgrade Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
300 West Hot Soils Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
100 North Water Main Replacement Project	$271.10	$609.99	$1,084.42	$2,439.94	$4,337.68	$9,759.77
Deer Fence/Zone 4 Mainline Project	$1,835.69	$4,130.31	$7,342.78	$16,521.25	$29,371.10	$66,084.99
Zone 3 Looping Project	$790.37	$1,778.33	$3,161.47	$7,113.31	$12,645.89	$28,453.26
City Well Drain Line Installation Project	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Water Master Plan	$129.37	$291.08	$517.47	$1,164.31	$2,069.88	$4,657.22
Total	**$4,938.43**	**$11,111.47**	**$19,753.72**	**$44,445.88**	**$79,014.90**	**$177,783.51**

7.2.4 Recommended Impact Fee Structure

Sunrise recommends for the City to implement the equivalent residential unit (ERU) based impact fee structure. The current method of assessing impact fees by the water service diameter does not account for flow. This means that connections with higher flows like commercial users with high water usage are paying significantly less per gallon than residential connections. The ERU method addresses this by charging users based on their impact to the system. Connections with higher culinary water flows would be charged for their higher flows.

7.3 User Rate Analysis

Currently Providence City utilizes a tiered user rate structure. Provided in **Table 7.12** is a summary of the current user rates and provided in **Table 7.13** is a summary of connection fees.

Table 7.12 Summary User Rates

1” Service Connection User Rates					
	Base Rate	**1st Excess Tier**	**2nd Excess Tier**	**3rd Excess Tier**	**4th Excess Tier**
Rate	$21.00	$0.85/1000 gallons	$1.50/1000 gallons	$1.75/1000 gallons	$2.00/1000 gallons
Quantity	10,000 gallons	10,001-50,000 gallons	50,001 - 100,000 gallons	100,001 - 200,000 gallons	200,001 gallons and up

1 1/2” Service Connection User Rates					
	Base Rate	**1st Excess Tier**	**2nd Excess Tier**	**3rd Excess Tier**	**4th Excess Tier**
Rate	$47.31	$0.85/1000 gallons	$1.50/1000 gallons	$1.75/1000 gallons	$2.00/1000 gallons
Quantity	20,000 gallons	20,001-60,000 gallons	60,001 - 110,000 gallons	110,001 - 210,000 gallons	210,001 gallons and up

2” Service Connection User Rates					
	Base Rate	**1st Excess Tier**	**2nd Excess Tier**	**3rd Excess Tier**	**4th Excess Tier**
Rate	$81.00	$0.85/1000 gallons	$1.50/1000 gallons	$1.75/1000 gallons	$2.00/1000 gallons
Quantity	40,000 gallons	40,001-80,000 gallons	80,001 - 130,000 gallons	130,001 - 230,000 gallons	230,001 gallons and up

4” Service Connection User Rates					
	Base Rate	**1st Excess Tier**	**2nd Excess Tier**	**3rd Excess Tier**	**4th Excess Tier**
Rate	$312.00	$0.85/1000 gallons	$1.50/1000 gallons	$1.75/1000 gallons	$2.00/1000 gallons
Quantity	100,000 gallons	100,001- 140,000 gallons	140,001 - 190,000 gallons	190,001 - 290,000 gallons	290,001 gallons and up

Table 7.13 Summary of Current Connection Fees and Impact Fees

Connection Size	Connection Fee	Impact Fee
1" Connection	$500.90	$2,500.00
1 1/2" Connection	$1,457.50	$2,500.00
2" Connection	$1,531.34	$2,500.00
4" Connection	$2,628.39	$2,500.00

To evaluate the current user rate and the potential need to raise it, a Cash Flow Analysis was performed. A Cash Flow Analysis compares projected income against projected expenses on a yearly basis for the planning period to determine if a selected route is economically feasible. The current Cash Flow Analysis includes the current base rates for water as provided in **Table 7.12** and the current Connection Fee and Impact Fee provided in **Table 7.13.**

Typically, it is not recommended to account for income that results from sales of water beyond the base volumes as this revenue is not a guaranteed revenue source. The sales of excess water is impacted by climate and behavior and is difficult to project. Over the past four years, almost 40% of water sales have come from the sale of water beyond the base volumes. On average, each connection spends $235.00 a year on the purchase of water beyond their base volumes primarily all during the summer months. Even during a characteristically wet year, 2019, residents still spent approximately $203.00 during the year for additional water (on a per connection average). Given this historic evidence, in projecting the water sales revenue, a $200.00 per connection purchase of additional water on an annual basis will be included.

The Cash Flow Analysis for the current scenario can be found in **Appendix G**. The current cash flow does indicate that if Providence City does not plan on performing any capital improvement projects there is no need to raise the user rates, connection fees, or impact fees. This option is referred to as the "Do Nothing" Alternative. The projected net account balances at the end of 2041 are as follows for this alternative:

- Impact Fee Account: $2,896,000
- General Water Fund: $14,638,000
- Total Water Funds: $17,534,000
    - This does not include any significant upgrade or improvement.

The second scenario, Alternative #1, includes the capital improvement projects as described in **Section 6**, the proposed impact fees as provided in **Table 7.5**, however it does not include impact fee increases due to service connection size, or updated connection fees, or updated user rates. The capital improvement projects have been divided up cost wise across their indicated years evenly and then an inflation rate has been added to help account for labor and material increases needed to complete the projects. Typically, an inflation rate of 3% is used, however, considering recent increases, a 4% inflation rate will be used.

Alternative #1 also includes the Zone 1 Tank being built in the first time period (2021 to 2026) to help keep pumping costs to a minimum. The capital improvement project costs have been broken up to impact fee eligible costs and none impact fee eligible costs. The impact fees costs are deducted from the Impact Fee Account along with the payment for the Dew Tank. The Alternative #1 Cash Flow Analysis indicates that if user rates are kept with no alterations, but the new impact fees are accepted then for the next five years there will be net loss as Providence City uses their savings to complete projects. After these five years, and for the next projected 15 years there is a net profit. The portion of funds required to complete the proposed capital improvement projects that is for growth will be covered completely by the Impact Fee Account and will not require any assistance from the general water fund. The portion of the capital improvement projects required for existing residents would require funds from the general water fund. The projected net account balances at the end of 2041 are as follows for this alternative:

- Impact Fee Account: $4,036,000
- General Water Fund: $7,017,000
- Total Water Funds: $11,053,000
    - This includes all proposed capital improvement projects with the zone 1 tank being built between 2021 and 2026.

The second scenario, Alternative #2, is identical to Alternative #1. It includes the capital improvement projects as described in **Section 6**, the proposed impact fees as provided in **Table 7.5**, however it does not include impact fee increases due to service connection size, or updated connection fees, or updated user rates. It also follows the same assumptions concerning inflation rates and the capital improvement projects have been split across the years in the same fashion.

The only difference is that the zone 1 tank is built in the third time period (2031 to 2041). This shifts the tank expenditure further into the future allows for more planning, but it does result in a more expensive tank due to inflation. The projected net account balances at the end of 2041 are as follows for this alternative:

- Impact Fee Account: $3,106,000
- General Water Fund: $6,494,000
- Total Water Funds: $9,600,000
    - This includes all proposed capital improvement projects with the zone 1 tank being built between 2031 and 2041.

Both alternatives do not require an increase to user rates. The savings developed in the general water fund provide flexibility to provide for Providence's needs in the immediate future without needing a rate increase. It is Sunrise's recommendation to move forward with Alternative #1 as it provides the pumping and energy benefit that the zone 1 tank provides sooner and will result in a higher net general water fund amount.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusion

After several months of analysis and research, Sunrise has the following conclusions with regards to Providence City's culinary water system:

- The majority of the distribution system has sufficient capacity for the next 20 years and can provide proper pressures and fire flows to more than 97% of the city.
- Pressure Zone 3 will need additional looping as development continues in that area. Eventually the Pressure Zone 4 pipeline, known as the Deer Fence Line, will need to be installed to help provide flow to Pressure Zone 3.
- Within the next few years, Pressure Zone 1 will require additional storage. Storage capacity is available in higher zones, but to move water to them for temporary holding will result in additional pumping costs that could be avoided.
- A new source is desperately needed. If Providence City were to lose any existing source, the remaining sources would not be sufficient to sustain the city during peak day conditions. Additionally, existing conditions require additional source for peak day demands, which growth will only expand this deficit.

8.2 Recommendations

Based on the findings from this study and the results of the cash flow analysis, Sunrise Engineering recommends that Providence City adopt the following recommendations.

- Proceed with Alternative 1
    - Implement a Capital Improvement Project schedule as outlined in **Section 6**
    - Construct the new zone 1 tank between 2021 and 2026 to take full advantage of pumping cost savings. The tank should have minimum capacity of 1,000,000 gallons.
    - Drill a new well within a minimum capacity of 2,000 gpm.
- Base impact fees on service connection flow capabilities.
- Continue to collect shares of irrigation companies and additional water rights.

8.2.1 Capital Improvement Projects

The recommended improvement projects and their associated costs are as follows:

- Time Period #1 [2021-2026]
  - Project #1 – New Well Development Project - $2,866,000.
  - Project #2 – Redds Tank #2 Roof Restoration - $201,000.
  - Project #3 – Fire Hydrant Valve Installation Project - $25,000.
  - Project #4 – Stonehenge Service Replacement Project - $333,000.
  - Project #5 – Alder Well Upgrade Project - $161,000.
  - Project #6 – Von's Way Water Main Replacement Project - $614,000.
  - Project #7 – Water Meter System Upgrade Project - $7,174,000.
  - Project #8 – Von's Park Water Main Replacement Project - $362,000.
  - Project #9 – 100 South Water Main Replacement Project - $179,600.
  - Project #10 – Zone 1 Tank Project - $2,465,000.
- Time Period #2 [2026-2031]
  - Project #11 - Canyon PRV Upgrade and Rebuild Project - $191,000.
  - Project #12 – Dales Well Upgrade Project - $291,000.
  - Project #13 – Edgewood Water Main Replacement Project - $592,000.
  - Project #14 – 400 East Water Main Replacement Project - $314,000.
  - Project #15 – Cottonwood Water Main Replacement Project - $477,000.
- Time Period #3 [2031-2041]
  - Project # 16 – Jays Well Upgrade Project - $291,000.
  - Project #17 – 200 West Water Main Replacement Project - $902,000.
  - Project #18 – Intercity PRV Upgrade and Rebuild Project - $944,000.
  - Project #19 – 300 West Hot Soils Project - $648,000.
  - Project #20 – 100 North Water Main Replacement Project - $990,000.
  - Project #21 – Deer Fence/ Zone 4 Mainline Project - $1,944,000.
  - Project #22 – Zone 3 Looping Project - $837,000.
  - Project #23 – City Well Drain Line Installation Project - $744,000.
  - Project #24 – Water Master Plan - $137,000.

Sunrise has completed a Preliminary Engineer's Opinion of Probable Cost for each improvement project. These cost estimate overviews can be found in **Appendix D**. The unit costs used for all cost estimates were compiled from an extensive record of Sunrise project bid tabulations. All costs associated with the estimates are in 2021 dollars. To account for inflation as time goes on, Providence City should adjust all cost estimates according to the cost of living and Heavy Construction Cost Index factors.

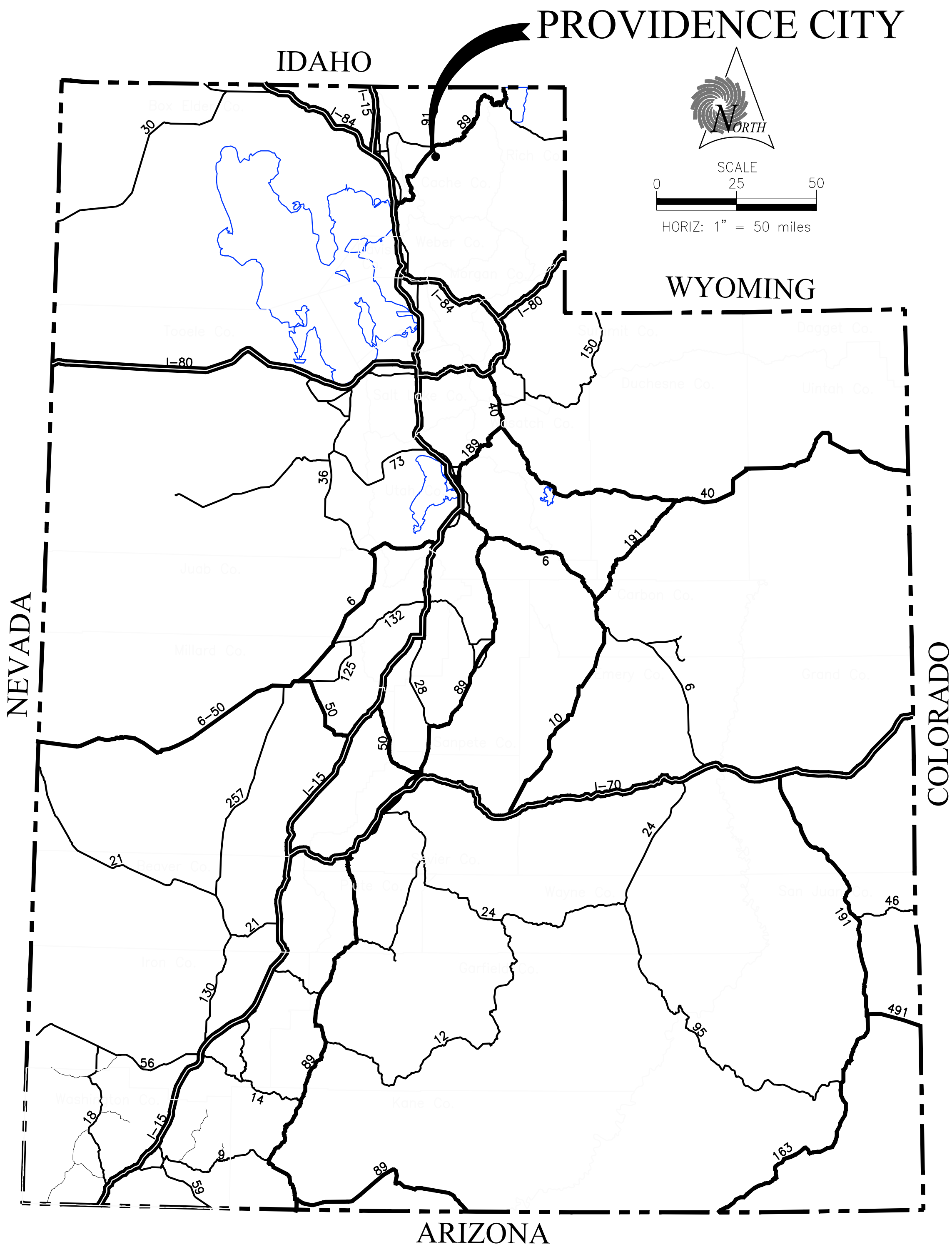
8.2.2 Impact Fee and User Rate

An impact fee and user rate analysis were performed for the recommended alternative. Sunrise recommends that Providence City implement an impact fee based on pipe diameter and its associating flow capacity and retain their existing based user rate structure. Impact fees were evaluated for three separate time periods in relation to the projects associated with those time periods. A modification to the user rate volumes could be made to help encourage more water conservation. The current and proposed impact fees per ERU per connection size are shown in **Table 8.1**.

Table 8.1 Existing and Proposed Impact Fees

	1" Service	1 ½" Service	2" Service	4" Service
Existing	$2,500	$2,500	$2,500	$2,500
Proposed				
Time Period 1 (2021 – 2026)	$7,121.79	$10,682.69	$14,243.58	$28,487.17
Time Period 2 (2026 – 2031)	$2,961.27	$4,441.91	$5,922.54	$11,845.09
Time Period 3 (2031 – 2041)	$4,938.43	$7,407.65	$9,876.86	$19,753.72

Exhibits



P:\Providence\07618 WW Masterplan 2020\DWG\Sheets\STATE MAP.dwg May 03, 2021 8:42pm sdwood

EXHIBIT 1.1
AREA MAP
PROVIDENCE CITY WASTEWATER
MASTER PLAN

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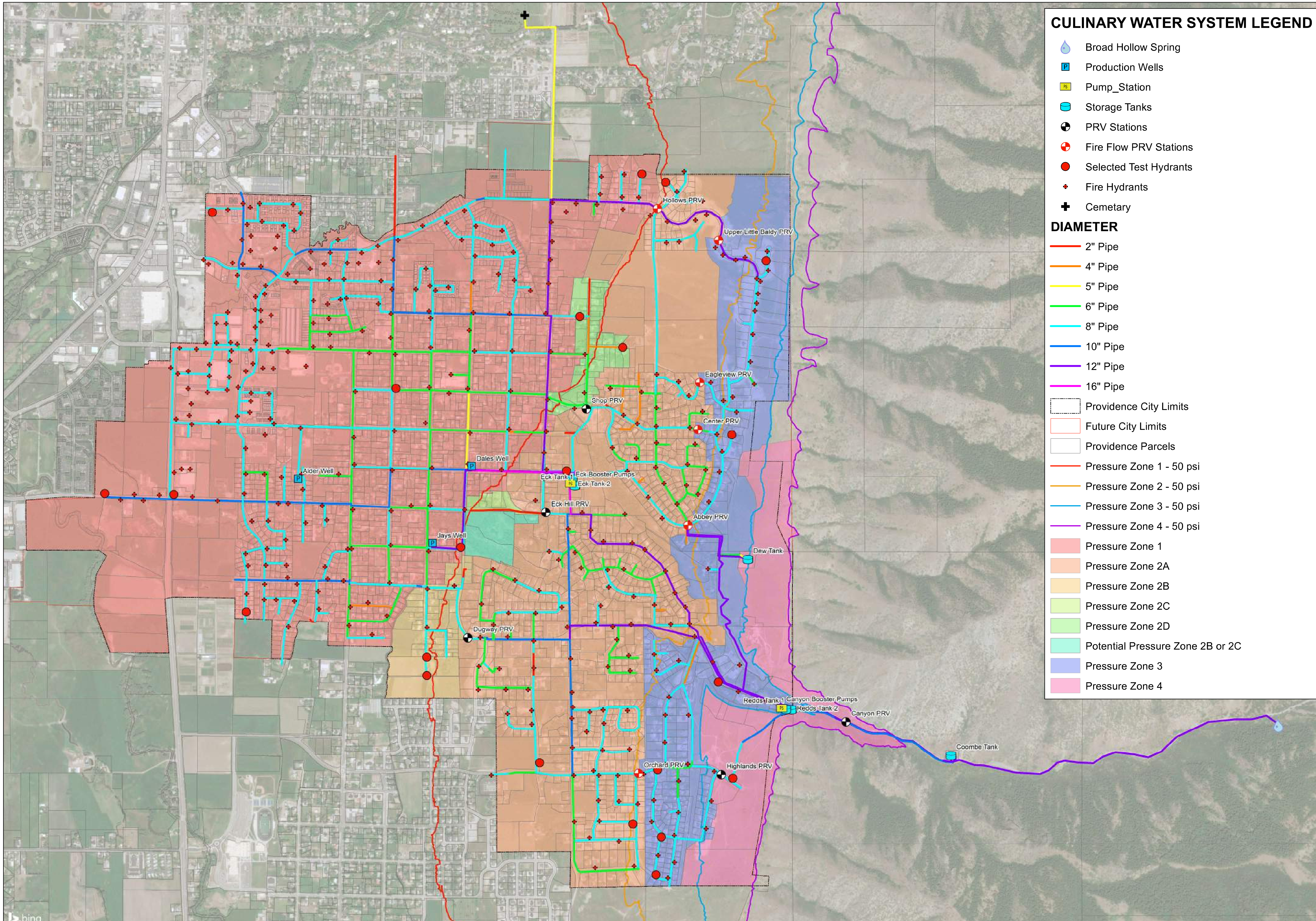

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0 445 890 1,780 Feet

2021 KEY INFRASTRUCTURE MAP
PRINTED: 5/10/2022
EXHIBIT 2.1

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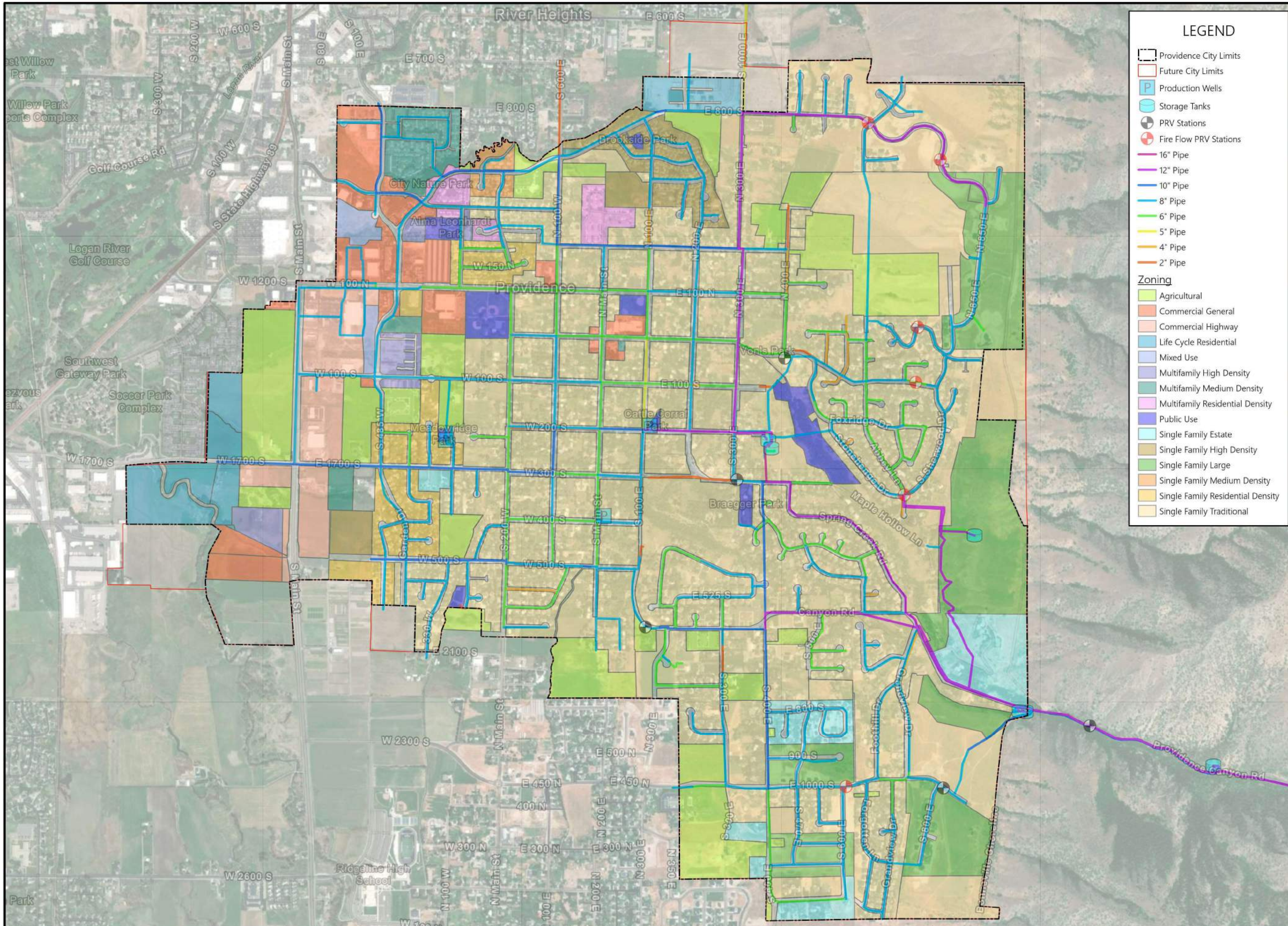

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0 0.07 0.15 0.3 Miles

Providence City Utah

PROVIDENCE CITY ZONING

PRINTED: 6/1/2022

EXHIBIT: 3.1

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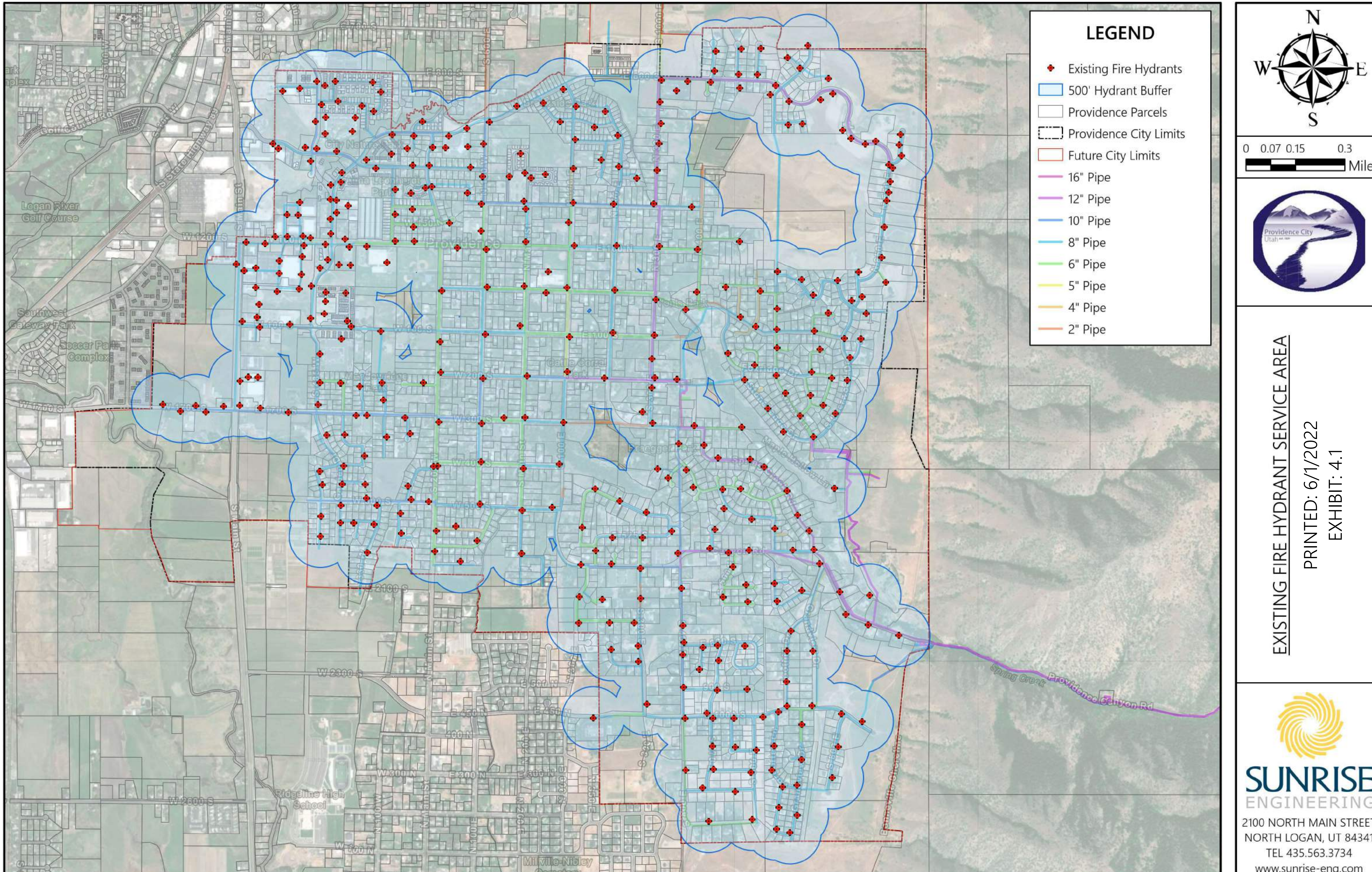

EXISTING FIRE HYDRANT SERVICE AREA

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EXHIBIT: 4.1

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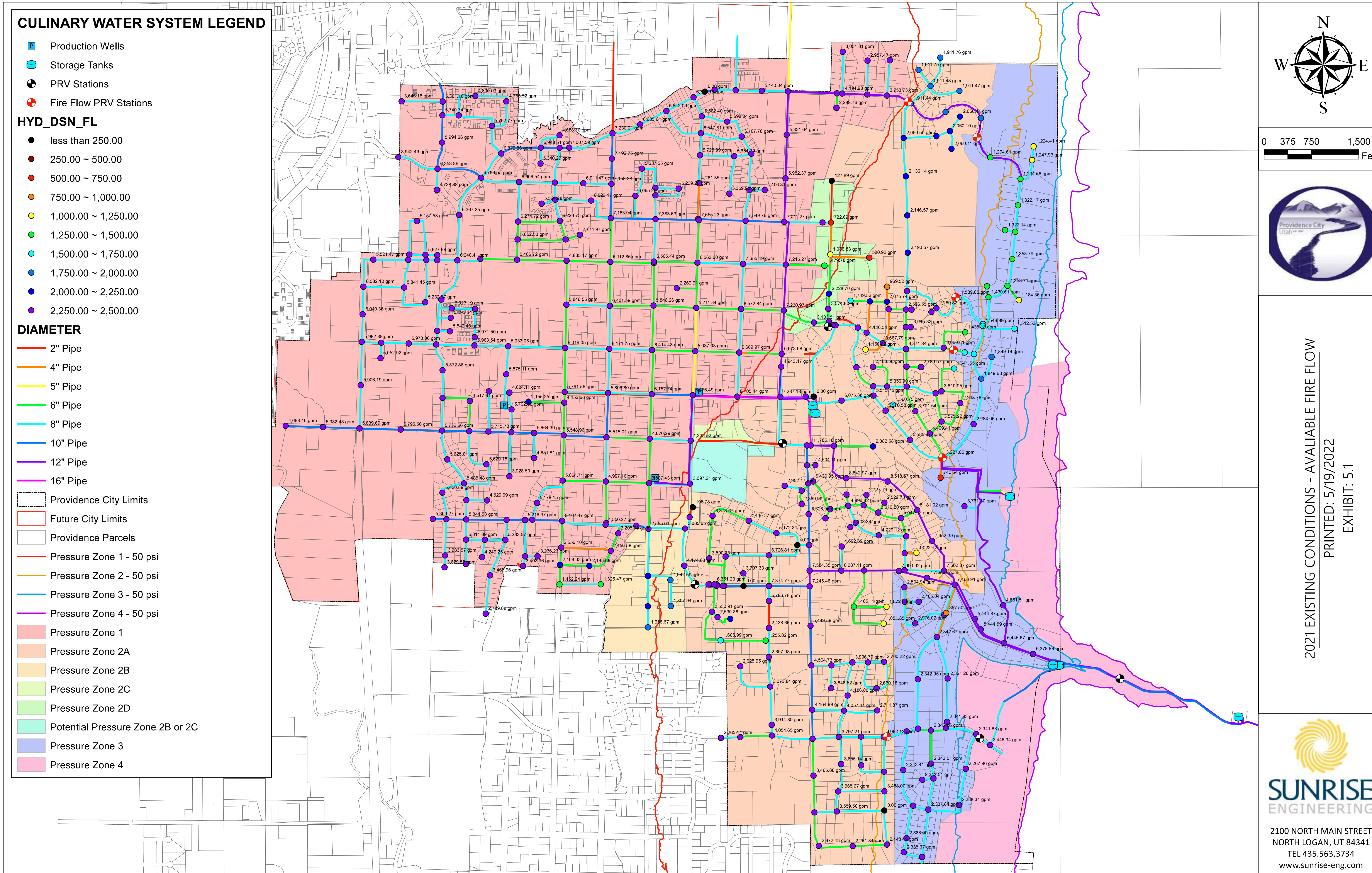
CULINARY WATER SYSTEM LEGEND
Production Wells
Storage Tanks
PRV Stations
Fire Flow PRV Stations
HYD_DSN_FL
less than 250.00
250.00 ~ 500.00
500.00 ~ 750.00
750.00 ~ 1,000.00
1,000.00 ~ 1,250.00
1,250.00 ~ 1,500.00
1,500.00 ~ 1,750.00
1,750.00 ~ 2,000.00
2,000.00 ~ 2,250.00
2,250.00 ~ 2,500.00
DIAMETER
2" Pipe
4" Pipe
5" Pipe
6" Pipe
8" Pipe
10" Pipe
12" Pipe
16" Pipe
Providence City Limits
Future City Limits
Providence Parcels
Pressure Zone 1 - 50 psi
Pressure Zone 2 - 50 psi
Pressure Zone 3 - 50 psi
Pressure Zone 4 - 50 psi
Pressure Zone 1
Pressure Zone 2A
Pressure Zone 2B
Pressure Zone 2C
Pressure Zone 2D
Potential Pressure Zone 2B or 2C
Pressure Zone 3
Pressure Zone 4
N
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0 375 750 1,500
Feet
Providence City Utah
2021 EXISTING CONDITIONS - AVALIABLE FIRE FLOW
PRINTED: 5/19/2022
EXHIBIT: 5.1
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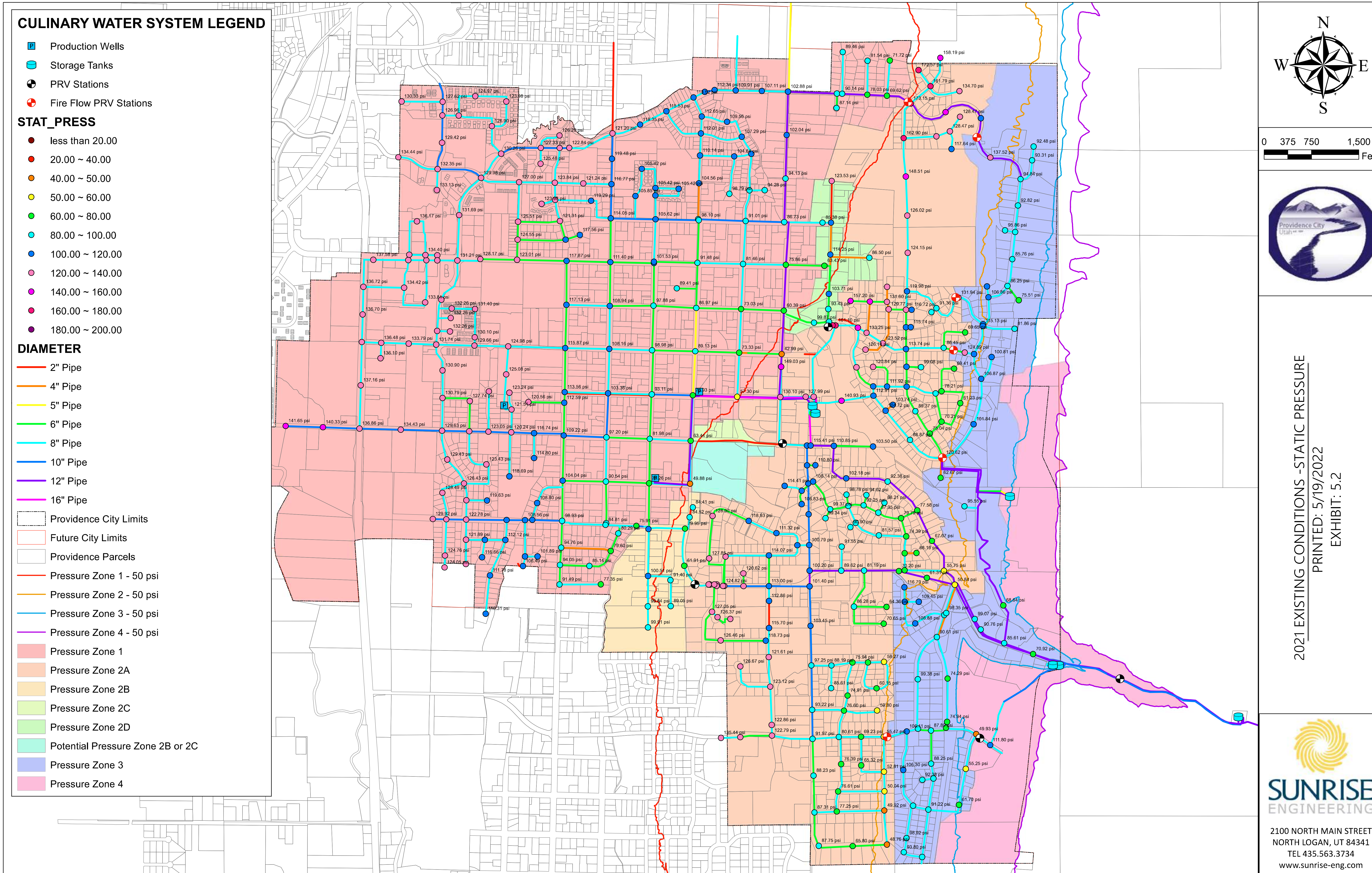
CULINARY WATER SYSTEM LEGEND
Production Wells
Storage Tanks
PRV Stations
Fire Flow PRV Stations
STAT_PRESS
less than 20.00
20.00 ~ 40.00
40.00 ~ 50.00
50.00 ~ 60.00
60.00 ~ 80.00
80.00 ~ 100.00
100.00 ~ 120.00
120.00 ~ 140.00
140.00 ~ 160.00
160.00 ~ 180.00
180.00 ~ 200.00
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12" Pipe
16" Pipe
Providence City Limits
Future City Limits
Providence Parcels
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Pressure Zone 2 - 50 psi
Pressure Zone 3 - 50 psi
Pressure Zone 4 - 50 psi
Pressure Zone 1
Pressure Zone 2A
Pressure Zone 2B
Pressure Zone 2C
Pressure Zone 2D
Potential Pressure Zone 2B or 2C
Pressure Zone 3
Pressure Zone 4
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Feet
Providence City
Utah
2021 EXISTING CONDITIONS -STATIC PRESSURE
PRINTED: 5/19/2022
EXHIBIT: 5.2
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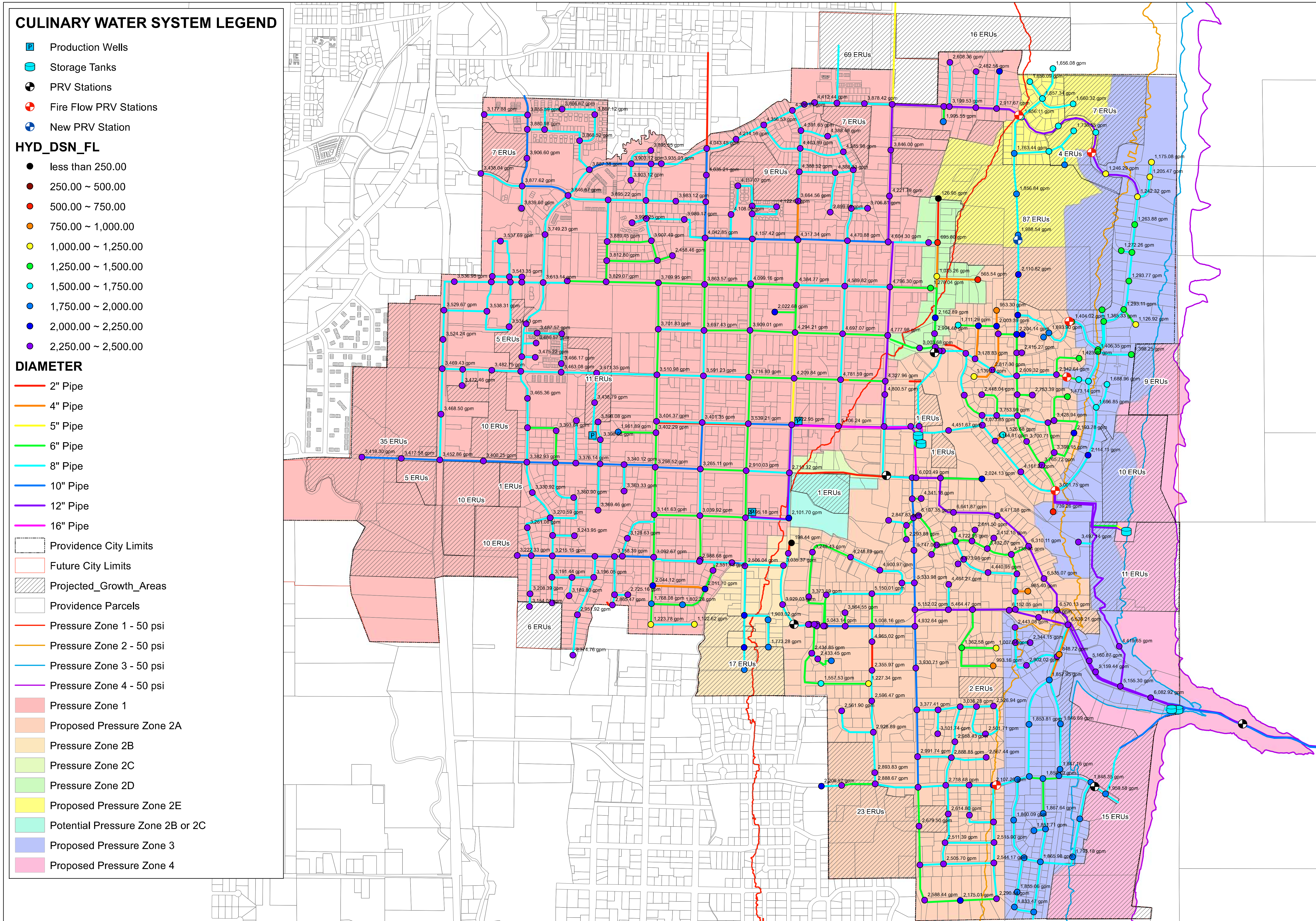

2026 PROJECTED GROWTH - AVALIABLE FIRE FLOW
WITHOUT COMPLETED CAPITAL IMPROVEMENT PROJECTS

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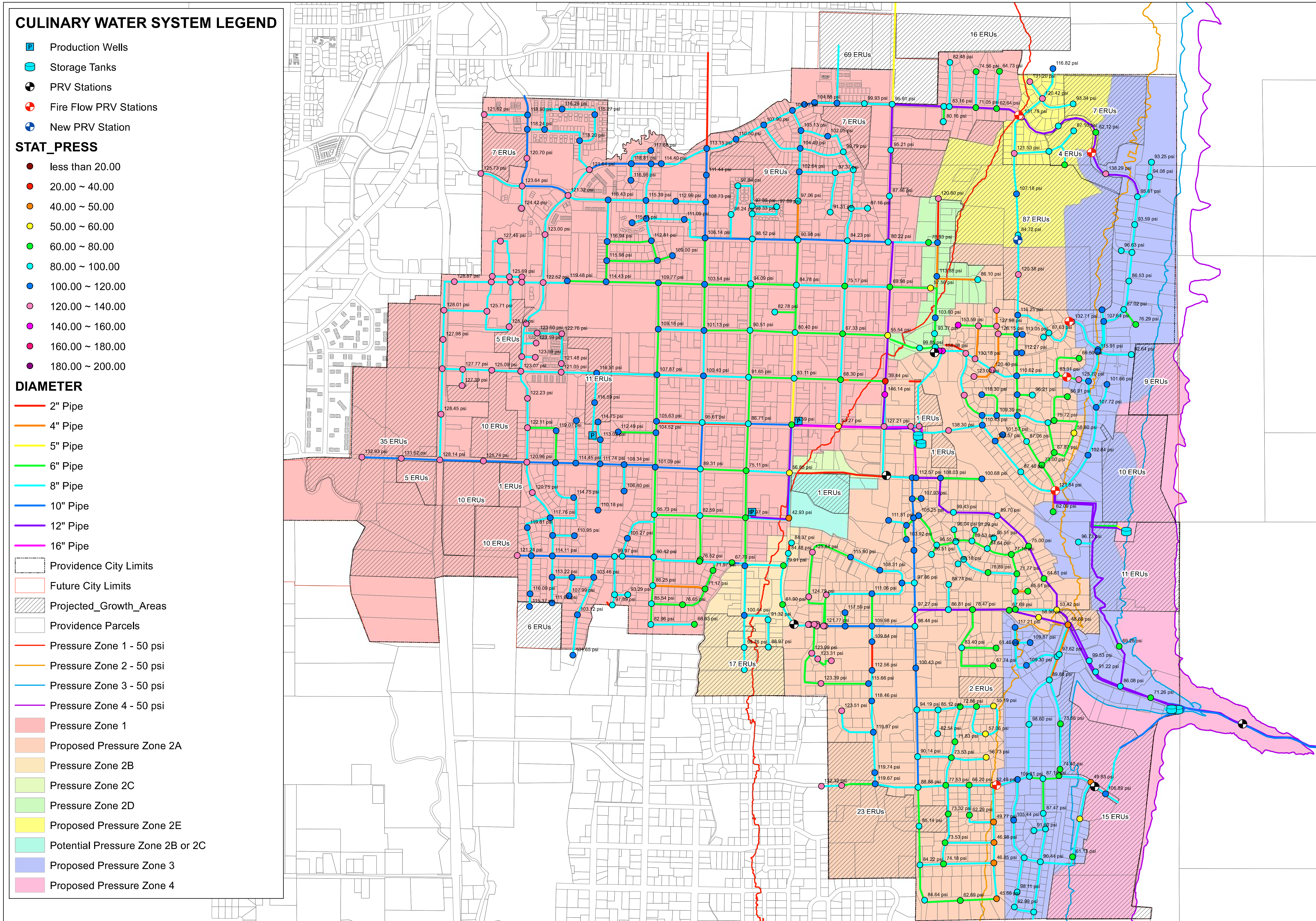

2026 PROJECTED GROWTH - STATIC PRESSURE
WITHOUT COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.4

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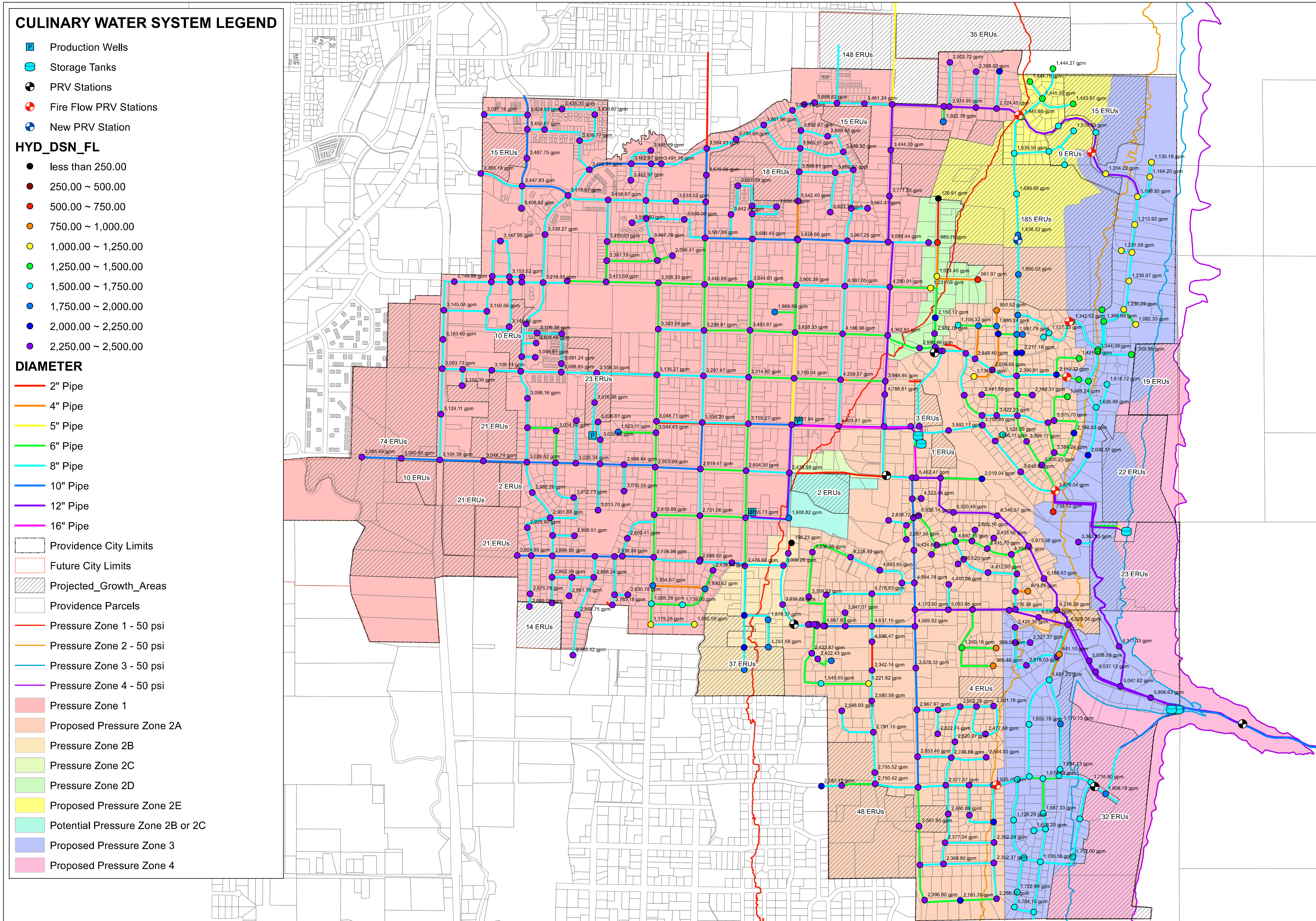

2031 PROJECTED GROWTH - AVALIABLE FIRE FLOW
WITHOUT COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.5

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CULINARY WATER SYSTEM LEGEND

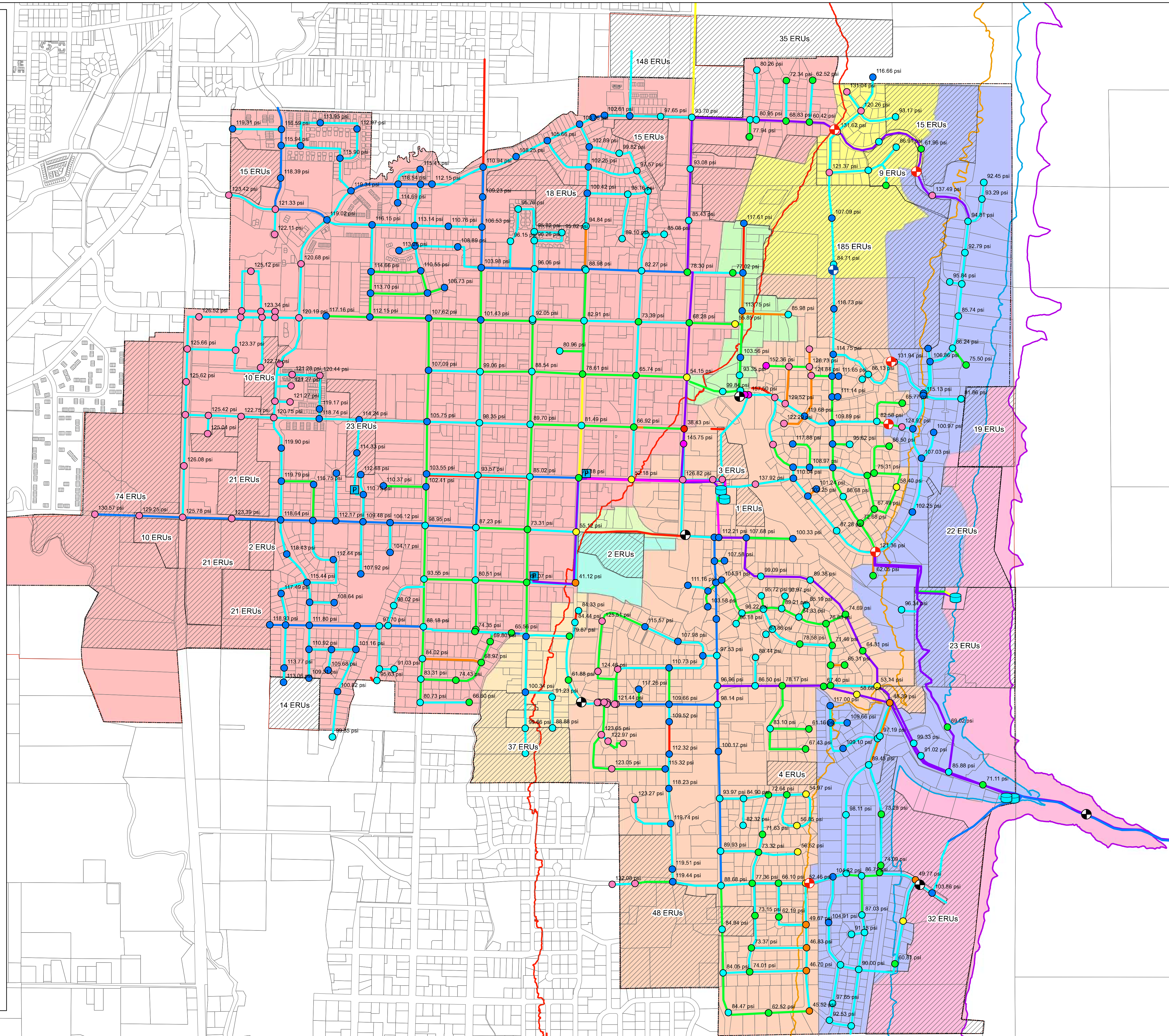
- Production Wells
- Storage Tanks
- PRV Stations
- Fire Flow PRV Stations
- New PRV Station

STAT_PRESS

- less than 20.00
- 20.00 ~ 40.00
- 40.00 ~ 50.00
- 50.00 ~ 60.00
- 60.00 ~ 80.00
- 80.00 ~ 100.00
- 100.00 ~ 120.00
- 120.00 ~ 140.00
- 140.00 ~ 160.00
- 160.00 ~ 180.00
- 180.00 ~ 200.00

DIAMETER

- 2" Pipe
- 4" Pipe
- 5" Pipe
- 6" Pipe
- 8" Pipe
- 10" Pipe
- 12" Pipe
- 16" Pipe
- Providence City Limits
- Future City Limits
- Projected_Growth_Areas
- Providence Parcels
- Pressure Zone 1 - 50 psi
- Pressure Zone 2 - 50 psi
- Pressure Zone 3 - 50 psi
- Pressure Zone 4 - 50 psi
- Pressure Zone 1
- Proposed Pressure Zone 2A
- Pressure Zone 2B
- Pressure Zone 2C
- Pressure Zone 2D
- Proposed Pressure Zone 2E
- Potential Pressure Zone 2B or 2C
- Proposed Pressure Zone 3
- Proposed Pressure Zone 4



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0 375 750 1,500
Feet

Providence City
Utah

2031 PROJECTED GROWTH - STATIC PRESSURE
WITHOUT COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.6

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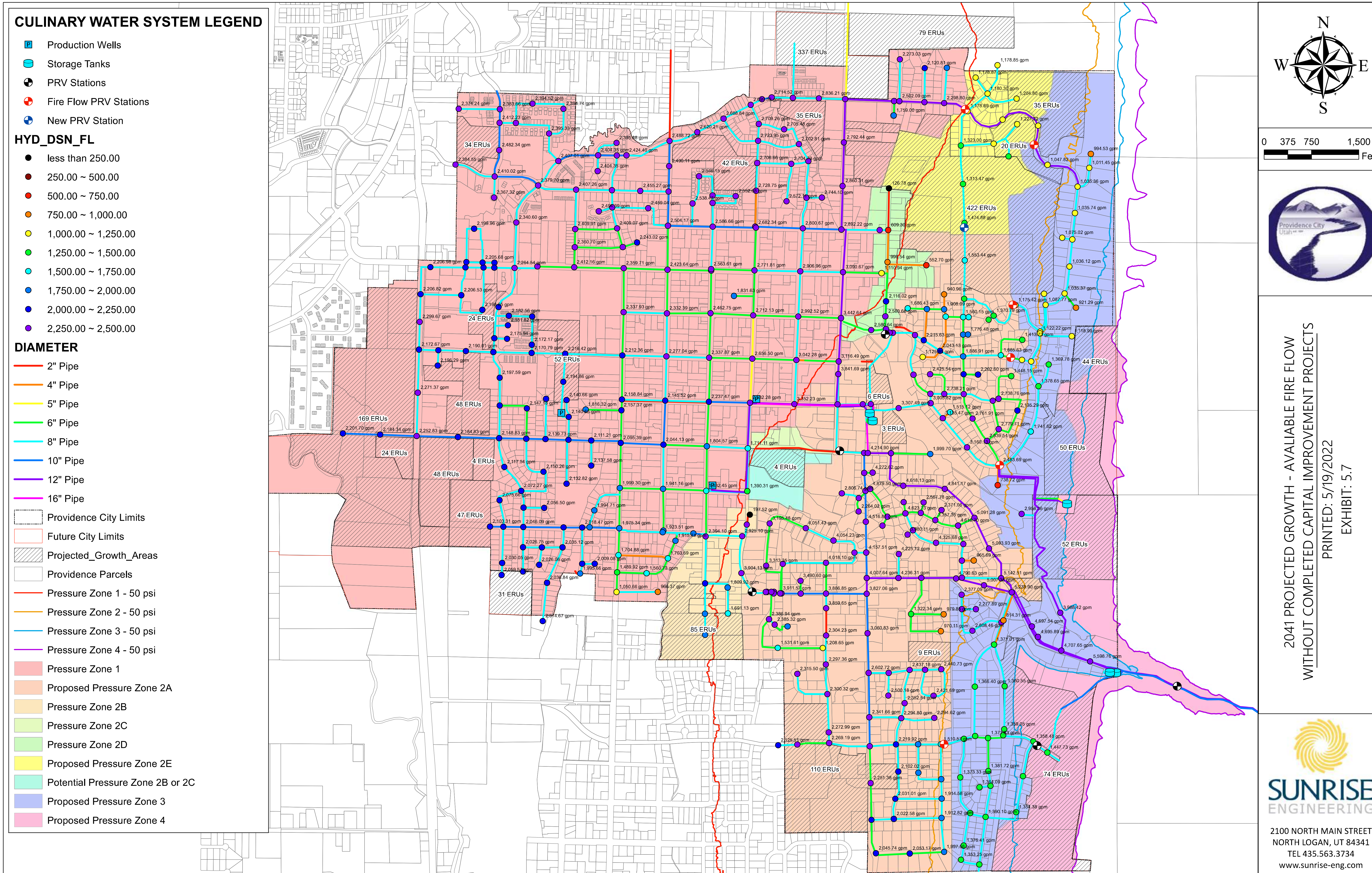
CULINARY WATER SYSTEM LEGEND
Production Wells
Storage Tanks
PRV Stations
Fire Flow PRV Stations
New PRV Station
HYD_DSN_FL
less than 250.00
250.00 ~ 500.00
500.00 ~ 750.00
750.00 ~ 1,000.00
1,000.00 ~ 1,250.00
1,250.00 ~ 1,500.00
1,500.00 ~ 1,750.00
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2,000.00 ~ 2,250.00
2,250.00 ~ 2,500.00
DIAMETER
2" Pipe
4" Pipe
5" Pipe
6" Pipe
8" Pipe
10" Pipe
12" Pipe
16" Pipe
Providence City Limits
Future City Limits
Projected_Growth_Areas
Providence Parcels
Pressure Zone 1 - 50 psi
Pressure Zone 2 - 50 psi
Pressure Zone 3 - 50 psi
Pressure Zone 4 - 50 psi
Pressure Zone 1
Proposed Pressure Zone 2A
Pressure Zone 2B
Pressure Zone 2C
Pressure Zone 2D
Proposed Pressure Zone 2E
Potential Pressure Zone 2B or 2C
Proposed Pressure Zone 3
Proposed Pressure Zone 4
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0 375 750 1,500
Feet
Providence City Utah
2041 PROJECTED GROWTH - AVALIABLE FIRE FLOW
WITHOUT COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.7
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CULINARY WATER SYSTEM LEGEND

- Production Wells
- Storage Tanks
- PRV Stations
- Fire Flow PRV Stations
- New PRV Station

STAT_PRESS

- less than 20.00
- 20.00 ~ 40.00
- 40.00 ~ 50.00
- 50.00 ~ 60.00
- 60.00 ~ 80.00
- 80.00 ~ 100.00
- 100.00 ~ 120.00
- 120.00 ~ 140.00
- 140.00 ~ 160.00
- 160.00 ~ 180.00
- 180.00 ~ 200.00

DIAMETER

- 2" Pipe
- 4" Pipe
- 5" Pipe
- 6" Pipe
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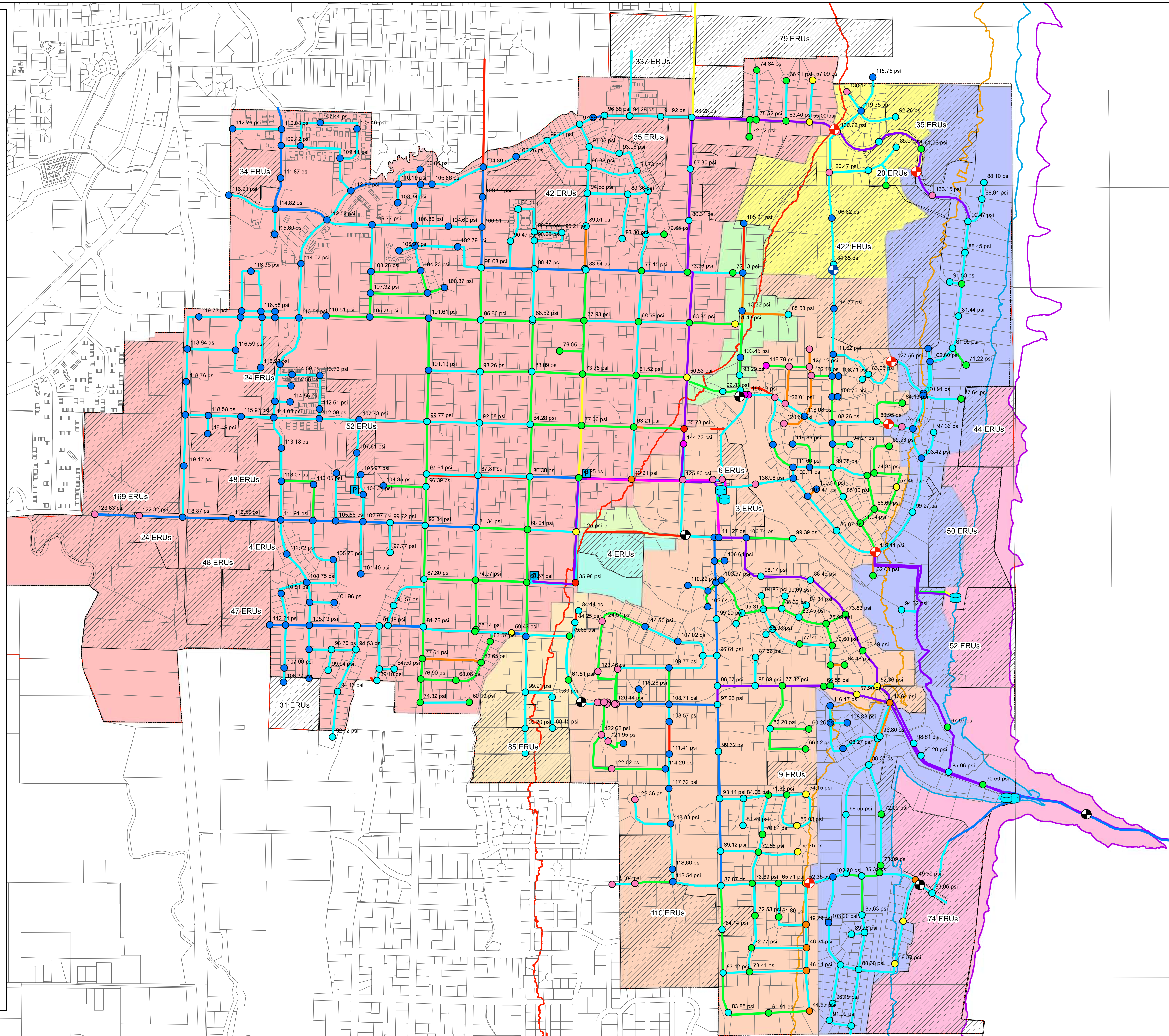
- Providence City Limits
- Future City Limits
- Projected_Growth_Areas
- Providence Parcels
- Pressure Zone 1 - 50 psi
- Pressure Zone 2 - 50 psi
- Pressure Zone 3 - 50 psi
- Pressure Zone 4 - 50 psi
- Pressure Zone 1
- Proposed Pressure Zone 2A
- Pressure Zone 2B
- Pressure Zone 2C
- Pressure Zone 2D
- Proposed Pressure Zone 2E
- Potential Pressure Zone 2B or 2C
- Proposed Pressure Zone 3
- Proposed Pressure Zone 4



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0 375 750 1,500 Feet

2041 PROJECTED GROWTH - STATIC PRESSURE
WITHOUT COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
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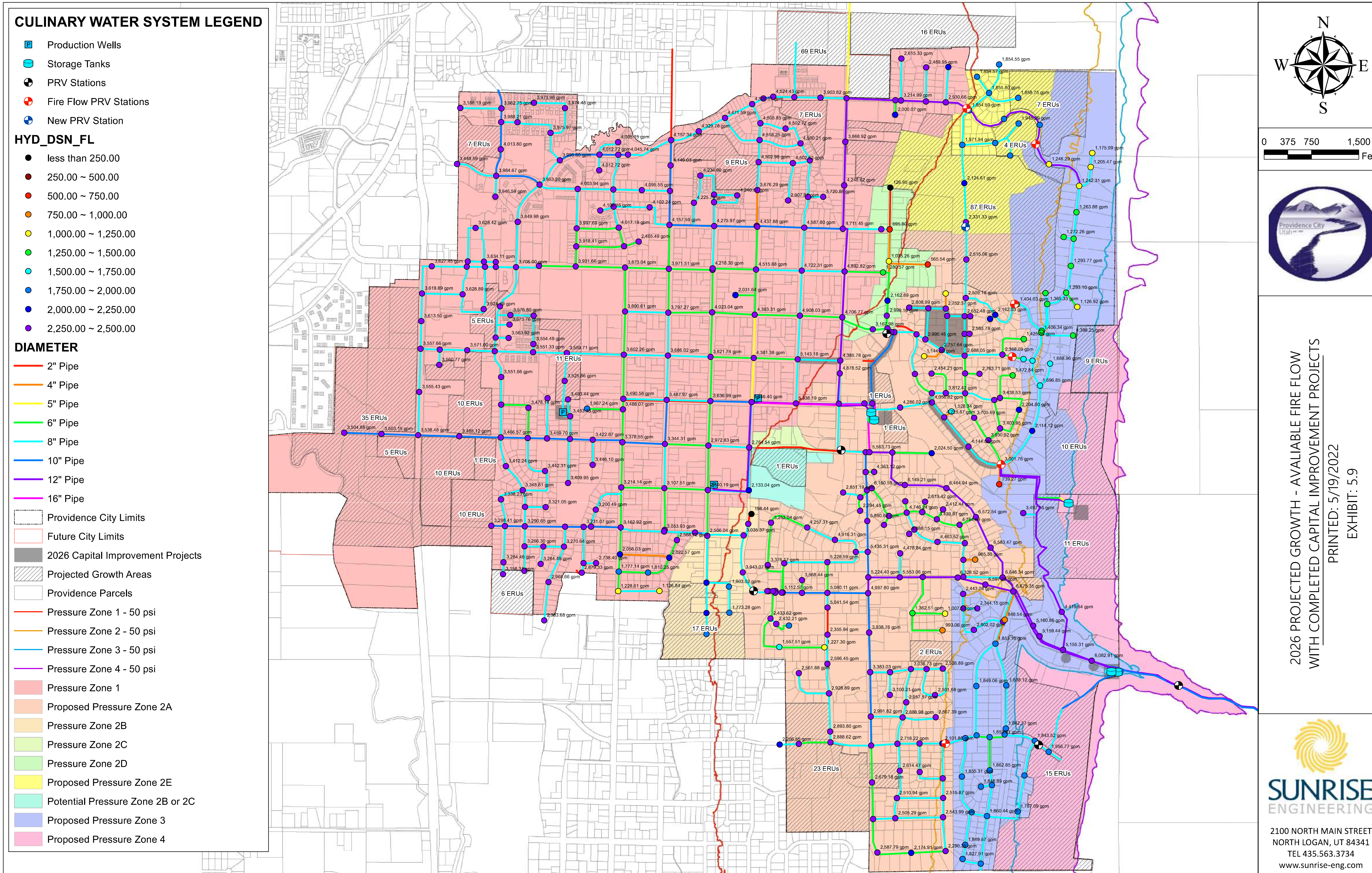
CULINARY WATER SYSTEM LEGEND
Production Wells
Storage Tanks
PRV Stations
Fire Flow PRV Stations
New PRV Station
HYD_DSN_FL
less than 250.00
250.00 ~ 500.00
500.00 ~ 750.00
750.00 ~ 1,000.00
1,000.00 ~ 1,250.00
1,250.00 ~ 1,500.00
1,500.00 ~ 1,750.00
1,750.00 ~ 2,000.00
2,000.00 ~ 2,250.00
2,250.00 ~ 2,500.00
DIAMETER
2" Pipe
4" Pipe
5" Pipe
6" Pipe
8" Pipe
10" Pipe
12" Pipe
16" Pipe
Providence City Limits
Future City Limits
2026 Capital Improvement Projects
Projected Growth Areas
Providence Parcels
Pressure Zone 1 - 50 psi
Pressure Zone 2 - 50 psi
Pressure Zone 3 - 50 psi
Pressure Zone 4 - 50 psi
Pressure Zone 1
Proposed Pressure Zone 2A
Pressure Zone 2B
Pressure Zone 2C
Pressure Zone 2D
Proposed Pressure Zone 2E
Potential Pressure Zone 2B or 2C
Proposed Pressure Zone 3
Proposed Pressure Zone 4
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0 375 750 1,500
Feet
Providence City Utah
2026 PROJECTED GROWTH - AVALIABLE FIRE FLOW
WITH COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.9
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CULINARY WATER SYSTEM LEGEND

- Production Wells
- Storage Tanks
- PRV Stations
- Fire Flow PRV Stations
- New PRV Station

STAT_PRESS

- less than 20.00
- 20.00 ~ 40.00
- 40.00 ~ 50.00
- 50.00 ~ 60.00
- 60.00 ~ 80.00
- 80.00 ~ 100.00
- 100.00 ~ 120.00
- 120.00 ~ 140.00
- 140.00 ~ 160.00
- 160.00 ~ 180.00
- 180.00 ~ 200.00

DIAMETER

- 2" Pipe
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- Providence Parcels
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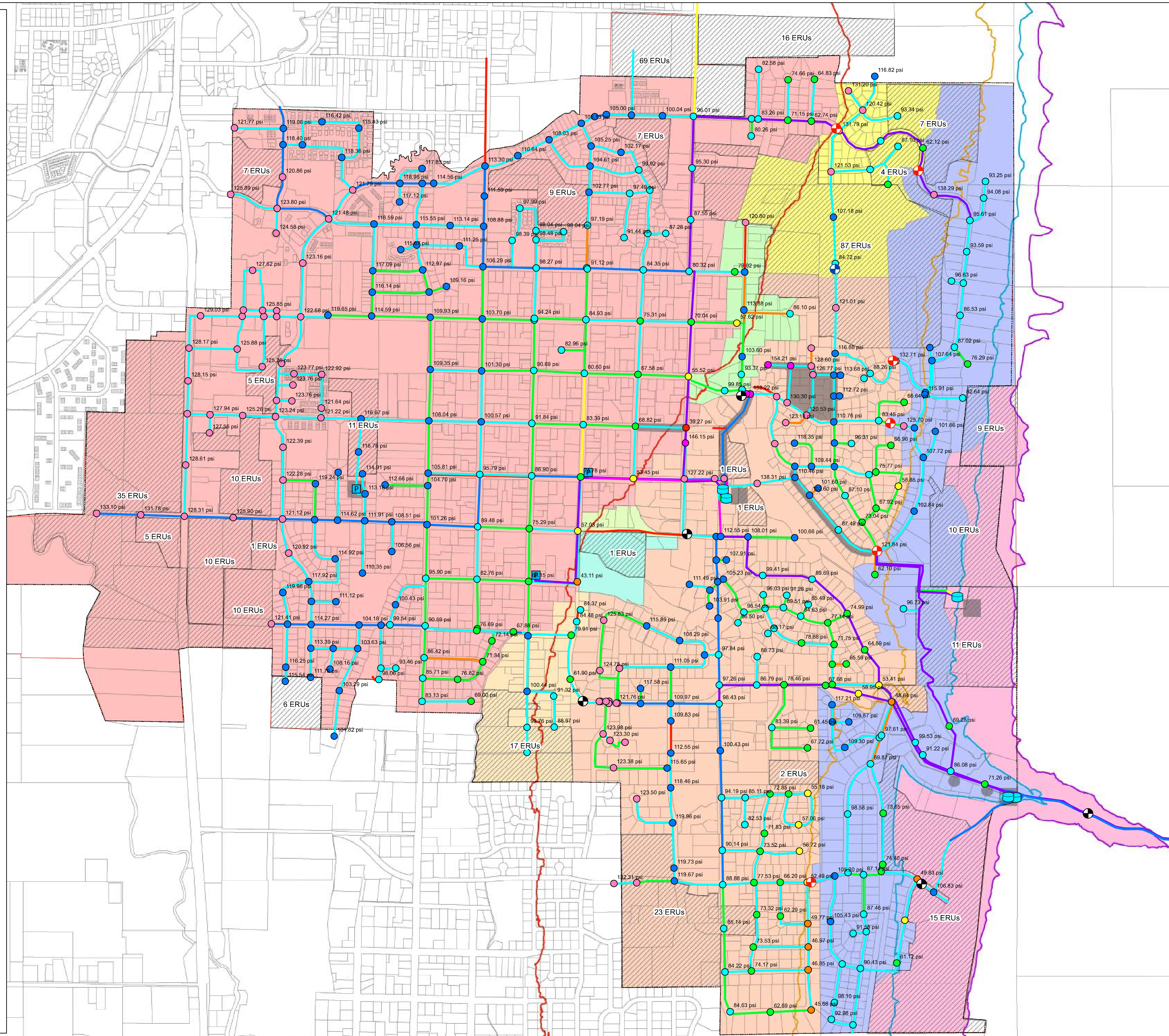
- Pressure Zone 2B
- Pressure Zone 2C
- Pressure Zone 2D
- Proposed Pressure Zone 2E
- Potential Pressure Zone 2B or 2C
- Proposed Pressure Zone 3
- Proposed Pressure Zone 4



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0 375 750 1,500
Feet

Providence City
Utah

2026 PROJECTED GROWTH - STATIC PRESSURE
WITH COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
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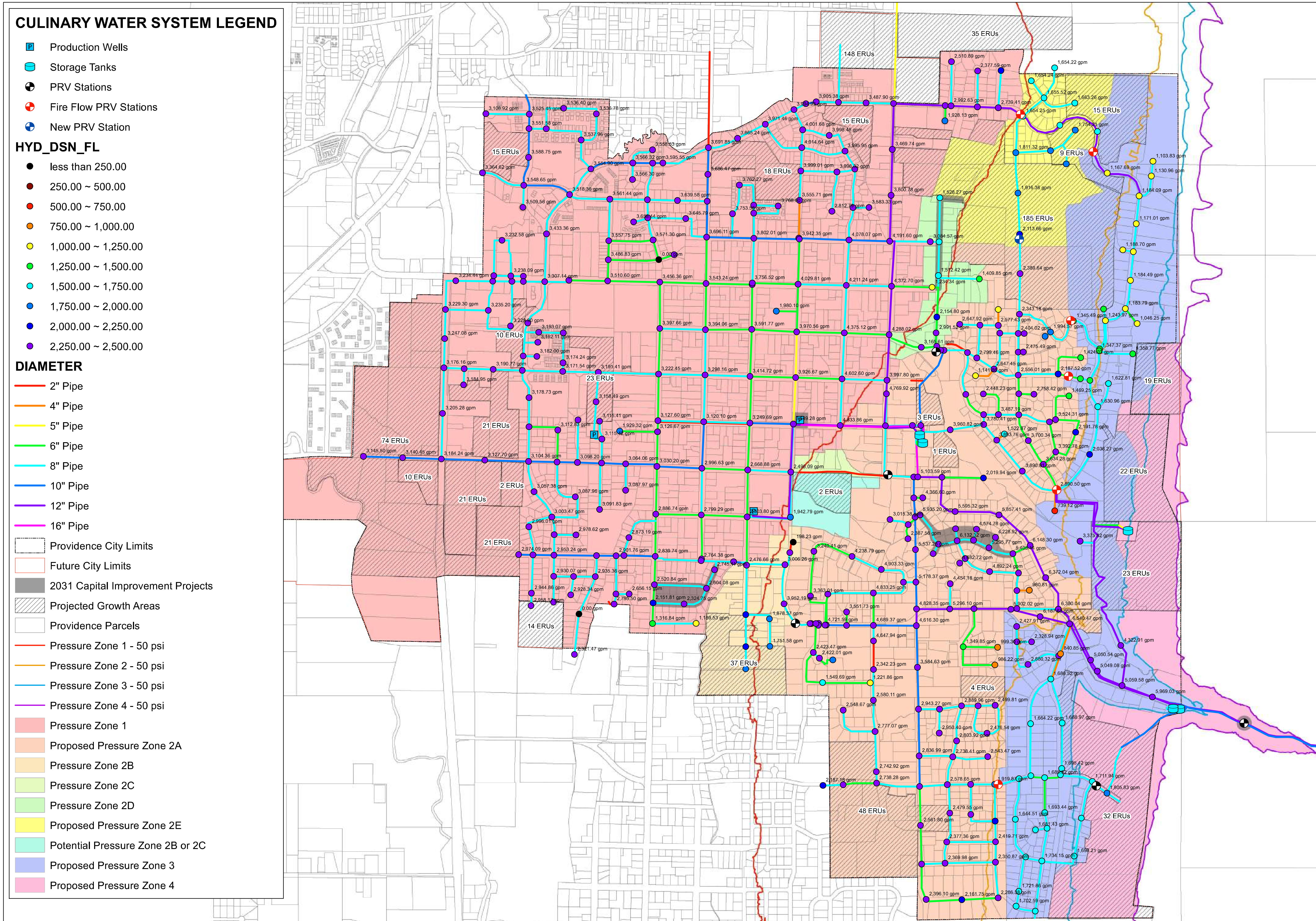

2031 PROJECTED GROWTH - AVALIABLE FIRE FLOW
WITH COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.11

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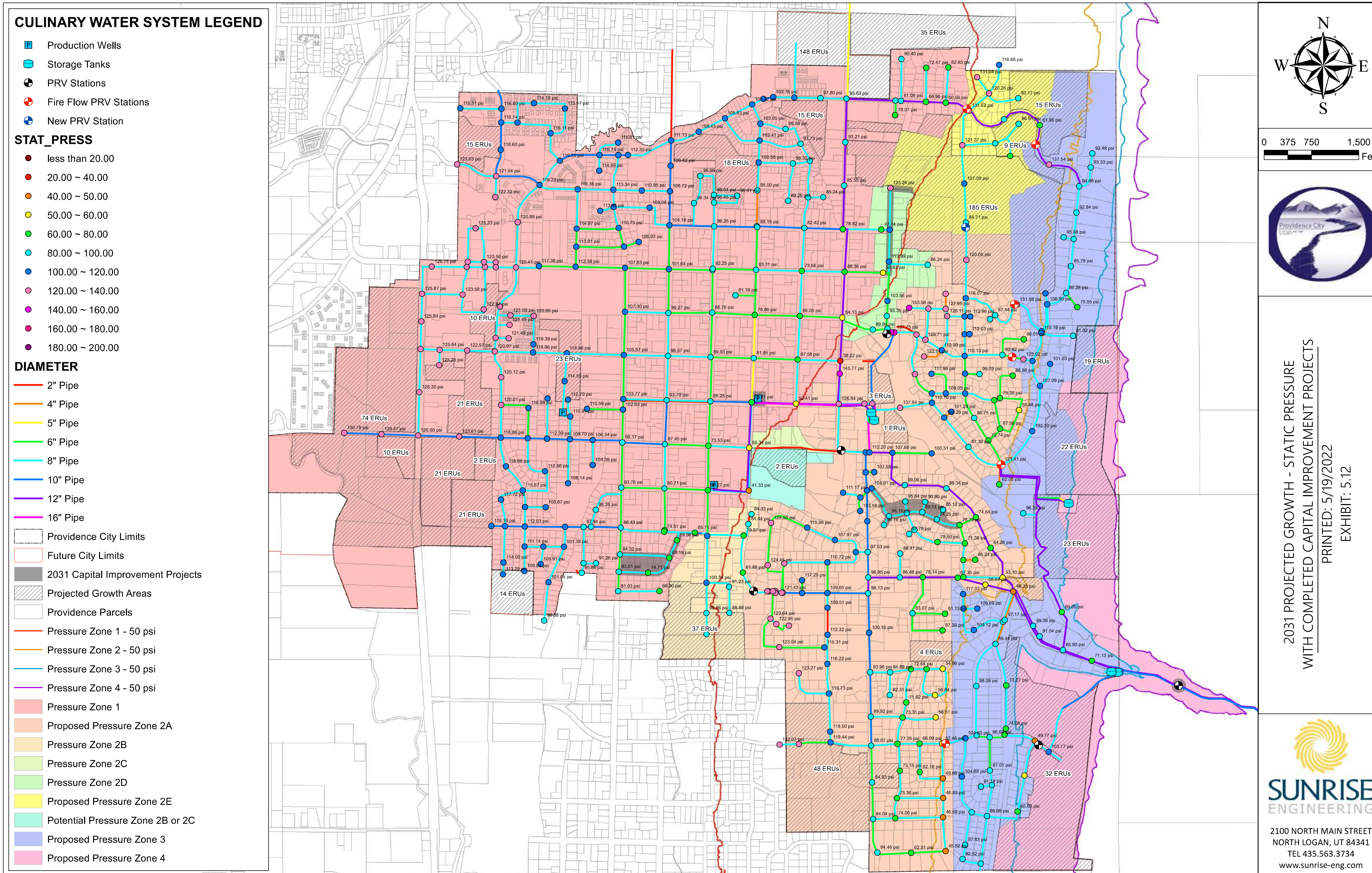

CULINARY WATER SYSTEM LEGEND
Production Wells
Storage Tanks
PRV Stations
Fire Flow PRV Stations
New PRV Station
STAT_PRESS
less than 20.00
20.00 ~ 40.00
40.00 ~ 50.00
50.00 ~ 60.00
60.00 ~ 80.00
80.00 ~ 100.00
100.00 ~ 120.00
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8" Pipe
10" Pipe
12" Pipe
16" Pipe
Providence City Limits
Future City Limits
2031 Capital Improvement Projects
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Pressure Zone 1 - 50 psi
Pressure Zone 2 - 50 psi
Pressure Zone 3 - 50 psi
Pressure Zone 4 - 50 psi
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Proposed Pressure Zone 2A
Pressure Zone 2B
Pressure Zone 2C
Pressure Zone 2D
Proposed Pressure Zone 2E
Potential Pressure Zone 2B or 2C
Proposed Pressure Zone 3
Proposed Pressure Zone 4
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0 375 750 1,500
Feet
Providence City Utah
2031 PROJECTED GROWTH - STATIC PRESSURE
WITH COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.12
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CULINARY WATER SYSTEM LEGEND

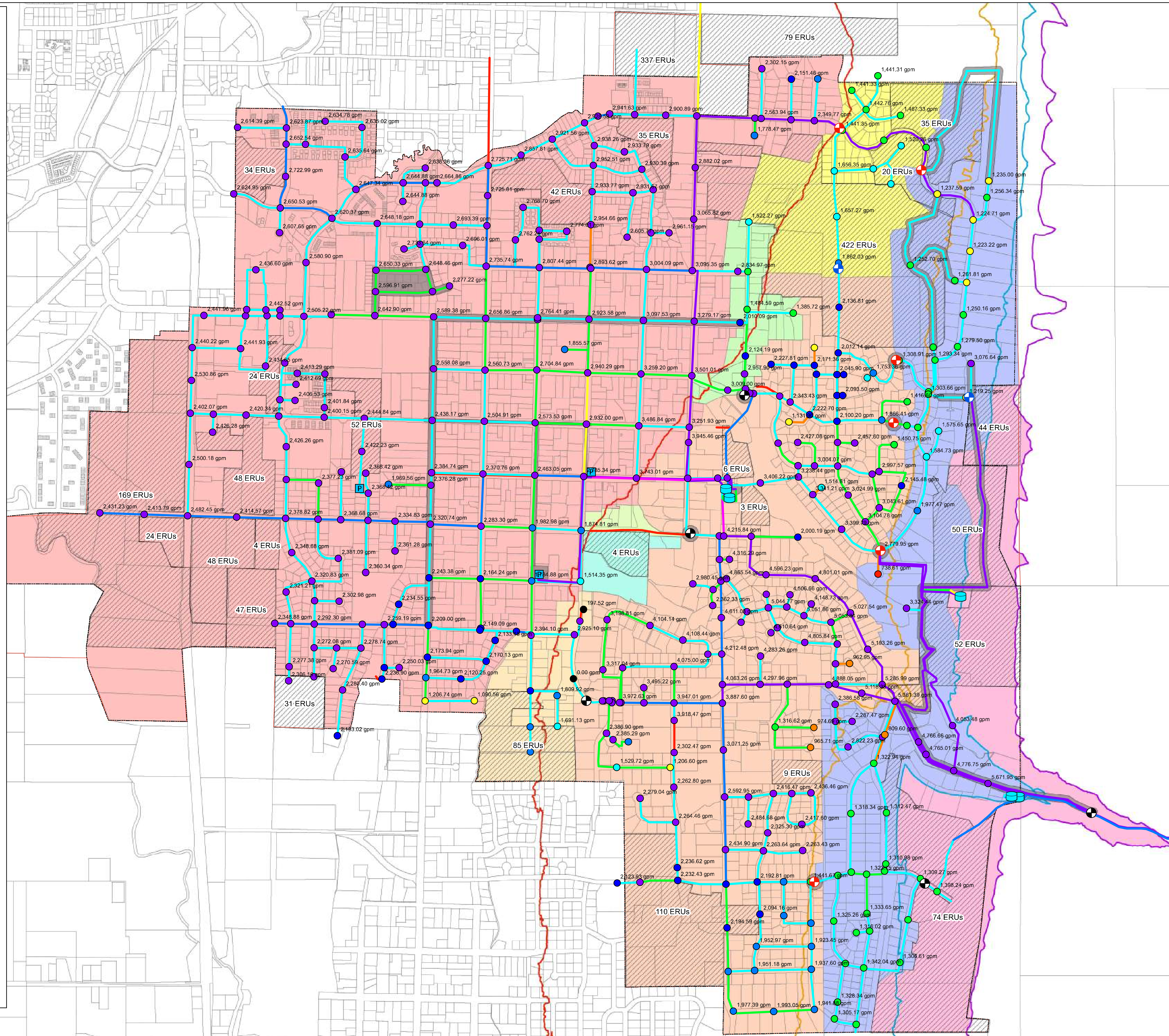
- Production Wells
- Storage Tanks
- PRV Stations
- Fire Flow PRV Stations
- New PRV Stations

HYD_DSN_FL

- less than 250.00
- 250.00 ~ 500.00
- 500.00 ~ 750.00
- 750.00 ~ 1,000.00
- 1,000.00 ~ 1,250.00
- 1,250.00 ~ 1,500.00
- 1,500.00 ~ 1,750.00
- 1,750.00 ~ 2,000.00
- 2,000.00 ~ 2,250.00
- 2,250.00 ~ 2,500.00

DIAMETER

- 2" Pipe
- 4" Pipe
- 5" Pipe
- 6" Pipe
- 8" Pipe
- 10" Pipe
- 12" Pipe
- 16" Pipe
- Providence City Limits
- Future City Limits
- 2041 Capital Improvement Projects
- Projected Growth Areas
- Providence Parcels
- Pressure Zone 1 - 50 psi
- Pressure Zone 2 - 50 psi
- Pressure Zone 3 - 50 psi
- Pressure Zone 4 - 50 psi
- Pressure Zone 1
- Proposed Pressure Zone 2A
- Pressure Zone 2B
- Pressure Zone 2C
- Pressure Zone 2D
- Proposed Pressure Zone 2E
- Potential Pressure Zone 2B or 2C
- Proposed Pressure Zone 3
- Proposed Pressure Zone 4



N W E S

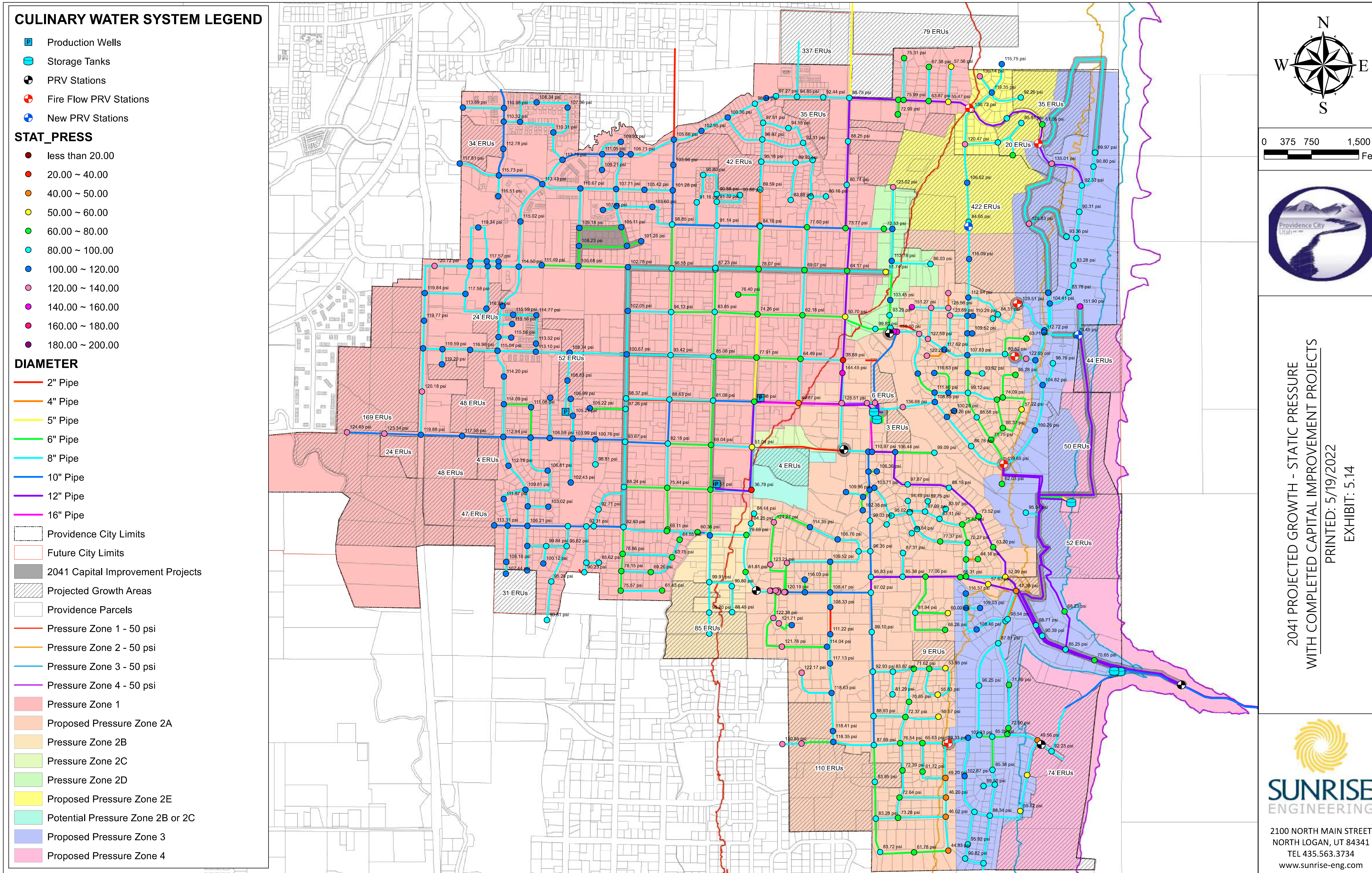
0 375 750 1,500 Feet

Providence City Utah

2041 PROJECTED GROWTH - AVALIABLE FIRE FLOW
WITH COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.13

SUNRISE ENGINEERING

2100 NORTH MAIN STREET
NORTH LOGAN, UT 84341
TEL 435.563.3734
www.sunrise-eng.com

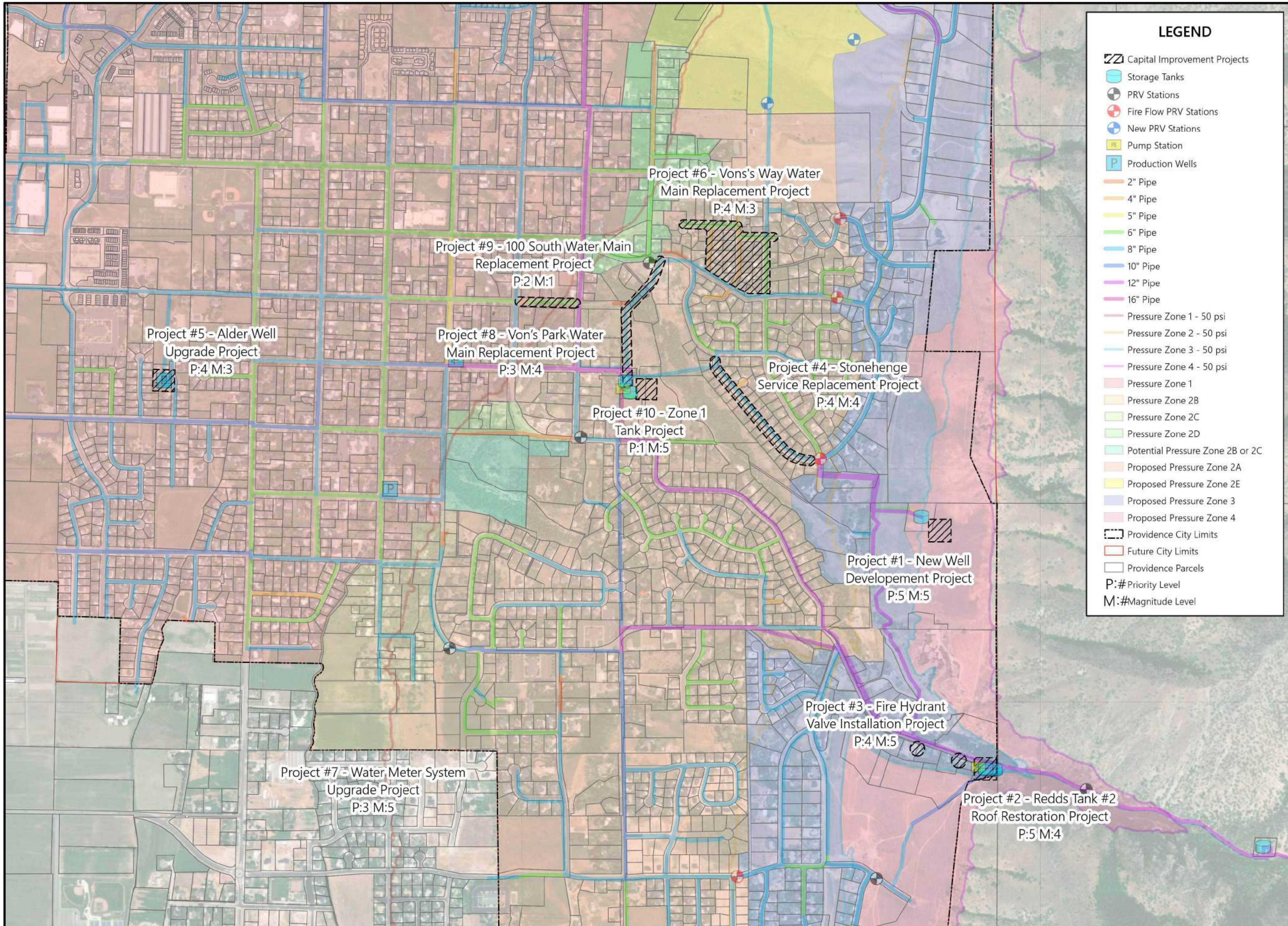


Providence City Utah

2041 PROJECTED GROWTH - STATIC PRESSURE
WITH COMPLETED CAPITAL IMPROVEMENT PROJECTS
PRINTED: 5/19/2022
EXHIBIT: 5.14

SUNRISE ENGINEERING

2100 NORTH MAIN STREET
NORTH LOGAN, UT 84341
TEL 435.563.3734
www.sunrise-eng.com



N
W
E
S

0 312.5 625 1,250 Feet

Providence City Utah

CAPITAL IMPROVEMENT PROJECTS

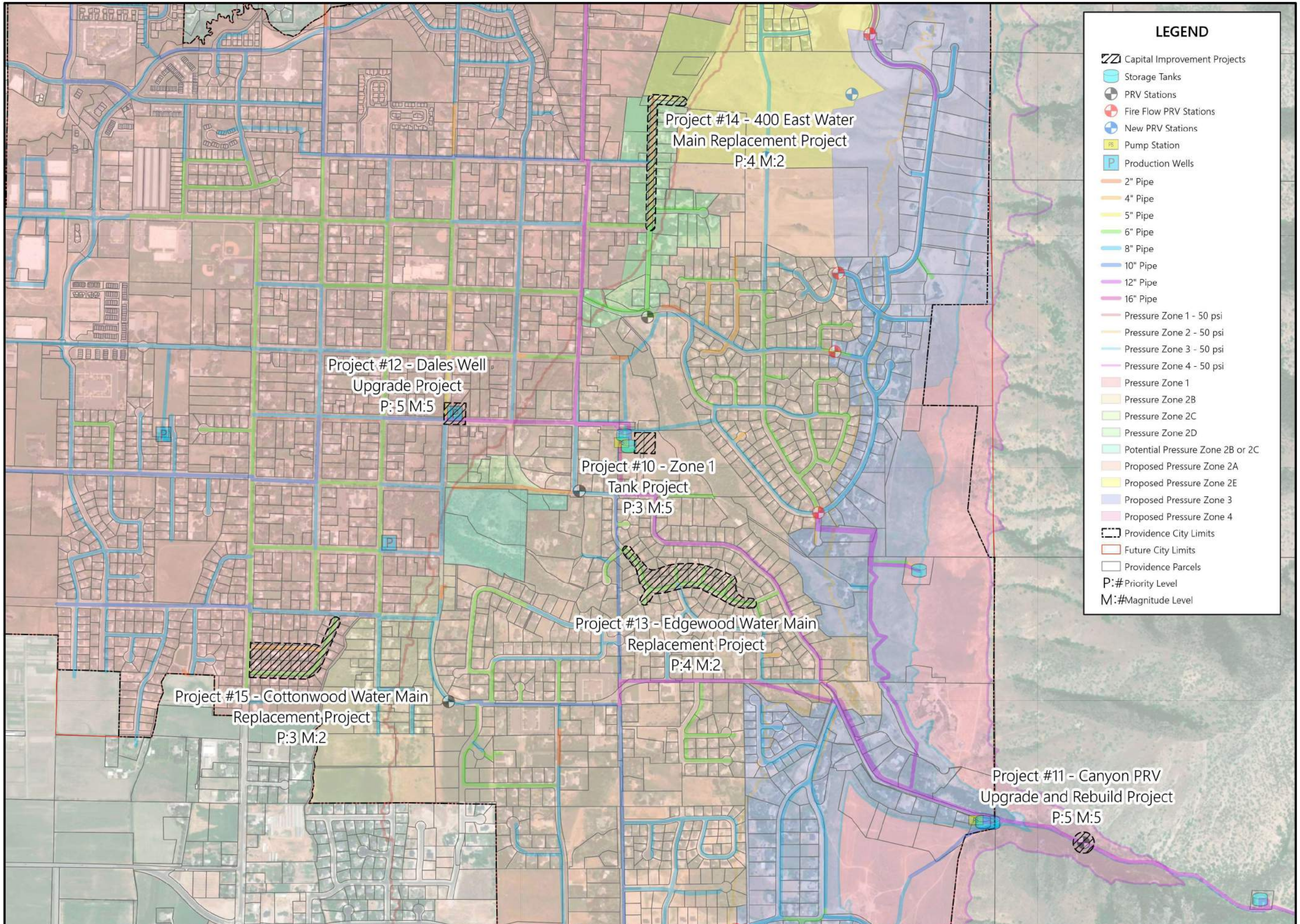
2021 - 2026

PRINTED: 6/1/2022

EXHIBIT: 6.1

SUNRISE ENGINEERING

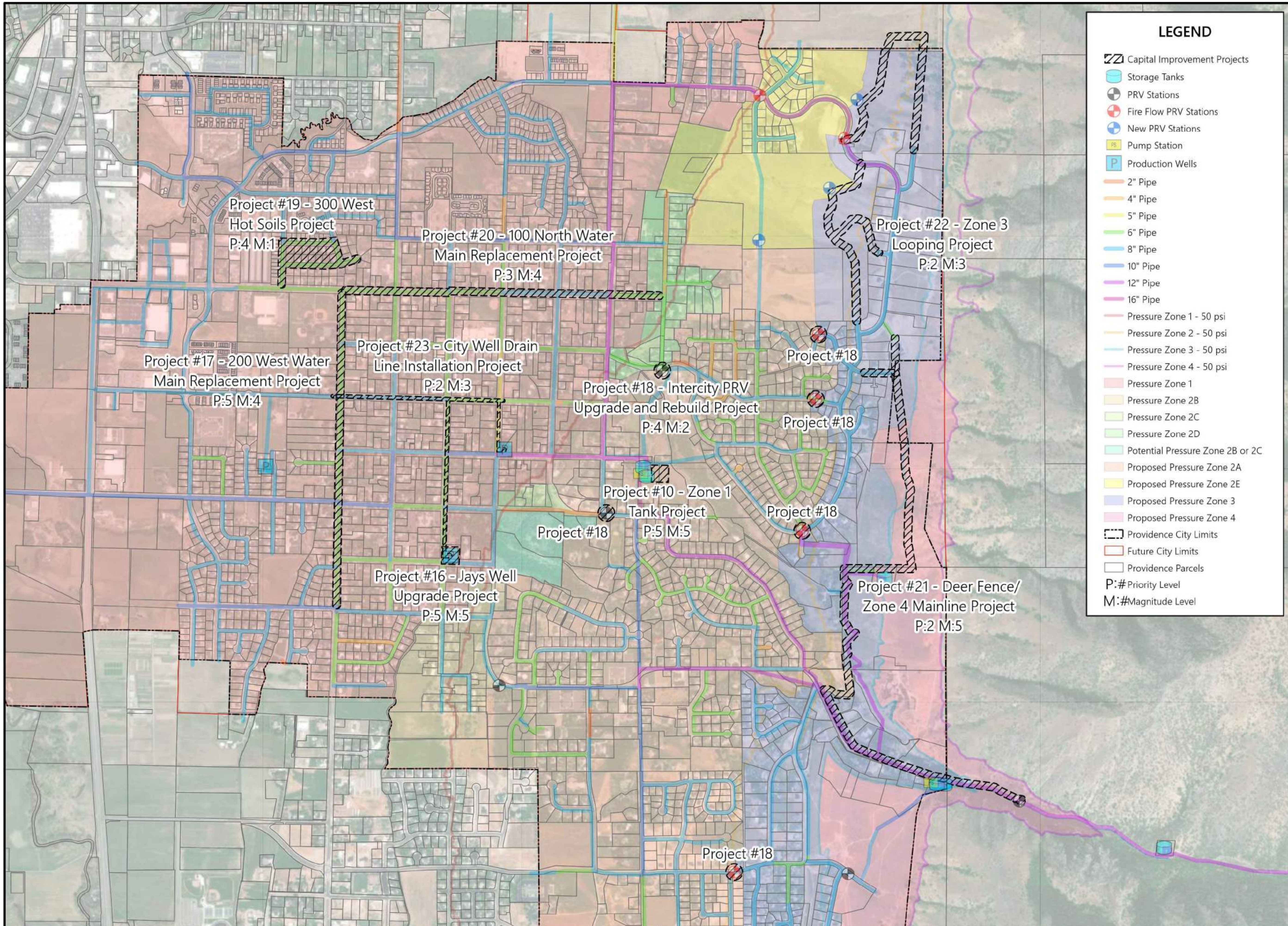
2100 NORTH MAIN STREET
NORTH LOGAN, UT 84341
TEL 435.563.3734
www.sunrise-eng.com



Providence City Utah

CAPITAL IMPROVEMENT PROJECTS
2026 - 2031
PRINTED: 6/1/2022
EXHIBIT: 6.2

SUNRISE ENGINEERING
2100 NORTH MAIN STREET
NORTH LOGAN, UT 84341
TEL 435.563.3734
www.sunrise-eng.com



N
W
E
S

0 380 760 1,520 Feet

Providence City Utah

CAPITAL IMPROVEMENT PROJECTS
2031 - 2041

PRINTED: 6/1/2022
EXHIBIT: #6.3

SUNRISE ENGINEERING
2100 NORTH MAIN STREET
NORTH LOGAN, UT 84341
TEL 435.563.3734
www.sunrise-eng.com

Appendix A – Water Rights

Water Right Details for 25-11417

Utah Division of Water Rights — 12/16/2021 3:43 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-11417 — Application/Claim: — Certificate:

Changes:

a41592	(Filed: 04/27/2016)	Lapsed
a45215	(Filed: 10/11/2019)	Approved

Stock Company:

This Water Right is a Share Statement which has a share ownership in the Water Company listed below:

Spring Creek Water Company - Shares of Stock: 227.35

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 — Interest:
Remarks:

Name: Spring Creek Water Company
Address: c/o Brent Speth
316 East Center Street
Providence UT 84332 — Interest:
Remarks:

General:

Type of Right: Water Company Shares — Source of Info.: Share Statement — Status:
Quantity of Water: 620.6655 ACFT

Source: Spring Creek
County: Cache
Common Description:
Proposed Det. Book: 25- — Map: — Pub. Date:
Land Owned by Appl.: — County Tax Id#:

Dates:

Filing:

Filed: 03/28/2017

Priority: Decree/Class:

Advertising:

Publication Began: Publication End: Newspaper:

Protest End Date: Protested: Hearing Held:

Approval:

State Eng. Action: Action Date:

Recon. Req. Date: Recon. Req Action:

Certification:

Proof Due Date: Extension Filed Date:

Election or Proof: Election/Proof Date:

Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:

Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required:

(1) S 130 ft. E 230 ft. from W4 corner, Sec 13 T 11N R 1E SLBM

Diverting Works: Source: Spring Creek (East Bench)

Elevation: UTM: 433937.657, 4615967.522

(2) S 10 ft. E 60 ft. from NW corner, Sec 14 T 11N R 1E SLBM

Diverting Works: Source:

Elevation: UTM: 432287.253, 4616821.128

(3) S 260 ft. E 410 ft. from NW corner, Sec 14 T 11N R 1E SLBM

Diverting Works: Source:

Elevation: UTM: 432393.933, 4616744.928

(4) N 1931 ft. E 1186 ft. from W4 corner, Sec 16 T 11N R 2E SLBM

Diverting Works: Source: Rocky Hollow Spring

Elevation: UTM: 438942.434, 4616237.253

(5) S 548 ft. E 828 ft. from W4 corner, Sec 16 T 11N R 2E SLBM

Diverting Works: Source: Upper Falls Spring

Elevation: UTM: 438833.315, 4615481.654

(6) S 1012 ft. W 995 ft. from E4 corner, Sec 17 T 11N R 2E SLBM

Diverting Works: Source: Lower Falls Spring

Elevation: UTM: 438277.665, 4615340.226

Points of Rediversion:

(1) S 130 ft. E 230 ft. from W4 corner, Sec 13 T 11N R 1E SLBM

Diverting Works: Source:

Elevation: UTM: 433937.657, 4615967.522

Proposed Water Uses:

Proposed Water Uses - Group Number: 639219

Water Use Types:

Irrigation-Beneficial Use Amount: 206.8885 Group Total: 206.8885 Period of Use: 04/01 to 10/31

Comments: PLACE OF USE: The PLACE OF USE is within the service area of the Spring Creek Water Company

Use Totals:

Irrigation sole-supply total: 206.8885 acres	for a group total of: 206.8885 acres	

Water Right Details for 25-11591

Utah Division of Water Rights 12/16/2021 3:43 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-11591 Application/Claim: Certificate:

Changes:

a45215 (Filed: 10/11/2019) Approved

Stock Company:

This Water Right is a Share Statement which has a share ownership in the Water Company listed below:

Spring Creek Water Company - Shares of Stock: 19.19

Owners:

Name: PRovidence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, UT 84332 Interest:
Remarks:

Name: Spring Creek Water Company
Address: c/o Brent Speth
316 East Center Street
Providence UT 84332 Interest:
Remarks:

General:

Type of Right: Water Company Shares Source of Info.: Share Statement Status:
Quantity of Water: 52.3887 ACFT

Source: Spring Creek
County: Cache
Common Description:
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 10/03/2019
Priority: Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required:

(1) S 130 ft. E 230 ft. from W4 corner, Sec 13 T 11N R 1E SLBM

Diverting Works: Source: Spring Creek (East Bench)

Elevation: UTM: 433937.657, 4615967.522

(2) S 10 ft. E 60 ft. from NW corner, Sec 14 T 11N R 1E SLBM

Diverting Works: Source: Dry Hollow Springs

Elevation: UTM: 432287.253, 4616821.128

(3) S 260 ft. E 410 ft. from NW corner, Sec 14 T 11N R 1E SLBM

Diverting Works: Source: Dry Hollow Springs

Elevation: UTM: 432393.933, 4616744.928

(4) S 548 ft. E 828 ft. from W4 corner, Sec 16 T 11N R 2E SLBM

Diverting Works: Source: Upper Falls Spring

Elevation: UTM: 438833.315, 4615481.654

(5) N 1931 ft. E 1186 ft. from W4 corner, Sec 16 T 11N R 2E SLBM

Diverting Works: Source: Rocky Hollow Spring

Elevation: UTM: 438942.434, 4616237.253

(6) S 1012 ft. W 995 ft. from E4 corner, Sec 17 T 11N R 2E SLBM

Diverting Works: Source: Lower Falls Spring

Elevation: UTM: 438277.665, 4615340.226

Points of Rediversion:

(1) S 130 ft. E 230 ft. from W4 corner, Sec 13 T 11N R 1E SLBM

Diverting Works: Source:

Elevation: UTM: 433937.657, 4615967.522

Proposed Water Uses:

Proposed Water Uses - Group Number: 726618

Water Use Types:

Irrigation-Beneficial Use Amount: 17.4629 Group Total: 17.4629 Period of Use: 04/01 to 10/31

Comments: PLACE OF USE: The PLACE OF USE is within the service area of the Spring Creek Water Company

Use Totals:

Irrigation sole-supply total: 17.4629 acres for a group total of: 17.4629 acres

Water Right Details for 25-3451

Utah Division of Water Rights 12/16/2021 4:19 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-3451 Application/Claim: A34203 Certificate:

Changes:

a32010 (Filed: 10/02/2006) Approved

Owners:

Name: Preston D. and Cumorah Alder
Address: 61 South 2nd East
Providence UT 84332
Interest:
Remarks: 0.00 ac sole supply interest segregated off to 25-10698

Name: Stan Checketts Properties
Address: 900 Canyon Road
Providence, Utah 84332
Interest:
Remarks: 20.90 acres (sole ?)

General:

Type of Right: Application To Appropriate Source of Info.: Proposed Determination Status: Water User's Claim
Quantity of Water: 1 CFS OR 108 ACFT

Source: Underground Water Drain
County: Cache
Common Description: Providence
Proposed Det. Book: 25-7 Map: 68a Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 04/06/1962
Priority: 04/06/1962 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Approved Action Date: 09/18/1963
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 60 ft. E 115 ft. from NW corner, Sec 16 T 11N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 429048.054, 4616815.614 (NAD83)

Source/Cmnt:

(2) S 1170 ft. E 90 ft. from NW corner, Sec 16 T 11N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 429040.434, 4616477.286 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 19880

Water Rights Appurtenant to the following use(s):

25-3451(WUC), 25-4692(DIL), 25-10698(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: Unevaluated Group Total: 21.3 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 16 T 11N R 1E SLBM	1.6																1.6
Sec 17 T 11N R 1E SLBM						19.7											19.7
Group Acreage Total :																	21.3

Proposed Water Uses - Group Number: 20182

Water Use Types:

Irrigation-Beneficial Use Amount: Unevaluated Group Total: 20.9 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 16 T 11N R 1E SLBM	1.7																1.7
Sec 17 T 11N R 1E SLBM						19.2											19.2
Group Acreage Total :																	42.2

In addition to the water rights in this group, water
was also supplied to the place of use described by this group by the following company(ies):

College Irrigation Company

Use Totals:

Irrigation sole-supply total: Unevaluated acres for a group total of: 42.2 acres

Segregation History:

This Right was Segregated from: none

as originally filed:	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
	1.0		108.0	27.0						

The following Water Rights have been Segregated from 25-3451:

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Municipal	Mining	Power	Other
(1) WrNum: 25-10698			[24.4]	[6.1]						

AppNum: A34203
Name: Alder, Preston D. and Cumorah
Filed: 01/17/2007
Commen

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
	1.0		83.6	20.9						

Water Right Details for 25-4150

Utah Division of Water Rights 1/10/2022 5:00 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-4150 Application/Claim: A35120 Certificate:

Changes:

a32010 (Filed: 10/02/2006) Approved

Owners:

Name: SJR Living Trust
Address: L Scott and Jodi Lynn Richins, Trustees
540 South 800 West
Smithfield UT 84335 Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Proposed Determination Status: Water User's Claim
Quantity of Water: 0 CFS OR 20 ACFT

Source: Unnamed Stream
County: Cache
Common Description:
Proposed Det. Book: 25-5 Map: 26b Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed:
Priority: 04/01/1963 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:
Stream Alteration Required:

(1) N 700 ft. W 660 ft. from S4 corner, Sec 30 T 14N R 1E SLBM
Diverting Works: Source: Unnamed Stream
Elevation: UTM: 426430.925, 4641230.175

Proposed Water Uses:

Proposed Water Uses - Group Number: 20154

Water Rights Appurtenant to the following use(s):
25-4147(WUC), 25-4150(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: Unevaluated Group Total: 15.4 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 30 T 14N R 1E SLBM												15.4					15.4
Group Acreage Total :																	15.4

Proposed Water Uses - Group Number: 20158

Water Use Types:

Irrigation-Beneficial Use Amount: Unevaluated Group Total: 27.7 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 30 T 14N R 1E SLBM											13	14.7					27.7
Group Acreage Total :																	43.1

Use Totals:

Irrigation sole-supply total: Unevaluated acres for a group total of: 43.1 acres

Other Comments:

```
Reservoir will fill once during irrigation season making total filling of
20 ac. ft.
WUC 4150 is limited to the irrigation requirements of 7.0 acs.  The land
described above is irrigated by sprinkler system.
```

Reservoirs:

Reservoir/Storage Name: Unnamed Reservoir Dam Number:

Capacity: 10 acre-feet Area Inundated: 0 acres

Dam Height: 0 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 30 T 14N R 1E SLBM																X

Water Right Details for 25-4147

Utah Division of Water Rights 12/16/2021 3:44 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-4147 Application/Claim: A35045 Certificate:

Changes:

a32010 (Filed: 10/02/2006) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, UT 84332 Interest:
Remarks: 178 Acre-Feet

Name: Stan Checketts Properties L.C.
Address: P.O. Box 55
Providence, Utah 84332
Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Proposed Determination Status: Water User's Claim
Quantity of Water: 0 CFS OR 250 ACFT

Source: Unnamed Spring
County: Cache
Common Description:
Proposed Det. Book: 25-5 Map: 26a Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed:
Priority: 03/13/1963 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:

Stream Alteration Required:

(1) N 50 ft. E 70 ft. from S4 corner, Sec 30 T 14N R 1E SLBM

Diverting Works: Source: Unnamed Stream

Elevation: UTM: 426653.429, 4641032.055

Proposed Water Uses:

Proposed Water Uses - Group Number: 20153

Water Use Types:

Irrigation-Beneficial Use Amount: Unevaluated Group Total: 98.4 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 30 T 14N R 1E SLBM													38	12.4	36.2	11.8	98.4
Group Acreage Total :																	98.4

Proposed Water Uses - Group Number: 20154

Water Rights Appurtenant to the following use(s):

25-4147(WUC), 25-4150(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: Unevaluated Group Total: 15.4 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 30 T 14N R 1E SLBM												15.4					15.4
Group Acreage Total :																	113.8

Use Totals:

Irrigation sole-supply total: Unevaluated acres for a group total of: 113.8 acres

Other Comments:

```
The reservoir is expected to fill once during the non-irrigation season and
four times during the irrigation season.
```

Reservoirs:

Reservoir/Storage Name: Unnamed Reservoir Dam Number:

Capacity: 50 acre-feet Area Inundated: 0 acres

Dam Height: 0 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 30 T 14N R 1E SLBM															X	X

Water Right Details for 25-4462

Utah Division of Water Rights 12/16/2021 3:45 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-4462 Application/Claim: U21942 Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest: 100%
Remarks:

General:

Type of Right: Underground Water Claim Source of Info.: Proposed Determination Status:
Quantity of Water: 0.1675 CFS OR 60 ACFT

Source: Underground Water Drain
County: Cache
Common Description: Southwest Richmond
Proposed Det. Book: 25-3 Map: 27b Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed:
Priority: / /1925 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 11/17/1976 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1550 ft. E 1220 ft. from SW corner, Sec 34 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 431020.135, 4639881.223 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC), 25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC), 25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC), 25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 15 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section Totals
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 15 acres for a group total of: 233.8 acres

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/24/2011

Comments:

Filed: 10/30/2018 Expiration Date: 01/31/2026

Advertising:

Publication Began: 11/15/2018 Publication End: 11/22/2018 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 12/12/2018 Hearing Held:

Approval:

SE Action: Approved Action Date: 01/07/2019

Comments:

Water Right Details for 25-7121

Utah Division of Water Rights 12/17/2021 3:54 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-7121 Application/Claim: A47308 Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Water User's Claim Status: Water User's Claim
Quantity of Water: 0.16 CFS OR 20 ACFT

Source: Drains (Surface & Underground Tile)
County: Cache
Common Description: Richmond
Proposed Det. Book: 25-4A Map: 26a&d Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 11/16/1976
Priority: 11/16/1976 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date: 03/16/1977
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election Election/Proof Date: 07/30/1979
Certificate Date: 04/28/1980 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 850 ft. E 375 ft. from NW corner, Sec 2 T 13N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 432377.106, 4639150.296 (NAD83)
Source/Cmnt:

Points of Rediversion:	
(1) N 405 ft. W 1105 ft. from S4 corner, Sec 33 T 14N R 1E SLBM	
Diverting Works:	Source:
Elevation:	UTM: 429507.051, 4639533.213
(2) N 1020 ft. E 1320 ft. from SW corner, Sec 33 T 14N R 1E SLBM	
Diverting Works:	Source:
Elevation:	UTM: 429441.769, 4639721.741

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC), 25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC), 25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC), 25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 5 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 5 acres for a group total of: 233.8 acres

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/21/2011

Comments:

Filed: 10/30/2018 Expiration Date: 01/31/2026

Advertising:

Publication Began: 11/15/2018 Publication End: 11/22/2018 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 12/12/2018 Hearing Held:

Approval:

SE Action: Approved Action Date: 01/07/2019

Comments:

Water Right Details for 25-10510

Utah Division of Water Rights 12/16/2021 3:47 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10510 Application/Claim: A36746 Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Proposed Determination Status: Water User's Claim
Quantity of Water: 72 ACFT

Source: Underground Water Drains
County: Cache
Common Description: Richmond
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 03/14/2005
Priority: 01/09/1976 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 405 ft. W 1105 ft. from S4 corner, Sec 33 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 429507.051, 4639533.213 (NAD83)
Source/Cmnt:

Points of Diversion - Underground:

(2) N 1020 ft. E 1320 ft. from SW corner, Sec 33 T 14N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 429441.769, 4639721.741 (NAD83)

Source/Cmnt:

(3) N 1010 ft. E 50 ft. from SW corner, Sec 34 T 14N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 430663.519, 4639716.631 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC),
25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC),
25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC),
25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 18 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 18 acres for a group total of: 233.8 acres

Segregation History:

This Right was Segregated from: 25-4325, with Appl.#:A36746, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses: Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
as originally filed:			72.0	18.0						

	Flow in CFS		Quantity in Acre-Feet	Water Uses: Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
This Right as currently calculated:			72.0	18.0						

Nonuses

Filed: 08/15/2011				Expiration Date:	10/31/2018
Advertising:					
Publication Began:	09/15/2011	Publication End:	09/22/2011	Newspaper:	The Herald Journal
Protested:	Not Protested	Protest End Date:	10/12/2011	Hearing Held:	
Approval:					
SE Action:	Approved	Action Date:	10/21/2011		
Comments:					

Filed: 10/30/2018				Expiration Date:	01/31/2026
Advertising:					
Publication Began:	11/15/2018	Publication End:	11/22/2018	Newspaper:	The Herald Journal
Protested:	Not Protested	Protest End Date:	12/12/2018	Hearing Held:	
Approval:					
SE Action:	Approved	Action Date:	01/07/2019		
Comments:					

Water Right Details for 25-10511

Utah Division of Water Rights | 12/16/2021 3:48 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10511 | Application/Claim: U1473 | Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 | Interest: 100%
Remarks:

General:

Type of Right: Underground Water Claim | Source of Info.: Ownership Segregation | Status:
Quantity of Water: 38.8 ACFT

Source: Underground Water Drain
County: Cache
Common Description: Southwest Richmond
Proposed Det. Book: 25- | Map: | Pub. Date:
Land Owned by Appl.: | County Tax Id#:

Dates:

Filing:
Filed: 01/09/1976
Priority: / /1903 | Decree/Class:

Advertising:
Publication Began: | Publication End: | Newspaper:
Protest End Date: | Protested: Not Protested | Hearing Held:

Approval:
State Eng. Action: Approved | Action Date: 07/23/1976
Recon. Req. Date: | Recon. Req Action:

Certification:
Proof Due Date: | Extension Filed Date:
Election or Proof: Election | Election/Proof Date: 05/25/1979
Certificate Date: 01/15/1980 | Lapsed, Etc. Date: | Lapsed Letter

Wells:
Prov. Well Date: | Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1020 ft. E 1320 ft. from SW corner, Sec 33 T 14N R 1E SLBM
Well Diameter: in. | Depth: to ft. | Year Drilled: | Well Log: | Well Id#:
Elevation: | UTM: 429441.769, 4639721.741 (NAD83)
Source/Cmnt:

Points of Diversion - Underground:

(2) N 405 ft. W 1105 ft. from S4 corner, Sec 33 T 14N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 429507.051, 4639533.213 (NAD83)

Source/Cmnt:

(3) N 1010 ft. E 50 ft. from SW corner, Sec 34 T 14N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 430663.519, 4639716.631 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC), 25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC), 25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC), 25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 9.7 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 9.7 acres for a group total of: 233.8 acres

Reservoirs:

Reservoir/Storage Name: #1- Funk and Peart Dam Number:

Capacity: 20 acre-feet Area Inundated: 0 acres

Dam Height: 14 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE

Reservoir/Storage Name: #2- Funk Dam Number:

Capacity: 40 acre-feet Area Inundated: 0 acres

Dam Height: 14 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE

Segregation History:

This Right was Segregated from: 25-2424, with Appl.#:U1473, Approval Date: / / under which Proof is to be submitted.

as originally filed:	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
			38.8	9.7						

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
			38.8	9.7						

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/21/2011

Comments:

Filed: 10/30/2018 Expiration Date: 01/31/2026

Advertising:

Publication Began: 11/15/2018 Publication End: 11/22/2018 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 12/12/2018 Hearing Held:

Approval:

SE Action: Approved Action Date: 01/07/2019

Comments:

Water Right Details for 25-10512

Utah Division of Water Rights — 12/16/2021 3:48 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10512 — Application/Claim: A36747 — Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 — Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate — Source of Info.: Proposed Determination — Status: Water User's Claim
Quantity of Water: 50 ACFT

Source: Underground Water Drain
County: Cache
Common Description: Richmond
Proposed Det. Book: 25- — Map: — Pub. Date:
Land Owned by Appl.: — County Tax Id#:

Dates:

Filing:
Filed: 03/14/2005
Priority: 01/09/1976 — Decree/Class:

Advertising:
Publication Began: — Publication End: — Newspaper:
Protest End Date: — Protested: Not Protested — Hearing Held:

Approval:
State Eng. Action: — Action Date:
Recon. Req. Date: — Recon. Req Action:

Certification:
Proof Due Date: — Extension Filed Date:
Election or Proof: — Election/Proof Date:
Certificate Date: — Lapsed, Etc. Date: — Lapsed Letter

Wells:
Prov. Well Date: — Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 405 ft. W 1105 ft. from S4 corner, Sec 33 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 429507.051, 4639533.213 (NAD83)
Source/Cmnt:

Points of Diversion - Underground:

(2) N 1020 ft. E 1320 ft. from SW corner, Sec 33 T 14N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 429441.769, 4639721.741 (NAD83)

Source/Cmnt:

Points of Rediversion:

(1) N 1010 ft. E 50 ft. from SW corner, Sec 34 T 14N R 1E SLBM

Diverting Works: Source:

Elevation: UTM: 430663.519, 4639716.631

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC), 25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC), 25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC), 25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 12.5 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 12.5 acres for a group total of: 233.8 acres

Reservoirs:

Reservoir/Storage Name: Funk & Peart Reservoir Dam Number:

Capacity: 20 acre-feet Area Inundated: 0 acres

Dam Height: 0 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 33 T 14N R 1E SLBM									X	X	X	X	X	X	X	X

Reservoir/Storage Name: Funk Reservoir Dam Number:

Capacity: 40 acre-feet Area Inundated: 0 acres

Dam Height: 0 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE
Sec 33 T 14N R 1E SLBM									X	X	X	X	X	X	X	X

Segregation History:

This Right was Segregated from: 25-4326, with Appl.#:A36747, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
as originally filed:							Municipal	Mining	Power	Other
			50.0	12.5						

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
			50.0	12.5						

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/21/2011

Comments:

Filed: 10/30/2018 Expiration Date: 01/31/2026

Advertising:

Publication Began: 11/15/2018 Publication End: 11/22/2018 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 12/12/2018 Hearing Held:

Approval:

SE Action: Approved Action Date: 01/07/2019

Comments:

Water Right Details for 25-10513

Utah Division of Water Rights 12/16/2021 3:48 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10513 Application/Claim: A37422 Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Proposed Determination Status: Water User's Claim
Quantity of Water: 60 ACFT

Source: Underground Water Drain
County: Cache
Common Description: Southwest Richmond
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 03/14/2005
Priority: 01/17/1966 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1020 ft. E 1320 ft. from SW corner, Sec 33 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 429441.769, 4639721.741 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC),
25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC),
25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC),
25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 15 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 15 acres for a group total of: 233.8 acres

Reservoirs:

Reservoir/Storage Name: Funk Reservoir Dam Number:

Capacity: 20 acre-feet Area Inundated: 0 acres

Dam Height: 0 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE

Segregation History:

This Right was Segregated from: 25-4470, with Appl.#:A37422, Approval Date: / / under which Proof is to be submitted.

as originally filed:	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
			60.0	15.0						

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
			60.0	15.0						

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/21/2011

Comments:

Nonuses

Filed:	10/30/2018			Expiration Date:	01/31/2026
Advertising:					
Publication Began:	11/15/2018	Publication End:	11/22/2018	Newspaper:	The Herald Journal
Protested:	Not Protested	Protest End Date:	12/12/2018	Hearing Held:	
Approval:					
SE Action:	Approved	Action Date:	01/07/2019		
Comments:					

Water Right Details for 25-10514

Utah Division of Water Rights 12/16/2021 3:53 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10514 Application/Claim: A30899 Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Ownership Segregation Status: Water User's Claim
Quantity of Water: 90.8 ACFT

Source: Underground Water Well
County: Cache
Common Description: Richmond
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed:
Priority: 04/20/1959 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Approved Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election Election/Proof Date: 07/25/1978
Certificate Date: 12/26/1979 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1195 ft. W 960 ft. from S4 corner, Sec 34 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 431162.935, 4639773.27 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC), 25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC), 25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC), 25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 22.7 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section Totals
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 22.7 acres for a group total of: 233.8 acres

Segregation History:

This Right was Segregated from: 25-3342, with Appl.#:A30899, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Municipal	Mining	Power	Other
as originally filed:			90.8	22.7						

	Flow in CFS		Quantity in Acre-Feet	Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Municipal	Mining	Power	Other
This Right as currently calculated:			90.8	22.7						

Water Uses column groups: Irrigated Acreage, Stock (ELUs), Domestic (EDUs), Acre-Feet (Municipal, Mining, Power, Other).

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/21/2011

Comments:

Nonuses

Filed: 10/30/2018				Expiration Date:	01/31/2026
Advertising:					
Publication Began:	11/15/2018	Publication End:	11/22/2018	Newspaper:	The Herald Journal
Protested:	Not Protested	Protest End Date:	12/12/2018	Hearing Held:	
Approval:					
SE Action:	Approved	Action Date:	01/07/2019		
Comments:					

Water Right Details for 25-10524

Utah Division of Water Rights 12/16/2021 3:54 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10524 Application/Claim: U1473 Certificate:

Changes:

a30283 (Filed: 05/24/2005) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest:
Remarks:

General:

Type of Right: Underground Water Claim Source of Info.: Ownership Segregation Status:
Quantity of Water: 40.4 ACFT

Source: Underground Water Drain
County: Cache
Common Description: Southwest Richmond
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 01/09/1976
Priority: / /1903 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Approved Action Date: 07/23/1976
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election Election/Proof Date: 05/25/1979
Certificate Date: 01/15/1980 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 405 ft. W 1105 ft. from S4 corner, Sec 33 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 429507.051, 4639533.213 (NAD83)
Source/Cmnt:

Points of Diversion - Underground:
(2) N 1020 ft. E 1320 ft. from SW corner, Sec 33 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 429441.769, 4639721.741 (NAD83)
Source/Cmnt:
(3) N 1010 ft. E 50 ft. from SW corner, Sec 34 T 14N R 1E SLBM
Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 430663.519, 4639716.631 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):
25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC),
25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC),
25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC),
25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 10.1 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 10.1 acres for a group total of: 233.8 acres

Reservoirs:

Reservoir/Storage Name: #1- Funk and Peart Dam Number:
Capacity: 20 acre-feet Area Inundated: 0 acres
Dam Height: 14 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE

Reservoir/Storage Name: #2- Funk Dam Number:
Capacity: 40 acre-feet Area Inundated: 0 acres
Dam Height: 14 feet From: 01/01 to 12/31 inclusive

	North West Quarter				North East Quarter				South West Quarter				South East Quarter			
Area	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE

Segregation History:

This Right was Segregated from: 25-2424, with Appl.#:U1473, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
as originally filed:							Municipal	Mining	Power	Other
			40.4	10.1						

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet			
							Municipal	Mining	Power	Other
			40.4	10.1						

Nonuses

Filed: 08/15/2011 Expiration Date: 10/31/2018

Advertising:

Publication Began: 09/15/2011 Publication End: 09/22/2011 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 10/12/2011 Hearing Held:

Approval:

SE Action: Approved Action Date: 10/21/2011

Comments:

Filed: 10/30/2018 Expiration Date: 01/31/2026

Advertising:

Publication Began: 11/15/2018 Publication End: 11/22/2018 Newspaper: The Herald Journal

Protested: Not Protested Protest End Date: 12/12/2018 Hearing Held:

Approval:

SE Action: Approved Action Date: 01/07/2019

Comments:

Water Right Details for 25-4153

Utah Division of Water Rights — 12/16/2021 3:45 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-4153 Application/Claim: A35254 Certificate:

Changes:

a4603 (Filed: 12/08/1964) Water User's Claim

Owners:

Name: Providence City (Public Water Supplier)
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Water User's Claim Status: Water User's Claim
Quantity of Water: 1.5 CFS

Source: Underground Water Well
County: Cache
Common Description:
Proposed Det. Book: 25- Map: 58cc Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 05/17/1963
Priority: 05/17/1963 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date: 09/21/1964
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election Election/Proof Date: 06/10/1969
Certificate Date: 07/30/1970 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 1160 ft. W 430 ft. from E4 corner, Sec 10 T 11N R 1E SLBM
Well Diameter: 16 in. Depth: 366 to ft. Year Drilled: 1965 Well Log: Yes Well Id#: 2803
Elevation: UTM: 432145.085, 4617275.561 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849	
Water Rights Appurtenant to the following use(s): 25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT), 25-9269(APP), E844(APP),	
Water Use Types:	
Municipal: Providence	Period of Use: 01/01 to 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated	

Use Totals:
Municipal sole-supply total: Unevaluated acft

Water Right Details for 25-5055

Utah Division of Water Rights 12/16/2021 3:46 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-5055 Application/Claim: A40166 Certificate:

Owners:

Name: Providence City (Public Water Supplier)
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest: 100%
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Water User's Claim Status: Water User's Claim
Quantity of Water: 1.63 CFS

Source: Underground Water Well
County: Cache
Common Description: Providence
Proposed Det. Book: 25- Map: 58cc Pub. Date:
Land Owned by Appl.: Yes County Tax Id#:

Dates:

Filing:
Filed: 08/03/1970
Priority: 08/03/1970 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Approved Action Date: 11/16/1970
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: 07/31/1973 Extension Filed Date:
Election or Proof: Election Election/Proof Date: 06/27/1973
Certificate Date: 09/26/1973 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 1160 ft. W 430 ft. from E4 corner, Sec 10 T 11N R 1E SLBM
Well Diameter: 16 in. Depth: 311 to ft. Year Drilled: Well Log: Well Id#: 2803
Elevation: UTM: 432145.085, 4617275.561 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849

Water Rights Appurtenant to the following use(s):

25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT),
25-9269(APP), E844(APP),

Water Use Types:

Municipal: Providence — Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Water Right Details for 25-8706

Utah Division of Water Rights — 12/16/2021 3:46 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-8706 Application/Claim: A61251 Certificate:

Changes:

a16226 (Filed: 06/11/1991) Certificated

Owners:

Name: Providence City (Public Water Supplier)
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Certificate Status: Certificated
Quantity of Water: 1.33 CFS

Source: Underground Water Well
County: Cache
Common Description: Providence City
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: Yes County Tax Id#:

Dates:

Filing:
Filed: 09/05/1985
Priority: 09/05/1985 Decree/Class:

Advertising:
Publication Began: 10/03/1985 Publication End: Newspaper: The Herald Journal
Protest End Date: 11/16/1985 Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Approved Action Date: 02/07/1986
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: 07/31/1992 Extension Filed Date: 07/27/1992
Election or Proof: Proof Election/Proof Date: 07/31/1992
Certificate Date: 10/08/1996 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 3930 ft. W 5626 ft. from NE corner, Sec 11 T 11N R 1E SLBM
Well Diameter: 6 in. Depth: 337 to ft. Year Drilled: Well Log: Well Id#: 2803
Elevation: UTM: 432204.414, 4617229.918 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849

Water Rights Appurtenant to the following use(s):
25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT),
25-9269(APP), E844(APP),

Water Use Types:

Municipal: Providence — Period of Use: 01/01 to 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Segregation History:

This Right was Segregated from: none

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses: Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
as originally filed:	4.5									

The following Water Rights have been Segregated from 25-8706:

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Municipal	Mining	Power	Other
(1) WrNum: 25-9269	[3.17]									

AppNum: A61251a
Name: Providence City
Filed: 09/30/1992
Commen Retaining future development portion.

	Flow in CFS		Quantity in Acre-Feet	Water Uses: Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
This Right as currently calculated:	1.33									

Water Right Details for 25-9269

Utah Division of Water Rights 12/16/2021 3:47 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-9269 Application/Claim: A61251a Certificate:

Changes:

a20298 (Filed: 07/31/1996) Approved

Owners:

Name: Providence City (Public Water Supplier)
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Application to Segregate Status: Approved
Quantity of Water: 3.17 CFS

Source: Underground Water Well
County: Cache
Common Description: Providence
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 09/05/1985
Priority: 09/16/2016 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Approved Action Date: 02/07/1986
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: 01/31/2026 Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 185 ft. W 1151 ft. from SE corner, Sec 10 T 11N R 1E SLBM
Well Diameter: 16 in. Depth: 200 to 600 ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 431918.14, 4616880.564 (NAD83)
Source/Cmnt:

Points of Diversion - Underground:

(2) N 1900 ft. E 250 ft. from SW corner, Sec 11 T 11N R 1E SLBM

Well Diameter: 10 in. Depth: 200 to 600 ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 432345.165, 4617403.296 (NAD83)

Source/Cmnt:

(3) N 2180 ft. E 1550 ft. from SW corner, Sec 11 T 11N R 1E SLBM

Well Diameter: 10 in. Depth: 200 to 600 ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 432741.405, 4617488.64 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849

Water Rights Appurtenant to the following use(s):

25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT),
25-9269(APP), E844(APP),

Water Use Types:

Municipal: Providence Period of Use: 01/01 to 12/31

Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Other Comments:

```
Retaining future development portion.
GENERAL:
Supplemental water rights used for same purpose - 25-9341, 8859, 8706, 5505,
4153, 3246.

As of December 19, 2013, the priority date and/or filing date have
administratively changed to reflect that of the original right
```

Segregation History:

This Right was Segregated from: 25-8706, with Appl.#:A61251, Approval Date:02/07/1986 under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses: Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
as originally filed:	3.17									

	Flow in CFS		Quantity in Acre-Feet	Water Uses: Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet: Municipal	Mining	Power	Other
This Right as currently calculated:	3.17									

Extensions

Filed: 07/20/1995 Proof Due: 07/31/2000

Advertising:

Publication Began: Publication End: Newspaper:

Protested: Not Protested Hearing Held: Protest End Date:

Approval:

SE Action: Approved Action Date: 08/07/1995 Memo Decision: No

Extensions

Filed: 07/28/2000				Proof Due:	01/31/2004
Advertising:					
Publication Began:		Publication End:		Newspaper:	
Protested:	Not Protested	Hearing Held:		Protest End Date:	
Approval:					
SE Action:	Approved	Action Date:	08/10/2000	Memo Decision:	No
Filed: 01/22/2004				Proof Due:	01/31/2007
Advertising:					
Publication Began:		Publication End:		Newspaper:	
Protested:	Not Protested	Hearing Held:		Protest End Date:	
Approval:					
SE Action:	Approved	Action Date:	02/26/2004	Memo Decision:	No
Filed: 09/16/2016				Proof Due:	01/31/2021
Advertising:					
Publication Began:	10/06/2016	Publication End:	10/13/2016	Newspaper:	The Herald Journal
Protested:	Not Protested	Hearing Held:		Protest End Date:	11/02/2016
Approval:					
SE Action:	Approved	Action Date:	02/01/2017	Memo Decision:	No
Filed: 12/07/2020				Proof Due:	01/31/2026
Advertising:					
Publication Began:	12/24/2020	Publication End:	12/31/2020	Newspaper:	The Herald Journal
Protested:	Not Protested	Hearing Held:		Protest End Date:	01/20/2021
Approval:					
SE Action:	Approved	Action Date:	05/04/2021	Memo Decision:	Yes

Water Right Details for 25-3426

Utah Division of Water Rights 1/10/2022 5:15 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-3426 Application/Claim: A33722 Certificate:

Owners:

Name: Providence City (Public Water Supplier)
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Proposed Determination Status: Water User's Claim
Quantity of Water: 3 CFS

Source: Spring Area
County: Cache
Common Description:
Proposed Det. Book: 25-7 Map: 69 Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed:
Priority: 08/29/1961 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: 09/15/1966 Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:
Stream Alteration Required:

(1) S 2000 ft. E 2800 ft. from NW corner, Sec 18 T 11N R 2E SLBM
Diverting Works: Source:
Elevation: UTM: 436349.339, 4615912.49 (NAD83)

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849

Water Rights Appurtenant to the following use(s): 25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT), 25-9269(APP), E844(APP),
Group Comment: Period of use for 25-3426 is 11/1 to 4/1 and E844 is 4/1 to 9/30. The rest are 1/1 to 12/31.
Water Use Types:
Municipal: Providence Period of Use: 01/01 to 12/31 Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Water Right Details for 25-10509

Utah Division of Water Rights 12/16/2021 3:47 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-10509 Application/Claim: U2772 Certificate:

Changes:

a30283a	(Filed: 05/24/2005)	Withdrawn
a42051	(Filed: 09/27/2016)	Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence, Utah 84332 Interest: 100%
Remarks:

General:

Type of Right: Underground Water Claim Source of Info.: Ownership Segregation Status:
Quantity of Water: 25 ACFT

Source: Underground Water Anderson Drain
County: Cache
Common Description: Richmond
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed:
Priority: / /1929 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) N 1665 ft. W 225 ft. from S4 corner, Sec 34 T 14N R 1E SLBM

Well Diameter: in. Depth: to ft. Year Drilled: Well Log: Well Id#:

Elevation: UTM: 431386.963, 4639916.526 (NAD83)

Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 636747

Water Rights Appurtenant to the following use(s):

25-2424(UGWC), 25-2492(UGWC), 25-3342(WUC), 25-4325(WUC), 25-4326(WUC), 25-4462(UGWC), 25-4470(WUC), 25-7121(WUC), 25-10509(UGWC), 25-10510(WUC), 25-10511(UGWC), 25-10512(WUC), 25-10513(WUC), 25-10514(WUC), 25-10524(UGWC), 25-11405(WUC),

Water Use Types:

Irrigation-Beneficial Use Amount: 6.25 acres Group Total: 233.8 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 04 T 13N R 1E SLBM		X		X	X												
Sec 33 T 14N R 1E SLBM												X			X	X	
Sec 34 T 14N R 1E SLBM									X	X	X	X					
Group Acreage Total :																	

Use Totals:

Irrigation sole-supply total: 6.25 acres for a group total of: 233.8 acres

Segregation History:

This Right was Segregated from: 25-2492, with Appl.#:U2772, Approval Date: / / under which Proof is to be submitted.

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses						
as originally filed:				Irrigated Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet Municipal	Mining	Power	Other
			25.0	6.25						

This Right as currently calculated:	Flow in CFS		Quantity in Acre-Feet	Water Uses						
				Irrigate Acreage	Stock (ELUs)	Domestic (EDUs)	Acre-Feet Municipal	Mining	Power	Other
			25.0	6.25						

Nonuses

Filed: 08/15/2011				Expiration Date:	10/31/2018
Advertising:					
Publication Began:	09/15/2011	Publication End:	09/22/2011	Newspaper:	The Herald Journal
Protested:	Not Protested	Protest End Date:	10/12/2011	Hearing Held:	
Approval:					
SE Action:	Approved	Action Date:	10/21/2011		
Comments:					

Water Right Details for 25-6853

Utah Division of Water Rights 12/16/2021 3:46 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-6853 Application/Claim: D3244 Certificate:

Changes:

a37620 (Filed: 08/15/2011) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest: 100%
Remarks:

General:

Type of Right: Diligence Claim Source of Info.: Diligence Claim Status:
Quantity of Water: 0.078 CFS

Source: Last Chance Spring Area
County: Cache
Common Description:
Proposed Det. Book: 25- Map: Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 04/19/1976
Priority: / /1900 Decree/Class:

Advertising:
Publication Began: Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date:
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election/Proof Date:
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Surface:
Stream Alteration Required:

(1) S 560 ft. E 1485 ft. from W4 corner, Sec 11 T 11N R 1E SLBM
Diverting Works: Source: Last Chance Spring Area
Elevation: UTM: 432728.777, 4617458.441

Proposed Water Uses:

Proposed Water Uses - Group Number: 22289		
Water Use Types:		
Irrigation-Beneficial Use Amount: 1.38 acres	Group Total: 1.38	Period of Use: 04/01 to 10/31
Domestic-Beneficial Use Amount: 1 EDUs	Group Total: 1	Period of Use: 01/01 to 12/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 10 T 11N R 1E SLBM			0.04						1.34								1.38
																Group Acreage Total :	1.38

Use Totals:

Irrigation sole-supply total:	1.38 acres	for a group total of:	1.38 acres
Domestic sole-supply total:	1 EDUs	for a group total of:	1 EDUs

Water Right Details for 25-3374

Utah Division of Water Rights 12/16/2021 4:19 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-3374 Application/Claim: A34588 Certificate:

Changes:

a37619 (Filed: 08/15/2011) Approved

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 Interest:
Remarks:

General:

Type of Right: Application To Appropriate Source of Info.: Water User's Claim Status: Water User's Claim
Quantity of Water: 0.2 CFS OR 12 ACFT

Source: Underground Water Well
County: Cache
Common Description:
Proposed Det. Book: 25-7 Map: 58a,c Pub. Date:
Land Owned by Appl.: County Tax Id#:

Dates:

Filing:
Filed: 09/13/1962
Priority: 09/13/1962 Decree/Class:

Advertising:
Publication Began: 11/02/1962 Publication End: Newspaper:
Protest End Date: Protested: Not Protested Hearing Held:

Approval:
State Eng. Action: Action Date: 03/18/1963
Recon. Req. Date: Recon. Req Action:

Certification:
Proof Due Date: Extension Filed Date:
Election or Proof: Election Election/Proof Date: 04/15/1975
Certificate Date: Lapsed, Etc. Date: Lapsed Letter

Wells:
Prov. Well Date: Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 1560 ft. E 160 ft. from NW corner, Sec 2 T 11N R 1E SLBM
Well Diameter: 8 in. Depth: 301 to ft. Year Drilled: Well Log: Well Id#:
Elevation: UTM: 432341.742, 4619569.598 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 23065
Water Rights Appurtenant to the following use(s): 25-3374(WUC), 25-7699(DIS),
Water Use Types:
Irrigation-Beneficial Use Amount: 3 acres Group Total: 6 Period of Use: 04/01 to 10/31

Place Of Use:	North West				North East				South West				South East				Section
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	Totals
Sec 02 T 11N R 1E SLBM			3	3													6
Group Acreage Total :																	6

Use Totals:

Irrigation sole-supply total: 3 acres for a group total of: 6 acres

Water Right Details for 25-8859

Utah Division of Water Rights — 12/17/2021 4:23 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Water Right: 25-8859 | Application/Claim: A62749 | Certificate: 13607

Owners:

Name: Providence City (Public Water Supplier)
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332
Interest:
Remarks:

General:

Type of Right: Application To Appropriate
Source of Info.: Certificate
Status: Certificated
Quantity of Water: 1.225 CFS

Source: Underground Water Well
County: Cache
Common Description: Providence City
Proposed Det. Book: 25-
Map:
Pub. Date:
Land Owned by Appl.: No
County Tax Id#:

Dates:

Filing:
Filed: 08/10/1987
Priority: 08/10/1987
Decree/Class:

Advertising:
Publication Began: 09/10/1987
Publication End:
Newspaper: The Herald Journal
Protest End Date: 10/24/1987
Protested: Not Protested
Hearing Held:

Approval:
State Eng. Action: Approved
Action Date: 02/05/1988
Recon. Req. Date:
Recon. Req Action:

Certification:
Proof Due Date: 07/31/1993
Extension Filed Date:
Election or Proof: Proof
Election/Proof Date: 08/20/1991
Certificate Date: 07/01/1992
Lapsed, Etc. Date:
Lapsed Letter

Wells:
Prov. Well Date:
Most Recent Well Renovate/Replace Date:

Points of Diversion:

Points of Diversion - Underground:

(1) S 4014 ft. E 1840 ft. from NW corner, Sec 10 T 11N R 1E SLBM
Well Diameter: 8 in.
Depth: 220 to ft.
Year Drilled: 1978
Well Log: Yes
Well Id#: 2815
Elevation:
UTM: 431224.289, 4617209.414 (NAD83)
Source/Cmnt:

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849

Water Rights Appurtenant to the following use(s):
25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT),
25-9269(APP), E844(APP),

Water Use Types:

Municipal: Providence — Period of Use: 01/01 to 12/31
Acre Feet Contributed by this Right for this Use: Unevaluated

Use Totals:

Municipal sole-supply total: Unevaluated acft

Exchange Details for E844

Utah Division of Water Rights — 12/16/2021 3:22 PM

(WARNING: Water Rights makes NO claims as to the accuracy of this data.)

Exchange: E844 (25-9341) — Base Water Right Number: 25-4255

General:

Status: Approved | Stock/Contract #: | County Tax ID:

Right Evidencd By: Kimball Decree, Right No. 255 (25-4255)

Proposed Det. Book: 25- | Map: | Pub. Date:

Owners:

Name: Providence City
Address: Attn: Administrative Services Director
164 North Gateway Drive
Providence UT 84332 — Interest:
Remarks:

Dates:

Filing:
Filed: 10/24/1974 — Priority: 10/24/1974

Advertising:
Publication Began: 04/10/1975 — Publication End: — Newspaper:
Protest End Date: — Protested: Not Protested — Hearing Held:

Approval:
State Eng. Action: Approved — Action Date: 10/01/1975
Recon. Req. Date: — Recon. Req Action:

Certification:
Proof Due Date: — Extension Filed Date:
Election or Proof: — Election/Proof Date:
Certificate Date: — Lapsed, Etc. Date: — Lapsed Letter

Wells:
Prov. Well Date: — Most Recent Well Renovate/Replace Date:

- - - Current Right - - -

Current General:

Quantity of Water: 1.5 CFS
Source: Blacksmith Fork
County: Cache

Current Points of Diversion:

Current Water Uses:

- - - Proposed Exchange - - -

Proposed General:

Quantity of Water - CFS: 1.5 And/Or: Acre Feet: 0
From: 04/01 To: 09/30
Source: Broad Hollow Spring
County: Cache
Common Description:

Proposed Points of Exchange:

Points of Exchange - Surface:
Stream Alteration Required:

(1) S 1640 ft. W 1000 ft. from NE corner, Sec 18 T 11N R 2E SLBM
Diverting Works: Source: Broad Hollow Spring
Elevation: UTM: 436686.78, 4616000.781 (NAD83)

Proposed Points of Release:

Quantity of water: 1.5 cfs And/Or: 0 acft
Period of Use: 04/01 To 09/30
*** Location of Release Point(s) is the SAME as Point(s) of Diversion in CURRENT RIGHT above ***

Proposed Water Uses:

Proposed Water Uses - Group Number: 20849

Water Rights Appurtenant to the following use(s):
25-3426(WUC), 25-4153(WUC), 25-5055(WUC), 25-8706(CERT), 25-8859(CERT),
25-9269(APP), E844(APP),

Group Comment: Period of use for 25-3426 is 11/1 to 4/1 and E844 is 4/1 to 9/30. The rest are 1/1 to 12/31.

Water Use Types:

Municipal: Providence Period of Use: 01/01 to 12/31
Acre Feet Contributed by this Right for this Use: 1085.96997

Proposed Use Totals:

Municipal sole-supply total: 1085.96997 acft

Proposed General Comments:

```
The point at which the water will be diverted from the Providence-Blacksmith
Fork Irrigation Company Canal is:  680 feet South and 15 feet East of the E4
corner of Section 10, T11N, R1E, SLB&M.
```

Segregation History:

This Right was Segregated from: none

	Flow in CFS	AND/ OR/ BLANK	Quantity in Acre-Feet	Water Uses: Irrigated Acreage	Stock (ELUs)	Domestic (Families)	Acre-Feet: Municipal	Mining	Power	Other
as originally filed:	1.5									

	Flow in CFS		Quantity in Acre-Feet	Water Uses: Irrigate Acreage	Stock (ELUs)	Domestic (Families)	Acre-Feet: Municipal	Mining	Power	Other
This Right as currently calculated:	1.5									

Appendix B – Well Logs

W_LL DRILLER'S REPO_T
State of Utah
Division of Water Rights

For additional space, use "Additional Well Data Form" and attach

Well Identification CHANGE APPLICATION: a20298(25-9269)

Owner *Note any changes*

Providence City
15 South Main
Providence, UT 84332

RECEIVED
MAY 24 1999
WATER RIGHTS
SALT LAKE

Contact Person/Engineer:

Well Location *Note any changes*

COUNTY: Cache
NORTH 185 feet WEST 1151 feet from the SE Corner of
SECTION 10, TOWNSHIP 11N, RANGE 1E, SLB&M.

Location Description: (address, proximity to buildings, landmarks, ground elevation, local well #) Providence

Drillers Activity Start Date: 1-15-99 Completion Date: 5-5-99

Check all that apply:
☒ New ☐ Repair ☐ Deepen ☐ Abandon ☐ Replace ☐ Public Nature of Use:

DEPTH (feet) FROM	TO	BOREHOLE DIAMETER (in)	DRILLING METHOD	DRILLING FLUID
0	100 ~~423~~	~~16~~ 24"	cable Tool	N/A
100	423	16"	cable tool	N/A

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE high	PERMEABLE low	CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	ROCK TYPE	COLOR	DESCRIPTIONS AND REMARKS (include comments on *water quality* if known.)
0	3				X	X		X	X				Black	Top Soil
3	24'				X			X	X	X			Brown	
24	30							X						Dry
30	78							X	X	X				Dry
78	83				X			X					Brown	
83	97							X						Dry
97	171				X			X						
171	242	X	X					X						
242	274				X			X		X			Brown	
274	295'	X	X					X	X	X				

Static Water Level

Date______ Water Level______feet Flowing? ☐ Yes ☐ No

Method of Water Level Measurement______ If Flowing, Capped Pressure______ PSI

Point to Which Water Level Measurement was Referenced______

Height of Water Level reference point above ground surface______feet Temperature______ ☐ °C ☐ °F

Well Log

Construction Information

DEPTH (feet) FROM	TO	CASING TYPE AND MATERIAL/GRADE	WALL THICK (in)	NOMINAL DIAM. (in)	DEPTH (feet) FROM	TO	SLOT SIZE OR PERF SIZE (in)	SCREEN DIAM. OR PERF LENGTH (in)	SCREEN TYPE OR NUMBER PERF (per round/interval)
+1	100	Steel A53-B	.375	24"	170'	240'	1/2"	3"	8/12"
+1.5	422	Steel A53-B	.375	16"	270'	390'	"	"	"
					390'	420'	"	"	"
		Perforations in 24" pipe			0'	100'	1"	4"	5/3 1/2"

SCREEN ☐ PERFORATIONS ☐

Well Head Configuration: steel plate - Access Port Provided? ☐ Yes ☒ No

Casing Joint Type: Welded Perforator Used: Mills Knife

DEPTH (feet) FROM	TO	FILTER PACK / GROUT / PACKER / ABANDONMENT MATERIAL: ANNULAR MATERIAL, ABANDONMENT MATERIAL and/or PACKER DESCRIPTION	Quantity of Material Used (if applicable)	GROUT DENSITY (lbs./gal.,# bag mix, gal./sack etc.)
0'	100'	13 bag mix sand & cement	13 C.Y.	5gals / bag cement

Well Development / Pump or Bail Tests

Date	Method	Yield	Units GPM	Units CFS	DRAWDOWN (ft)	TIME PUMPED (hrs & min)
5-4-99	Test Pump	900	X		4 1/2'	2 hrs.
5-5-99	" "	1500	X		14	12 hrs.
5-5-99	" "	1800	X		14 (24 hrs @ 1800)	48 hrs.

Pump (Permanent)

Pump Description: ______ Horsepower: ______ Pump Intake Depth: ______ feet

Approximate maximum pumping rate: ______ Well disinfected upon completion? ☐ Yes ☐ No

Comments

Description of construction activity, additional materials used, problems encountered, extraordinary circumstances, abandonment / procedures. *Use additional well data form for more space.*

Well Driller Statement

This well was drilled or abandoned under my supervision, according to applicable rules and regulations, and this report is complete and correct to the best of my knowledge and belief.

Name: R. Wright Drilling Inc. License No. 333

(Person, Firm, or Corporation – Print or Type)

Signature: Ken Wright Date 5-22-99

(Licensed Well Driller)

ADDITIONAL WELL DATA FORM

Water Right # 25-92-69

OWNER NAME Providence City

Well Log

DEPTH (feet) FROM	TO	WATER	PERMEABLE high	PERMEABLE low	UNCONSOLIDATED CLAY	SILT	SAND	GRAVEL	COBBLES	BOULDER	OTHER	CONSOLIDATED ROCK TYPE	COLOR	DESCRIPTIONS AND REMARKS (include comments on *water quality* if known.)
295	354	X	X				X	X			X			conglomerate (lightly cemented)
354	371	X		X	X			X		X			Brown	
371	392	X	X				X	X						lightly cemented
392		X		X	X		X	X						conglomerate

25-4153

~~4~~

Form 113—5M—12-60

Examined 1-11-66 V.F.O

Recorded: B. C. 1-13-66 T. B. V.F.O

Inspection Sheet 1-13-66 B.M.

Copied

REPORT OF WELL DRILLER

STATE OF UTAH

Application No. 35254 ~~24603~~

Claim No.

Coordinate No. (A-11-1) 10 d a d

GENERAL STATEMENT: Report of well driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of the well. Failure to file such reports constitutes a misdemeanor.)

(1) WELL OWNER:

Name: Providence City Corporation

Address: Providence, Utah

(2) LOCATION OF WELL:

County: Cache Ground Water Basin (leave blank)

North ~~1910~~ 1600 feet, ~~East~~ ~~West~~ W 450 ~~20~~ feet from ~~SW~~ SE Corner ~~South~~

of Section ~~11~~ 10, T 11 N ~~S~~, R 1 E SLBM ~~W USM~~ (strike out words not needed)

(3) NATURE OF WORK (check): New Well ☒ Replacement Well ☐ Deepening ☐ Repair ☐ Abandon ☐

If abandonment, describe material and procedure:

(4) NATURE OF USE (check): Domestic ☐ Industrial ☐ Municipal ☒ Stockwater ☐ Irrigation ☐ Mining ☐ Other ☐ Test Well ☐

(5) TYPE OF CONSTRUCTION (check): Rotary ☐ Dug ☐ Jetted ☐ Cable ☒ Driven ☐ Bored ☐

(6) CASING SCHEDULE: Threaded ☐ Welded ☒

16" Diam. from 0 feet to 366 feet Gage .375

" Diam. from feet to feet Gage

" Diam. from feet to feet Gage

New ☒ prime Reject ☐ Used ☐

(7) PERFORATIONS: Perforated? Yes ☒ No ☐

Type of perforator used: Mills

Size of perforations 5/8 inches by 3 inches

132 perforations from 240 feet to 262 feet

18 perforations from 264 feet to 267 feet

24 perforations from 324 feet to 328 feet

168 perforations from 338 feet to 366 feet

perforations from feet to feet

(8) SCREENS: Well screen installed? Yes ☐ No ☒

Manufacturer's Name

Type Model No.

Diam. Slot size Set from ft. to

Diam. Slot size Set from ft. to

(9) CONSTRUCTION:

Was well gravel packed? Yes ☐ No ☒ Size of gravel:

Gravel placed from feet to feet

Was a surface seal provided? Yes ☐ No ☒

To what depth? feet

Material used in seal:

Did any strata contain unusable water? Yes ☐ No ☒

Type of water: Depth of strata

Method of sealing strata off:

Was surface casing used? Yes ☒ No ☐

Was it cemented in place? Yes ☐ No ☒

(10) WATER LEVELS:

Static level 134 feet below land surface Date 10/28/65

Artesian pressure feet above land surface Date

LOG RECEIVED: 1-11-66 V.F.O

(11) FLOWING WELL:

Controlled by (check) Valve ☐ Cap ☐ Plug ☐ No Control ☐

Does well leak around casing? Yes ☐ No ☐

(12) WELL TESTS: Drawdown is the distance in feet the water level is lowered below static level.

Was a pump test made? Yes ☒ No ☐ If so, by whom? Rhodes Bros.

Yield: 1425 gal./min. with 24 feet drawdown after 8 hours

" 1620 " 26 " 12 "

" 2018 " 31 " 24 "

Bailer test gal./min. with feet drawdown after hours

Artesian flow g.p.m. Date

Temperature of water 51° Was a chemical analysis made? No ☒ Yes ☐

(13) WELL LOG: Diameter of well 16 inches

Depth drilled 377 feet. Depth of completed well 366 feet.

NOTE: Place an "X" in the space or combination of spaces needed to designate the material or combination of materials encountered in each depth interval. Under REMARKS make any desirable notes as to occurrence of water and the color, size, nature, etc., of material encountered in each depth interval. Use additional sheet if needed.

From	To	Clay	Silt	Sand	Gravel	Cobbles	Boulders	Hardpan	Conglomerate	Bedrock	Other	REMARKS
0	2					x						w/soil
2	3					x						cemented
3	9			x								silty
9	12					x						
12	28	x										brown
28	47					x						cemented, trace water
47	49	x										brown
49	69					x						cemented, some water
69	76	x										w/cobbles
76	89				x	x						some water
89	90	x										gray
90	110				x							cemented
110	113	x										gray
113	126			x	x	x						cemented
126	135			xx	x							cemented
135	137				x							& large boulder
137	139	x										gray, beleive SLformation
139	172			x	x							cemented /starts here
172	230				x							cemented
230	243	x										brown, w/gravel
243	261				x							cemented HSL - 140'
261	265	x										gray
265	266				x							coarse
266	324				x							cemented
324	337			x	x							cemented
337	346			x	x							coarse HSL - 140'
346	377				x							cemented HSL -134'

from 135 to 377' probably is Salt Lake Formation, with solution channels as aquifers.

Work started 3/29, 1965 Completed 10/28, 1965

(14) PUMP:

Manufacturer's Name

Type: H. P.

Depth to pump or bowles feet

Well Driller's Statement:

This well was drilled under my supervision, and this report is true to the best of my knowledge and belief.

Name: Cache Valley Drilling Company (Person, firm, or corporation) (Type or print)

Address: Box 66, Smithfield, Utah

(Signed) [signature] (Well Driller)

License No. 33 Date 11/2, 1965

USE OTHER SIDE FOR ADDITIONAL REMARKS

Form 168

WELL INSPECTION REPORT

Water Right Application No. 35254-a4605 Date 4-26-66

Owner's Name Providence City Corporation

Owner's Address Providence, Utah

Well location (from application or claim) North 1600 ft. and W 450 ft. from SE Cor. of Sec. 10, T 11 N., R 1 E., SLB&M. County Cache

New Well ✓ Repair ____ Clean ____ Deepen ____ Replace ____

Diameter of Casing 16" I.D. New ✓ Used ____

If "used" casing, was it inspected before being used? ____

Replacement Well
New well is located ____ feet east or west and ____ feet north or south from old well.
Has old well been plugged? ____ By whom? ____
Date plugged ____ Method of plugging ____

Flowing Well
Type of control: Valve ( ) Cap ( ) Other ( )
If other than commercial valve or cap, describe the type of control ____
Is the control effective? ____
If not, explain why: ____
Does water leak around casing when control is closed? ____
If so, what is the rate of leakage? ____
Was the well in use at time of inspection? ____
Does the well yield sand? ____ Are there signs of caving? ____

Non-Flowing Well
Was the well equipped with pump at time of inspection? No
Does well pump sand? ____ Are there signs of caving? No
Comments: ____

Nature of Use
Domestic ____ Stock ____ Irrigation ____ Municipal ✓ Mining ____ Other ____
If "other" describe use ____
Rate of Discharge
Estimated ____ Measured ____ Method of Measurement: ____
(State whether g.p.m. or c.f.s.)

Capped At Time Of Inspection

Tag placed on well 4-26-66 Tag already on well ____ Tag needs to be prepared ____

Comments: ____

Inspection made by Blaine Taylor

Appendix C – Info Water Model Results

2021 Model - 2021 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	WDNJ_ID_1	0.70	4,676.71	4,939.63	113.92
2	☐	WDNJ_ID_10	0.37	4,691.06	4,941.34	108.45
3	☐	WDNJ_ID_100	0.15	4,813.66	5,097.05	122.79
4	☐	WDNJ_ID_101	2.07	4,897.99	5,097.12	86.28
5	☐	WDNJ_ID_102	1.12	4,909.76	5,097.13	81.19
6	☐	WDNJ_ID_103	1.29	4,724.83	5,096.63	161.10
7	☐	WDNJ_ID_104	1.29	4,722.32	5,096.63	162.19
8	☐	WDNJ_ID_105	0.37	4,722.88	4,939.63	93.92
9	☐	WDNJ_ID_106	1.49	4,620.88	4,816.27	84.66
10	☐	WDNJ_ID_107	0.84	4,836.26	5,097.05	113.00
11	☐	WDNJ_ID_108	3.84	4,833.78	5,097.05	114.07
12	☐	WDNJ_ID_109	11.80	4,526.58	4,816.23	125.51
13	☐	WDNJ_ID_11	0.65	4,554.61	4,816.28	113.38
14	☐	WDNJ_ID_110	1.62	4,536.26	4,816.24	121.31
15	☐	WDNJ_ID_111	1.86	4,540.72	4,816.23	119.38
16	☐	WDNJ_ID_112	0.64	4,934.34	5,096.38	70.21
17	☐	WDNJ_ID_113	5.78	4,548.87	4,816.28	115.87
18	☐	WDNJ_ID_114	1.74	4,905.96	5,096.41	82.52
19	☐	WDNJ_ID_115	0.99	4,895.53	5,097.12	87.35
20	☐	WDNJ_ID_116	3.24	4,553.07	4,816.28	114.05
21	☐	WDNJ_ID_117	1.12	4,809.72	5,097.05	124.50
22	☐	WDNJ_ID_118	2.02	4,822.57	5,097.05	118.93
23	☐	WDNJ_ID_119	2.21	4,528.78	4,816.23	124.55
24	☐	WDNJ_ID_12	0.20	4,768.87	5,096.54	141.98
25	☐	WDNJ_ID_120	0.89	4,884.20	5,097.11	92.25
26	☐	WDNJ_ID_121	0.97	4,915.91	5,096.41	78.21
27	☐	WDNJ_ID_122	1.60	4,936.22	5,096.41	69.41
28	☐	WDNJ_ID_123	0.74	4,587.56	4,816.26	99.09
29	☐	WDNJ_ID_124	0.57	4,836.02	5,096.46	112.85
30	☐	WDNJ_ID_125	1.10	4,599.20	4,816.26	94.05
31	☐	WDNJ_ID_126	2.27	4,934.08	5,097.12	70.65
32	☐	WDNJ_ID_127	1.00	4,948.59	5,097.12	64.36
33	☐	WDNJ_ID_128	0.84	4,740.00	4,939.63	86.50
34	☐	WDNJ_ID_129	1.47	4,896.98	5,096.49	86.45
35	☐	WDNJ_ID_13	1.29	4,737.65	5,096.52	155.50
36	☐	WDNJ_ID_130	2.27	4,935.74	5,096.49	69.65
37	☐	WDNJ_ID_131	2.02	4,514.40	4,816.25	130.79
38	☐	WDNJ_ID_132	1.42	4,523.49	4,816.25	126.85
39	☐	WDNJ_ID_133	0.28	4,867.81	5,097.07	99.34
40	☐	WDNJ_ID_134	1.27	4,884.80	5,097.05	91.97
41	☐	WDNJ_ID_135	0.40	4,895.55	5,097.05	87.31
42	☐	WDNJ_ID_136	0.74	4,589.40	4,816.26	98.30
43	☐	WDNJ_ID_137	1.70	4,838.17	5,096.46	111.92
44	☐	WDNJ_ID_138	1.82	4,817.57	5,096.46	120.84
45	☐	WDNJ_ID_139	2.14	4,605.12	4,816.26	91.49
46	☐	WDNJ_ID_14	0.13	4,738.09	5,096.74	155.40
47	☐	WDNJ_ID_140	1.97	4,538.03	4,816.28	120.56
48	☐	WDNJ_ID_141	0.84	4,867.79	5,096.46	99.08
49	☐	WDNJ_ID_142	1.34	4,869.14	5,097.11	98.78
50	☐	WDNJ_ID_143	1.81	4,544.93	4,816.23	117.56

2021 Model - 2021 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	WDNJ_ID_144	0.30	4,984.51	5,097.05	48.76
52	☐	WDNJ_ID_145	1.07	4,880.13	5,097.11	94.02
53	☐	WDNJ_ID_146	0.50	4,893.54	5,097.12	88.21
54	☐	WDNJ_ID_147	0.47	4,819.82	5,097.05	120.12
55	☐	WDNJ_ID_148	0.94	4,818.67	5,097.05	120.62
56	☐	WDNJ_ID_149	3.58	4,641.32	4,816.39	75.86
57	☐	WDNJ_ID_15	0.25	4,775.66	5,096.74	139.12
58	☐	WDNJ_ID_150	0.60	4,837.49	5,096.99	112.44
59	☐	WDNJ_ID_151	0.64	4,841.27	5,096.99	110.80
60	☐	WDNJ_ID_152	0.00	4,508.55	4,816.23	133.32
61	☐	WDNJ_ID_153	0.00	4,508.72	4,816.23	133.25
62	☐	WDNJ_ID_154	0.35	4,733.70	5,096.50	157.20
63	☐	WDNJ_ID_155	1.74	4,682.35	4,939.63	111.48
64	☐	WDNJ_ID_156	0.15	4,520.43	4,816.23	128.17
65	☐	WDNJ_ID_157	2.29	4,841.17	5,096.99	110.85
66	☐	WDNJ_ID_158	0.62	4,858.12	5,096.99	103.50
67	☐	WDNJ_ID_159	1.30	4,942.94	5,231.17	124.89
68	☐	WDNJ_ID_16	0.10	4,718.53	4,913.58	84.52
69	☐	WDNJ_ID_160	0.38	4,827.12	5,096.49	116.72
70	☐	WDNJ_ID_161	1.29	4,829.39	5,096.49	115.73
71	☐	WDNJ_ID_164	0.00	5,040.72	5,231.18	82.53
72	☐	WDNJ_ID_165	0.18	4,810.50	5,097.05	124.16
73	☐	WDNJ_ID_166	0.03	4,807.28	5,097.05	125.56
74	☐	WDNJ_ID_167	0.03	4,807.38	5,097.05	125.51
75	☐	WDNJ_ID_168	0.03	4,805.39	5,097.05	126.37
76	☐	WDNJ_ID_169	0.10	4,615.25	4,816.35	87.14
77	☐	WDNJ_ID_17	0.10	4,718.78	4,913.58	84.41
78	☐	WDNJ_ID_170	0.07	4,604.27	4,816.35	91.90
79	☐	WDNJ_ID_171	0.38	4,645.37	4,816.27	74.05
80	☐	WDNJ_ID_172	0.00	5,150.51	5,410.17	112.51
81	☐	WDNJ_ID_173	0.00	5,152.13	5,410.16	111.80
82	☐	WDNJ_ID_174	0.00	5,162.66	5,410.16	107.24
83	☐	WDNJ_ID_175	0.37	5,143.15	5,258.39	49.93
84	☐	WDNJ_ID_176	0.03	5,032.58	5,233.46	87.04
85	☐	WDNJ_ID_177	1.47	4,980.58	5,233.46	109.57
86	☐	WDNJ_ID_178	0.52	4,803.00	5,096.88	127.34
87	☐	WDNJ_ID_179	0.67	4,835.91	5,096.48	112.91
88	☐	WDNJ_ID_18	0.60	4,536.56	4,816.27	121.20
89	☐	WDNJ_ID_180	0.60	5,034.51	5,258.39	97.01
90	☐	WDNJ_ID_181	0.33	4,819.60	5,096.49	119.98
91	☐	WDNJ_ID_182	1.47	4,669.93	4,816.35	63.44
92	☐	WDNJ_ID_183	2.72	4,577.74	4,816.29	103.36
93	☐	WDNJ_ID_184	1.64	5,033.57	5,258.39	97.41
94	☐	WDNJ_ID_185	1.35	5,013.51	5,258.39	106.11
95	☐	WDNJ_ID_186	0.18	4,939.28	5,097.17	68.41
96	☐	WDNJ_ID_187	0.18	4,935.16	5,097.17	70.20
97	☐	WDNJ_ID_188	3.48	4,606.30	4,816.34	91.01
98	☐	WDNJ_ID_189	1.87	4,592.72	4,816.33	96.89
99	☐	WDNJ_ID_19	0.00	4,562.55	4,816.27	109.94
100	☐	WDNJ_ID_190	2.06	4,577.41	4,816.32	103.52

2021 Model - 2021 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	WDNJ_ID_191	3.58	4,684.23	4,816.48	57.30
102	☐	WDNJ_ID_192	0.77	4,828.89	5,096.97	116.16
103	☐	WDNJ_ID_193	8.67	4,628.37	4,816.36	81.46
104	☐	WDNJ_ID_194	1.81	4,856.68	5,097.05	104.15
105	☐	WDNJ_ID_195	0.53	4,864.44	5,097.05	100.79
106	☐	WDNJ_ID_196	5.23	4,532.73	4,816.24	122.84
107	☐	WDNJ_ID_197	1.05	4,532.20	4,816.24	123.07
108	☐	WDNJ_ID_198	3.26	4,530.43	4,816.24	123.84
109	☐	WDNJ_ID_199	0.94	4,546.77	4,816.27	116.77
110	☐	WDNJ_ID_2	0.70	4,675.95	4,939.63	114.25
111	☐	WDNJ_ID_20	0.17	4,569.94	4,816.25	106.73
112	☐	WDNJ_ID_200	2.37	4,527.82	4,816.26	124.98
113	☐	WDNJ_ID_201	3.89	4,796.65	5,096.90	130.10
114	☐	WDNJ_ID_202	3.61	4,566.67	4,816.29	108.16
115	☐	WDNJ_ID_203	3.51	4,549.68	4,816.31	115.53
116	☐	WDNJ_ID_204	1.79	4,568.71	4,816.31	107.29
117	☐	WDNJ_ID_205	14.61	4,523.13	4,816.23	127.00
118	☐	WDNJ_ID_206	0.33	4,889.42	5,097.11	89.99
119	☐	WDNJ_ID_207	0.00	4,512.20	4,816.25	131.74
120	☐	WDNJ_ID_208	1.84	4,574.36	4,816.31	104.84
121	☐	WDNJ_ID_209	4.48	4,557.81	4,816.31	112.01
122	☐	WDNJ_ID_21	0.17	4,567.80	4,816.25	107.66
123	☐	WDNJ_ID_210	1.64	4,562.12	4,816.31	110.14
124	☐	WDNJ_ID_211	1.32	4,968.54	5,097.20	55.75
125	☐	WDNJ_ID_212	0.87	4,554.32	4,816.31	113.52
126	☐	WDNJ_ID_213	1.57	4,556.33	4,816.31	112.65
127	☐	WDNJ_ID_214	2.11	4,572.55	4,816.30	105.62
128	☐	WDNJ_ID_215	1.72	5,057.69	5,258.39	86.96
129	☐	WDNJ_ID_216	4.76	4,523.35	4,816.22	126.90
130	☐	WDNJ_ID_217	5.45	4,515.60	4,816.22	130.26
131	☐	WDNJ_ID_218	3.18	4,513.41	4,816.23	131.21
132	☐	WDNJ_ID_219	1.00	5,054.71	5,258.39	88.25
133	☐	WDNJ_ID_220	1.50	5,053.89	5,258.39	88.61
134	☐	WDNJ_ID_221	0.79	4,516.24	4,816.22	129.98
135	☐	WDNJ_ID_222	0.69	4,565.17	4,816.26	108.80
136	☐	WDNJ_ID_223	4.60	4,500.70	4,816.23	136.72
137	☐	WDNJ_ID_224	0.00	4,500.39	4,816.24	136.86
138	☐	WDNJ_ID_225	1.44	4,808.23	5,097.05	125.15
139	☐	WDNJ_ID_226	1.02	4,556.27	4,816.25	112.65
140	☐	WDNJ_ID_227	1.50	4,557.50	4,816.25	112.12
141	☐	WDNJ_ID_228	0.15	4,534.59	4,816.26	122.05
142	☐	WDNJ_ID_229	1.87	4,532.90	4,816.25	122.78
143	☐	WDNJ_ID_230	1.34	4,528.97	4,816.25	124.48
144	☐	WDNJ_ID_231	0.30	4,501.26	4,816.24	136.48
145	☐	WDNJ_ID_232	0.85	4,812.91	5,097.05	123.12
146	☐	WDNJ_ID_233	0.90	4,567.15	4,816.25	107.94
147	☐	WDNJ_ID_234	4.76	4,523.67	4,816.21	126.76
148	☐	WDNJ_ID_235	1.47	4,984.54	5,231.17	106.87
149	☐	WDNJ_ID_236	1.32	4,957.23	5,231.17	118.70
150	☐	WDNJ_ID_237	5.40	4,530.12	4,816.24	123.98

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151	☐	WDNJ_ID_238	2.31	4,532.28	4,816.25	123.05
152	☐	WDNJ_ID_239	2.54	4,528.19	4,816.25	124.82
153	☐	WDNJ_ID_24	1.57	4,587.87	4,816.31	98.98
154	☐	WDNJ_ID_240	1.27	4,547.66	4,816.25	116.38
155	☐	WDNJ_ID_241	2.87	4,500.40	4,816.25	136.86
156	☐	WDNJ_ID_242	2.32	4,804.72	5,097.05	126.67
157	☐	WDNJ_ID_243	0.22	4,912.25	5,097.05	80.07
158	☐	WDNJ_ID_244	0.67	4,937.27	5,097.05	69.23
159	☐	WDNJ_ID_245	0.89	4,534.94	4,816.25	121.89
160	☐	WDNJ_ID_246	1.87	4,517.07	4,816.25	129.63
161	☐	WDNJ_ID_247	0.20	4,920.25	5,097.05	76.61
162	☐	WDNJ_ID_248	3.04	4,524.46	4,816.25	126.43
163	☐	WDNJ_ID_249	0.69	4,523.29	4,816.25	126.94
164	☐	WDNJ_ID_25	1.57	4,588.54	4,816.33	98.70
165	☐	WDNJ_ID_250	9.24	4,506.00	4,816.23	134.42
166	☐	WDNJ_ID_251	0.64	4,504.34	4,816.23	135.14
167	☐	WDNJ_ID_252	8.32	4,528.99	4,816.24	124.46
168	☐	WDNJ_ID_253	0.59	4,652.77	4,913.58	113.01
169	☐	WDNJ_ID_254	1.04	4,681.61	4,913.58	100.51
170	☐	WDNJ_ID_255	1.86	4,540.16	4,816.25	119.63
171	☐	WDNJ_ID_256	1.69	4,588.33	4,816.31	98.79
172	☐	WDNJ_ID_257	1.15	4,538.21	4,816.26	120.48
173	☐	WDNJ_ID_258	2.06	4,542.33	4,816.26	118.69
174	☐	WDNJ_ID_259	0.65	4,969.04	5,097.05	55.47
175	☐	WDNJ_ID_26	1.47	4,789.01	5,096.53	133.25
176	☐	WDNJ_ID_260	0.64	4,506.47	4,816.23	134.22
177	☐	WDNJ_ID_261	1.55	4,510.77	4,816.22	132.35
178	☐	WDNJ_ID_262	8.56	4,505.95	4,816.21	134.44
179	☐	WDNJ_ID_263	1.50	4,522.38	4,816.23	127.33
180	☐	WDNJ_ID_264	1.50	4,526.64	4,816.23	125.48
181	☐	WDNJ_ID_265	1.15	4,503.90	4,816.23	135.33
182	☐	WDNJ_ID_266	1.27	4,887.33	5,097.11	90.90
183	☐	WDNJ_ID_267	0.12	4,975.18	5,097.05	52.80
184	☐	WDNJ_ID_268	0.00	5,050.99	5,258.39	89.86
185	☐	WDNJ_ID_269	1.02	4,521.68	4,816.21	127.62
186	☐	WDNJ_ID_27	0.87	4,765.80	5,096.50	143.29
187	☐	WDNJ_ID_270	0.30	4,515.42	4,816.21	130.33
188	☐	WDNJ_ID_271	0.97	4,998.52	5,231.17	100.81
189	☐	WDNJ_ID_272	1.87	4,598.75	4,816.33	94.28
190	☐	WDNJ_ID_273	1.15	4,506.06	4,816.23	134.40
191	☐	WDNJ_ID_274	0.00	4,561.67	4,816.25	110.31
192	☐	WDNJ_ID_275	0.67	4,538.64	4,816.25	120.29
193	☐	WDNJ_ID_276	0.69	4,683.16	4,913.58	99.84
194	☐	WDNJ_ID_277	6.05	4,523.20	4,816.21	126.96
195	☐	WDNJ_ID_278	0.32	4,708.07	4,913.58	89.05
196	☐	WDNJ_ID_279	1.00	5,045.19	5,258.39	92.38
197	☐	WDNJ_ID_28	1.19	4,811.45	5,096.51	123.52
198	☐	WDNJ_ID_280	1.44	4,547.02	4,816.25	116.66
199	☐	WDNJ_ID_281	0.25	4,752.96	5,096.90	149.03
200	☐	WDNJ_ID_282	2.22	4,619.33	4,816.37	85.38

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201	☐	WDNJ_ID_283	0.70	4,637.74	4,816.26	77.35
202	☐	WDNJ_ID_284	0.87	4,548.29	4,816.32	116.14
203	☐	WDNJ_ID_285	1.07	4,942.21	5,097.05	67.09
204	☐	WDNJ_ID_286	1.32	4,962.57	5,097.05	58.27
205	☐	WDNJ_ID_287	1.00	4,655.67	4,816.35	69.62
206	☐	WDNJ_ID_288	0.40	4,650.84	4,816.35	71.72
207	☐	WDNJ_ID_289	0.15	4,535.63	4,816.26	121.60
208	☐	WDNJ_ID_29	0.38	4,797.00	5,096.50	129.77
209	☐	WDNJ_ID_290	1.67	4,966.37	5,233.46	115.73
210	☐	WDNJ_ID_291	0.69	4,963.92	5,233.46	116.79
211	☐	WDNJ_ID_292	0.00	4,502.14	4,816.24	136.10
212	☐	WDNJ_ID_293	1.42	4,921.79	5,097.05	75.94
213	☐	WDNJ_ID_294	0.79	4,893.51	5,097.05	88.19
214	☐	WDNJ_ID_295	1.00	4,899.47	5,097.05	85.61
215	☐	WDNJ_ID_296	0.57	4,529.97	4,816.25	124.04
216	☐	WDNJ_ID_297	0.00	4,508.97	4,816.22	133.13
217	☐	WDNJ_ID_298	0.00	4,524.99	4,816.23	126.19
218	☐	WDNJ_ID_299	1.49	4,636.27	4,816.35	78.03
219	☐	WDNJ_ID_3	2.72	4,578.05	4,816.29	103.23
220	☐	WDNJ_ID_30	1.96	4,647.19	4,816.42	73.33
221	☐	WDNJ_ID_300	0.64	4,628.17	4,816.35	81.54
222	☐	WDNJ_ID_301	0.87	4,924.16	5,097.05	74.91
223	☐	WDNJ_ID_302	0.69	4,980.86	5,233.46	109.45
224	☐	WDNJ_ID_303	0.35	4,720.55	5,096.49	162.90
225	☐	WDNJ_ID_304	0.32	4,783.30	5,096.49	135.71
226	☐	WDNJ_ID_305	0.00	4,784.46	5,097.05	135.44
227	☐	WDNJ_ID_306	0.03	4,723.11	5,096.49	161.79
228	☐	WDNJ_ID_307	0.00	4,731.42	5,096.49	158.19
229	☐	WDNJ_ID_308	0.03	4,720.44	5,096.49	162.94
230	☐	WDNJ_ID_309	0.03	4,785.62	5,096.49	134.70
231	☐	WDNJ_ID_31	1.96	4,660.52	4,816.47	67.57
232	☐	WDNJ_ID_310	0.00	4,698.23	5,096.49	172.57
233	☐	WDNJ_ID_311	1.64	4,645.74	4,816.31	73.91
234	☐	WDNJ_ID_312	1.64	4,642.65	4,816.31	75.25
235	☐	WDNJ_ID_313	0.05	4,562.67	4,816.33	109.91
236	☐	WDNJ_ID_314	0.40	4,578.91	4,816.35	102.88
237	☐	WDNJ_ID_315	0.00	4,565.65	4,816.33	108.62
238	☐	WDNJ_ID_316	0.38	4,641.09	4,816.27	75.91
239	☐	WDNJ_ID_317	0.00	5,104.82	5,410.18	132.31
240	☐	WDNJ_ID_318	1.81	4,830.61	5,096.96	115.41
241	☐	WDNJ_ID_319	1.54	4,620.39	4,816.40	84.93
242	☐	WDNJ_ID_32	0.38	4,792.78	5,096.50	131.60
243	☐	WDNJ_ID_320	0.57	4,865.83	5,097.07	100.20
244	☐	WDNJ_ID_321	1.15	4,538.76	4,816.26	120.24
245	☐	WDNJ_ID_322	2.04	4,565.71	4,816.25	108.56
246	☐	WDNJ_ID_323	2.19	4,863.04	5,097.06	101.40
247	☐	WDNJ_ID_324	0.15	4,516.42	4,816.25	129.92
248	☐	WDNJ_ID_325	0.00	4,522.94	4,816.21	127.08
249	☐	WDNJ_ID_326	0.05	4,557.06	4,816.32	112.34
250	☐	WDNJ_ID_327	0.00	4,489.34	4,816.25	141.65

2021 Model - 2021 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	WDNJ_ID_33	0.79	4,678.58	4,939.63	113.11
252	☐	WDNJ_ID_330	0.00	4,796.18	4,816.59	8.84
253	☐	WDNJ_ID_331	1.10	5,035.87	5,233.46	85.61
254	☐	WDNJ_ID_333	1.47	4,979.91	5,097.24	50.84
255	☐	WDNJ_ID_334	1.72	4,616.21	4,816.36	86.73
256	☐	WDNJ_ID_335	2.93	4,890.28	5,097.10	89.62
257	☐	WDNJ_ID_336	0.00	5,815.00	5,830.00	6.50
258	☐	WDNJ_ID_337	0.00	5,507.00	5,830.00	139.96
259	☐	WDNJ_ID_338	0.00	5,506.00	5,830.00	140.39
260	☐	WDNJ_ID_339	0.00	5,385.23	5,830.00	192.72
261	☐	WDNJ_ID_34	3.38	4,589.41	4,816.32	98.32
262	☐	WDNJ_ID_342	0.05	4,557.65	4,816.32	112.08
263	☐	WDNJ_ID_343	0.07	4,608.31	4,816.35	90.14
264	☐	WDNJ_ID_344	0.22	4,609.89	4,816.35	89.46
265	☐	WDNJ_ID_345	0.00	4,696.88	5,096.49	173.15
266	☐	WDNJ_ID_346	0.00	4,697.94	5,096.49	172.69
267	☐	WDNJ_ID_347	0.00	5,012.29	5,231.17	94.84
268	☐	WDNJ_ID_348	0.00	5,017.75	5,231.17	92.48
269	☐	WDNJ_ID_349	1.17	4,884.08	5,096.49	92.04
270	☐	WDNJ_ID_35	1.15	4,575.01	4,816.31	104.56
271	☐	WDNJ_ID_350	1.96	4,885.64	5,096.49	91.36
272	☐	WDNJ_ID_351	0.42	4,964.87	5,231.17	115.39
273	☐	WDNJ_ID_352	0.00	5,036.73	5,231.17	84.25
274	☐	WDNJ_ID_353	0.00	5,009.94	5,231.17	95.86
275	☐	WDNJ_ID_354	0.07	4,984.55	5,231.17	106.86
276	☐	WDNJ_ID_355	0.07	4,981.46	5,231.17	108.20
277	☐	WDNJ_ID_356	0.00	5,032.13	5,231.17	86.25
278	☐	WDNJ_ID_357	0.05	5,056.90	5,231.17	75.51
279	☐	WDNJ_ID_358	0.15	4,535.82	4,816.26	121.51
280	☐	WDNJ_ID_359	0.15	4,531.83	4,816.26	123.24
281	☐	WDNJ_ID_36	1.49	4,582.38	4,816.30	101.36
282	☐	WDNJ_ID_360	0.42	4,965.47	5,231.17	115.13
283	☐	WDNJ_ID_361	0.42	5,042.24	5,231.17	81.86
284	☐	WDNJ_ID_362	0.13	4,546.83	4,816.26	116.74
285	☐	WDNJ_ID_363	2.12	4,551.32	4,816.26	114.80
286	☐	WDNJ_ID_364	0.75	4,844.98	5,097.02	109.21
287	☐	WDNJ_ID_365	0.97	4,850.47	5,097.02	106.83
288	☐	WDNJ_ID_366	1.05	4,832.98	5,097.02	114.41
289	☐	WDNJ_ID_367	0.90	4,948.84	5,096.13	63.82
290	☐	WDNJ_ID_368	0.17	4,951.51	5,096.13	62.67
291	☐	WDNJ_ID_369	0.90	4,950.13	5,096.13	63.26
292	☐	WDNJ_ID_37	1.49	4,581.98	4,816.30	101.53
293	☐	WDNJ_ID_371	0.48	4,952.80	5,231.18	120.62
294	☐	WDNJ_ID_372	0.17	4,569.87	4,816.25	106.76
295	☐	WDNJ_ID_373	0.00	4,570.48	4,816.25	106.49
296	☐	WDNJ_ID_374	0.64	4,581.10	4,816.25	101.89
297	☐	WDNJ_ID_375	0.74	4,588.79	4,816.26	98.56
298	☐	WDNJ_ID_376	0.74	4,589.16	4,816.26	98.40
299	☐	WDNJ_ID_377	0.74	4,587.95	4,816.26	98.93
300	☐	WDNJ_ID_378	1.49	4,620.53	4,816.27	84.81

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301	☐	WDNJ_ID_379	0.32	4,629.28	4,816.27	81.02
302	☐	WDNJ_ID_38	1.67	4,805.40	5,096.51	126.14
303	☐	WDNJ_ID_380	0.59	4,652.74	4,913.58	113.02
304	☐	WDNJ_ID_381	0.23	4,729.07	4,913.58	79.95
305	☐	WDNJ_ID_382	1.17	4,650.41	4,913.58	114.03
306	☐	WDNJ_ID_384	0.12	4,803.18	5,097.05	127.33
307	☐	WDNJ_ID_385	0.12	4,802.68	5,097.05	127.55
308	☐	WDNJ_ID_386	0.12	4,806.01	5,097.05	126.11
309	☐	WDNJ_ID_387	0.12	4,806.21	5,097.05	126.02
310	☐	WDNJ_ID_388	0.12	4,804.96	5,097.05	126.56
311	☐	WDNJ_ID_389	1.12	4,808.98	5,097.05	124.82
312	☐	WDNJ_ID_39	0.57	4,931.69	5,097.15	71.69
313	☐	WDNJ_ID_390	1.02	4,885.82	5,097.10	91.55
314	☐	WDNJ_ID_391	0.00	5,047.91	5,231.43	79.52
315	☐	WDNJ_ID_392	1.17	5,010.90	5,231.43	95.55
316	☐	WDNJ_ID_393	0.94	4,823.03	5,097.04	118.73
317	☐	WDNJ_ID_394	0.07	4,803.84	5,097.05	127.05
318	☐	WDNJ_ID_395	1.07	4,872.60	5,097.05	97.25
319	☐	WDNJ_ID_397	0.00	5,085.00	5,097.98	5.63
320	☐	WDNJ_ID_398	0.00	5,085.00	5,098.00	5.63
321	☐	WDNJ_ID_399	0.00	5,085.00	5,410.18	140.90
322	☐	WDNJ_ID_4	2.09	4,601.69	4,816.36	93.02
323	☐	WDNJ_ID_40	0.67	4,939.77	5,097.15	68.19
324	☐	WDNJ_ID_400	0.00	5,085.00	5,410.18	140.90
325	☐	WDNJ_ID_402	0.00	5,085.00	5,099.49	6.28
326	☐	WDNJ_ID_403	0.00	5,085.00	5,234.28	64.68
327	☐	WDNJ_ID_404	0.00	5,085.00	5,234.28	64.68
328	☐	WDNJ_ID_405	0.00	5,085.00	5,234.28	64.68
329	☐	WDNJ_ID_406	0.00	5,103.19	5,234.30	56.81
330	☐	WDNJ_ID_407	0.00	5,103.69	5,234.31	56.60
331	☐	WDNJ_ID_408	0.00	5,103.50	5,410.18	132.88
332	☐	WDNJ_ID_409	0.00	5,376.88	5,410.20	14.44
333	☐	WDNJ_ID_41	1.17	4,854.72	5,096.41	104.72
334	☐	WDNJ_ID_410	0.00	5,376.96	5,409.97	14.30
335	☐	WDNJ_ID_411	1.17	4,881.91	5,097.05	93.22
336	☐	WDNJ_ID_412	0.12	4,920.26	5,097.05	76.60
337	☐	WDNJ_ID_413	0.13	4,959.03	5,097.05	59.80
338	☐	WDNJ_ID_414	0.22	4,911.02	5,097.05	80.61
339	☐	WDNJ_ID_415	0.75	5,055.55	5,258.39	87.89
340	☐	WDNJ_ID_416	0.00	5,402.92	5,830.00	185.05
341	☐	WDNJ_ID_417	0.00	5,384.00	5,410.20	11.35
342	☐	WDNJ_ID_418	0.00	5,384.00	5,410.20	11.35
343	☐	WDNJ_ID_419	0.00	5,384.00	5,410.11	11.31
344	☐	WDNJ_ID_42	0.80	4,857.00	5,096.41	103.74
345	☐	WDNJ_ID_420	0.00	5,396.00	5,830.00	188.05
346	☐	WDNJ_ID_421	0.30	4,918.76	5,097.05	77.25
347	☐	WDNJ_ID_422	0.05	4,981.83	5,097.05	49.92
348	☐	WDNJ_ID_423	0.28	4,981.57	5,097.05	50.04
349	☐	WDNJ_ID_424	3.69	5,047.86	5,258.39	91.22
350	☐	WDNJ_ID_425	18.60	4,517.53	4,816.21	129.42

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351	☐	WDNJ_ID_426	4.76	4,530.08	4,816.21	123.98
352	☐	WDNJ_ID_427	4.76	4,527.79	4,816.21	124.97
353	☐	WDNJ_ID_428	0.00	4,543.77	4,816.27	118.07
354	☐	WDNJ_ID_429	0.05	4,562.42	4,816.33	110.02
355	☐	WDNJ_ID_43	1.60	4,597.56	4,816.26	94.76
356	☐	WDNJ_ID_430	0.40	4,569.14	4,816.34	107.11
357	☐	WDNJ_ID_432	2.77	4,599.11	4,816.36	94.13
358	☐	WDNJ_ID_433	1.09	4,580.86	4,816.36	102.04
359	☐	WDNJ_ID_434	2.22	4,563.46	4,816.31	109.56
360	☐	WDNJ_ID_435	1.17	4,543.14	4,816.29	118.35
361	☐	WDNJ_ID_436	1.29	4,540.52	4,816.27	119.48
362	☐	WDNJ_ID_437	1.29	4,536.44	4,816.25	121.24
363	☐	WDNJ_ID_438	2.06	4,540.95	4,816.26	119.29
364	☐	WDNJ_ID_439	3.18	4,512.30	4,816.23	131.69
365	☐	WDNJ_ID_44	2.44	4,632.56	4,816.26	79.60
366	☐	WDNJ_ID_440	0.00	4,509.64	4,816.24	132.85
367	☐	WDNJ_ID_441	0.48	4,507.42	4,816.23	133.81
368	☐	WDNJ_ID_442	0.37	4,501.97	4,816.23	136.17
369	☐	WDNJ_ID_443	0.48	4,498.71	4,816.23	137.58
370	☐	WDNJ_ID_444	5.32	4,500.76	4,816.24	136.70
371	☐	WDNJ_ID_445	0.74	4,499.69	4,816.24	137.16
372	☐	WDNJ_ID_446	1.12	4,492.38	4,816.25	140.33
373	☐	WDNJ_ID_447	0.00	4,505.99	4,816.25	134.43
374	☐	WDNJ_ID_448	0.40	4,507.48	4,816.24	133.79
375	☐	WDNJ_ID_449	0.00	4,516.92	4,816.25	129.70
376	☐	WDNJ_ID_45	0.18	4,783.52	5,096.50	135.61
377	☐	WDNJ_ID_450	1.39	4,537.03	4,816.27	120.99
378	☐	WDNJ_ID_451	0.53	4,527.59	4,816.26	125.08
379	☐	WDNJ_ID_452	0.57	4,514.14	4,816.25	130.90
380	☐	WDNJ_ID_453	1.84	4,521.43	4,816.25	127.74
381	☐	WDNJ_ID_454	4.28	4,531.39	4,816.25	123.43
382	☐	WDNJ_ID_455	1.74	4,517.54	4,816.25	129.43
383	☐	WDNJ_ID_456	3.09	4,519.72	4,816.25	128.49
384	☐	WDNJ_ID_457	1.77	4,558.27	4,816.25	111.78
385	☐	WDNJ_ID_458	1.45	4,619.77	4,816.26	85.14
386	☐	WDNJ_ID_459	0.62	4,701.21	4,816.33	49.88
387	☐	WDNJ_ID_46	1.15	5,049.28	5,258.39	90.61
388	☐	WDNJ_ID_460	2.59	4,766.28	4,941.34	75.86
389	☐	WDNJ_ID_461	1.60	4,702.64	4,913.58	91.40
390	☐	WDNJ_ID_462	2.29	4,770.70	4,913.59	61.91
391	☐	WDNJ_ID_463	1.67	4,801.98	5,097.05	127.85
392	☐	WDNJ_ID_464	1.72	4,799.57	5,097.05	128.90
393	☐	WDNJ_ID_465	1.76	4,840.13	5,097.05	111.32
394	☐	WDNJ_ID_466	0.00	4,771.42	5,096.68	140.93
395	☐	WDNJ_ID_467	0.28	4,858.24	5,097.03	103.47
396	☐	WDNJ_ID_468	2.07	4,861.21	5,097.03	102.18
397	☐	WDNJ_ID_469	2.01	4,883.87	5,097.08	92.38
398	☐	WDNJ_ID_47	1.47	4,981.32	5,258.38	120.05
399	☐	WDNJ_ID_471	0.94	4,942.38	5,097.16	67.07
400	☐	WDNJ_ID_472	2.69	4,908.88	5,097.12	81.57

2021 Model - 2021 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401	☐	WDNJ_ID_473	1.40	4,858.30	5,097.06	103.45
402	☐	WDNJ_ID_474	5.27	4,805.19	5,097.04	126.46
403	☐	WDNJ_ID_475	0.18	4,816.39	5,097.05	121.61
404	☐	WDNJ_ID_476	0.00	4,771.32	5,096.49	140.90
405	☐	WDNJ_ID_477	0.00	4,857.66	5,096.49	103.49
406	☐	WDNJ_ID_478	0.05	4,913.79	5,231.17	137.52
407	☐	WDNJ_ID_479	0.03	5,016.96	5,231.17	92.82
408	☐	WDNJ_ID_48	2.76	4,610.67	4,816.38	89.13
409	☐	WDNJ_ID_480	0.08	5,033.25	5,231.17	85.76
410	☐	WDNJ_ID_481	0.00	4,809.96	5,096.49	124.15
411	☐	WDNJ_ID_482	0.00	4,805.65	5,096.49	126.02
412	☐	WDNJ_ID_483	0.00	4,753.74	5,096.49	148.51
413	☐	WDNJ_ID_484	0.28	4,700.28	4,939.63	103.71
414	☐	WDNJ_ID_485	0.97	4,926.68	5,231.17	131.94
415	☐	WDNJ_ID_486	1.25	4,955.08	5,096.40	61.23
416	☐	WDNJ_ID_487	1.22	4,890.14	5,096.39	89.37
417	☐	WDNJ_ID_488	1.72	4,996.14	5,231.18	101.84
418	☐	WDNJ_ID_489	2.74	4,891.16	5,096.27	88.87
419	☐	WDNJ_ID_49	4.75	4,615.63	4,816.35	86.97
420	☐	WDNJ_ID_490	0.17	5,000.11	5,231.18	100.12
421	☐	WDNJ_ID_491	0.00	5,037.67	5,096.04	25.29
422	☐	WDNJ_ID_492	0.17	4,993.66	5,096.09	44.38
423	☐	WDNJ_ID_493	0.00	5,060.40	5,231.93	74.33
424	☐	WDNJ_ID_494	0.00	5,063.08	5,232.44	73.38
425	☐	WDNJ_ID_495	3.86	5,074.54	5,232.94	68.64
426	☐	WDNJ_ID_496	0.18	4,955.71	5,097.20	61.31
427	☐	WDNJ_ID_497	0.28	5,004.81	5,233.46	99.07
428	☐	WDNJ_ID_498	1.10	5,047.31	5,097.73	21.85
429	☐	WDNJ_ID_499	0.28	5,007.27	5,097.48	39.09
430	☐	WDNJ_ID_5	1.17	4,663.87	4,939.62	119.48
431	☐	WDNJ_ID_50	1.54	4,631.95	4,816.41	79.93
432	☐	WDNJ_ID_500	0.52	5,070.20	5,233.87	70.92
433	☐	WDNJ_ID_501	0.03	5,031.41	5,258.39	98.35
434	☐	WDNJ_ID_502	1.86	4,982.18	5,233.46	108.88
435	☐	WDNJ_ID_503	1.27	4,958.24	5,097.05	60.15
436	☐	WDNJ_ID_504	1.44	5,029.02	5,258.39	99.38
437	☐	WDNJ_ID_505	0.62	5,086.93	5,258.39	74.29
438	☐	WDNJ_ID_506	0.00	5,181.07	5,410.18	99.27
439	☐	WDNJ_ID_507	1.02	5,130.89	5,258.39	55.25
440	☐	WDNJ_ID_508	0.69	5,115.99	5,258.39	61.70
441	☐	WDNJ_ID_509	1.91	5,013.06	5,258.39	106.30
442	☐	WDNJ_ID_51	0.00	5,084.43	5,222.88	59.99
443	☐	WDNJ_ID_510	1.54	4,946.29	5,097.05	65.32
444	☐	WDNJ_ID_511	1.97	4,920.74	5,097.05	76.39
445	☐	WDNJ_ID_512	0.35	4,893.42	5,097.05	88.23
446	☐	WDNJ_ID_513	0.87	4,894.53	5,097.05	87.75
447	☐	WDNJ_ID_514	4.90	4,945.18	5,097.05	65.80
448	☐	WDNJ_ID_515	1.91	5,030.10	5,258.39	98.92
449	☐	WDNJ_ID_516	0.00	5,309.12	5,409.38	43.44
450	☐	WDNJ_ID_517	0.00	5,226.79	5,408.79	78.86

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	WDNJ_ID_518	0.00	5,162.81	5,234.90	31.24
452	☐	WDNJ_ID_519	0.00	5,158.31	5,410.18	109.14
453	☐	WDNJ_ID_520	0.00	5,227.61	5,410.19	79.11
454	☐	WDNJ_ID_521	0.00	5,308.63	5,410.19	44.01
455	☐	WDNJ_ID_522	0.00	5,773.00	5,830.00	24.70
456	☐	WDNJ_ID_523	0.00	5,661.00	5,830.00	73.23
457	☐	WDNJ_ID_524	0.00	5,630.00	5,830.00	86.66
458	☐	WDNJ_ID_525	0.00	5,605.00	5,830.00	97.49
459	☐	WDNJ_ID_526	0.00	5,562.00	5,830.00	116.12
460	☐	WDNJ_ID_527	0.00	5,486.00	5,830.00	149.06
461	☐	WDNJ_ID_528	0.00	5,416.00	5,830.00	179.39
462	☐	WDNJ_ID_529	0.00	4,803.00	4,816.82	5.99
463	☐	WDNJ_ID_53	0.40	4,578.70	4,816.35	102.97
464	☐	WDNJ_ID_530	0.00	4,803.00	5,096.95	127.37
465	☐	WDNJ_ID_531	0.00	4,803.00	5,096.95	127.37
466	☐	WDNJ_ID_532	0.00	4,803.00	5,096.95	127.37
467	☐	WDNJ_ID_533	0.00	4,803.00	4,816.82	5.99
468	☐	WDNJ_ID_534	0.00	4,803.00	5,096.90	127.35
469	☐	WDNJ_ID_535	0.00	4,803.00	5,096.90	127.35
470	☐	WDNJ_ID_536	0.00	4,803.00	4,816.66	5.92
471	☐	WDNJ_ID_537	0.00	4,803.00	4,816.66	5.92
472	☐	WDNJ_ID_54	0.00	4,581.03	4,816.35	101.97
473	☐	WDNJ_ID_546	0.00	5,024.00	5,097.54	31.86
474	☐	WDNJ_ID_547	0.00	5,024.00	5,233.46	90.76
475	☐	WDNJ_ID_548	0.00	4,803.00	5,096.95	127.37
476	☐	WDNJ_ID_549	0.00	4,528.32	4,816.25	124.76
477	☐	WDNJ_ID_55	0.38	4,648.63	4,816.27	72.64
478	☐	WDNJ_ID_550	0.00	4,670.00	4,816.39	63.43
479	☐	WDNJ_ID_551	0.00	4,665.00	4,816.39	65.60
480	☐	WDNJ_ID_552	0.00	4,620.00	4,816.37	85.09
481	☐	WDNJ_ID_553	0.00	4,619.33	4,816.37	85.38
482	☐	WDNJ_ID_554	0.00	4,683.00	4,913.58	99.91
483	☐	WDNJ_ID_555	0.00	4,517.00	4,816.25	129.66
484	☐	WDNJ_ID_556	0.00	4,516.00	4,816.25	130.10
485	☐	WDNJ_ID_557	0.00	4,513.00	4,816.25	131.40
486	☐	WDNJ_ID_558	0.00	4,511.00	4,816.24	132.26
487	☐	WDNJ_ID_559	0.00	4,510.00	4,816.24	132.70
488	☐	WDNJ_ID_56	0.38	4,645.72	4,816.28	73.90
489	☐	WDNJ_ID_560	0.00	4,511.00	4,816.24	132.26
490	☐	WDNJ_ID_561	0.00	4,511.00	4,816.24	132.26
491	☐	WDNJ_ID_563	0.00	4,511.00	4,816.24	132.26
492	☐	WDNJ_ID_564	0.00	4,572.00	4,816.30	105.85
493	☐	WDNJ_ID_565	0.00	4,573.00	4,816.30	105.42
494	☐	WDNJ_ID_566	0.00	4,573.00	4,816.30	105.42
495	☐	WDNJ_ID_567	0.00	4,573.00	4,816.30	105.42
496	☐	WDNJ_ID_568	0.00	4,572.00	4,816.29	105.85
497	☐	WDNJ_ID_569	0.00	4,560.00	4,816.29	111.05
498	☐	WDNJ_ID_57	0.69	4,629.71	4,816.27	80.83
499	☐	WDNJ_ID_570	0.00	4,573.00	4,816.30	105.42
500	☐	WDNJ_ID_571	0.00	4,573.00	4,816.30	105.42

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501	☐	WDNJ_ID_572	0.00	4,510.44	4,816.24	132.50
502	☐	WDNJ_ID_573	0.00	5,041.91	5,258.39	93.80
503	☐	WDNJ_ID_574	0.00	5,015.82	5,231.17	93.31
504	☐	WDNJ_ID_575	0.00	4,801.49	5,096.88	127.99
505	☐	WDNJ_ID_576	0.00	4,813.50	5,097.05	122.86
506	☐	WDNJ_ID_577	0.00	4,709.16	4,939.63	99.87
507	☐	WDNJ_ID_578	0.00	4,724.00	4,939.63	93.43
508	☐	WDNJ_ID_579	0.00	4,676.24	4,816.39	60.73
509	☐	WDNJ_ID_58	0.69	4,630.97	4,816.27	80.29
510	☐	WDNJ_ID_582	0.00	4,611.17	4,816.34	88.90
511	☐	WDNJ_ID_583	0.00	4,610.00	4,816.34	89.41
512	☐	WDNJ_ID_584	0.00	5,182.00	5,408.40	98.10
513	☐	WDNJ_ID_585	0.00	4,800.00	5,096.49	128.47
514	☐	WDNJ_ID_586	0.00	4,825.00	5,096.49	117.64
515	☐	WDNJ_ID_587	0.00	4,800.00	5,096.49	128.47
516	☐	WDNJ_ID_6	0.65	4,654.53	4,939.61	123.53
517	☐	WDNJ_ID_61	0.42	5,078.12	5,258.39	78.11
518	☐	WDNJ_ID_62	0.42	5,085.43	5,258.39	74.94
519	☐	WDNJ_ID_63	1.04	4,834.00	5,096.49	113.74
520	☐	WDNJ_ID_64	0.17	4,824.54	5,096.49	117.84
521	☐	WDNJ_ID_65	0.55	4,817.59	5,096.49	120.85
522	☐	WDNJ_ID_66	0.47	4,845.49	5,097.01	108.98
523	☐	WDNJ_ID_67	0.47	4,847.45	5,097.02	108.14
524	☐	WDNJ_ID_68	1.00	4,912.99	5,097.12	79.79
525	☐	WDNJ_ID_69	2.93	4,918.07	5,097.12	77.58
526	☐	WDNJ_ID_7	3.11	4,836.59	5,097.05	112.86
527	☐	WDNJ_ID_70	0.37	4,809.70	5,096.53	124.28
528	☐	WDNJ_ID_71	1.60	4,829.72	5,096.48	115.59
529	☐	WDNJ_ID_72	1.19	4,591.96	4,816.28	97.20
530	☐	WDNJ_ID_73	1.62	4,627.14	4,816.34	81.98
531	☐	WDNJ_ID_74	1.40	4,867.73	5,097.07	99.37
532	☐	WDNJ_ID_75	0.65	4,554.19	4,816.28	113.56
533	☐	WDNJ_ID_76	2.06	4,556.44	4,816.28	112.59
534	☐	WDNJ_ID_77	1.64	4,642.62	4,816.31	75.26
535	☐	WDNJ_ID_78	2.11	4,607.33	4,816.28	90.54
536	☐	WDNJ_ID_79	2.41	4,925.45	5,097.13	74.39
537	☐	WDNJ_ID_8	1.67	4,830.02	5,097.05	115.70
538	☐	WDNJ_ID_80	1.47	4,876.58	5,097.11	95.55
539	☐	WDNJ_ID_81	1.55	4,562.92	4,816.27	109.78
540	☐	WDNJ_ID_82	3.78	4,605.22	4,816.34	91.48
541	☐	WDNJ_ID_83	2.09	4,601.47	4,816.36	93.11
542	☐	WDNJ_ID_84	0.25	4,717.29	4,816.51	42.99
543	☐	WDNJ_ID_85	2.47	4,590.41	4,816.31	97.88
544	☐	WDNJ_ID_86	2.49	4,544.23	4,816.27	117.87
545	☐	WDNJ_ID_87	3.26	4,545.96	4,816.28	117.13
546	☐	WDNJ_ID_88	12.85	4,647.85	4,816.39	73.03
547	☐	WDNJ_ID_89	2.87	4,677.08	4,816.44	60.39
548	☐	WDNJ_ID_9	6.45	4,816.84	5,096.93	121.36
549	☐	WDNJ_ID_90	1.55	4,564.20	4,816.27	109.22
550	☐	WDNJ_ID_91	2.66	4,532.34	4,816.24	123.01

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551		WDNJ_ID_92	0.89	4,923.16	5,096.34	75.04
552		WDNJ_ID_93	2.66	4,857.99	5,096.44	103.32
553		WDNJ_ID_94	1.87	4,576.15	4,816.27	104.04
554		WDNJ_ID_95	1.67	4,577.66	4,816.26	103.39
555		WDNJ_ID_96	3.38	4,589.92	4,816.32	98.10
556		WDNJ_ID_97	2.44	4,559.19	4,816.28	111.40
557		WDNJ_ID_98	4.96	4,564.87	4,816.29	108.94
558		WDNJ_ID_99	0.15	4,798.10	5,097.05	129.53
559		WDNJ_NI_538	0.00	4,645.00	4,816.83	74.45
560		WDNJ_NI_539	0.00	4,701.00	4,816.83	50.19
561		WDNJ_NI_540	0.00	4,630.00	4,816.83	80.95
562		WDNJ_NI_541	0.00	4,632.00	4,816.83	80.09
563		WDNJ_NI_542	0.00	4,803.00	4,816.83	5.99
564		WDNJ_NI_545	0.10	4,660.00	4,816.35	67.75

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
1	☐	WDNJ_ID_100	0.15	122.79	5,097.05	1,500.00	107.34	4,417.38
2	☐	WDNJ_ID_101	2.07	86.28	5,097.12	1,500.00	39.92	1,832.56
3	☐	WDNJ_ID_102	1.12	81.19	5,097.13	1,500.00	77.69	9,336.43
4	☐	WDNJ_ID_103	1.29	161.10	5,096.63	1,500.00	151.54	7,644.20
5	☐	WDNJ_ID_104	1.29	162.19	5,096.63	1,500.00	149.14	6,219.05
6	☐	WDNJ_ID_105	0.37	93.92	4,939.63	1,500.00	90.22	4,212.02
7	☐	WDNJ_ID_106	1.49	84.66	4,816.27	1,500.00	75.81	4,599.43
8	☐	WDNJ_ID_107	0.84	113.00	5,097.05	1,500.00	107.68	8,313.72
9	☐	WDNJ_ID_108	3.84	114.07	5,097.05	1,500.00	106.76	6,726.79
10	☐	WDNJ_ID_109	11.80	125.51	4,816.23	1,500.00	117.08	6,279.16
11	☐	WDNJ_ID_110	1.62	121.31	4,816.24	1,500.00	113.15	6,228.71
12	☐	WDNJ_ID_111	1.86	119.38	4,816.23	1,500.00	103.93	4,218.03
13	☐	WDNJ_ID_112	0.64	70.21	5,096.38	1,500.00	59.30	3,590.62
14	☐	WDNJ_ID_113	5.78	115.87	4,816.28	1,500.00	109.99	7,331.38
15	☐	WDNJ_ID_114	1.74	82.52	5,096.41	1,500.00	73.20	4,585.78
16	☐	WDNJ_ID_115	0.99	87.35	5,097.12	1,500.00	72.86	3,616.20
17	☐	WDNJ_ID_116	3.24	114.05	4,816.28	1,500.00	109.48	8,608.52
18	☐	WDNJ_ID_117	1.12	124.50	5,097.05	1,500.00	117.47	7,361.57
19	☐	WDNJ_ID_118	2.02	118.93	5,097.05	1,500.00	104.36	4,445.36
20	☐	WDNJ_ID_119	2.21	124.55	4,816.23	1,500.00	114.72	5,655.48
21	☐	WDNJ_ID_12	0.20	141.98	5,096.54	1,500.00	133.20	7,994.97
22	☐	WDNJ_ID_120	0.89	92.25	5,097.11	1,500.00	78.28	3,842.02
23	☐	WDNJ_ID_121	0.97	78.21	5,096.41	1,500.00	67.84	4,084.19
24	☐	WDNJ_ID_122	1.60	69.41	5,096.41	1,500.00	22.32	1,541.55
25	☐	WDNJ_ID_124	0.57	112.85	5,096.46	1,500.00	100.32	5,408.73
26	☐	WDNJ_ID_125	1.10	94.05	4,816.26	1,500.00	64.64	2,494.12
27	☐	WDNJ_ID_126	2.27	70.65	5,097.12	1,500.00	-26.25	1,051.96
28	☐	WDNJ_ID_127	1.00	64.36	5,097.12	1,500.00	-17.26	1,072.20
29	☐	WDNJ_ID_128	0.84	86.50	4,939.63	1,500.00	-298.32	580.92
30	☐	WDNJ_ID_129	1.47	86.45	5,096.49	1,500.00	72.57	4,546.73
31	☐	WDNJ_ID_130	2.27	69.65	5,096.49	1,500.00	16.60	1,435.18
32	☐	WDNJ_ID_131	2.02	130.79	4,816.25	1,500.00	123.35	6,903.31
33	☐	WDNJ_ID_132	1.42	126.85	4,816.25	1,500.00	121.11	7,981.52
34	☐	WDNJ_ID_133	0.28	99.34	5,097.07	1,500.00	75.17	2,923.56
35	☐	WDNJ_ID_134	1.27	91.97	5,097.05	1,500.00	86.64	6,126.74

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
36	☐	WDNJ_ID_135	0.40	87.31	5,097.05	1,500.00	78.11	4,546.76
37	☐	WDNJ_ID_137	1.70	111.92	5,096.46	1,500.00	106.25	8,014.38
38	☐	WDNJ_ID_138	1.82	120.84	5,096.46	1,500.00	80.72	2,489.14
39	☐	WDNJ_ID_139	2.14	91.49	4,816.26	1,500.00	30.47	1,637.74
40	☐	WDNJ_ID_140	1.97	120.56	4,816.28	1,500.00	68.75	2,155.25
41	☐	WDNJ_ID_141	0.84	99.08	5,096.46	1,500.00	70.98	2,796.84
42	☐	WDNJ_ID_142	1.34	98.78	5,097.11	1,500.00	76.95	3,093.43
43	☐	WDNJ_ID_143	1.81	117.56	4,816.23	1,500.00	85.72	2,775.03
44	☐	WDNJ_ID_144	0.30	48.76	5,097.05	1,500.00	35.66	2,443.49
45	☐	WDNJ_ID_145	1.07	94.02	5,097.11	1,500.00	68.44	2,727.79
46	☐	WDNJ_ID_146	0.50	88.21	5,097.12	1,500.00	61.12	2,522.72
47	☐	WDNJ_ID_147	0.47	120.12	5,097.05	1,500.00	113.71	7,655.30
48	☐	WDNJ_ID_148	0.94	120.62	5,097.05	1,500.00	100.52	3,707.33
49	☐	WDNJ_ID_149	3.58	75.86	4,816.39	1,500.00	72.91	8,303.51
50	☐	WDNJ_ID_150	0.60	112.44	5,096.99	1,500.00	108.38	10,637.12
51	☐	WDNJ_ID_151	0.64	110.80	5,096.99	1,500.00	97.63	4,508.03
52	☐	WDNJ_ID_152	0.00	133.32	4,816.23	1,500.00	123.10	5,784.54
53	☐	WDNJ_ID_153	0.00	133.25	4,816.23	1,500.00	124.68	6,441.05
54	☐	WDNJ_ID_154	0.35	157.20	5,096.50	1,500.00	52.66	1,749.52
55	☐	WDNJ_ID_156	0.15	128.17	4,816.23	1,500.00	118.93	5,972.97
56	☐	WDNJ_ID_157	2.29	110.85	5,096.99	1,500.00	106.92	11,036.08
57	☐	WDNJ_ID_158	0.62	103.50	5,096.99	1,500.00	57.21	2,082.58
58	☐	WDNJ_ID_159	1.30	124.89	5,231.17	1,500.00	78.05	2,300.11
59	☐	WDNJ_ID_16	0.10	84.52	4,913.58	1,500.00	64.79	2,849.44
60	☐	WDNJ_ID_160	0.38	116.72	5,096.49	1,500.00	98.61	3,820.08
61	☐	WDNJ_ID_161	1.29	115.74	5,096.49	1,500.00	92.59	3,533.58
62	☐	WDNJ_ID_165	0.18	124.16	5,097.05	1,500.00	63.34	2,019.06
63	☐	WDNJ_ID_168	0.03	126.37	5,097.05	1,500.00	85.73	2,559.15
64	☐	WDNJ_ID_169	0.10	87.14	4,816.35	1,500.00	56.17	2,289.78
65	☐	WDNJ_ID_17	0.10	84.41	4,913.58	1,500.00	-2,634.51	198.78
66	☐	WDNJ_ID_170	0.07	91.90	4,816.35	1,500.00	84.16	5,226.86
67	☐	WDNJ_ID_173	0.00	111.80	5,410.16	1,500.00	74.27	2,446.38
68	☐	WDNJ_ID_175	0.37	49.93	5,258.39	1,500.00	49.11	2,341.89
69	☐	WDNJ_ID_176	0.03	87.04	5,233.46	1,500.00	70.33	3,193.64
70	☐	WDNJ_ID_178	0.52	127.34	5,096.88	1,500.00	122.14	9,590.54

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
71	☐	WDNJ_ID_179	0.67	112.91	5,096.48	1,500.00	108.66	9,526.53
72	☐	WDNJ_ID_18	0.60	121.20	4,816.27	1,500.00	115.69	7,928.09
73	☐	WDNJ_ID_180	0.60	97.01	5,258.39	1,500.00	87.68	2,635.68
74	☐	WDNJ_ID_181	0.33	119.98	5,096.49	1,500.00	108.73	4,583.53
75	☐	WDNJ_ID_182	1.47	63.44	4,816.35	1,500.00	57.90	4,823.45
76	☐	WDNJ_ID_183	2.72	103.36	4,816.29	1,500.00	99.09	8,303.22
77	☐	WDNJ_ID_184	1.64	97.41	5,258.39	1,500.00	88.03	2,639.39
78	☐	WDNJ_ID_185	1.35	106.11	5,258.39	1,500.00	96.00	2,703.86
79	☐	WDNJ_ID_186	0.18	68.41	5,097.17	1,500.00	64.74	7,896.54
80	☐	WDNJ_ID_187	0.18	70.20	5,097.17	1,500.00	66.95	9,061.21
81	☐	WDNJ_ID_188	3.48	91.01	4,816.34	1,500.00	87.41	8,421.00
82	☐	WDNJ_ID_189	1.87	96.89	4,816.33	1,500.00	90.25	5,969.22
83	☐	WDNJ_ID_190	2.06	103.52	4,816.32	1,500.00	96.71	6,171.08
84	☐	WDNJ_ID_191	3.58	57.30	4,816.48	1,500.00	55.47	8,805.42
85	☐	WDNJ_ID_192	0.77	116.16	5,096.97	1,500.00	112.36	11,683.17
86	☐	WDNJ_ID_193	8.67	81.46	4,816.36	1,500.00	77.83	7,668.60
87	☐	WDNJ_ID_194	1.81	104.15	5,097.05	1,500.00	98.86	7,984.14
88	☐	WDNJ_ID_195	0.53	100.79	5,097.05	1,500.00	96.88	9,696.57
89	☐	WDNJ_ID_196	5.23	122.84	4,816.24	1,500.00	116.33	7,261.17
90	☐	WDNJ_ID_197	1.05	123.07	4,816.24	1,500.00	116.78	7,405.01
91	☐	WDNJ_ID_198	3.26	123.84	4,816.24	1,500.00	118.16	7,973.45
92	☐	WDNJ_ID_199	0.94	116.77	4,816.27	1,500.00	111.69	8,160.66
93	☐	WDNJ_ID_2	0.70	114.25	4,939.63	1,500.00	-21.10	1,233.66
94	☐	WDNJ_ID_200	2.37	124.98	4,816.26	1,500.00	118.43	7,232.68
95	☐	WDNJ_ID_201	3.89	130.10	5,096.90	1,500.00	122.46	7,287.17
96	☐	WDNJ_ID_202	3.61	108.16	4,816.29	1,500.00	103.62	8,218.93
97	☐	WDNJ_ID_203	3.51	115.53	4,816.31	1,500.00	109.03	6,847.50
98	☐	WDNJ_ID_204	1.79	107.29	4,816.31	1,500.00	100.08	6,111.73
99	☐	WDNJ_ID_205	14.61	127.00	4,816.23	1,500.00	120.18	7,236.58
100	☐	WDNJ_ID_206	0.33	89.99	5,097.11	1,500.00	80.38	4,766.49
101	☐	WDNJ_ID_207	0.02	131.74	4,816.25	1,500.00	125.33	7,614.98
102	☐	WDNJ_ID_208	1.84	104.84	4,816.31	1,500.00	96.68	5,580.34
103	☐	WDNJ_ID_209	4.48	112.01	4,816.31	1,500.00	105.48	6,691.42
104	☐	WDNJ_ID_210	1.64	110.14	4,816.31	1,500.00	102.24	5,879.05
105	☐	WDNJ_ID_211	1.32	55.75	5,097.20	1,500.00	52.46	7,603.07

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
106	☐	WDNJ_ID_212	0.87	113.52	4,816.31	1,500.00	107.02	6,752.08
107	☐	WDNJ_ID_213	1.57	112.65	4,816.31	1,500.00	105.92	6,587.35
108	☐	WDNJ_ID_214	2.11	105.62	4,816.30	1,500.00	101.36	8,463.38
109	☐	WDNJ_ID_215	1.72	86.96	5,258.39	1,500.00	74.22	2,445.42
110	☐	WDNJ_ID_216	4.76	126.90	4,816.22	1,500.00	117.01	5,766.95
111	☐	WDNJ_ID_217	5.45	130.26	4,816.22	1,500.00	123.14	7,175.80
112	☐	WDNJ_ID_218	3.18	131.21	4,816.23	1,500.00	124.60	7,487.12
113	☐	WDNJ_ID_219	1.00	88.25	5,258.39	1,500.00	75.72	2,462.59
114	☐	WDNJ_ID_220	1.50	88.61	5,258.39	1,500.00	76.96	2,489.23
115	☐	WDNJ_ID_221	0.79	129.98	4,816.22	1,500.00	123.22	7,404.34
116	☐	WDNJ_ID_222	0.69	108.80	4,816.26	1,500.00	100.01	5,511.56
117	☐	WDNJ_ID_223	4.60	136.72	4,816.23	1,500.00	127.05	6,085.53
118	☐	WDNJ_ID_224	0.00	136.86	4,816.24	1,500.00	128.52	6,642.48
119	☐	WDNJ_ID_225	1.44	125.15	5,097.05	1,500.00	114.34	5,528.22
120	☐	WDNJ_ID_226	1.02	112.65	4,816.25	1,500.00	105.23	6,272.51
121	☐	WDNJ_ID_227	1.50	112.12	4,816.25	1,500.00	102.58	5,362.89
122	☐	WDNJ_ID_229	1.87	122.78	4,816.25	1,500.00	115.37	6,651.19
123	☐	WDNJ_ID_230	1.34	124.48	4,816.25	1,500.00	116.33	6,328.23
124	☐	WDNJ_ID_231	0.30	136.48	4,816.24	1,500.00	127.49	6,324.71
125	☐	WDNJ_ID_232	0.85	123.12	5,097.05	1,500.00	96.12	3,198.76
126	☐	WDNJ_ID_233	0.90	107.94	4,816.25	1,500.00	100.68	6,172.26
127	☐	WDNJ_ID_234	4.76	126.76	4,816.21	1,500.00	116.49	5,639.32
128	☐	WDNJ_ID_235	1.47	106.87	5,231.17	1,500.00	69.60	2,344.41
129	☐	WDNJ_ID_236	1.32	118.70	5,231.17	1,500.00	74.33	2,291.07
130	☐	WDNJ_ID_237	5.40	123.98	4,816.24	1,500.00	113.92	5,566.89
131	☐	WDNJ_ID_238	2.31	123.04	4,816.25	1,500.00	117.24	7,758.96
132	☐	WDNJ_ID_239	2.54	124.82	4,816.25	1,500.00	108.26	4,164.48
133	☐	WDNJ_ID_24	1.57	98.98	4,816.31	1,500.00	93.06	6,475.05
134	☐	WDNJ_ID_240	1.27	116.38	4,816.25	1,500.00	106.27	5,311.34
135	☐	WDNJ_ID_241	2.87	136.86	4,816.25	1,500.00	128.02	6,403.92
136	☐	WDNJ_ID_242	2.32	126.67	5,097.05	1,500.00	87.39	2,625.95
137	☐	WDNJ_ID_244	0.67	69.23	5,097.05	1,500.00	64.79	5,163.70
138	☐	WDNJ_ID_245	0.89	121.89	4,816.25	1,500.00	112.35	5,668.85
139	☐	WDNJ_ID_246	1.87	129.63	4,816.25	1,500.00	123.72	7,946.99
140	☐	WDNJ_ID_247	0.20	76.61	5,097.05	1,500.00	70.01	4,843.97

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
141	☐	WDNJ_ID_248	3.04	126.43	4,816.25	1,500.00	119.36	6,981.08
142	☐	WDNJ_ID_249	0.69	126.94	4,816.25	1,500.00	118.84	6,428.44
143	☐	WDNJ_ID_250	9.24	134.42	4,816.23	1,500.00	124.25	5,844.21
144	☐	WDNJ_ID_251	0.64	135.14	4,816.23	1,500.00	125.91	6,210.61
145	☐	WDNJ_ID_252	8.32	124.46	4,816.24	1,500.00	118.15	7,484.51
146	☐	WDNJ_ID_254	1.04	100.51	4,913.58	1,500.00	63.63	2,290.59
147	☐	WDNJ_ID_255	1.86	119.63	4,816.25	1,500.00	105.99	4,530.74
148	☐	WDNJ_ID_256	1.69	98.79	4,816.31	1,500.00	80.54	3,360.13
149	☐	WDNJ_ID_258	2.06	118.69	4,816.26	1,500.00	101.41	3,928.95
150	☐	WDNJ_ID_259	0.65	55.47	5,097.05	1,500.00	52.16	4,714.46
151	☐	WDNJ_ID_26	1.47	133.25	5,096.53	1,500.00	123.55	7,281.38
152	☐	WDNJ_ID_260	0.64	134.22	4,816.23	1,500.00	124.99	6,179.81
153	☐	WDNJ_ID_261	1.55	132.35	4,816.22	1,500.00	123.53	6,365.09
154	☐	WDNJ_ID_262	8.56	134.44	4,816.21	1,500.00	114.31	3,943.02
155	☐	WDNJ_ID_263	1.50	127.33	4,816.23	1,500.00	120.59	7,290.48
156	☐	WDNJ_ID_264	1.50	125.48	4,816.23	1,500.00	114.54	5,342.76
157	☐	WDNJ_ID_265	1.15	135.33	4,816.23	1,500.00	125.56	6,001.87
158	☐	WDNJ_ID_266	1.27	90.90	5,097.11	1,500.00	79.48	4,303.34
159	☐	WDNJ_ID_267	0.12	52.80	5,097.05	1,500.00	47.74	4,302.49
160	☐	WDNJ_ID_269	1.02	127.62	4,816.21	1,500.00	116.41	5,364.47
161	☐	WDNJ_ID_27	0.87	143.29	5,096.50	1,500.00	72.47	2,061.13
162	☐	WDNJ_ID_270	0.30	130.33	4,816.21	1,500.00	108.18	3,646.63
163	☐	WDNJ_ID_271	0.97	100.81	5,231.17	1,500.00	56.85	2,069.36
164	☐	WDNJ_ID_272	1.87	94.28	4,816.33	1,500.00	83.58	4,407.81
165	☐	WDNJ_ID_273	1.15	134.40	4,816.23	1,500.00	124.22	5,831.10
166	☐	WDNJ_ID_274	0.02	110.31	4,816.25	1,500.00	80.19	2,739.96
167	☐	WDNJ_ID_275	0.67	120.29	4,816.25	1,500.00	104.26	4,141.98
168	☐	WDNJ_ID_276	0.69	99.84	4,913.58	1,500.00	55.91	2,073.54
169	☐	WDNJ_ID_277	6.05	126.96	4,816.21	1,500.00	116.97	5,744.95
170	☐	WDNJ_ID_278	0.32	89.05	4,913.58	1,500.00	40.12	1,807.93
171	☐	WDNJ_ID_279	1.00	92.38	5,258.39	1,500.00	77.76	2,452.19
172	☐	WDNJ_ID_28	1.19	123.52	5,096.51	1,500.00	113.03	6,578.75
173	☐	WDNJ_ID_280	1.44	116.66	4,816.25	1,500.00	101.85	4,250.06
174	☐	WDNJ_ID_281	0.25	149.03	5,096.90	1,500.00	133.34	4,945.55
175	☐	WDNJ_ID_283	0.70	77.35	4,816.26	1,500.00	5.35	1,325.47

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
176	☐	WDNJ_ID_284	0.87	116.14	4,816.32	1,500.00	108.82	6,368.84
177	☐	WDNJ_ID_285	1.07	67.09	5,097.05	1,500.00	55.02	3,374.11
178	☐	WDNJ_ID_286	1.32	58.27	5,097.05	1,500.00	44.03	2,700.22
179	☐	WDNJ_ID_287	1.00	69.62	4,816.35	1,500.00	60.03	3,754.62
180	☐	WDNJ_ID_288	0.40	71.72	4,816.35	1,500.00	52.71	2,602.67
181	☐	WDNJ_ID_29	0.38	129.77	5,096.50	1,500.00	105.41	3,601.49
182	☐	WDNJ_ID_290	1.67	115.73	5,233.46	1,500.00	81.84	2,640.50
183	☐	WDNJ_ID_291	0.69	116.79	5,233.46	1,500.00	79.05	2,504.94
184	☐	WDNJ_ID_292	0.00	136.10	4,816.24	1,500.00	123.04	5,054.32
185	☐	WDNJ_ID_293	1.42	75.94	5,097.05	1,500.00	68.02	4,783.76
186	☐	WDNJ_ID_294	0.79	88.19	5,097.05	1,500.00	81.16	5,507.71
187	☐	WDNJ_ID_295	1.00	85.61	5,097.05	1,500.00	72.53	3,848.59
188	☐	WDNJ_ID_296	0.57	124.04	4,816.25	1,500.00	103.12	3,629.88
189	☐	WDNJ_ID_297	0.00	133.13	4,816.22	1,500.00	118.73	4,740.41
190	☐	WDNJ_ID_298	0.00	126.20	4,816.23	1,500.00	112.49	4,690.02
191	☐	WDNJ_ID_299	1.49	78.03	4,816.35	1,500.00	69.16	4,287.26
192	☐	WDNJ_ID_30	1.96	73.33	4,816.42	1,500.00	69.52	6,675.64
193	☐	WDNJ_ID_300	0.64	81.54	4,816.35	1,500.00	63.60	2,957.61
194	☐	WDNJ_ID_301	0.87	74.91	5,097.05	1,500.00	67.81	4,957.20
195	☐	WDNJ_ID_302	0.69	109.45	5,233.46	1,500.00	71.83	2,405.04
196	☐	WDNJ_ID_303	0.35	162.90	5,096.49	1,500.00	147.89	3,984.76
197	☐	WDNJ_ID_304	0.32	135.71	5,096.49	1,500.00	111.96	3,131.58
198	☐	WDNJ_ID_305	0.00	135.44	5,097.05	1,500.00	80.49	2,265.14
199	☐	WDNJ_ID_306	0.03	161.79	5,096.49	1,500.00	143.35	3,500.29
200	☐	WDNJ_ID_307	0.00	158.19	5,096.49	1,500.00	131.44	3,084.49
201	☐	WDNJ_ID_309	0.03	134.70	5,096.49	1,500.00	107.80	2,829.05
202	☐	WDNJ_ID_310	0.00	172.57	5,096.49	1,500.00	148.78	3,353.09
203	☐	WDNJ_ID_313	0.05	109.91	4,816.33	1,500.00	101.89	5,800.25
204	☐	WDNJ_ID_314	0.40	102.88	4,816.35	1,500.00	96.96	6,648.36
205	☐	WDNJ_ID_316	0.38	75.91	4,816.27	1,500.00	64.96	3,738.83
206	☐	WDNJ_ID_318	1.81	115.41	5,096.96	1,500.00	111.66	11,805.94
207	☐	WDNJ_ID_32	0.38	131.60	5,096.50	1,500.00	68.05	2,075.74
208	☐	WDNJ_ID_320	0.57	100.20	5,097.07	1,500.00	96.68	10,312.71
209	☐	WDNJ_ID_321	1.15	120.24	4,816.26	1,500.00	114.65	7,817.87
210	☐	WDNJ_ID_322	2.04	108.56	4,816.25	1,500.00	101.24	6,165.00

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
211	☐	WDNJ_ID_323	2.19	101.40	5,097.06	1,500.00	97.76	10,000.38
212	☐	WDNJ_ID_324	0.15	129.92	4,816.25	1,500.00	120.60	5,992.30
213	☐	WDNJ_ID_326	0.05	112.34	4,816.32	1,500.00	104.86	6,145.41
214	☐	WDNJ_ID_327	0.00	141.65	4,816.25	1,500.00	126.19	4,699.27
215	☐	WDNJ_ID_331	1.10	85.61	5,233.46	1,500.00	81.09	6,378.11
216	☐	WDNJ_ID_333	1.47	50.84	5,097.24	1,500.00	47.79	7,466.88
217	☐	WDNJ_ID_334	1.72	86.73	4,816.36	1,500.00	83.28	8,335.09
218	☐	WDNJ_ID_335	2.93	89.62	5,097.10	1,500.00	86.06	9,710.14
219	☐	WDNJ_ID_34	3.38	98.32	4,816.32	1,500.00	94.18	8,143.61
220	☐	WDNJ_ID_343	0.07	90.14	4,816.35	1,500.00	82.21	5,079.26
221	☐	WDNJ_ID_344	0.22	89.46	4,816.35	1,500.00	70.38	3,051.94
222	☐	WDNJ_ID_345	0.00	173.15	5,096.49	1,500.00	161.73	4,083.13
223	☐	WDNJ_ID_347	0.00	94.84	5,231.17	1,500.00	-0.80	1,316.78
224	☐	WDNJ_ID_348	0.00	92.48	5,231.17	1,500.00	-13.72	1,224.41
225	☐	WDNJ_ID_349	1.17	92.04	5,096.49	1,500.00	78.73	3,568.39
226	☐	WDNJ_ID_35	1.15	104.56	4,816.31	1,500.00	91.81	4,282.10
227	☐	WDNJ_ID_350	1.96	91.36	5,096.49	1,500.00	79.78	3,733.39
228	☐	WDNJ_ID_351	0.42	115.39	5,231.17	1,500.00	62.51	2,050.87
229	☐	WDNJ_ID_352	0.00	84.25	5,231.17	1,500.00	2.72	1,322.14
230	☐	WDNJ_ID_353	0.00	95.86	5,231.17	1,500.00	11.55	1,418.18
231	☐	WDNJ_ID_354	0.07	106.86	5,231.17	1,500.00	46.13	1,813.36
232	☐	WDNJ_ID_355	0.07	108.20	5,231.17	1,500.00	44.53	1,783.03
233	☐	WDNJ_ID_356	0.00	86.25	5,231.17	1,500.00	19.29	1,491.58
234	☐	WDNJ_ID_357	0.05	75.51	5,231.17	200.00	72.76	1,184.36
235	☐	WDNJ_ID_358	0.15	121.51	4,816.26	1,500.00	113.81	6,417.07
236	☐	WDNJ_ID_359	0.15	123.24	4,816.26	1,500.00	110.90	4,885.39
237	☐	WDNJ_ID_36	1.49	101.36	4,816.30	1,500.00	93.98	5,777.85
238	☐	WDNJ_ID_360	0.42	115.13	5,231.17	1,500.00	62.75	2,058.16
239	☐	WDNJ_ID_361	0.42	81.86	5,231.17	1,500.00	20.94	1,512.53
240	☐	WDNJ_ID_362	0.13	116.74	4,816.26	1,500.00	111.03	7,536.22
241	☐	WDNJ_ID_363	2.12	114.80	4,816.26	1,500.00	102.41	4,652.92
242	☐	WDNJ_ID_364	0.75	109.21	5,097.02	1,500.00	86.01	3,190.44
243	☐	WDNJ_ID_365	0.97	106.83	5,097.02	1,500.00	68.68	2,369.90
244	☐	WDNJ_ID_366	1.05	114.41	5,097.02	1,500.00	86.35	2,952.17
245	☐	WDNJ_ID_368	0.17	62.67	5,096.13	1,500.00	-93.59	740.69

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
246	☐	WDNJ_ID_37	1.49	101.53	4,816.30	1,500.00	95.45	6,510.89
247	☐	WDNJ_ID_371	0.48	120.62	5,231.18	1,500.00	108.33	4,423.15
248	☐	WDNJ_ID_372	0.17	106.76	4,816.25	1,500.00	89.77	3,698.93
249	☐	WDNJ_ID_373	0.00	106.49	4,816.25	1,500.00	86.89	3,403.26
250	☐	WDNJ_ID_374	0.64	101.89	4,816.25	1,500.00	81.56	3,236.47
251	☐	WDNJ_ID_377	0.74	98.93	4,816.26	1,500.00	91.34	5,655.36
252	☐	WDNJ_ID_378	1.49	84.81	4,816.27	1,500.00	76.15	4,668.30
253	☐	WDNJ_ID_38	1.67	126.14	5,096.51	1,500.00	-44.11	1,156.78
254	☐	WDNJ_ID_381	0.23	79.95	4,913.58	1,500.00	64.11	3,085.65
255	☐	WDNJ_ID_382	1.17	114.03	4,913.58	1,500.00	88.17	3,019.65
256	☐	WDNJ_ID_384	0.12	127.33	5,097.05	1,500.00	118.60	6,448.17
257	☐	WDNJ_ID_385	0.12	127.55	5,097.05	1,500.00	118.71	6,401.81
258	☐	WDNJ_ID_386	0.12	126.11	5,097.05	1,500.00	118.01	6,737.59
259	☐	WDNJ_ID_387	0.12	126.02	5,097.05	1,500.00	118.35	6,985.75
260	☐	WDNJ_ID_388	0.12	126.56	5,097.05	1,500.00	118.23	6,625.84
261	☐	WDNJ_ID_389	1.12	124.82	5,097.05	1,500.00	117.73	7,332.33
262	☐	WDNJ_ID_39	0.57	71.69	5,097.15	1,500.00	66.18	5,893.15
263	☐	WDNJ_ID_390	1.02	91.55	5,097.10	1,500.00	81.62	4,692.68
264	☐	WDNJ_ID_392	1.17	95.55	5,231.43	1,500.00	82.94	3,761.29
265	☐	WDNJ_ID_393	0.94	118.73	5,097.04	1,500.00	-17.78	1,255.81
266	☐	WDNJ_ID_394	0.07	127.05	5,097.05	1,500.00	88.49	2,645.89
267	☐	WDNJ_ID_395	1.07	97.25	5,097.05	1,500.00	92.45	7,009.12
268	☐	WDNJ_ID_40	0.67	68.19	5,097.15	1,500.00	-29.34	1,022.74
269	☐	WDNJ_ID_41	1.17	104.72	5,096.41	1,500.00	99.66	7,625.23
270	☐	WDNJ_ID_411	1.17	93.22	5,097.05	1,500.00	88.21	6,443.85
271	☐	WDNJ_ID_412	0.12	76.60	5,097.05	1,500.00	70.95	5,486.35
272	☐	WDNJ_ID_413	0.13	59.80	5,097.05	1,500.00	45.12	2,711.87
273	☐	WDNJ_ID_414	0.22	80.61	5,097.05	1,500.00	75.94	5,841.04
274	☐	WDNJ_ID_415	0.75	87.89	5,258.39	1,500.00	79.42	2,566.40
275	☐	WDNJ_ID_42	0.80	103.74	5,096.41	1,500.00	25.83	1,560.75
276	☐	WDNJ_ID_421	0.30	77.25	5,097.05	1,500.00	69.91	4,666.89
277	☐	WDNJ_ID_422	0.05	49.92	5,097.05	1,500.00	42.20	3,611.57
278	☐	WDNJ_ID_423	0.28	50.04	5,097.05	1,500.00	43.81	3,939.06
279	☐	WDNJ_ID_424	3.69	91.22	5,258.39	1,500.00	82.59	2,599.73
280	☐	WDNJ_ID_425	18.60	129.42	4,816.21	1,500.00	119.88	5,998.27

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
281	☐	WDNJ_ID_426	4.76	123.98	4,816.21	1,500.00	110.83	4,785.40
282	☐	WDNJ_ID_427	4.76	124.97	4,816.21	1,500.00	111.78	4,801.92
283	☐	WDNJ_ID_43	1.60	94.76	4,816.26	1,500.00	71.32	2,845.70
284	☐	WDNJ_ID_430	0.40	107.11	4,816.34	1,500.00	99.49	5,867.72
285	☐	WDNJ_ID_432	2.77	94.13	4,816.36	1,500.00	89.66	7,451.20
286	☐	WDNJ_ID_433	1.09	102.04	4,816.36	1,500.00	96.77	7,104.29
287	☐	WDNJ_ID_434	2.22	109.56	4,816.31	1,500.00	101.29	5,701.56
288	☐	WDNJ_ID_435	1.17	118.35	4,816.29	1,500.00	111.41	6,690.74
289	☐	WDNJ_ID_436	1.29	119.48	4,816.27	1,500.00	113.98	7,866.46
290	☐	WDNJ_ID_437	1.29	121.24	4,816.25	1,500.00	114.39	6,918.56
291	☐	WDNJ_ID_438	2.06	119.29	4,816.26	1,500.00	111.92	6,528.64
292	☐	WDNJ_ID_439	3.18	131.69	4,816.23	1,500.00	123.07	6,371.97
293	☐	WDNJ_ID_44	2.44	79.60	4,816.26	1,500.00	55.18	2,456.65
294	☐	WDNJ_ID_440	0.00	132.85	4,816.24	1,500.00	125.16	6,834.54
295	☐	WDNJ_ID_441	0.48	133.81	4,816.23	1,500.00	121.68	5,234.50
296	☐	WDNJ_ID_442	0.37	136.17	4,816.23	1,500.00	123.50	5,159.25
297	☐	WDNJ_ID_443	0.48	137.58	4,816.23	1,500.00	126.16	5,523.79
298	☐	WDNJ_ID_444	5.32	136.70	4,816.24	1,500.00	127.00	6,071.16
299	☐	WDNJ_ID_445	0.74	137.16	4,816.24	1,500.00	127.04	5,906.15
300	☐	WDNJ_ID_446	1.12	140.33	4,816.25	1,500.00	128.21	5,384.10
301	☐	WDNJ_ID_447	0.00	134.43	4,816.25	1,500.00	126.77	6,902.04
302	☐	WDNJ_ID_448	0.40	133.79	4,816.24	1,500.00	125.18	6,407.82
303	☐	WDNJ_ID_45	0.18	135.61	5,096.50	1,500.00	-117.63	969.52
304	☐	WDNJ_ID_451	0.53	125.08	4,816.26	1,500.00	116.81	6,259.97
305	☐	WDNJ_ID_452	0.57	130.90	4,816.25	1,500.00	122.93	6,613.79
306	☐	WDNJ_ID_453	1.84	127.74	4,816.25	1,500.00	113.00	4,518.44
307	☐	WDNJ_ID_454	4.28	123.43	4,816.25	1,500.00	114.43	5,917.15
308	☐	WDNJ_ID_455	1.74	129.43	4,816.25	1,500.00	121.57	6,626.35
309	☐	WDNJ_ID_456	3.09	128.49	4,816.25	1,500.00	119.47	6,072.47
310	☐	WDNJ_ID_457	1.77	111.78	4,816.25	1,500.00	91.96	3,497.12
311	☐	WDNJ_ID_458	1.45	85.14	4,816.26	1,500.00	51.24	2,148.70
312	☐	WDNJ_ID_459	0.62	49.88	4,816.33	1,500.00	41.64	3,098.04
313	☐	WDNJ_ID_46	1.15	90.61	5,258.39	1,500.00	77.06	2,460.85
314	☐	WDNJ_ID_461	1.60	91.40	4,913.58	1,500.00	48.50	1,978.12
315	☐	WDNJ_ID_462	2.29	61.91	4,913.59	1,500.00	56.11	4,296.61

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
316	☐	WDNJ_ID_463	1.67	127.85	5,097.05	1,500.00	104.14	3,500.68
317	☐	WDNJ_ID_464	1.72	128.90	5,097.05	1,500.00	103.38	3,373.67
318	☐	WDNJ_ID_465	1.76	111.32	5,097.05	1,500.00	100.73	5,174.16
319	☐	WDNJ_ID_466	0.00	140.93	5,096.68	1,500.00	135.22	9,117.90
320	☐	WDNJ_ID_467	0.28	103.47	5,097.03	1,500.00	99.22	9,413.20
321	☐	WDNJ_ID_468	2.07	102.18	5,097.03	1,500.00	98.10	10,094.25
322	☐	WDNJ_ID_469	2.01	92.38	5,097.08	1,500.00	88.34	9,423.91
323	☐	WDNJ_ID_471	0.94	67.07	5,097.16	1,500.00	63.41	8,026.48
324	☐	WDNJ_ID_472	2.69	81.57	5,097.12	1,500.00	72.84	4,729.11
325	☐	WDNJ_ID_473	1.40	103.45	5,097.06	1,500.00	98.96	8,099.06
326	☐	WDNJ_ID_474	5.27	126.46	5,097.04	1,500.00	38.70	1,673.83
327	☐	WDNJ_ID_475	0.18	121.61	5,097.05	1,500.00	87.85	2,785.84
328	☐	WDNJ_ID_476	0.00	140.90	5,096.49	1,500.00	130.22	3,675.77
329	☐	WDNJ_ID_477	0.00	103.49	5,096.49	1,500.00	93.63	3,142.84
330	☐	WDNJ_ID_478	0.05	137.52	5,231.17	1,500.00	40.26	1,659.32
331	☐	WDNJ_ID_479	0.03	92.82	5,231.17	1,500.00	4.22	1,351.71
332	☐	WDNJ_ID_48	2.76	89.13	4,816.38	1,500.00	81.30	5,038.34
333	☐	WDNJ_ID_480	0.08	85.76	5,231.17	1,500.00	11.50	1,406.60
334	☐	WDNJ_ID_481	0.00	124.15	5,096.49	1,500.00	109.43	4,024.28
335	☐	WDNJ_ID_482	0.00	126.02	5,096.49	1,500.00	109.72	3,755.12
336	☐	WDNJ_ID_483	0.00	148.51	5,096.49	1,500.00	132.05	3,894.71
337	☐	WDNJ_ID_484	0.28	103.71	4,939.63	1,500.00	71.69	2,524.34
338	☐	WDNJ_ID_485	0.97	131.94	5,231.17	1,500.00	68.63	2,031.65
339	☐	WDNJ_ID_486	1.25	61.23	5,096.40	1,500.00	42.24	2,298.78
340	☐	WDNJ_ID_487	1.22	89.37	5,096.39	1,500.00	75.91	3,796.09
341	☐	WDNJ_ID_488	1.72	101.84	5,231.18	1,500.00	77.08	2,803.32
342	☐	WDNJ_ID_489	2.74	88.87	5,096.27	1,500.00	84.24	6,791.23
343	☐	WDNJ_ID_49	4.75	86.97	4,816.35	1,500.00	79.72	5,213.87
344	☐	WDNJ_ID_495	3.86	68.64	5,232.94	1,500.00	63.42	4,681.51
345	☐	WDNJ_ID_496	0.18	61.31	5,097.20	1,500.00	58.04	8,052.17
346	☐	WDNJ_ID_497	0.28	99.07	5,233.46	1,500.00	93.05	6,050.31
347	☐	WDNJ_ID_5	1.17	119.48	4,939.62	1,500.00	-264.97	722.69
348	☐	WDNJ_ID_50	1.54	79.93	4,816.41	1,500.00	77.26	9,154.70
349	☐	WDNJ_ID_500	0.52	70.92	5,233.87	1,500.00	66.98	6,478.21
350	☐	WDNJ_ID_501	0.03	98.35	5,258.39	1,500.00	-117.27	867.50

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
351	☐	WDNJ_ID_502	1.86	108.88	5,233.46	1,500.00	83.65	2,976.02
352	☐	WDNJ_ID_503	1.27	60.15	5,097.05	1,500.00	44.91	2,660.18
353	☐	WDNJ_ID_504	1.44	99.38	5,258.39	1,500.00	86.69	2,567.99
354	☐	WDNJ_ID_505	0.62	74.29	5,258.39	1,500.00	61.87	2,321.26
355	☐	WDNJ_ID_507	1.02	55.25	5,258.39	1,500.00	49.36	2,267.95
356	☐	WDNJ_ID_508	0.69	61.70	5,258.39	1,500.00	53.62	2,288.35
357	☐	WDNJ_ID_509	1.91	106.30	5,258.39	1,500.00	95.38	2,683.06
358	☐	WDNJ_ID_510	1.54	65.32	5,097.05	1,500.00	59.16	4,493.47
359	☐	WDNJ_ID_511	1.97	76.39	5,097.05	1,500.00	69.63	4,847.52
360	☐	WDNJ_ID_512	0.35	88.23	5,097.05	1,500.00	72.01	3,465.88
361	☐	WDNJ_ID_513	0.87	87.75	5,097.05	1,500.00	65.70	2,872.43
362	☐	WDNJ_ID_514	4.90	65.80	5,097.05	1,500.00	42.82	2,251.33
363	☐	WDNJ_ID_515	1.91	98.92	5,258.39	1,500.00	86.55	2,572.79
364	☐	WDNJ_ID_547	0.00	90.76	5,233.46	1,500.00	85.19	5,944.47
365	☐	WDNJ_ID_549	0.00	124.76	4,816.25	1,500.00	107.00	3,999.07
366	☐	WDNJ_ID_550	0.00	63.43	4,816.39	1,500.00	18.90	1,479.77
367	☐	WDNJ_ID_553	0.00	85.38	4,816.37	1,500.00	72.95	3,754.27
368	☐	WDNJ_ID_554	0.00	99.91	4,913.58	1,500.00	51.09	1,958.66
369	☐	WDNJ_ID_555	0.00	129.66	4,816.25	1,500.00	122.77	7,185.52
370	☐	WDNJ_ID_556	0.00	130.10	4,816.25	1,500.00	122.40	6,724.93
371	☐	WDNJ_ID_557	0.00	131.40	4,816.25	1,500.00	122.58	6,232.29
372	☐	WDNJ_ID_558	0.00	132.26	4,816.24	1,500.00	124.01	6,521.11
373	☐	WDNJ_ID_560	0.00	132.26	4,816.24	1,500.00	124.90	6,996.94
374	☐	WDNJ_ID_561	0.00	132.26	4,816.24	1,500.00	121.47	5,544.58
375	☐	WDNJ_ID_563	0.00	132.26	4,816.24	1,500.00	121.32	5,497.63
376	☐	WDNJ_ID_564	0.00	105.85	4,816.30	1,500.00	98.65	6,052.92
377	☐	WDNJ_ID_565	0.00	105.42	4,816.30	1,500.00	97.93	5,892.85
378	☐	WDNJ_ID_567	0.00	105.42	4,816.30	1,500.00	97.13	5,540.22
379	☐	WDNJ_ID_568	0.00	105.85	4,816.29	1,500.00	98.68	6,069.37
380	☐	WDNJ_ID_571	0.00	105.42	4,816.30	1,500.00	96.32	5,241.32
381	☐	WDNJ_ID_573	0.00	93.80	5,258.39	1,500.00	81.01	2,510.17
382	☐	WDNJ_ID_574	0.00	93.31	5,231.17	1,500.00	-9.15	1,255.54
383	☐	WDNJ_ID_575	0.00	127.99	5,096.88	1,500.00	121.93	8,555.69
384	☐	WDNJ_ID_576	0.00	122.86	5,097.05	1,500.00	104.84	4,065.02
385	☐	WDNJ_ID_577	0.00	99.87	4,939.63	1,500.00	80.01	3,136.48

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
386		WDNJ_ID_578	0.00	93.43	4,939.63	1,500.00	75.77	3,164.91
387		WDNJ_ID_58	0.69	80.29	4,816.27	1,500.00	64.92	3,206.16
388		WDNJ_ID_583	0.00	89.41	4,816.34	1,500.00	56.92	2,269.92
389		WDNJ_ID_585	0.00	128.47	5,096.49	1,500.00	96.21	2,708.77
390		WDNJ_ID_586	0.00	117.64	5,096.49	1,500.00	85.25	2,577.90
391		WDNJ_ID_587	0.00	128.47	5,096.49	1,500.00	100.93	2,883.58
392		WDNJ_ID_6	0.65	123.53	4,939.61	1,500.00	-9,766.72	127.89
393		WDNJ_ID_61	0.42	78.11	5,258.39	1,500.00	72.69	2,548.04
394		WDNJ_ID_62	0.42	74.94	5,258.39	1,500.00	65.78	2,408.97
395		WDNJ_ID_63	1.04	113.74	5,096.49	1,500.00	103.03	6,595.08
396		WDNJ_ID_64	0.17	117.84	5,096.49	1,500.00	99.87	4,107.16
397		WDNJ_ID_65	0.55	120.85	5,096.49	1,500.00	108.81	4,668.45
398		WDNJ_ID_66	0.47	108.98	5,097.01	1,500.00	104.88	10,215.12
399		WDNJ_ID_67	0.47	108.14	5,097.02	1,500.00	100.85	6,490.57
400		WDNJ_ID_68	1.00	79.79	5,097.12	1,500.00	72.06	5,047.96
401		WDNJ_ID_69	2.93	77.58	5,097.12	1,500.00	73.81	8,758.64
402		WDNJ_ID_7	3.11	112.86	5,097.05	1,500.00	103.81	5,795.84
403		WDNJ_ID_70	0.37	124.28	5,096.53	1,500.00	113.75	6,081.39
404		WDNJ_ID_71	1.60	115.59	5,096.48	1,500.00	110.88	9,279.99
405		WDNJ_ID_72	1.19	97.20	4,816.28	1,500.00	92.62	7,620.72
406		WDNJ_ID_73	1.62	81.98	4,816.34	1,500.00	75.93	5,584.03
407		WDNJ_ID_74	1.40	99.37	5,097.07	1,500.00	86.17	4,178.19
408		WDNJ_ID_75	0.65	113.56	4,816.28	1,500.00	105.76	6,049.12
409		WDNJ_ID_76	2.06	112.59	4,816.28	1,500.00	99.57	4,454.50
410		WDNJ_ID_77	1.64	75.26	4,816.31	1,500.00	68.03	4,726.33
411		WDNJ_ID_78	2.11	90.54	4,816.28	1,500.00	83.86	5,709.03
412		WDNJ_ID_79	2.41	74.39	5,097.13	1,500.00	68.10	5,525.31
413		WDNJ_ID_8	1.67	115.70	5,097.05	1,500.00	75.46	2,438.66
414		WDNJ_ID_80	1.47	95.55	5,097.11	1,500.00	86.02	5,004.02
415		WDNJ_ID_82	3.78	91.48	4,816.34	1,500.00	86.20	6,569.43
416		WDNJ_ID_83	2.09	93.11	4,816.36	1,500.00	89.44	8,361.33
417		WDNJ_ID_84	0.25	42.99	4,816.51	1,500.00	41.18	6,673.64
418		WDNJ_ID_85	2.47	97.88	4,816.31	1,500.00	90.96	5,849.58
419		WDNJ_ID_86	2.49	117.87	4,816.27	1,500.00	105.96	4,836.32
420		WDNJ_ID_87	3.26	117.13	4,816.28	1,500.00	108.58	5,849.15

		ID	Static Demand (gpm)	Static Pressure (psi)	Static Head (ft)	Fire-Flow Demand (gpm)	Residual Pressure (psi)	Hydrant Available Flow (gpm)
421	☐	WDNJ_ID_88	12.85	73.03	4,816.39	1,500.00	69.05	6,579.53
422	☐	WDNJ_ID_89	2.87	60.39	4,816.44	1,500.00	57.94	7,706.40
423	☐	WDNJ_ID_90	1.55	109.22	4,816.27	1,500.00	103.93	7,537.57
424	☐	WDNJ_ID_91	2.66	123.01	4,816.24	1,500.00	112.85	5,489.13
425	☐	WDNJ_ID_92	0.89	75.04	5,096.34	1,500.00	67.04	4,508.43
426	☐	WDNJ_ID_93	2.66	103.32	5,096.44	1,500.00	97.24	7,292.81
427	☐	WDNJ_ID_94	1.87	104.04	4,816.27	1,500.00	94.46	5,064.68
428	☐	WDNJ_ID_96	3.38	98.10	4,816.32	1,500.00	93.96	8,134.22
429	☐	WDNJ_ID_97	2.44	111.40	4,816.28	1,500.00	103.89	6,116.52
430	☐	WDNJ_ID_98	4.96	108.94	4,816.29	1,500.00	103.18	7,099.97
431	☐	WDNJ_ID_99	0.15	129.53	5,097.05	1,500.00	79.70	2,325.09
432	☐	WDNJ_NI_545	0.10	67.75	4,816.35	1,500.00	-616.84	355.45

2021 Model - 2021 Flows - Fire Flow Junction Report

		ID	Hydrant Pressure at Available Flow (psi)
1	☐	WDNJ_ID_100	20.00
2	☐	WDNJ_ID_101	20.00
3	☐	WDNJ_ID_102	20.00
4	☐	WDNJ_ID_103	20.00
5	☐	WDNJ_ID_104	20.00
6	☐	WDNJ_ID_105	20.00
7	☐	WDNJ_ID_106	20.00
8	☐	WDNJ_ID_107	20.00
9	☐	WDNJ_ID_108	20.00
10	☐	WDNJ_ID_109	20.00
11	☐	WDNJ_ID_110	20.00
12	☐	WDNJ_ID_111	20.00
13	☐	WDNJ_ID_112	20.00
14	☐	WDNJ_ID_113	20.00
15	☐	WDNJ_ID_114	20.00
16	☐	WDNJ_ID_115	20.00
17	☐	WDNJ_ID_116	20.00
18	☐	WDNJ_ID_117	20.00
19	☐	WDNJ_ID_118	20.00
20	☐	WDNJ_ID_119	20.00
21	☐	WDNJ_ID_12	20.00
22	☐	WDNJ_ID_120	20.00
23	☐	WDNJ_ID_121	20.00
24	☐	WDNJ_ID_122	20.00
25	☐	WDNJ_ID_124	20.00
26	☐	WDNJ_ID_125	20.00
27	☐	WDNJ_ID_126	20.00
28	☐	WDNJ_ID_127	20.00
29	☐	WDNJ_ID_128	20.00
30	☐	WDNJ_ID_129	20.00
31	☐	WDNJ_ID_130	20.00
32	☐	WDNJ_ID_131	20.00
33	☐	WDNJ_ID_132	20.00
34	☐	WDNJ_ID_133	20.00
35	☐	WDNJ_ID_134	20.00

		ID	Hydrant Pressure at Available Flow (psi)
36	☐	WDNJ_ID_135	20.00
37	☐	WDNJ_ID_137	20.00
38	☐	WDNJ_ID_138	20.00
39	☐	WDNJ_ID_139	20.00
40	☐	WDNJ_ID_140	20.00
41	☐	WDNJ_ID_141	20.00
42	☐	WDNJ_ID_142	20.00
43	☐	WDNJ_ID_143	20.00
44	☐	WDNJ_ID_144	20.00
45	☐	WDNJ_ID_145	20.00
46	☐	WDNJ_ID_146	20.00
47	☐	WDNJ_ID_147	20.00
48	☐	WDNJ_ID_148	20.00
49	☐	WDNJ_ID_149	20.00
50	☐	WDNJ_ID_150	20.00
51	☐	WDNJ_ID_151	20.00
52	☐	WDNJ_ID_152	20.00
53	☐	WDNJ_ID_153	20.00
54	☐	WDNJ_ID_154	20.00
55	☐	WDNJ_ID_156	20.00
56	☐	WDNJ_ID_157	20.00
57	☐	WDNJ_ID_158	20.00
58	☐	WDNJ_ID_159	20.00
59	☐	WDNJ_ID_16	20.00
60	☐	WDNJ_ID_160	20.00
61	☐	WDNJ_ID_161	20.00
62	☐	WDNJ_ID_165	20.00
63	☐	WDNJ_ID_168	20.00
64	☐	WDNJ_ID_169	20.00
65	☐	WDNJ_ID_17	20.00
66	☐	WDNJ_ID_170	20.00
67	☐	WDNJ_ID_173	20.00
68	☐	WDNJ_ID_175	20.00
69	☐	WDNJ_ID_176	20.00
70	☐	WDNJ_ID_178	20.00

		ID	Hydrant Pressure at Available Flow (psi)
71	☐	WDNJ_ID_179	20.00
72	☐	WDNJ_ID_18	20.00
73	☐	WDNJ_ID_180	20.00
74	☐	WDNJ_ID_181	20.00
75	☐	WDNJ_ID_182	20.00
76	☐	WDNJ_ID_183	20.00
77	☐	WDNJ_ID_184	20.00
78	☐	WDNJ_ID_185	20.00
79	☐	WDNJ_ID_186	20.00
80	☐	WDNJ_ID_187	20.00
81	☐	WDNJ_ID_188	20.00
82	☐	WDNJ_ID_189	20.00
83	☐	WDNJ_ID_190	20.00
84	☐	WDNJ_ID_191	20.00
85	☐	WDNJ_ID_192	20.00
86	☐	WDNJ_ID_193	20.00
87	☐	WDNJ_ID_194	20.00
88	☐	WDNJ_ID_195	20.00
89	☐	WDNJ_ID_196	20.00
90	☐	WDNJ_ID_197	20.00
91	☐	WDNJ_ID_198	20.00
92	☐	WDNJ_ID_199	20.00
93	☐	WDNJ_ID_2	20.00
94	☐	WDNJ_ID_200	20.00
95	☐	WDNJ_ID_201	20.00
96	☐	WDNJ_ID_202	20.00
97	☐	WDNJ_ID_203	20.00
98	☐	WDNJ_ID_204	20.00
99	☐	WDNJ_ID_205	20.00
100	☐	WDNJ_ID_206	20.00
101	☐	WDNJ_ID_207	20.00
102	☐	WDNJ_ID_208	20.00
103	☐	WDNJ_ID_209	20.00
104	☐	WDNJ_ID_210	20.00
105	☐	WDNJ_ID_211	20.00

		ID	Hydrant Pressure at Available Flow (psi)
106	☐	WDNJ_ID_212	20.00
107	☐	WDNJ_ID_213	20.00
108	☐	WDNJ_ID_214	20.00
109	☐	WDNJ_ID_215	20.00
110	☐	WDNJ_ID_216	20.00
111	☐	WDNJ_ID_217	20.00
112	☐	WDNJ_ID_218	20.00
113	☐	WDNJ_ID_219	20.00
114	☐	WDNJ_ID_220	20.00
115	☐	WDNJ_ID_221	20.00
116	☐	WDNJ_ID_222	20.00
117	☐	WDNJ_ID_223	20.00
118	☐	WDNJ_ID_224	20.00
119	☐	WDNJ_ID_225	20.00
120	☐	WDNJ_ID_226	20.00
121	☐	WDNJ_ID_227	20.00
122	☐	WDNJ_ID_229	20.00
123	☐	WDNJ_ID_230	20.00
124	☐	WDNJ_ID_231	20.00
125	☐	WDNJ_ID_232	20.00
126	☐	WDNJ_ID_233	20.00
127	☐	WDNJ_ID_234	20.00
128	☐	WDNJ_ID_235	20.00
129	☐	WDNJ_ID_236	20.00
130	☐	WDNJ_ID_237	20.00
131	☐	WDNJ_ID_238	20.00
132	☐	WDNJ_ID_239	20.00
133	☐	WDNJ_ID_24	20.00
134	☐	WDNJ_ID_240	20.00
135	☐	WDNJ_ID_241	20.00
136	☐	WDNJ_ID_242	20.00
137	☐	WDNJ_ID_244	20.00
138	☐	WDNJ_ID_245	20.00
139	☐	WDNJ_ID_246	20.00
140	☐	WDNJ_ID_247	20.00

		ID	Hydrant Pressure at Available Flow (psi)
141	☐	WDNJ_ID_248	20.00
142	☐	WDNJ_ID_249	20.00
143	☐	WDNJ_ID_250	20.00
144	☐	WDNJ_ID_251	20.00
145	☐	WDNJ_ID_252	20.00
146	☐	WDNJ_ID_254	20.00
147	☐	WDNJ_ID_255	20.00
148	☐	WDNJ_ID_256	20.00
149	☐	WDNJ_ID_258	20.00
150	☐	WDNJ_ID_259	20.00
151	☐	WDNJ_ID_26	20.00
152	☐	WDNJ_ID_260	20.00
153	☐	WDNJ_ID_261	20.00
154	☐	WDNJ_ID_262	20.00
155	☐	WDNJ_ID_263	20.00
156	☐	WDNJ_ID_264	20.00
157	☐	WDNJ_ID_265	20.00
158	☐	WDNJ_ID_266	20.00
159	☐	WDNJ_ID_267	20.00
160	☐	WDNJ_ID_269	20.00
161	☐	WDNJ_ID_27	20.00
162	☐	WDNJ_ID_270	20.00
163	☐	WDNJ_ID_271	20.00
164	☐	WDNJ_ID_272	20.00
165	☐	WDNJ_ID_273	20.00
166	☐	WDNJ_ID_274	20.00
167	☐	WDNJ_ID_275	20.00
168	☐	WDNJ_ID_276	20.00
169	☐	WDNJ_ID_277	20.00
170	☐	WDNJ_ID_278	20.00
171	☐	WDNJ_ID_279	20.00
172	☐	WDNJ_ID_28	20.00
173	☐	WDNJ_ID_280	20.00
174	☐	WDNJ_ID_281	20.00
175	☐	WDNJ_ID_283	20.00

		ID	Hydrant Pressure at Available Flow (psi)
176	☐	WDNJ_ID_284	20.00
177	☐	WDNJ_ID_285	20.00
178	☐	WDNJ_ID_286	20.00
179	☐	WDNJ_ID_287	20.00
180	☐	WDNJ_ID_288	20.00
181	☐	WDNJ_ID_29	20.00
182	☐	WDNJ_ID_290	20.00
183	☐	WDNJ_ID_291	20.00
184	☐	WDNJ_ID_292	20.00
185	☐	WDNJ_ID_293	20.00
186	☐	WDNJ_ID_294	20.00
187	☐	WDNJ_ID_295	20.00
188	☐	WDNJ_ID_296	20.00
189	☐	WDNJ_ID_297	20.00
190	☐	WDNJ_ID_298	20.00
191	☐	WDNJ_ID_299	20.00
192	☐	WDNJ_ID_30	20.00
193	☐	WDNJ_ID_300	20.00
194	☐	WDNJ_ID_301	20.00
195	☐	WDNJ_ID_302	20.00
196	☐	WDNJ_ID_303	20.00
197	☐	WDNJ_ID_304	20.00
198	☐	WDNJ_ID_305	20.00
199	☐	WDNJ_ID_306	20.00
200	☐	WDNJ_ID_307	20.00
201	☐	WDNJ_ID_309	20.00
202	☐	WDNJ_ID_310	20.00
203	☐	WDNJ_ID_313	20.00
204	☐	WDNJ_ID_314	20.00
205	☐	WDNJ_ID_316	20.00
206	☐	WDNJ_ID_318	20.00
207	☐	WDNJ_ID_32	20.00
208	☐	WDNJ_ID_320	20.00
209	☐	WDNJ_ID_321	20.00
210	☐	WDNJ_ID_322	20.00

		ID	Hydrant Pressure at Available Flow (psi)
211	☐	WDNJ_ID_323	20.00
212	☐	WDNJ_ID_324	20.00
213	☐	WDNJ_ID_326	20.00
214	☐	WDNJ_ID_327	20.00
215	☐	WDNJ_ID_331	20.00
216	☐	WDNJ_ID_333	20.00
217	☐	WDNJ_ID_334	20.00
218	☐	WDNJ_ID_335	20.00
219	☐	WDNJ_ID_34	20.00
220	☐	WDNJ_ID_343	20.00
221	☐	WDNJ_ID_344	20.00
222	☐	WDNJ_ID_345	20.00
223	☐	WDNJ_ID_347	20.00
224	☐	WDNJ_ID_348	20.00
225	☐	WDNJ_ID_349	20.00
226	☐	WDNJ_ID_35	20.00
227	☐	WDNJ_ID_350	20.00
228	☐	WDNJ_ID_351	20.00
229	☐	WDNJ_ID_352	20.00
230	☐	WDNJ_ID_353	20.00
231	☐	WDNJ_ID_354	20.00
232	☐	WDNJ_ID_355	20.00
233	☐	WDNJ_ID_356	20.00
234	☐	WDNJ_ID_357	20.00
235	☐	WDNJ_ID_358	20.00
236	☐	WDNJ_ID_359	20.00
237	☐	WDNJ_ID_36	20.00
238	☐	WDNJ_ID_360	20.00
239	☐	WDNJ_ID_361	20.00
240	☐	WDNJ_ID_362	20.00
241	☐	WDNJ_ID_363	20.00
242	☐	WDNJ_ID_364	20.00
243	☐	WDNJ_ID_365	20.00
244	☐	WDNJ_ID_366	20.00
245	☐	WDNJ_ID_368	20.00

		ID	Hydrant Pressure at Available Flow (psi)
246	☐	WDNJ_ID_37	20.00
247	☐	WDNJ_ID_371	20.00
248	☐	WDNJ_ID_372	20.00
249	☐	WDNJ_ID_373	20.00
250	☐	WDNJ_ID_374	20.00
251	☐	WDNJ_ID_377	20.00
252	☐	WDNJ_ID_378	20.00
253	☐	WDNJ_ID_38	20.00
254	☐	WDNJ_ID_381	20.00
255	☐	WDNJ_ID_382	20.00
256	☐	WDNJ_ID_384	20.00
257	☐	WDNJ_ID_385	20.00
258	☐	WDNJ_ID_386	20.00
259	☐	WDNJ_ID_387	20.00
260	☐	WDNJ_ID_388	20.00
261	☐	WDNJ_ID_389	20.00
262	☐	WDNJ_ID_39	20.00
263	☐	WDNJ_ID_390	20.00
264	☐	WDNJ_ID_392	20.00
265	☐	WDNJ_ID_393	20.00
266	☐	WDNJ_ID_394	20.00
267	☐	WDNJ_ID_395	20.00
268	☐	WDNJ_ID_40	20.00
269	☐	WDNJ_ID_41	20.00
270	☐	WDNJ_ID_411	20.00
271	☐	WDNJ_ID_412	20.00
272	☐	WDNJ_ID_413	20.00
273	☐	WDNJ_ID_414	20.00
274	☐	WDNJ_ID_415	20.00
275	☐	WDNJ_ID_42	20.00
276	☐	WDNJ_ID_421	20.00
277	☐	WDNJ_ID_422	20.00
278	☐	WDNJ_ID_423	20.00
279	☐	WDNJ_ID_424	20.00
280	☐	WDNJ_ID_425	20.00

		ID	Hydrant Pressure at Available Flow (psi)
281	☐	WDNJ_ID_426	20.00
282	☐	WDNJ_ID_427	20.00
283	☐	WDNJ_ID_43	20.00
284	☐	WDNJ_ID_430	20.00
285	☐	WDNJ_ID_432	20.00
286	☐	WDNJ_ID_433	20.00
287	☐	WDNJ_ID_434	20.00
288	☐	WDNJ_ID_435	20.00
289	☐	WDNJ_ID_436	20.00
290	☐	WDNJ_ID_437	20.00
291	☐	WDNJ_ID_438	20.00
292	☐	WDNJ_ID_439	20.00
293	☐	WDNJ_ID_44	20.00
294	☐	WDNJ_ID_440	20.00
295	☐	WDNJ_ID_441	20.00
296	☐	WDNJ_ID_442	20.00
297	☐	WDNJ_ID_443	20.00
298	☐	WDNJ_ID_444	20.00
299	☐	WDNJ_ID_445	20.00
300	☐	WDNJ_ID_446	20.00
301	☐	WDNJ_ID_447	20.00
302	☐	WDNJ_ID_448	20.00
303	☐	WDNJ_ID_45	20.00
304	☐	WDNJ_ID_451	20.00
305	☐	WDNJ_ID_452	20.00
306	☐	WDNJ_ID_453	20.00
307	☐	WDNJ_ID_454	20.00
308	☐	WDNJ_ID_455	20.00
309	☐	WDNJ_ID_456	20.00
310	☐	WDNJ_ID_457	20.00
311	☐	WDNJ_ID_458	20.00
312	☐	WDNJ_ID_459	20.00
313	☐	WDNJ_ID_46	20.00
314	☐	WDNJ_ID_461	20.00
315	☐	WDNJ_ID_462	20.00

		ID	Hydrant Pressure at Available Flow (psi)
316	☐	WDNJ_ID_463	20.00
317	☐	WDNJ_ID_464	20.00
318	☐	WDNJ_ID_465	20.00
319	☐	WDNJ_ID_466	20.00
320	☐	WDNJ_ID_467	20.00
321	☐	WDNJ_ID_468	20.00
322	☐	WDNJ_ID_469	20.00
323	☐	WDNJ_ID_471	20.00
324	☐	WDNJ_ID_472	20.00
325	☐	WDNJ_ID_473	20.00
326	☐	WDNJ_ID_474	20.00
327	☐	WDNJ_ID_475	20.00
328	☐	WDNJ_ID_476	20.00
329	☐	WDNJ_ID_477	20.00
330	☐	WDNJ_ID_478	20.00
331	☐	WDNJ_ID_479	20.00
332	☐	WDNJ_ID_48	20.00
333	☐	WDNJ_ID_480	20.00
334	☐	WDNJ_ID_481	20.00
335	☐	WDNJ_ID_482	20.00
336	☐	WDNJ_ID_483	20.00
337	☐	WDNJ_ID_484	20.00
338	☐	WDNJ_ID_485	20.00
339	☐	WDNJ_ID_486	20.00
340	☐	WDNJ_ID_487	20.00
341	☐	WDNJ_ID_488	20.00
342	☐	WDNJ_ID_489	20.00
343	☐	WDNJ_ID_49	20.00
344	☐	WDNJ_ID_495	20.00
345	☐	WDNJ_ID_496	20.00
346	☐	WDNJ_ID_497	20.00
347	☐	WDNJ_ID_5	20.00
348	☐	WDNJ_ID_50	20.00
349	☐	WDNJ_ID_500	20.00
350	☐	WDNJ_ID_501	20.00

		ID	Hydrant Pressure at Available Flow (psi)
351	☐	WDNJ_ID_502	20.00
352	☐	WDNJ_ID_503	20.00
353	☐	WDNJ_ID_504	20.00
354	☐	WDNJ_ID_505	20.00
355	☐	WDNJ_ID_507	20.00
356	☐	WDNJ_ID_508	20.00
357	☐	WDNJ_ID_509	20.00
358	☐	WDNJ_ID_510	20.00
359	☐	WDNJ_ID_511	20.00
360	☐	WDNJ_ID_512	20.00
361	☐	WDNJ_ID_513	20.00
362	☐	WDNJ_ID_514	20.00
363	☐	WDNJ_ID_515	20.00
364	☐	WDNJ_ID_547	20.00
365	☐	WDNJ_ID_549	20.00
366	☐	WDNJ_ID_550	20.00
367	☐	WDNJ_ID_553	20.00
368	☐	WDNJ_ID_554	20.00
369	☐	WDNJ_ID_555	20.00
370	☐	WDNJ_ID_556	20.00
371	☐	WDNJ_ID_557	20.00
372	☐	WDNJ_ID_558	20.00
373	☐	WDNJ_ID_560	20.00
374	☐	WDNJ_ID_561	20.00
375	☐	WDNJ_ID_563	20.00
376	☐	WDNJ_ID_564	20.00
377	☐	WDNJ_ID_565	20.00
378	☐	WDNJ_ID_567	20.00
379	☐	WDNJ_ID_568	20.00
380	☐	WDNJ_ID_571	20.00
381	☐	WDNJ_ID_573	20.00
382	☐	WDNJ_ID_574	20.00
383	☐	WDNJ_ID_575	20.00
384	☐	WDNJ_ID_576	20.00
385	☐	WDNJ_ID_577	20.00

		ID	Hydrant Pressure at Available Flow (psi)
386	☐	WDNJ_ID_578	20.00
387	☐	WDNJ_ID_58	20.00
388	☐	WDNJ_ID_583	20.00
389	☐	WDNJ_ID_585	20.00
390	☐	WDNJ_ID_586	20.00
391	☐	WDNJ_ID_587	20.00
392	☐	WDNJ_ID_6	20.00
393	☐	WDNJ_ID_61	20.00
394	☐	WDNJ_ID_62	20.00
395	☐	WDNJ_ID_63	20.00
396	☐	WDNJ_ID_64	20.00
397	☐	WDNJ_ID_65	20.00
398	☐	WDNJ_ID_66	20.00
399	☐	WDNJ_ID_67	20.00
400	☐	WDNJ_ID_68	20.00
401	☐	WDNJ_ID_69	20.00
402	☐	WDNJ_ID_7	20.00
403	☐	WDNJ_ID_70	20.00
404	☐	WDNJ_ID_71	20.00
405	☐	WDNJ_ID_72	20.00
406	☐	WDNJ_ID_73	20.00
407	☐	WDNJ_ID_74	20.00
408	☐	WDNJ_ID_75	20.00
409	☐	WDNJ_ID_76	20.00
410	☐	WDNJ_ID_77	20.00
411	☐	WDNJ_ID_78	20.00
412	☐	WDNJ_ID_79	20.00
413	☐	WDNJ_ID_8	20.00
414	☐	WDNJ_ID_80	20.00
415	☐	WDNJ_ID_82	20.00
416	☐	WDNJ_ID_83	20.00
417	☐	WDNJ_ID_84	20.00
418	☐	WDNJ_ID_85	20.00
419	☐	WDNJ_ID_86	20.00
420	☐	WDNJ_ID_87	20.00

		ID	Hydrant Pressure at Available Flow (psi)
421	☐	WDNJ_ID_88	20.00
422	☐	WDNJ_ID_89	20.00
423	☐	WDNJ_ID_90	20.00
424	☐	WDNJ_ID_91	20.00
425	☐	WDNJ_ID_92	20.00
426	☐	WDNJ_ID_93	20.00
427	☐	WDNJ_ID_94	20.00
428	☐	WDNJ_ID_96	20.00
429	☐	WDNJ_ID_97	20.00
430	☐	WDNJ_ID_98	20.00
431	☐	WDNJ_ID_99	20.00
432	☐	WDNJ_NI_545	20.00

2021 Model - 2026 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	WDNJ_ID_1	9.67	4,676.71	4,938.81	113.57
2	☐	WDNJ_ID_10	4.11	4,691.06	4,937.58	106.82
3	☐	WDNJ_ID_100	1.01	4,813.66	5,089.85	119.67
4	☐	WDNJ_ID_101	26.16	4,897.99	5,090.48	83.40
5	☐	WDNJ_ID_102	11.46	4,909.76	5,090.86	78.47
6	☐	WDNJ_ID_103	4.27	4,724.83	5,089.65	158.08
7	☐	WDNJ_ID_104	4.27	4,722.32	5,089.62	159.15
8	☐	WDNJ_ID_105	3.37	4,722.88	4,939.60	93.90
9	☐	WDNJ_ID_106	6.28	4,620.88	4,797.14	76.37
10	☐	WDNJ_ID_107	11.13	4,836.26	5,090.09	109.98
11	☐	WDNJ_ID_108	36.13	4,833.78	5,090.08	111.06
12	☐	WDNJ_ID_109	35.02	4,526.58	4,796.45	116.94
13	☐	WDNJ_ID_11	9.11	4,554.61	4,797.95	105.44
14	☐	WDNJ_ID_110	14.15	4,536.26	4,796.62	112.81
15	☐	WDNJ_ID_111	17.07	4,540.72	4,796.50	110.83
16	☐	WDNJ_ID_112	24.17	4,934.34	5,090.97	67.87
17	☐	WDNJ_ID_113	12.48	4,548.87	4,797.81	107.87
18	☐	WDNJ_ID_114	23.37	4,905.96	5,090.67	80.03
19	☐	WDNJ_ID_115	12.54	4,895.53	5,090.88	84.64
20	☐	WDNJ_ID_116	17.83	4,553.07	4,798.02	106.14
21	☐	WDNJ_ID_117	8.09	4,809.72	5,090.02	121.45
22	☐	WDNJ_ID_118	28.18	4,822.57	5,090.05	115.90
23	☐	WDNJ_ID_119	13.37	4,528.78	4,796.44	115.98
24	☐	WDNJ_ID_12	5.63	4,768.87	5,089.62	138.98
25	☐	WDNJ_ID_120	10.75	4,884.20	5,090.81	89.53
26	☐	WDNJ_ID_121	14.76	4,915.91	5,090.67	75.72
27	☐	WDNJ_ID_122	18.92	4,936.22	5,090.64	66.91
28	☐	WDNJ_ID_123	3.78	4,587.56	4,796.62	90.59
29	☐	WDNJ_ID_124	4.43	4,836.02	5,089.84	109.98
30	☐	WDNJ_ID_125	15.04	4,599.20	4,796.61	85.54
31	☐	WDNJ_ID_126	27.31	4,934.08	5,090.40	67.74
32	☐	WDNJ_ID_127	22.03	4,948.59	5,090.44	61.46
33	☐	WDNJ_ID_128	13.30	4,740.00	4,938.71	86.10
34	☐	WDNJ_ID_129	21.41	4,896.98	5,089.25	83.31
35	☐	WDNJ_ID_13	4.27	4,737.65	5,089.40	152.41
36	☐	WDNJ_ID_130	23.94	4,935.74	5,089.21	66.50
37	☐	WDNJ_ID_131	18.44	4,514.40	4,796.22	122.11
38	☐	WDNJ_ID_132	17.92	4,523.49	4,796.29	118.20
39	☐	WDNJ_ID_133	10.04	4,867.81	5,090.55	96.51
40	☐	WDNJ_ID_134	20.35	4,884.80	5,089.93	88.88
41	☐	WDNJ_ID_135	8.68	4,895.55	5,089.92	84.22
42	☐	WDNJ_ID_136	3.78	4,589.40	4,796.63	89.79
43	☐	WDNJ_ID_137	10.16	4,838.17	5,090.62	109.39
44	☐	WDNJ_ID_138	22.05	4,817.57	5,090.58	118.30
45	☐	WDNJ_ID_139	11.51	4,605.12	4,796.59	82.96
46	☐	WDNJ_ID_14	2.00	4,738.09	5,089.90	152.44
47	☐	WDNJ_ID_140	20.40	4,538.03	4,797.64	112.49
48	☐	WDNJ_ID_141	15.02	4,867.79	5,089.83	96.21
49	☐	WDNJ_ID_142	8.89	4,869.14	5,090.79	96.04
50	☐	WDNJ_ID_143	19.84	4,544.93	4,796.48	109.00

2021 Model - 2026 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	WDNJ_ID_144	2.93	4,984.51	5,089.94	45.68
52	☐	WDNJ_ID_145	6.98	4,880.13	5,090.81	91.29
53	☐	WDNJ_ID_146	7.08	4,893.54	5,090.88	85.51
54	☐	WDNJ_ID_147	11.79	4,819.82	5,090.04	117.09
55	☐	WDNJ_ID_148	6.42	4,818.67	5,090.04	117.59
56	☐	WDNJ_ID_149	31.96	4,641.32	4,802.83	69.98
57	☐	WDNJ_ID_15	0.56	4,775.66	5,089.90	136.16
58	☐	WDNJ_ID_150	10.21	4,837.49	5,090.36	109.57
59	☐	WDNJ_ID_151	10.23	4,841.27	5,090.36	107.93
60	☐	WDNJ_ID_152	0.00	4,508.55	4,796.13	124.61
61	☐	WDNJ_ID_153	0.00	4,508.72	4,796.14	124.54
62	☐	WDNJ_ID_154	10.69	4,733.70	5,088.16	153.59
63	☐	WDNJ_ID_155	4.25	4,682.35	4,939.59	111.46
64	☐	WDNJ_ID_156	24.81	4,520.43	4,796.18	119.48
65	☐	WDNJ_ID_157	27.90	4,841.17	5,090.48	108.03
66	☐	WDNJ_ID_158	11.29	4,858.12	5,090.47	100.68
67	☐	WDNJ_ID_159	9.60	4,942.94	5,233.04	125.70
68	☐	WDNJ_ID_16	0.71	4,718.53	4,913.50	84.48
69	☐	WDNJ_ID_160	5.85	4,827.12	5,088.02	113.05
70	☐	WDNJ_ID_161	12.66	4,829.39	5,088.49	112.27
71	☐	WDNJ_ID_164	0.00	5,040.72	5,234.11	83.80
72	☐	WDNJ_ID_165	0.35	4,810.50	5,089.98	121.10
73	☐	WDNJ_ID_166	0.26	4,807.28	5,089.98	122.50
74	☐	WDNJ_ID_167	0.26	4,807.38	5,089.98	122.45
75	☐	WDNJ_ID_168	0.26	4,805.39	5,089.98	123.31
76	☐	WDNJ_ID_169	5.54	4,615.25	4,800.24	80.16
77	☐	WDNJ_ID_17	0.71	4,718.78	4,913.49	84.37
78	☐	WDNJ_ID_170	1.30	4,604.27	4,800.24	84.91
79	☐	WDNJ_ID_171	3.73	4,645.37	4,797.36	65.86
80	☐	WDNJ_ID_172	19.97	5,150.51	5,402.47	109.17
81	☐	WDNJ_ID_173	0.00	5,152.13	5,398.83	106.89
82	☐	WDNJ_ID_174	0.00	5,162.66	5,398.83	102.33
83	☐	WDNJ_ID_175	6.16	5,143.15	5,258.16	49.83
84	☐	WDNJ_ID_176	1.89	5,032.58	5,234.47	87.48
85	☐	WDNJ_ID_177	4.29	4,980.58	5,234.51	110.03
86	☐	WDNJ_ID_178	12.38	4,803.00	5,090.23	124.46
87	☐	WDNJ_ID_179	11.27	4,835.91	5,090.76	110.43
88	☐	WDNJ_ID_18	3.59	4,536.56	4,797.70	113.15
89	☐	WDNJ_ID_180	5.99	5,034.51	5,256.45	96.17
90	☐	WDNJ_ID_181	8.16	4,819.60	5,087.90	116.25
91	☐	WDNJ_ID_182	7.99	4,669.93	4,801.13	56.85
92	☐	WDNJ_ID_183	18.02	4,577.74	4,798.40	95.61
93	☐	WDNJ_ID_184	21.03	5,033.57	5,256.52	96.60
94	☐	WDNJ_ID_185	13.94	5,013.51	5,256.32	105.21
95	☐	WDNJ_ID_186	3.96	4,939.28	5,091.38	65.90
96	☐	WDNJ_ID_187	3.96	4,935.16	5,091.37	67.69
97	☐	WDNJ_ID_188	19.48	4,606.30	4,800.70	84.23
98	☐	WDNJ_ID_189	12.50	4,592.72	4,799.91	89.77
99	☐	WDNJ_ID_19	0.00	4,562.55	4,797.70	101.89
100	☐	WDNJ_ID_190	15.56	4,577.41	4,799.14	96.08

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	WDNJ_ID_191	16.29	4,684.23	4,807.17	53.27
102	☐	WDNJ_ID_192	12.29	4,828.89	5,090.38	113.30
103	☐	WDNJ_ID_193	26.75	4,628.37	4,801.86	75.17
104	☐	WDNJ_ID_194	21.13	4,856.68	5,090.16	101.17
105	☐	WDNJ_ID_195	7.22	4,864.44	5,090.28	97.86
106	☐	WDNJ_ID_196	12.21	4,532.73	4,796.76	114.40
107	☐	WDNJ_ID_197	12.45	4,532.20	4,796.74	114.63
108	☐	WDNJ_ID_198	19.62	4,530.43	4,796.74	115.39
109	☐	WDNJ_ID_199	7.47	4,546.77	4,797.71	108.73
110	☐	WDNJ_ID_2	9.67	4,675.95	4,938.77	113.88
111	☐	WDNJ_ID_20	8.51	4,569.94	4,796.41	98.13
112	☐	WDNJ_ID_200	17.12	4,527.82	4,796.70	116.51
113	☐	WDNJ_ID_201	43.79	4,796.65	5,090.23	127.21
114	☐	WDNJ_ID_202	33.92	4,566.67	4,798.37	100.40
115	☐	WDNJ_ID_203	34.32	4,549.68	4,798.71	107.90
116	☐	WDNJ_ID_204	12.92	4,568.71	4,799.01	99.79
117	☐	WDNJ_ID_205	24.57	4,523.13	4,796.45	118.43
118	☐	WDNJ_ID_206	3.37	4,889.42	5,090.84	87.28
119	☐	WDNJ_ID_207	0.42	4,512.20	4,796.23	123.07
120	☐	WDNJ_ID_208	12.00	4,574.36	4,799.07	97.37
121	☐	WDNJ_ID_209	35.97	4,557.81	4,798.95	104.49
122	☐	WDNJ_ID_21	8.51	4,567.80	4,796.11	98.93
123	☐	WDNJ_ID_210	16.48	4,562.12	4,799.01	102.64
124	☐	WDNJ_ID_211	14.38	4,968.54	5,091.83	53.42
125	☐	WDNJ_ID_212	9.83	4,554.32	4,798.96	106.00
126	☐	WDNJ_ID_213	23.33	4,556.33	4,798.96	105.13
127	☐	WDNJ_ID_214	25.54	4,572.55	4,799.01	98.12
128	☐	WDNJ_ID_215	21.25	5,057.69	5,256.53	86.16
129	☐	WDNJ_ID_216	20.82	4,523.35	4,796.15	118.20
130	☐	WDNJ_ID_217	24.10	4,515.60	4,796.32	121.64
131	☐	WDNJ_ID_218	37.61	4,513.41	4,796.17	122.52
132	☐	WDNJ_ID_219	24.72	5,054.71	5,256.58	87.47
133	☐	WDNJ_ID_220	12.55	5,053.89	5,256.58	87.83
134	☐	WDNJ_ID_221	15.64	4,516.24	4,796.23	121.32
135	☐	WDNJ_ID_222	7.80	4,565.17	4,796.57	100.27
136	☐	WDNJ_ID_223	13.84	4,500.70	4,796.12	128.01
137	☐	WDNJ_ID_224	0.00	4,500.39	4,796.13	128.15
138	☐	WDNJ_ID_225	17.24	4,808.23	5,090.05	122.11
139	☐	WDNJ_ID_226	12.34	4,556.27	4,796.33	104.02
140	☐	WDNJ_ID_227	17.80	4,557.50	4,796.27	103.46
141	☐	WDNJ_ID_228	3.07	4,534.59	4,796.65	113.55
142	☐	WDNJ_ID_229	18.44	4,532.90	4,796.25	114.11
143	☐	WDNJ_ID_230	12.31	4,528.97	4,796.23	115.80
144	☐	WDNJ_ID_231	13.39	4,501.26	4,796.15	127.77
145	☐	WDNJ_ID_232	16.51	4,812.91	5,089.78	119.97
146	☐	WDNJ_ID_233	8.39	4,567.15	4,796.50	99.38
147	☐	WDNJ_ID_234	20.82	4,523.67	4,796.10	118.05
148	☐	WDNJ_ID_235	22.83	4,984.54	5,233.15	107.72
149	☐	WDNJ_ID_236	14.48	4,957.23	5,233.04	119.51
150	☐	WDNJ_ID_237	75.38	4,530.12	4,796.71	115.51

2021 Model - 2026 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151	☐	WDNJ_ID_238	18.28	4,532.28	4,796.43	114.45
152	☐	WDNJ_ID_239	20.30	4,528.19	4,796.42	116.22
153	☐	WDNJ_ID_24	10.07	4,587.87	4,799.39	91.65
154	☐	WDNJ_ID_240	16.93	4,547.66	4,796.25	107.71
155	☐	WDNJ_ID_241	43.42	4,500.40	4,796.14	128.14
156	☐	WDNJ_ID_242	35.64	4,804.72	5,089.76	123.51
157	☐	WDNJ_ID_243	5.09	4,912.25	5,089.96	77.00
158	☐	WDNJ_ID_244	3.42	4,937.27	5,090.05	66.20
159	☐	WDNJ_ID_245	8.06	4,534.94	4,796.25	113.22
160	☐	WDNJ_ID_246	20.14	4,517.07	4,796.23	120.96
161	☐	WDNJ_ID_247	1.60	4,920.25	5,089.96	73.53
162	☐	WDNJ_ID_248	19.10	4,524.46	4,796.22	117.76
163	☐	WDNJ_ID_249	7.15	4,523.29	4,796.24	118.27
164	☐	WDNJ_ID_25	10.07	4,588.54	4,800.39	91.79
165	☐	WDNJ_ID_250	8.63	4,506.00	4,796.13	125.71
166	☐	WDNJ_ID_251	4.57	4,504.34	4,796.13	126.43
167	☐	WDNJ_ID_252	34.69	4,528.99	4,796.70	116.00
168	☐	WDNJ_ID_253	1.68	4,652.77	4,913.44	112.95
169	☐	WDNJ_ID_254	18.00	4,681.61	4,913.40	100.44
170	☐	WDNJ_ID_255	14.83	4,540.16	4,796.23	110.95
171	☐	WDNJ_ID_256	19.81	4,588.33	4,799.07	91.31
172	☐	WDNJ_ID_257	15.12	4,538.21	4,796.63	111.97
173	☐	WDNJ_ID_258	11.81	4,542.33	4,796.62	110.18
174	☐	WDNJ_ID_259	7.14	4,969.04	5,090.19	52.49
175	☐	WDNJ_ID_26	12.99	4,789.01	5,089.46	130.18
176	☐	WDNJ_ID_260	4.57	4,506.47	4,796.13	125.51
177	☐	WDNJ_ID_261	36.84	4,510.77	4,796.12	123.64
178	☐	WDNJ_ID_262	14.86	4,505.95	4,796.12	125.73
179	☐	WDNJ_ID_263	7.31	4,522.38	4,796.57	118.81
180	☐	WDNJ_ID_264	7.31	4,526.64	4,796.57	116.96
181	☐	WDNJ_ID_265	4.90	4,503.90	4,796.13	126.62
182	☐	WDNJ_ID_266	14.79	4,887.33	5,090.84	88.18
183	☐	WDNJ_ID_267	0.66	4,975.18	5,090.05	49.77
184	☐	WDNJ_ID_268	0.00	5,050.99	5,256.53	89.06
185	☐	WDNJ_ID_269	12.31	4,521.68	4,796.09	118.90
186	☐	WDNJ_ID_27	16.39	4,765.80	5,088.16	139.68
187	☐	WDNJ_ID_270	4.17	4,515.42	4,796.09	121.62
188	☐	WDNJ_ID_271	14.95	4,998.52	5,233.14	101.66
189	☐	WDNJ_ID_272	12.50	4,598.75	4,799.91	87.16
190	☐	WDNJ_ID_273	4.90	4,506.06	4,796.13	125.69
191	☐	WDNJ_ID_274	0.52	4,561.67	4,796.26	101.65
192	☐	WDNJ_ID_275	12.90	4,538.64	4,796.24	111.62
193	☐	WDNJ_ID_276	7.50	4,683.16	4,913.40	99.76
194	☐	WDNJ_ID_277	36.95	4,523.20	4,796.09	118.24
195	☐	WDNJ_ID_278	3.92	4,708.07	4,913.40	88.97
196	☐	WDNJ_ID_279	9.41	5,045.19	5,256.58	91.60
197	☐	WDNJ_ID_28	24.06	4,811.45	5,089.31	120.40
198	☐	WDNJ_ID_280	9.46	4,547.02	4,796.25	107.99
199	☐	WDNJ_ID_281	0.56	4,752.96	5,090.23	146.14
200	☐	WDNJ_ID_282	13.75	4,619.33	4,801.49	78.93

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201		WDNJ_ID_283	7.90	4,637.74	4,796.59	68.83
202		WDNJ_ID_284	9.83	4,548.29	4,799.07	108.66
203		WDNJ_ID_285	7.52	4,942.21	5,089.93	64.01
204		WDNJ_ID_286	10.28	4,962.57	5,089.93	55.19
205		WDNJ_ID_287	10.26	4,655.67	4,800.23	62.64
206		WDNJ_ID_288	4.10	4,650.84	4,800.23	64.73
207		WDNJ_ID_289	3.07	4,535.63	4,796.65	113.10
208		WDNJ_ID_29	4.10	4,797.00	5,088.13	126.15
209		WDNJ_ID_290	14.57	4,966.37	5,234.42	116.15
210		WDNJ_ID_291	7.69	4,963.92	5,234.42	117.21
211		WDNJ_ID_292	3.47	4,502.14	4,796.14	127.39
212		WDNJ_ID_293	13.25	4,921.79	5,089.94	72.86
213		WDNJ_ID_294	12.07	4,893.51	5,089.95	85.12
214		WDNJ_ID_295	10.99	4,899.47	5,089.95	82.54
215		WDNJ_ID_296	7.53	4,529.97	4,796.23	115.37
216		WDNJ_ID_297	0.00	4,508.97	4,796.12	124.42
217		WDNJ_ID_298	0.00	4,524.99	4,796.57	117.68
218		WDNJ_ID_299	35.28	4,636.27	4,800.24	71.05
219		WDNJ_ID_3	18.02	4,578.05	4,798.40	95.48
220		WDNJ_ID_30	7.45	4,647.19	4,804.82	68.30
221		WDNJ_ID_300	9.53	4,628.17	4,800.23	74.56
222		WDNJ_ID_301	8.72	4,924.16	5,089.94	71.83
223		WDNJ_ID_302	8.99	4,980.86	5,234.42	109.87
224		WDNJ_ID_303	26.91	4,720.55	5,001.03	121.53
225		WDNJ_ID_304	3.63	4,783.30	5,001.02	94.34
226		WDNJ_ID_305	0.00	4,784.46	5,089.84	132.32
227		WDNJ_ID_306	1.27	4,723.11	5,001.03	120.42
228		WDNJ_ID_307	0.00	4,731.42	5,001.03	116.82
229		WDNJ_ID_308	0.16	4,720.44	5,001.03	121.58
230		WDNJ_ID_309	4.25	4,785.62	5,001.03	93.34
231		WDNJ_ID_31	7.45	4,660.52	4,807.00	63.47
232		WDNJ_ID_310	0.00	4,698.23	5,001.03	131.20
233		WDNJ_ID_311	5.17	4,645.74	4,799.52	66.63
234		WDNJ_ID_312	5.17	4,642.65	4,799.52	67.97
235		WDNJ_ID_313	0.68	4,562.67	4,799.33	102.55
236		WDNJ_ID_314	8.56	4,578.91	4,800.26	95.91
237		WDNJ_ID_315	43.40	4,565.65	4,799.28	101.23
238		WDNJ_ID_316	3.73	4,641.09	4,797.34	67.70
239		WDNJ_ID_317	0.00	5,104.82	5,404.57	129.88
240		WDNJ_ID_318	7.53	4,830.61	5,090.40	112.57
241		WDNJ_ID_319	11.84	4,620.39	4,803.48	79.33
242		WDNJ_ID_32	4.10	4,792.78	5,088.15	127.98
243		WDNJ_ID_320	28.14	4,865.83	5,090.31	97.27
244		WDNJ_ID_321	15.12	4,538.76	4,796.64	111.74
245		WDNJ_ID_322	19.29	4,565.71	4,796.43	99.97
246		WDNJ_ID_323	23.13	4,863.04	5,090.22	98.44
247		WDNJ_ID_324	13.77	4,516.42	4,796.23	121.24
248		WDNJ_ID_325	0.00	4,522.94	4,796.09	118.36
249		WDNJ_ID_326	0.68	4,557.06	4,799.11	104.88
250		WDNJ_ID_327	10.42	4,489.34	4,796.14	132.94

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	WDNJ_ID_33	3.92	4,678.58	4,939.19	112.92
252	☐	WDNJ_ID_330	0.00	4,796.18	4,811.93	6.82
253	☐	WDNJ_ID_331	10.16	5,035.87	5,234.53	86.08
254	☐	WDNJ_ID_333	4.29	4,979.91	5,092.20	48.66
255	☐	WDNJ_ID_334	16.91	4,616.21	4,801.36	80.22
256	☐	WDNJ_ID_335	18.66	4,890.28	5,090.62	86.81
257	☐	WDNJ_ID_336	0.00	5,815.00	5,830.00	6.50
258	☐	WDNJ_ID_337	0.00	5,507.00	5,830.00	139.96
259	☐	WDNJ_ID_338	0.00	5,506.00	5,830.00	140.39
260	☐	WDNJ_ID_339	0.00	5,385.23	5,830.00	192.72
261	☐	WDNJ_ID_34	13.99	4,589.41	4,799.91	91.21
262	☐	WDNJ_ID_342	0.68	4,557.65	4,799.11	104.62
263	☐	WDNJ_ID_343	1.30	4,608.31	4,800.24	83.16
264	☐	WDNJ_ID_344	2.59	4,609.89	4,800.24	82.48
265	☐	WDNJ_ID_345	0.03	4,696.88	5,001.03	131.79
266	☐	WDNJ_ID_346	0.95	4,697.94	5,001.03	131.33
267	☐	WDNJ_ID_347	0.00	5,012.29	5,232.95	95.61
268	☐	WDNJ_ID_348	0.00	5,017.75	5,232.95	93.25
269	☐	WDNJ_ID_349	14.67	4,884.08	5,087.87	88.30
270	☐	WDNJ_ID_35	15.66	4,575.01	4,799.02	97.06
271	☐	WDNJ_ID_350	25.42	4,885.64	5,087.87	87.63
272	☐	WDNJ_ID_351	7.64	4,964.87	5,232.97	116.17
273	☐	WDNJ_ID_352	0.00	5,036.73	5,232.95	85.02
274	☐	WDNJ_ID_353	8.70	5,009.94	5,232.95	96.63
275	☐	WDNJ_ID_354	1.28	4,984.55	5,232.97	107.64
276	☐	WDNJ_ID_355	9.97	4,981.46	5,232.97	108.98
277	☐	WDNJ_ID_356	0.00	5,032.13	5,232.96	87.02
278	☐	WDNJ_ID_357	0.10	5,056.90	5,232.96	76.29
279	☐	WDNJ_ID_358	3.07	4,535.82	4,796.65	113.02
280	☐	WDNJ_ID_359	3.07	4,531.83	4,796.65	114.74
281	☐	WDNJ_ID_36	12.71	4,582.38	4,799.05	93.88
282	☐	WDNJ_ID_360	7.64	4,965.47	5,232.97	115.91
283	☐	WDNJ_ID_361	16.46	5,042.24	5,232.97	82.64
284	☐	WDNJ_ID_362	0.43	4,546.83	4,796.87	108.34
285	☐	WDNJ_ID_363	23.28	4,551.32	4,796.87	106.40
286	☐	WDNJ_ID_364	6.93	4,844.98	5,090.32	106.31
287	☐	WDNJ_ID_365	17.31	4,850.47	5,090.31	103.92
288	☐	WDNJ_ID_366	5.43	4,832.98	5,090.32	111.51
289	☐	WDNJ_ID_367	8.89	4,948.84	5,094.82	63.26
290	☐	WDNJ_ID_368	9.11	4,951.51	5,094.80	62.09
291	☐	WDNJ_ID_369	8.89	4,950.13	5,094.86	62.71
292	☐	WDNJ_ID_37	12.71	4,581.98	4,799.13	94.09
293	☐	WDNJ_ID_371	17.15	4,952.80	5,233.98	121.84
294	☐	WDNJ_ID_372	8.51	4,569.87	4,796.41	98.16
295	☐	WDNJ_ID_373	0.00	4,570.48	4,796.41	97.89
296	☐	WDNJ_ID_374	11.35	4,581.10	4,796.41	93.29
297	☐	WDNJ_ID_375	3.78	4,588.79	4,796.63	90.05
298	☐	WDNJ_ID_376	3.78	4,589.16	4,796.64	89.90
299	☐	WDNJ_ID_377	3.78	4,587.95	4,796.62	90.42
300	☐	WDNJ_ID_378	6.28	4,620.53	4,797.13	76.52

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301		WDNJ_ID_379	1.94	4,629.28	4,797.17	72.75
302		WDNJ_ID_38	10.24	4,805.40	5,089.28	123.00
303		WDNJ_ID_380	1.68	4,652.74	4,913.45	112.97
304		WDNJ_ID_381	1.89	4,729.07	4,913.50	79.91
305		WDNJ_ID_382	3.37	4,650.41	4,913.45	113.97
306		WDNJ_ID_384	1.56	4,803.18	5,090.00	124.28
307		WDNJ_ID_385	1.56	4,802.68	5,090.00	124.50
308		WDNJ_ID_386	1.56	4,806.01	5,090.01	123.06
309		WDNJ_ID_387	1.56	4,806.21	5,090.01	122.97
310		WDNJ_ID_388	1.56	4,804.96	5,090.00	123.51
311		WDNJ_ID_389	8.09	4,808.98	5,090.02	121.77
312		WDNJ_ID_39	8.63	4,931.69	5,091.21	69.12
313		WDNJ_ID_390	10.36	4,885.82	5,090.61	88.74
314		WDNJ_ID_391	0.00	5,047.91	5,234.15	80.70
315		WDNJ_ID_392	7.33	5,010.90	5,234.15	96.73
316		WDNJ_ID_393	8.18	4,823.03	5,089.95	115.66
317		WDNJ_ID_394	1.65	4,803.84	5,089.98	123.99
318		WDNJ_ID_395	9.05	4,872.60	5,089.98	94.19
319		WDNJ_ID_397	0.00	5,085.00	5,100.31	6.63
320		WDNJ_ID_398	0.00	5,085.00	5,100.50	6.72
321		WDNJ_ID_399	0.00	5,085.00	5,404.61	138.49
322		WDNJ_ID_4	16.98	4,601.69	4,801.55	86.60
323		WDNJ_ID_40	12.17	4,939.77	5,091.18	65.61
324		WDNJ_ID_400	0.00	5,085.00	5,404.61	138.49
325		WDNJ_ID_402	0.00	5,085.00	5,100.50	6.72
326		WDNJ_ID_403	0.00	5,085.00	5,234.81	64.91
327		WDNJ_ID_404	0.00	5,085.00	5,234.81	64.91
328		WDNJ_ID_405	0.00	5,085.00	5,234.81	64.91
329		WDNJ_ID_406	0.00	5,103.19	5,234.82	57.03
330		WDNJ_ID_407	0.00	5,103.69	5,234.82	56.82
331		WDNJ_ID_408	0.00	5,103.50	5,404.61	130.47
332		WDNJ_ID_409	0.00	5,376.88	5,409.68	14.21
333		WDNJ_ID_41	17.73	4,854.72	5,091.44	102.57
334		WDNJ_ID_410	0.00	5,376.96	5,410.12	14.37
335		WDNJ_ID_411	31.65	4,881.91	5,089.94	90.14
336		WDNJ_ID_412	1.56	4,920.26	5,089.95	73.53
337		WDNJ_ID_413	1.39	4,959.03	5,089.95	56.73
338		WDNJ_ID_414	5.09	4,911.02	5,089.96	77.53
339		WDNJ_ID_415	16.13	5,055.55	5,256.68	87.15
340		WDNJ_ID_416	0.00	5,402.92	5,830.00	185.05
341		WDNJ_ID_417	0.00	5,384.00	5,410.07	11.30
342		WDNJ_ID_418	0.00	5,384.00	5,410.07	11.29
343		WDNJ_ID_419	0.00	5,384.00	5,410.17	11.34
344		WDNJ_ID_42	14.12	4,857.00	5,091.41	101.57
345		WDNJ_ID_420	0.00	5,396.00	5,830.00	188.05
346		WDNJ_ID_421	3.11	4,918.76	5,089.95	74.18
347		WDNJ_ID_422	0.14	4,981.83	5,089.96	46.85
348		WDNJ_ID_423	1.70	4,981.57	5,089.98	46.98
349		WDNJ_ID_424	32.00	5,047.86	5,256.58	90.44
350		WDNJ_ID_425	62.88	4,517.53	4,796.09	120.70

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351	☐	WDNJ_ID_426	20.82	4,530.08	4,796.11	115.27
352	☐	WDNJ_ID_427	20.82	4,527.79	4,796.10	116.26
353	☐	WDNJ_ID_428	0.00	4,543.77	4,797.70	110.03
354	☐	WDNJ_ID_429	0.68	4,562.42	4,799.31	102.64
355	☐	WDNJ_ID_43	15.47	4,597.56	4,796.62	86.25
356	☐	WDNJ_ID_430	17.93	4,569.14	4,799.76	99.93
357	☐	WDNJ_ID_432	21.65	4,599.11	4,800.95	87.46
358	☐	WDNJ_ID_433	28.42	4,580.86	4,800.58	95.21
359	☐	WDNJ_ID_434	17.76	4,563.46	4,798.98	102.05
360	☐	WDNJ_ID_435	20.89	4,543.14	4,798.16	110.50
361	☐	WDNJ_ID_436	14.13	4,540.52	4,797.70	111.44
362	☐	WDNJ_ID_437	14.41	4,536.44	4,797.20	112.99
363	☐	WDNJ_ID_438	15.71	4,540.95	4,797.34	111.09
364	☐	WDNJ_ID_439	44.98	4,512.30	4,796.17	123.00
365	☐	WDNJ_ID_44	21.49	4,632.56	4,796.80	71.17
366	☐	WDNJ_ID_440	0.00	4,509.64	4,796.22	124.18
367	☐	WDNJ_ID_441	0.61	4,507.42	4,796.13	125.10
368	☐	WDNJ_ID_442	0.40	4,501.97	4,796.13	127.46
369	☐	WDNJ_ID_443	10.19	4,498.71	4,796.12	128.87
370	☐	WDNJ_ID_444	33.02	4,500.76	4,796.12	127.98
371	☐	WDNJ_ID_445	26.63	4,499.69	4,796.13	128.45
372	☐	WDNJ_ID_446	8.73	4,492.38	4,796.14	131.62
373	☐	WDNJ_ID_447	9.38	4,505.99	4,796.18	125.74
374	☐	WDNJ_ID_448	16.74	4,507.48	4,796.18	125.09
375	☐	WDNJ_ID_449	0.63	4,516.92	4,796.36	121.08
376	☐	WDNJ_ID_45	1.65	4,783.52	5,088.15	132.00
377	☐	WDNJ_ID_450	16.88	4,537.03	4,797.22	112.74
378	☐	WDNJ_ID_451	10.24	4,527.59	4,796.67	116.59
379	☐	WDNJ_ID_452	40.61	4,514.14	4,796.22	122.23
380	☐	WDNJ_ID_453	18.56	4,521.43	4,796.23	119.07
381	☐	WDNJ_ID_454	45.49	4,531.39	4,796.23	114.75
382	☐	WDNJ_ID_455	16.93	4,517.54	4,796.22	120.75
383	☐	WDNJ_ID_456	30.61	4,519.72	4,796.22	119.81
384	☐	WDNJ_ID_457	19.24	4,558.27	4,796.26	103.12
385	☐	WDNJ_ID_458	12.33	4,619.77	4,796.68	76.65
386	☐	WDNJ_ID_459	3.94	4,701.21	4,800.30	42.93
387	☐	WDNJ_ID_46	15.42	5,049.28	5,256.72	89.88
388	☐	WDNJ_ID_460	9.79	4,766.28	4,937.96	74.39
389	☐	WDNJ_ID_461	5.14	4,702.64	4,913.40	91.32
390	☐	WDNJ_ID_462	1.08	4,770.70	4,913.55	61.90
391	☐	WDNJ_ID_463	25.56	4,801.98	5,089.99	124.79
392	☐	WDNJ_ID_464	19.90	4,799.57	5,089.99	125.84
393	☐	WDNJ_ID_465	20.83	4,840.13	5,090.09	108.31
394	☐	WDNJ_ID_466	0.00	4,771.42	5,090.59	138.30
395	☐	WDNJ_ID_467	10.04	4,858.24	5,090.31	100.55
396	☐	WDNJ_ID_468	29.06	4,861.21	5,090.67	99.43
397	☐	WDNJ_ID_469	32.94	4,883.87	5,090.90	89.70
398	☐	WDNJ_ID_47	4.29	4,981.32	5,256.69	119.32
399	☐	WDNJ_ID_471	24.74	4,942.38	5,091.48	64.61
400	☐	WDNJ_ID_472	12.48	4,908.88	5,090.95	78.89

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401		WDNJ_ID_473	18.99	4,858.30	5,090.09	100.43
402		WDNJ_ID_474	7.69	4,805.19	5,089.96	123.39
403		WDNJ_ID_475	1.86	4,816.39	5,089.78	118.46
404		WDNJ_ID_476	0.14	4,771.32	5,001.03	99.53
405		WDNJ_ID_477	0.00	4,857.66	5,001.03	62.12
406		WDNJ_ID_478	3.98	4,913.79	5,232.95	138.29
407		WDNJ_ID_479	0.33	5,016.96	5,232.95	93.59
408		WDNJ_ID_48	18.77	4,610.67	4,802.47	83.11
409		WDNJ_ID_480	0.66	5,033.25	5,232.96	86.53
410		WDNJ_ID_481	23.61	4,809.96	5,087.78	120.38
411		WDNJ_ID_482	0.00	4,805.65	5,001.16	84.71
412		WDNJ_ID_483	0.00	4,753.74	5,001.10	107.18
413		WDNJ_ID_484	6.08	4,700.28	4,939.37	103.60
414		WDNJ_ID_485	12.14	4,926.68	5,232.97	132.71
415		WDNJ_ID_486	15.82	4,955.08	5,090.77	58.80
416		WDNJ_ID_487	16.41	4,890.14	5,091.05	87.06
417		WDNJ_ID_488	32.76	4,996.14	5,233.48	102.84
418		WDNJ_ID_489	26.41	4,891.16	5,093.01	87.46
419		WDNJ_ID_49	25.07	4,615.63	4,801.19	80.40
420		WDNJ_ID_490	9.11	5,000.11	5,234.04	101.36
421		WDNJ_ID_491	0.00	5,037.67	5,096.29	25.40
422		WDNJ_ID_492	9.11	4,993.66	5,095.57	44.16
423		WDNJ_ID_493	13.89	5,060.40	5,234.23	75.32
424		WDNJ_ID_494	0.00	5,063.08	5,234.33	74.20
425		WDNJ_ID_495	19.79	5,074.54	5,234.42	69.28
426		WDNJ_ID_496	3.96	4,955.71	5,091.78	58.96
427		WDNJ_ID_497	1.42	5,004.81	5,234.52	99.53
428		WDNJ_ID_498	10.16	5,047.31	5,097.58	21.78
429		WDNJ_ID_499	1.42	5,007.27	5,094.89	37.96
430		WDNJ_ID_5	11.89	4,663.87	4,938.41	118.96
431		WDNJ_ID_50	11.84	4,631.95	4,804.10	74.59
432		WDNJ_ID_500	2.40	5,070.20	5,234.67	71.26
433		WDNJ_ID_501	1.89	5,031.41	5,256.70	97.62
434		WDNJ_ID_502	19.77	4,982.18	5,234.43	109.30
435		WDNJ_ID_503	12.88	4,958.24	5,089.93	57.06
436		WDNJ_ID_504	11.42	5,029.02	5,256.57	98.60
437		WDNJ_ID_505	6.34	5,086.93	5,256.92	73.66
438		WDNJ_ID_506	0.00	5,181.07	5,403.52	96.39
439		WDNJ_ID_507	13.44	5,130.89	5,257.57	54.89
440		WDNJ_ID_508	7.86	5,115.99	5,257.06	61.13
441		WDNJ_ID_509	17.43	5,013.06	5,256.40	105.44
442		WDNJ_ID_51	0.00	5,084.43	5,234.11	64.86
443		WDNJ_ID_510	16.46	4,946.29	5,090.05	62.29
444		WDNJ_ID_511	17.66	4,920.74	5,089.96	73.32
445		WDNJ_ID_512	20.99	4,893.42	5,089.92	85.14
446		WDNJ_ID_513	25.37	4,894.53	5,089.86	84.64
447		WDNJ_ID_514	39.53	4,945.18	5,089.86	62.69
448		WDNJ_ID_515	20.10	5,030.10	5,256.52	98.11
449		WDNJ_ID_516	0.00	5,309.12	5,409.92	43.68
450		WDNJ_ID_517	0.00	5,226.79	5,409.72	79.26

2021 Model - 2026 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	WDNJ_ID_518	0.00	5,162.81	5,235.02	31.29
452	☐	WDNJ_ID_519	0.00	5,158.31	5,405.87	107.27
453	☐	WDNJ_ID_520	0.00	5,227.61	5,407.14	77.79
454	☐	WDNJ_ID_521	0.00	5,308.63	5,408.41	43.23
455	☐	WDNJ_ID_522	0.00	5,773.00	5,830.00	24.70
456	☐	WDNJ_ID_523	0.00	5,661.00	5,830.00	73.23
457	☐	WDNJ_ID_524	0.00	5,630.00	5,830.00	86.66
458	☐	WDNJ_ID_525	0.00	5,605.00	5,830.00	97.49
459	☐	WDNJ_ID_526	0.00	5,562.00	5,830.00	116.12
460	☐	WDNJ_ID_527	0.00	5,486.00	5,830.00	149.06
461	☐	WDNJ_ID_528	0.00	5,416.00	5,830.00	179.39
462	☐	WDNJ_ID_529	0.00	4,803.00	4,816.75	5.96
463	☐	WDNJ_ID_53	8.56	4,578.70	4,800.26	96.00
464	☐	WDNJ_ID_530	0.00	4,803.00	5,090.40	124.53
465	☐	WDNJ_ID_531	0.00	4,803.00	5,090.40	124.53
466	☐	WDNJ_ID_532	0.00	4,803.00	5,090.40	124.53
467	☐	WDNJ_ID_533	0.00	4,803.00	4,816.75	5.96
468	☐	WDNJ_ID_534	0.00	4,803.00	5,090.39	124.53
469	☐	WDNJ_ID_535	0.00	4,803.00	5,090.40	124.53
470	☐	WDNJ_ID_536	0.00	4,803.00	4,815.25	5.31
471	☐	WDNJ_ID_537	0.00	4,803.00	4,815.25	5.31
472	☐	WDNJ_ID_54	46.88	4,581.03	4,798.67	94.30
473	☐	WDNJ_ID_546	0.00	5,024.00	5,095.43	30.95
474	☐	WDNJ_ID_547	0.00	5,024.00	5,234.52	91.22
475	☐	WDNJ_ID_548	0.00	4,803.00	5,090.40	124.53
476	☐	WDNJ_ID_549	0.00	4,528.32	4,796.23	116.09
477	☐	WDNJ_ID_55	3.73	4,648.63	4,797.43	64.48
478	☐	WDNJ_ID_550	0.00	4,670.00	4,802.83	57.56
479	☐	WDNJ_ID_551	0.00	4,665.00	4,802.83	59.72
480	☐	WDNJ_ID_552	0.00	4,620.00	4,801.49	78.64
481	☐	WDNJ_ID_553	0.00	4,619.33	4,801.49	78.93
482	☐	WDNJ_ID_554	13.89	4,683.00	4,913.39	99.83
483	☐	WDNJ_ID_555	0.00	4,517.00	4,796.37	121.05
484	☐	WDNJ_ID_556	0.00	4,516.00	4,796.36	121.48
485	☐	WDNJ_ID_557	0.00	4,513.00	4,796.30	122.76
486	☐	WDNJ_ID_558	0.00	4,511.00	4,796.26	123.60
487	☐	WDNJ_ID_559	6.42	4,510.00	4,796.24	124.03
488	☐	WDNJ_ID_56	3.73	4,645.72	4,797.91	65.94
489	☐	WDNJ_ID_560	0.00	4,511.00	4,796.23	123.59
490	☐	WDNJ_ID_561	0.00	4,511.00	4,796.23	123.59
491	☐	WDNJ_ID_563	0.00	4,511.00	4,796.24	123.59
492	☐	WDNJ_ID_564	0.00	4,572.00	4,798.93	98.33
493	☐	WDNJ_ID_565	0.00	4,573.00	4,798.92	97.89
494	☐	WDNJ_ID_566	0.00	4,573.00	4,798.85	97.86
495	☐	WDNJ_ID_567	0.00	4,573.00	4,798.81	97.84
496	☐	WDNJ_ID_568	0.00	4,572.00	4,798.72	98.24
497	☐	WDNJ_ID_569	0.00	4,560.00	4,798.64	103.40
498	☐	WDNJ_ID_57	4.13	4,629.71	4,797.17	72.56
499	☐	WDNJ_ID_570	0.00	4,573.00	4,798.92	97.89
500	☐	WDNJ_ID_571	0.00	4,573.00	4,798.92	97.89

2021 Model - 2026 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501	☐	WDNJ_ID_572	0.00	4,510.44	4,796.24	123.84
502	☐	WDNJ_ID_573	0.00	5,041.91	5,256.52	92.99
503	☐	WDNJ_ID_574	0.00	5,015.82	5,232.95	94.08
504	☐	WDNJ_ID_575	0.00	4,801.49	5,090.23	125.11
505	☐	WDNJ_ID_576	0.00	4,813.50	5,089.83	119.74
506	☐	WDNJ_ID_577	0.00	4,709.16	4,939.60	99.85
507	☐	WDNJ_ID_578	0.00	4,724.00	4,939.48	93.37
508	☐	WDNJ_ID_579	0.00	4,676.24	4,802.83	54.85
509	☐	WDNJ_ID_58	4.13	4,630.97	4,797.07	71.97
510	☐	WDNJ_ID_582	0.00	4,611.17	4,801.06	82.28
511	☐	WDNJ_ID_583	0.00	4,610.00	4,801.06	82.78
512	☐	WDNJ_ID_584	0.00	5,182.00	5,409.59	98.61
513	☐	WDNJ_ID_585	0.00	4,800.00	5,001.02	87.10
514	☐	WDNJ_ID_586	23.61	4,825.00	5,001.01	76.27
515	☐	WDNJ_ID_590	5.21	4,913.79	5,232.95	138.29
516	☐	WDNJ_ID_591	21.35	4,594.18	4,798.42	88.50
517	☐	WDNJ_ID_592	0.00	4,790.00	5,001.02	91.43
518	☐	WDNJ_ID_593	0.00	4,900.00	5,090.45	82.52
519	☐	WDNJ_ID_594	0.00	5,000.00	5,233.27	101.07
520	☐	WDNJ_ID_6	16.34	4,654.53	4,933.33	120.80
521	☐	WDNJ_ID_61	5.03	5,078.12	5,257.29	77.63
522	☐	WDNJ_ID_62	5.03	5,085.43	5,257.15	74.40
523	☐	WDNJ_ID_63	15.17	4,834.00	5,089.29	110.62
524	☐	WDNJ_ID_64	6.23	4,824.54	5,088.49	114.37
525	☐	WDNJ_ID_65	5.47	4,817.59	5,088.02	117.18
526	☐	WDNJ_ID_66	7.17	4,845.49	5,090.34	106.09
527	☐	WDNJ_ID_67	7.17	4,847.45	5,090.35	105.25
528	☐	WDNJ_ID_68	12.50	4,912.99	5,091.06	77.16
529	☐	WDNJ_ID_69	33.82	4,918.07	5,091.16	75.00
530	☐	WDNJ_ID_7	17.83	4,836.59	5,090.09	109.84
531	☐	WDNJ_ID_70	3.91	4,809.70	5,089.88	121.40
532	☐	WDNJ_ID_71	8.23	4,829.72	5,090.63	113.05
533	☐	WDNJ_ID_72	15.82	4,591.96	4,798.07	89.31
534	☐	WDNJ_ID_73	19.86	4,627.14	4,800.49	75.11
535	☐	WDNJ_ID_74	18.92	4,867.73	5,090.55	96.55
536	☐	WDNJ_ID_75	9.11	4,554.19	4,797.98	105.63
537	☐	WDNJ_ID_76	13.91	4,556.44	4,797.67	104.52
538	☐	WDNJ_ID_77	5.17	4,642.62	4,799.50	67.97
539	☐	WDNJ_ID_78	18.59	4,607.33	4,797.94	82.59
540	☐	WDNJ_ID_79	8.70	4,925.45	5,091.08	71.77
541	☐	WDNJ_ID_8	5.00	4,830.02	5,089.78	112.56
542	☐	WDNJ_ID_80	10.57	4,876.58	5,090.79	92.82
543	☐	WDNJ_ID_81	17.80	4,562.92	4,797.23	101.53
544	☐	WDNJ_ID_82	27.31	4,605.22	4,800.88	84.78
545	☐	WDNJ_ID_83	16.98	4,601.47	4,801.58	86.71
546	☐	WDNJ_ID_84	0.56	4,717.29	4,808.31	39.44
547	☐	WDNJ_ID_85	21.56	4,590.41	4,799.30	90.51
548	☐	WDNJ_ID_86	26.93	4,544.23	4,797.56	109.77
549	☐	WDNJ_ID_87	46.95	4,545.96	4,797.94	109.18
550	☐	WDNJ_ID_88	31.27	4,647.85	4,803.24	67.33

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551	☐	WDNJ_ID_89	13.72	4,677.08	4,805.26	55.54
552	☐	WDNJ_ID_9	57.05	4,816.84	5,090.26	118.47
553	☐	WDNJ_ID_90	17.80	4,564.20	4,797.51	101.09
554	☐	WDNJ_ID_91	80.45	4,532.34	4,796.43	114.43
555	☐	WDNJ_ID_92	13.04	4,923.16	5,091.63	73.00
556	☐	WDNJ_ID_93	22.60	4,857.99	5,090.61	100.80
557	☐	WDNJ_ID_94	13.02	4,576.15	4,797.09	95.73
558	☐	WDNJ_ID_95	13.11	4,577.66	4,796.73	94.92
559	☐	WDNJ_ID_96	13.99	4,589.92	4,799.90	90.98
560	☐	WDNJ_ID_97	21.65	4,559.19	4,798.15	103.54
561	☐	WDNJ_ID_98	27.57	4,564.87	4,798.26	101.13
562	☐	WDNJ_ID_99	13.16	4,798.10	5,089.84	126.41
563	☐	WDNJ_NI_538	0.00	4,645.00	4,816.83	74.45
564	☐	WDNJ_NI_539	0.00	4,701.00	4,816.83	50.19
565	☐	WDNJ_NI_540	0.00	4,630.00	4,816.83	80.95
566	☐	WDNJ_NI_541	0.00	4,632.00	4,816.83	80.09
567	☐	WDNJ_NI_542	0.00	4,803.00	4,816.83	5.99
568	☐	WDNJ_NI_545	18.35	4,660.00	4,798.12	59.85

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
1	☐	WDNJ_ID_100	1,501.01	4,067.13	WDNJ_ID_175	-1.07
2	☐	WDNJ_ID_101	1,526.16	1,731.93	WDNJ_ID_127	-1.94
3	☐	WDNJ_ID_102	1,511.46	8,165.49	WDNJ_ID_175	-3.26
4	☐	WDNJ_ID_103	1,504.27	7,227.46	WDNJ_ID_357	-28.40
5	☐	WDNJ_ID_104	1,504.27	5,876.62	WDNJ_ID_357	-14.68
6	☐	WDNJ_ID_105	1,503.37	4,076.98	WDNJ_ID_357	9.61
7	☐	WDNJ_ID_106	1,506.28	3,570.75	WDNJ_ID_459	13.59
8	☐	WDNJ_ID_107	1,511.13	7,501.17	WDNJ_ID_175	-6.75
9	☐	WDNJ_ID_108	1,536.13	6,271.52	WDNJ_ID_175	4.57
10	☐	WDNJ_ID_109	1,535.02	5,230.97	WDNJ_ID_459	9.01
11	☐	WDNJ_ID_110	1,514.15	5,148.18	WDNJ_ID_459	10.03
12	☐	WDNJ_ID_111	1,517.07	3,620.60	WDNJ_ID_143	18.17
13	☐	WDNJ_ID_112	1,524.17	3,455.82	WDNJ_ID_486	18.92
14	☐	WDNJ_ID_113	1,512.48	5,964.59	WDNJ_ID_459	-4.71
15	☐	WDNJ_ID_114	1,523.37	4,374.09	WDNJ_ID_357	4.24
16	☐	WDNJ_ID_115	1,512.54	3,435.23	WDNJ_ID_115	20.00
17	☐	WDNJ_ID_116	1,517.83	6,820.25	WDNJ_ID_459	-3.33
18	☐	WDNJ_ID_117	1,508.09	6,749.53	WDNJ_ID_175	-0.11
19	☐	WDNJ_ID_118	1,528.18	4,253.54	WDNJ_ID_118	20.00
20	☐	WDNJ_ID_119	1,513.37	4,747.28	WDNJ_ID_459	12.39
21	☐	WDNJ_ID_12	1,505.63	7,468.55	WDNJ_ID_357	-42.33
22	☐	WDNJ_ID_120	1,510.75	3,651.17	WDNJ_ID_120	20.00
23	☐	WDNJ_ID_121	1,514.76	3,927.44	WDNJ_ID_486	10.27
24	☐	WDNJ_ID_122	1,518.92	1,473.14	WDNJ_ID_122	20.00
25	☐	WDNJ_ID_124	1,504.43	5,058.43	WDNJ_ID_357	-16.77
26	☐	WDNJ_ID_125	1,515.04	2,110.65	WDNJ_ID_283	3.29
27	☐	WDNJ_ID_126	1,527.31	993.23	WDNJ_ID_126	20.00
28	☐	WDNJ_ID_127	1,522.03	1,007.74	WDNJ_ID_127	20.00
29	☐	WDNJ_ID_128	1,513.30	565.63	WDNJ_ID_128	20.00
30	☐	WDNJ_ID_129	1,521.41	4,130.88	WDNJ_ID_357	-20.26
31	☐	WDNJ_ID_130	1,523.94	1,423.40	WDNJ_ID_130	20.00
32	☐	WDNJ_ID_131	1,518.44	5,676.77	WDNJ_ID_459	-3.30
33	☐	WDNJ_ID_132	1,517.92	6,380.00	WDNJ_ID_459	-13.08
34	☐	WDNJ_ID_133	1,510.03	2,807.95	WDNJ_ID_133	20.00

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
35	☐	WDNJ_ID_134	1,520.35	5,427.45	WDNJ_ID_175	-22.89
36	☐	WDNJ_ID_135	1,508.68	4,072.80	WDNJ_ID_175	-7.25
37	☐	WDNJ_ID_137	1,510.16	7,484.40	WDNJ_ID_357	-22.03
38	☐	WDNJ_ID_138	1,522.05	2,448.04	WDNJ_ID_138	20.00
39	☐	WDNJ_ID_139	1,511.51	1,419.86	WDNJ_ID_283	5.87
40	☐	WDNJ_ID_140	1,520.40	1,962.06	WDNJ_ID_140	20.00
41	☐	WDNJ_ID_141	1,515.02	2,755.09	WDNJ_ID_141	20.00
42	☐	WDNJ_ID_142	1,508.89	2,966.11	WDNJ_ID_142	20.00
43	☐	WDNJ_ID_143	1,519.84	2,460.16	WDNJ_ID_143	20.00
44	☐	WDNJ_ID_144	1,502.93	2,291.01	WDNJ_ID_144	20.00
45	☐	WDNJ_ID_145	1,506.98	2,612.54	WDNJ_ID_145	20.00
46	☐	WDNJ_ID_146	1,507.08	2,412.96	WDNJ_ID_146	20.00
47	☐	WDNJ_ID_147	1,511.79	6,968.17	WDNJ_ID_175	-1.96
48	☐	WDNJ_ID_148	1,506.42	3,566.69	WDNJ_ID_148	20.00
49	☐	WDNJ_ID_149	1,531.96	6,223.28	WDNJ_ID_459	10.44
50	☐	WDNJ_ID_150	1,510.21	9,481.78	WDNJ_ID_357	-8.33
51	☐	WDNJ_ID_151	1,510.23	4,344.17	WDNJ_ID_151	20.00
52	☐	WDNJ_ID_152	1,500.00	4,869.39	WDNJ_ID_459	7.81
53	☐	WDNJ_ID_153	1,500.00	5,351.05	WDNJ_ID_459	2.95
54	☐	WDNJ_ID_154	1,510.69	1,711.30	WDNJ_ID_154	20.00
55	☐	WDNJ_ID_156	1,524.81	5,005.00	WDNJ_ID_459	7.73
56	☐	WDNJ_ID_157	1,527.90	9,859.84	WDNJ_ID_357	-11.57
57	☐	WDNJ_ID_158	1,511.29	2,024.26	WDNJ_ID_158	20.00
58	☐	WDNJ_ID_159	1,509.60	2,155.82	WDNJ_ID_357	-24.57
59	☐	WDNJ_ID_16	1,500.71	2,808.35	WDNJ_ID_16	20.00
60	☐	WDNJ_ID_160	1,505.85	3,405.17	WDNJ_ID_357	-15.76
61	☐	WDNJ_ID_161	1,512.66	3,261.60	WDNJ_ID_357	-6.18
62	☐	WDNJ_ID_165	1,500.35	1,955.58	WDNJ_ID_165	20.00
63	☐	WDNJ_ID_168	1,500.26	2,467.98	WDNJ_ID_393	17.61
64	☐	WDNJ_ID_169	1,505.54	1,996.10	WDNJ_ID_169	20.00
65	☐	WDNJ_ID_17	1,500.71	198.44	WDNJ_ID_17	20.00
66	☐	WDNJ_ID_170	1,501.30	4,243.40	WDNJ_ID_287	-2.27
67	☐	WDNJ_ID_173	1,500.00	1,959.58	WDNJ_ID_173	20.00
68	☐	WDNJ_ID_175	1,506.16	1,864.71	WDNJ_ID_175	20.00

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
69	☐	WDNJ_ID_176	1,501.89	3,081.27	WDNJ_ID_176	20.00
70	☐	WDNJ_ID_178	1,512.38	8,905.87	WDNJ_ID_357	-16.11
71	☐	WDNJ_ID_179	1,511.27	8,896.85	WDNJ_ID_357	-26.80
72	☐	WDNJ_ID_18	1,503.59	6,426.33	WDNJ_ID_459	0.53
73	☐	WDNJ_ID_180	1,505.99	2,399.00	WDNJ_ID_175	-4.51
74	☐	WDNJ_ID_181	1,508.16	3,982.34	WDNJ_ID_357	-40.26
75	☐	WDNJ_ID_182	1,507.99	3,571.92	WDNJ_ID_459	9.01
76	☐	WDNJ_ID_183	1,518.02	6,475.08	WDNJ_ID_459	-13.36
77	☐	WDNJ_ID_184	1,521.03	2,198.97	WDNJ_ID_507	-6.70
78	☐	WDNJ_ID_185	1,513.94	2,477.18	WDNJ_ID_175	-10.42
79	☐	WDNJ_ID_186	1,503.96	7,141.60	WDNJ_ID_175	8.29
80	☐	WDNJ_ID_187	1,503.96	7,947.25	WDNJ_ID_175	2.80
81	☐	WDNJ_ID_188	1,519.48	6,502.14	WDNJ_ID_459	5.22
82	☐	WDNJ_ID_189	1,512.50	4,872.19	WDNJ_ID_459	16.94
83	☐	WDNJ_ID_190	1,515.56	5,046.88	WDNJ_ID_459	15.58
84	☐	WDNJ_ID_191	1,516.29	6,342.92	WDNJ_ID_459	11.75
85	☐	WDNJ_ID_192	1,512.29	10,420.58	WDNJ_ID_357	-16.24
86	☐	WDNJ_ID_193	1,526.75	5,920.85	WDNJ_ID_459	10.67
87	☐	WDNJ_ID_194	1,521.13	7,202.10	WDNJ_ID_175	-1.34
88	☐	WDNJ_ID_195	1,507.22	8,584.56	WDNJ_ID_175	-11.67
89	☐	WDNJ_ID_196	1,512.21	5,903.01	WDNJ_ID_459	3.69
90	☐	WDNJ_ID_197	1,512.45	6,007.03	WDNJ_ID_459	2.65
91	☐	WDNJ_ID_198	1,519.62	6,413.77	WDNJ_ID_459	-1.23
92	☐	WDNJ_ID_199	1,507.47	6,521.79	WDNJ_ID_459	-0.83
93	☐	WDNJ_ID_2	1,509.67	1,185.25	WDNJ_ID_128	2.10
94	☐	WDNJ_ID_200	1,517.12	5,921.29	WDNJ_ID_459	-5.02
95	☐	WDNJ_ID_201	1,543.79	6,956.76	WDNJ_ID_357	1.60
96	☐	WDNJ_ID_202	1,533.92	6,545.25	WDNJ_ID_459	-9.79
97	☐	WDNJ_ID_203	1,534.32	5,681.47	WDNJ_ID_459	10.48
98	☐	WDNJ_ID_204	1,512.92	5,039.13	WDNJ_ID_459	15.56
99	☐	WDNJ_ID_205	1,524.57	5,917.21	WDNJ_ID_459	2.89
100	☐	WDNJ_ID_206	1,503.37	4,489.09	WDNJ_ID_206	20.00
101	☐	WDNJ_ID_207	1,500.42	6,187.37	WDNJ_ID_459	-8.19
102	☐	WDNJ_ID_208	1,512.00	4,627.46	WDNJ_ID_459	18.49

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
103	☐	WDNJ_ID_209	1,535.97	5,527.08	WDNJ_ID_459	12.08
104	☐	WDNJ_ID_210	1,516.48	4,904.97	WDNJ_ID_459	16.53
105	☐	WDNJ_ID_211	1,514.38	6,757.20	WDNJ_ID_175	16.79
106	☐	WDNJ_ID_212	1,509.83	5,571.35	WDNJ_ID_459	11.65
107	☐	WDNJ_ID_213	1,523.33	5,450.37	WDNJ_ID_459	12.57
108	☐	WDNJ_ID_214	1,525.54	6,692.92	WDNJ_ID_459	-0.41
109	☐	WDNJ_ID_215	1,521.25	2,031.90	WDNJ_ID_507	7.51
110	☐	WDNJ_ID_216	1,520.82	4,802.26	WDNJ_ID_459	12.52
111	☐	WDNJ_ID_217	1,524.10	5,885.74	WDNJ_ID_459	3.06
112	☐	WDNJ_ID_218	1,537.61	6,118.65	WDNJ_ID_459	-4.30
113	☐	WDNJ_ID_219	1,524.72	2,051.61	WDNJ_ID_175	6.94
114	☐	WDNJ_ID_220	1,512.55	2,059.22	WDNJ_ID_175	5.36
115	☐	WDNJ_ID_221	1,515.64	6,024.23	WDNJ_ID_459	1.14
116	☐	WDNJ_ID_222	1,507.80	4,461.21	WDNJ_ID_459	5.35
117	☐	WDNJ_ID_223	1,513.84	5,122.31	WDNJ_ID_459	4.98
118	☐	WDNJ_ID_224	1,500.00	5,518.31	WDNJ_ID_459	-0.26
119	☐	WDNJ_ID_225	1,517.24	5,282.17	WDNJ_ID_507	14.41
120	☐	WDNJ_ID_226	1,512.34	5,000.65	WDNJ_ID_459	-0.32
121	☐	WDNJ_ID_227	1,517.80	4,363.94	WDNJ_ID_459	7.63
122	☐	WDNJ_ID_229	1,518.44	5,381.06	WDNJ_ID_459	-4.35
123	☐	WDNJ_ID_230	1,512.31	5,173.05	WDNJ_ID_459	-1.06
124	☐	WDNJ_ID_231	1,513.39	5,301.02	WDNJ_ID_459	2.26
125	☐	WDNJ_ID_232	1,516.51	3,088.64	WDNJ_ID_175	12.71
126	☐	WDNJ_ID_233	1,508.39	4,883.94	WDNJ_ID_459	0.27
127	☐	WDNJ_ID_234	1,520.82	4,698.47	WDNJ_ID_459	13.36
128	☐	WDNJ_ID_235	1,522.83	2,193.47	WDNJ_ID_357	-11.43
129	☐	WDNJ_ID_236	1,514.48	2,144.03	WDNJ_ID_357	-23.22
130	☐	WDNJ_ID_237	1,575.38	4,736.17	WDNJ_ID_459	14.27
131	☐	WDNJ_ID_238	1,518.28	6,197.27	WDNJ_ID_459	-10.71
132	☐	WDNJ_ID_239	1,520.30	3,606.76	WDNJ_ID_459	17.93
133	☐	WDNJ_ID_24	1,510.07	5,295.46	WDNJ_ID_459	5.96
134	☐	WDNJ_ID_240	1,516.93	4,367.95	WDNJ_ID_459	7.62
135	☐	WDNJ_ID_241	1,543.42	5,376.20	WDNJ_ID_459	0.60
136	☐	WDNJ_ID_242	1,535.64	2,562.03	WDNJ_ID_242	20.00

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
137	☐	WDNJ_ID_244	1,503.42	4,486.00	WDNJ_ID_175	-16.63
138	☐	WDNJ_ID_245	1,508.06	4,668.38	WDNJ_ID_459	4.05
139	☐	WDNJ_ID_246	1,520.14	6,383.59	WDNJ_ID_459	-12.90
140	☐	WDNJ_ID_247	1,501.60	4,260.29	WDNJ_ID_175	-10.74
141	☐	WDNJ_ID_248	1,519.10	5,658.09	WDNJ_ID_459	-6.53
142	☐	WDNJ_ID_249	1,507.15	5,260.45	WDNJ_ID_459	-2.68
143	☐	WDNJ_ID_250	1,508.63	4,920.96	WDNJ_ID_459	7.21
144	☐	WDNJ_ID_251	1,504.57	5,199.77	WDNJ_ID_459	4.41
145	☐	WDNJ_ID_252	1,534.69	6,088.95	WDNJ_ID_459	2.04
146	☐	WDNJ_ID_254	1,518.00	2,258.65	WDNJ_ID_278	8.53
147	☐	WDNJ_ID_255	1,514.83	3,829.70	WDNJ_ID_459	14.20
148	☐	WDNJ_ID_256	1,519.81	2,905.64	WDNJ_ID_256	20.00
149	☐	WDNJ_ID_258	1,511.81	3,394.05	WDNJ_ID_459	19.82
150	☐	WDNJ_ID_259	1,507.14	4,023.72	WDNJ_ID_175	-12.95
151	☐	WDNJ_ID_26	1,512.99	6,785.80	WDNJ_ID_357	-41.92
152	☐	WDNJ_ID_260	1,504.57	5,171.54	WDNJ_ID_459	4.77
153	☐	WDNJ_ID_261	1,536.84	5,299.65	WDNJ_ID_459	8.22
154	☐	WDNJ_ID_262	1,514.86	3,450.30	WDNJ_ID_262	20.00
155	☐	WDNJ_ID_263	1,507.31	5,950.78	WDNJ_ID_459	2.81
156	☐	WDNJ_ID_264	1,507.31	4,524.01	WDNJ_ID_459	15.23
157	☐	WDNJ_ID_265	1,504.90	5,048.36	WDNJ_ID_459	6.00
158	☐	WDNJ_ID_266	1,514.79	4,080.13	WDNJ_ID_266	20.00
159	☐	WDNJ_ID_267	1,500.66	3,639.74	WDNJ_ID_175	-3.50
160	☐	WDNJ_ID_269	1,512.31	4,495.25	WDNJ_ID_459	14.98
161	☐	WDNJ_ID_27	1,516.39	2,006.35	WDNJ_ID_27	20.00
162	☐	WDNJ_ID_270	1,504.17	3,187.21	WDNJ_ID_270	20.00
163	☐	WDNJ_ID_271	1,514.95	1,933.58	WDNJ_ID_357	5.31
164	☐	WDNJ_ID_272	1,512.50	3,707.03	WDNJ_ID_272	20.00
165	☐	WDNJ_ID_273	1,504.90	4,915.21	WDNJ_ID_459	7.37
166	☐	WDNJ_ID_274	1,500.52	2,376.90	WDNJ_ID_274	20.00
167	☐	WDNJ_ID_275	1,512.90	3,533.52	WDNJ_ID_459	16.67
168	☐	WDNJ_ID_276	1,507.50	2,035.97	WDNJ_ID_276	20.00
169	☐	WDNJ_ID_277	1,536.95	4,788.29	WDNJ_ID_459	12.73
170	☐	WDNJ_ID_278	1,503.92	1,773.29	WDNJ_ID_278	20.00

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
171	☐	WDNJ_ID_279	1,509.41	2,041.12	WDNJ_ID_175	6.55
172	☐	WDNJ_ID_28	1,524.06	6,114.01	WDNJ_ID_357	-43.05
173	☐	WDNJ_ID_280	1,509.46	3,588.26	WDNJ_ID_459	16.04
174	☐	WDNJ_ID_281	1,500.56	4,808.69	WDNJ_ID_281	20.00
175	☐	WDNJ_ID_283	1,507.90	1,122.89	WDNJ_ID_283	20.00
176	☐	WDNJ_ID_284	1,509.83	5,327.94	WDNJ_ID_459	13.71
177	☐	WDNJ_ID_285	1,507.52	3,171.29	WDNJ_ID_286	11.18
178	☐	WDNJ_ID_286	1,510.28	2,527.75	WDNJ_ID_286	20.00
179	☐	WDNJ_ID_287	1,510.26	2,917.87	WDNJ_ID_287	20.00
180	☐	WDNJ_ID_288	1,504.10	2,138.23	WDNJ_ID_288	20.00
181	☐	WDNJ_ID_29	1,504.10	3,302.76	WDNJ_ID_357	-8.61
182	☐	WDNJ_ID_290	1,514.57	2,577.84	WDNJ_ID_302	13.72
183	☐	WDNJ_ID_291	1,507.69	2,443.27	WDNJ_ID_291	20.00
184	☐	WDNJ_ID_292	1,503.47	4,335.75	WDNJ_ID_459	12.09
185	☐	WDNJ_ID_293	1,513.25	4,226.57	WDNJ_ID_175	-0.63
186	☐	WDNJ_ID_294	1,512.07	4,903.18	WDNJ_ID_175	-8.90
187	☐	WDNJ_ID_295	1,510.99	3,614.91	WDNJ_ID_175	7.18
188	☐	WDNJ_ID_296	1,507.53	3,154.01	WDNJ_ID_296	20.00
189	☐	WDNJ_ID_297	1,500.00	4,064.86	WDNJ_ID_459	18.33
190	☐	WDNJ_ID_298	1,500.00	4,027.86	WDNJ_ID_459	19.09
191	☐	WDNJ_ID_299	1,535.28	3,429.03	WDNJ_ID_287	11.59
192	☐	WDNJ_ID_30	1,507.45	5,417.92	WDNJ_ID_459	15.98
193	☐	WDNJ_ID_300	1,509.53	2,486.70	WDNJ_ID_300	20.00
194	☐	WDNJ_ID_301	1,508.72	4,359.68	WDNJ_ID_175	-3.71
195	☐	WDNJ_ID_302	1,508.99	2,344.31	WDNJ_ID_302	20.00
196	☐	WDNJ_ID_303	1,526.91	3,774.19	WDNJ_ID_357	-63.91
197	☐	WDNJ_ID_304	1,503.63	2,934.04	WDNJ_ID_357	-27.60
198	☐	WDNJ_ID_305	1,500.00	2,206.65	WDNJ_ID_305	20.00
199	☐	WDNJ_ID_306	1,501.27	3,318.16	WDNJ_ID_357	-46.58
200	☐	WDNJ_ID_307	1,500.00	2,929.39	WDNJ_ID_357	-29.92
201	☐	WDNJ_ID_309	1,504.25	2,675.84	WDNJ_ID_357	-19.85
202	☐	WDNJ_ID_310	1,500.02	3,191.25	WDNJ_ID_357	-40.98
203	☐	WDNJ_ID_313	1,500.68	4,839.65	WDNJ_NI_545	9.66
204	☐	WDNJ_ID_314	1,508.56	5,410.51	WDNJ_NI_545	-16.06

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
205	☐	WDNJ_ID_316	1,503.73	2,893.54	WDNJ_ID_316	20.00
206	☐	WDNJ_ID_318	1,507.53	10,512.72	WDNJ_ID_357	-17.22
207	☐	WDNJ_ID_32	1,504.10	2,003.46	WDNJ_ID_32	20.00
208	☐	WDNJ_ID_320	1,528.14	9,049.07	WDNJ_ID_175	-19.38
209	☐	WDNJ_ID_321	1,515.12	6,217.65	WDNJ_ID_459	-11.06
210	☐	WDNJ_ID_322	1,519.29	4,891.38	WDNJ_ID_459	0.55
211	☐	WDNJ_ID_323	1,523.13	8,800.98	WDNJ_ID_175	-20.98
212	☐	WDNJ_ID_324	1,513.77	4,984.87	WDNJ_ID_459	0.81
213	☐	WDNJ_ID_326	1,500.68	5,116.86	WDNJ_ID_459	15.23
214	☐	WDNJ_ID_327	1,510.42	4,083.80	WDNJ_ID_459	13.84
215	☐	WDNJ_ID_331	1,510.16	6,103.78	WDNJ_ID_495	3.20
216	☐	WDNJ_ID_333	1,504.29	6,545.60	WDNJ_ID_333	20.00
217	☐	WDNJ_ID_334	1,516.91	6,383.36	WDNJ_ID_459	7.54
218	☐	WDNJ_ID_335	1,518.66	8,523.11	WDNJ_ID_175	-9.25
219	☐	WDNJ_ID_34	1,513.99	6,414.30	WDNJ_ID_459	4.23
220	☐	WDNJ_ID_343	1,501.30	4,115.69	WDNJ_ID_287	-0.52
221	☐	WDNJ_ID_344	1,502.59	2,612.90	WDNJ_ID_344	20.00
222	☐	WDNJ_ID_345	1,500.03	3,870.24	WDNJ_ID_357	-73.34
223	☐	WDNJ_ID_347	1,500.00	1,265.39	WDNJ_ID_348	17.63
224	☐	WDNJ_ID_348	1,500.00	1,175.20	WDNJ_ID_348	20.00
225	☐	WDNJ_ID_349	1,514.67	3,210.00	WDNJ_ID_357	-21.56
226	☐	WDNJ_ID_35	1,515.66	3,664.69	WDNJ_ID_35	20.00
227	☐	WDNJ_ID_350	1,525.42	3,354.97	WDNJ_ID_357	-26.65
228	☐	WDNJ_ID_351	1,507.64	1,911.65	WDNJ_ID_357	-19.88
229	☐	WDNJ_ID_352	1,500.02	1,263.67	WDNJ_ID_352	20.00
230	☐	WDNJ_ID_353	1,508.70	1,373.83	WDNJ_ID_352	10.75
231	☐	WDNJ_ID_354	1,501.28	1,769.01	WDNJ_ID_357	-11.35
232	☐	WDNJ_ID_355	1,509.97	1,747.48	WDNJ_ID_357	-8.79
233	☐	WDNJ_ID_356	1,500.00	1,432.68	WDNJ_ID_357	9.27
234	☐	WDNJ_ID_357	1,500.10	1,127.14	WDNJ_ID_357	20.00
235	☐	WDNJ_ID_358	1,503.07	5,268.03	WDNJ_ID_459	1.07
236	☐	WDNJ_ID_359	1,503.07	4,159.24	WDNJ_ID_459	12.85
237	☐	WDNJ_ID_36	1,512.71	4,782.75	WDNJ_ID_459	14.04
238	☐	WDNJ_ID_360	1,507.64	1,918.04	WDNJ_ID_357	-19.62

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
239	☐	WDNJ_ID_361	1,516.46	1,398.27	WDNJ_ID_361	20.00
240	☐	WDNJ_ID_362	1,500.43	5,993.94	WDNJ_ID_459	-8.89
241	☐	WDNJ_ID_363	1,523.28	3,944.30	WDNJ_ID_459	14.49
242	☐	WDNJ_ID_364	1,506.93	3,069.41	WDNJ_ID_365	17.62
243	☐	WDNJ_ID_365	1,517.31	2,294.19	WDNJ_ID_365	20.00
244	☐	WDNJ_ID_366	1,505.43	2,848.61	WDNJ_ID_366	20.00
245	☐	WDNJ_ID_368	1,509.11	739.26	WDNJ_ID_368	20.00
246	☐	WDNJ_ID_37	1,512.71	5,321.40	WDNJ_ID_459	10.61
247	☐	WDNJ_ID_371	1,517.15	4,214.31	WDNJ_ID_357	-25.55
248	☐	WDNJ_ID_372	1,508.51	3,107.85	WDNJ_ID_374	15.13
249	☐	WDNJ_ID_373	1,500.00	2,874.01	WDNJ_ID_373	20.00
250	☐	WDNJ_ID_374	1,511.35	2,731.49	WDNJ_ID_374	20.00
251	☐	WDNJ_ID_377	1,503.78	4,425.65	WDNJ_ID_459	5.13
252	☐	WDNJ_ID_378	1,506.28	3,615.99	WDNJ_ID_459	13.06
253	☐	WDNJ_ID_38	1,510.24	1,139.11	WDNJ_ID_38	20.00
254	☐	WDNJ_ID_381	1,501.89	3,035.67	WDNJ_ID_381	20.00
255	☐	WDNJ_ID_382	1,503.37	2,971.23	WDNJ_ID_278	-5.00
256	☐	WDNJ_ID_384	1,501.56	6,018.67	WDNJ_ID_175	5.29
257	☐	WDNJ_ID_385	1,501.56	5,981.62	WDNJ_ID_175	5.55
258	☐	WDNJ_ID_386	1,501.56	6,252.10	WDNJ_ID_175	3.62
259	☐	WDNJ_ID_387	1,501.56	6,452.50	WDNJ_ID_175	2.13
260	☐	WDNJ_ID_388	1,501.56	6,162.29	WDNJ_ID_175	4.27
261	☐	WDNJ_ID_389	1,508.09	6,728.07	WDNJ_ID_175	0.06
262	☐	WDNJ_ID_39	1,508.63	5,433.54	WDNJ_ID_40	16.49
263	☐	WDNJ_ID_390	1,510.36	4,470.99	WDNJ_ID_390	20.00
264	☐	WDNJ_ID_392	1,507.33	3,586.60	WDNJ_ID_357	17.64
265	☐	WDNJ_ID_393	1,508.18	1,227.35	WDNJ_ID_393	20.00
266	☐	WDNJ_ID_394	1,501.65	2,551.97	WDNJ_ID_393	11.67
267	☐	WDNJ_ID_395	1,509.05	6,193.07	WDNJ_ID_175	-26.65
268	☐	WDNJ_ID_40	1,512.17	985.42	WDNJ_ID_40	20.00
269	☐	WDNJ_ID_41	1,517.73	7,239.17	WDNJ_ID_357	-9.28
270	☐	WDNJ_ID_411	1,531.65	5,714.26	WDNJ_ID_175	-25.06
271	☐	WDNJ_ID_412	1,501.56	4,790.08	WDNJ_ID_175	-11.50
272	☐	WDNJ_ID_413	1,501.39	2,568.02	WDNJ_ID_413	20.00

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
273	☐	WDNJ_ID_414	1,505.09	5,108.24	WDNJ_ID_175	-21.41
274	☐	WDNJ_ID_415	1,516.13	2,120.35	WDNJ_ID_175	0.71
275	☐	WDNJ_ID_42	1,514.11	1,526.68	WDNJ_ID_42	20.00
276	☐	WDNJ_ID_421	1,503.11	4,115.84	WDNJ_ID_175	-8.44
277	☐	WDNJ_ID_422	1,500.14	3,062.42	WDNJ_ID_175	5.49
278	☐	WDNJ_ID_423	1,501.70	3,315.29	WDNJ_ID_175	1.97
279	☐	WDNJ_ID_424	1,532.00	2,164.59	WDNJ_ID_507	-2.97
280	☐	WDNJ_ID_425	1,562.88	5,012.78	WDNJ_ID_459	11.01
281	☐	WDNJ_ID_426	1,520.82	4,048.34	WDNJ_ID_459	18.68
282	☐	WDNJ_ID_427	1,520.82	4,066.65	WDNJ_ID_459	18.53
283	☐	WDNJ_ID_43	1,515.47	2,388.31	WDNJ_ID_283	5.94
284	☐	WDNJ_ID_430	1,517.93	4,892.88	WDNJ_NI_545	3.52
285	☐	WDNJ_ID_432	1,521.65	5,909.82	WDNJ_NI_545	-6.17
286	☐	WDNJ_ID_433	1,528.42	5,770.13	WDNJ_NI_545	-14.22
287	☐	WDNJ_ID_434	1,517.76	4,769.20	WDNJ_ID_459	17.50
288	☐	WDNJ_ID_435	1,520.89	5,576.48	WDNJ_ID_459	9.91
289	☐	WDNJ_ID_436	1,514.13	6,368.52	WDNJ_ID_459	0.87
290	☐	WDNJ_ID_437	1,514.41	5,697.22	WDNJ_ID_459	6.17
291	☐	WDNJ_ID_438	1,515.71	5,404.70	WDNJ_ID_459	8.78
292	☐	WDNJ_ID_439	1,544.98	5,339.52	WDNJ_ID_459	6.03
293	☐	WDNJ_ID_44	1,521.49	2,012.78	WDNJ_ID_44	20.00
294	☐	WDNJ_ID_440	1,500.00	5,654.38	WDNJ_ID_459	-1.08
295	☐	WDNJ_ID_441	1,500.61	4,458.84	WDNJ_ID_459	11.72
296	☐	WDNJ_ID_442	1,500.40	4,416.81	WDNJ_ID_459	12.16
297	☐	WDNJ_ID_443	1,510.19	4,709.14	WDNJ_ID_459	9.29
298	☐	WDNJ_ID_444	1,533.02	5,125.63	WDNJ_ID_459	4.72
299	☐	WDNJ_ID_445	1,526.63	4,998.66	WDNJ_ID_459	5.15
300	☐	WDNJ_ID_446	1,508.73	4,605.44	WDNJ_ID_459	8.57
301	☐	WDNJ_ID_447	1,509.38	5,691.41	WDNJ_ID_459	-3.81
302	☐	WDNJ_ID_448	1,516.74	5,350.58	WDNJ_ID_459	1.70
303	☐	WDNJ_ID_45	1,501.65	953.31	WDNJ_ID_45	20.00
304	☐	WDNJ_ID_451	1,510.24	5,208.85	WDNJ_ID_459	2.47
305	☐	WDNJ_ID_452	1,540.61	5,496.31	WDNJ_ID_459	-0.48
306	☐	WDNJ_ID_453	1,518.56	3,888.96	WDNJ_ID_459	15.41

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
307	☐	WDNJ_ID_454	1,545.49	4,913.21	WDNJ_ID_459	4.09
308	☐	WDNJ_ID_455	1,516.93	5,458.72	WDNJ_ID_459	-2.63
309	☐	WDNJ_ID_456	1,530.61	5,044.97	WDNJ_ID_459	0.74
310	☐	WDNJ_ID_457	1,519.24	2,991.78	WDNJ_ID_274	18.53
311	☐	WDNJ_ID_458	1,512.33	1,802.56	WDNJ_ID_458	20.00
312	☐	WDNJ_ID_459	1,503.94	2,107.56	WDNJ_ID_459	20.00
313	☐	WDNJ_ID_46	1,515.42	2,053.84	WDNJ_ID_175	6.02
314	☐	WDNJ_ID_461	1,505.14	1,938.58	WDNJ_ID_278	17.65
315	☐	WDNJ_ID_462	1,501.08	4,106.58	WDNJ_ID_462	20.00
316	☐	WDNJ_ID_463	1,525.56	3,374.77	WDNJ_ID_463	20.00
317	☐	WDNJ_ID_464	1,519.90	3,250.88	WDNJ_ID_464	20.00
318	☐	WDNJ_ID_465	1,520.83	4,911.48	WDNJ_ID_465	20.00
319	☐	WDNJ_ID_466	1,500.00	8,644.55	WDNJ_ID_357	-20.11
320	☐	WDNJ_ID_467	1,510.03	8,441.01	WDNJ_ID_175	-4.88
321	☐	WDNJ_ID_468	1,529.06	9,038.56	WDNJ_ID_357	-4.50
322	☐	WDNJ_ID_469	1,532.94	8,521.55	WDNJ_ID_175	2.66
323	☐	WDNJ_ID_471	1,524.74	7,288.67	WDNJ_ID_175	9.00
324	☐	WDNJ_ID_472	1,512.48	4,440.97	WDNJ_ID_472	20.00
325	☐	WDNJ_ID_473	1,518.99	7,217.31	WDNJ_ID_175	-25.57
326	☐	WDNJ_ID_474	1,507.69	1,625.66	WDNJ_ID_393	12.27
327	☐	WDNJ_ID_475	1,501.86	2,686.21	WDNJ_ID_8	14.20
328	☐	WDNJ_ID_476	1,500.14	3,456.08	WDNJ_ID_357	-53.44
329	☐	WDNJ_ID_477	1,500.00	2,911.45	WDNJ_ID_357	-29.95
330	☐	WDNJ_ID_478	1,503.98	1,624.29	WDNJ_ID_348	-23.16
331	☐	WDNJ_ID_479	1,500.33	1,298.57	WDNJ_ID_352	16.91
332	☐	WDNJ_ID_48	1,518.77	4,297.21	WDNJ_ID_459	19.44
333	☐	WDNJ_ID_480	1,500.66	1,348.47	WDNJ_ID_357	15.90
334	☐	WDNJ_ID_481	1,523.61	3,211.30	WDNJ_ID_357	-12.78
335	☐	WDNJ_ID_482	1,500.00	3,469.31	WDNJ_ID_357	-43.59
336	☐	WDNJ_ID_483	1,500.00	3,638.47	WDNJ_ID_357	-55.12
337	☐	WDNJ_ID_484	1,506.08	2,463.76	WDNJ_ID_128	2.51
338	☐	WDNJ_ID_485	1,512.14	1,917.67	WDNJ_ID_357	-20.01
339	☐	WDNJ_ID_486	1,515.82	2,193.78	WDNJ_ID_486	20.00
340	☐	WDNJ_ID_487	1,516.41	3,709.86	WDNJ_ID_487	20.00

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
341	☐	WDNJ_ID_488	1,532.76	2,639.88	WDNJ_ID_357	-6.55
342	☐	WDNJ_ID_489	1,526.41	6,530.78	WDNJ_ID_357	0.22
343	☐	WDNJ_ID_49	1,525.07	4,330.19	WDNJ_ID_459	19.84
344	☐	WDNJ_ID_495	1,519.79	4,429.27	WDNJ_ID_495	20.00
345	☐	WDNJ_ID_496	1,503.96	7,201.75	WDNJ_ID_175	8.71
346	☐	WDNJ_ID_497	1,501.42	5,824.34	WDNJ_ID_495	8.30
347	☐	WDNJ_ID_5	1,511.89	695.96	WDNJ_ID_5	20.00
348	☐	WDNJ_ID_50	1,511.84	6,990.15	WDNJ_ID_459	-9.59
349	☐	WDNJ_ID_500	1,502.40	6,196.24	WDNJ_ID_495	18.01
350	☐	WDNJ_ID_501	1,501.89	848.72	WDNJ_ID_501	20.00
351	☐	WDNJ_ID_502	1,519.77	2,902.46	WDNJ_ID_502	20.00
352	☐	WDNJ_ID_503	1,512.88	2,502.36	WDNJ_ID_503	20.00
353	☐	WDNJ_ID_504	1,511.42	2,145.82	WDNJ_ID_175	-1.76
354	☐	WDNJ_ID_505	1,506.34	1,902.23	WDNJ_ID_505	20.00
355	☐	WDNJ_ID_507	1,513.44	1,821.64	WDNJ_ID_507	20.00
356	☐	WDNJ_ID_508	1,507.86	1,841.15	WDNJ_ID_508	20.00
357	☐	WDNJ_ID_509	1,517.43	2,461.72	WDNJ_ID_175	-8.81
358	☐	WDNJ_ID_510	1,516.46	3,928.31	WDNJ_ID_175	-7.10
359	☐	WDNJ_ID_511	1,517.66	4,282.26	WDNJ_ID_175	-9.51
360	☐	WDNJ_ID_512	1,520.99	3,252.38	WDNJ_ID_175	5.90
361	☐	WDNJ_ID_513	1,525.37	2,772.25	WDNJ_ID_175	9.21
362	☐	WDNJ_ID_514	1,539.53	2,175.08	WDNJ_ID_514	20.00
363	☐	WDNJ_ID_515	1,520.10	2,155.03	WDNJ_ID_507	-3.04
364	☐	WDNJ_ID_547	1,500.00	5,703.37	WDNJ_ID_495	10.49
365	☐	WDNJ_ID_549	1,500.00	3,440.66	WDNJ_ID_459	17.76
366	☐	WDNJ_ID_550	1,500.00	1,278.11	WDNJ_ID_550	20.00
367	☐	WDNJ_ID_553	1,500.00	3,191.58	WDNJ_ID_553	20.00
368	☐	WDNJ_ID_554	1,513.89	1,931.20	WDNJ_ID_554	20.00
369	☐	WDNJ_ID_555	1,500.00	5,890.82	WDNJ_ID_459	-4.63
370	☐	WDNJ_ID_556	1,500.00	5,564.78	WDNJ_ID_459	-0.86
371	☐	WDNJ_ID_557	1,500.00	5,213.09	WDNJ_ID_459	3.21
372	☐	WDNJ_ID_558	1,500.00	5,426.98	WDNJ_ID_459	1.09
373	☐	WDNJ_ID_560	1,500.00	5,765.24	WDNJ_ID_459	-2.92
374	☐	WDNJ_ID_561	1,500.00	4,703.38	WDNJ_ID_459	8.49

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
375	☐	WDNJ_ID_563	1,500.00	4,668.72	WDNJ_ID_459	9.00
376	☐	WDNJ_ID_564	1,500.00	5,008.12	WDNJ_ID_459	13.47
377	☐	WDNJ_ID_565	1,500.00	4,887.16	WDNJ_ID_459	14.41
378	☐	WDNJ_ID_567	1,500.00	4,627.75	WDNJ_ID_459	16.35
379	☐	WDNJ_ID_568	1,500.00	5,013.10	WDNJ_ID_459	13.29
380	☐	WDNJ_ID_571	1,500.00	4,407.78	WDNJ_ID_459	18.04
381	☐	WDNJ_ID_573	1,500.00	2,077.52	WDNJ_ID_507	1.89
382	☐	WDNJ_ID_574	1,500.00	1,205.57	WDNJ_ID_574	20.00
383	☐	WDNJ_ID_575	1,500.00	7,999.82	WDNJ_ID_357	-9.27
384	☐	WDNJ_ID_576	1,500.00	3,774.78	WDNJ_ID_175	2.70
385	☐	WDNJ_ID_577	1,500.00	3,059.98	WDNJ_ID_577	20.00
386	☐	WDNJ_ID_578	1,500.00	3,058.66	WDNJ_ID_128	12.73
387	☐	WDNJ_ID_58	1,504.13	2,559.17	WDNJ_ID_58	20.00
388	☐	WDNJ_ID_583	1,500.00	2,023.05	WDNJ_ID_583	20.00
389	☐	WDNJ_ID_585	1,500.00	2,549.02	WDNJ_ID_357	-13.34
390	☐	WDNJ_ID_586	1,523.61	2,365.32	WDNJ_ID_357	-6.04
391	☐	WDNJ_ID_6	1,516.34	126.95	WDNJ_ID_6	20.00
392	☐	WDNJ_ID_61	1,505.03	2,079.99	WDNJ_ID_175	3.09
393	☐	WDNJ_ID_62	1,505.03	1,968.49	WDNJ_ID_175	11.92
394	☐	WDNJ_ID_63	1,515.17	6,074.96	WDNJ_ID_357	-51.06
395	☐	WDNJ_ID_64	1,506.23	3,752.92	WDNJ_ID_357	-17.44
396	☐	WDNJ_ID_65	1,505.47	4,083.87	WDNJ_ID_357	-37.47
397	☐	WDNJ_ID_66	1,507.17	9,098.12	WDNJ_ID_175	-5.16
398	☐	WDNJ_ID_67	1,507.17	6,162.58	WDNJ_ID_365	18.68
399	☐	WDNJ_ID_68	1,512.50	4,735.38	WDNJ_ID_68	20.00
400	☐	WDNJ_ID_69	1,533.82	7,937.75	WDNJ_ID_175	5.75
401	☐	WDNJ_ID_7	1,517.83	5,482.28	WDNJ_ID_175	8.50
402	☐	WDNJ_ID_70	1,503.91	5,717.92	WDNJ_ID_357	-15.27
403	☐	WDNJ_ID_71	1,508.23	8,646.50	WDNJ_ID_357	-31.11
404	☐	WDNJ_ID_72	1,515.82	5,847.31	WDNJ_ID_459	-8.85
405	☐	WDNJ_ID_73	1,519.86	4,422.82	WDNJ_ID_459	1.59
406	☐	WDNJ_ID_74	1,518.92	3,989.70	WDNJ_ID_74	20.00
407	☐	WDNJ_ID_75	1,509.11	5,026.58	WDNJ_ID_459	3.77
408	☐	WDNJ_ID_76	1,513.91	3,809.83	WDNJ_ID_459	16.25

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
409	☐	WDNJ_ID_77	1,505.17	3,637.32	WDNJ_ID_459	3.55
410	☐	WDNJ_ID_78	1,518.59	4,466.59	WDNJ_ID_459	3.60
411	☐	WDNJ_ID_79	1,508.70	5,114.15	WDNJ_ID_79	20.00
412	☐	WDNJ_ID_8	1,505.00	2,356.16	WDNJ_ID_8	20.00
413	☐	WDNJ_ID_80	1,510.57	4,722.98	WDNJ_ID_80	20.00
414	☐	WDNJ_ID_82	1,527.31	5,326.33	WDNJ_ID_459	13.29
415	☐	WDNJ_ID_83	1,516.98	6,615.06	WDNJ_ID_459	-11.35
416	☐	WDNJ_ID_84	1,500.56	4,341.30	WDNJ_ID_84	20.00
417	☐	WDNJ_ID_85	1,521.56	4,831.70	WDNJ_ID_459	12.59
418	☐	WDNJ_ID_86	1,526.93	4,155.86	WDNJ_ID_459	16.91
419	☐	WDNJ_ID_87	1,546.95	4,961.00	WDNJ_ID_459	8.89
420	☐	WDNJ_ID_88	1,531.27	5,165.00	WDNJ_ID_459	16.99
421	☐	WDNJ_ID_89	1,513.72	5,529.88	WDNJ_ID_84	15.76
422	☐	WDNJ_ID_90	1,517.80	5,960.75	WDNJ_ID_459	-9.75
423	☐	WDNJ_ID_91	1,580.45	4,666.47	WDNJ_ID_459	13.08
424	☐	WDNJ_ID_92	1,513.04	4,361.01	WDNJ_ID_357	5.52
425	☐	WDNJ_ID_93	1,522.60	6,796.11	WDNJ_ID_357	-17.68
426	☐	WDNJ_ID_94	1,513.02	4,147.58	WDNJ_ID_459	9.26
427	☐	WDNJ_ID_96	1,513.99	6,402.60	WDNJ_ID_459	4.28
428	☐	WDNJ_ID_97	1,521.65	5,100.08	WDNJ_ID_459	9.76
429	☐	WDNJ_ID_98	1,527.57	5,776.12	WDNJ_ID_459	0.83
430	☐	WDNJ_ID_99	1,513.16	2,273.62	WDNJ_ID_99	20.00
431	☐	WDNJ_NI_545	1,518.35	302.88	WDNJ_NI_545	20.00

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
1	☐	WDNJ_ID_100	49.13	20.00	2,888.67	70.25
2	☐	WDNJ_ID_101	10.81	20.00	1,362.58	41.55
3	☐	WDNJ_ID_102	49.43	20.00	5,703.30	43.87
4	☐	WDNJ_ID_103	67.29	20.00	3,729.60	112.18
5	☐	WDNJ_ID_104	67.29	20.00	3,729.58	90.80
6	☐	WDNJ_ID_105	67.29	20.00	3,728.04	21.90
7	☐	WDNJ_ID_106	33.59	20.00	2,988.86	34.77
8	☐	WDNJ_ID_107	49.39	20.00	5,008.16	61.35
9	☐	WDNJ_ID_108	49.40	20.00	5,150.01	37.12
10	☐	WDNJ_ID_109	35.64	20.00	3,889.45	60.46
11	☐	WDNJ_ID_110	35.72	20.00	3,907.49	56.98
12	☐	WDNJ_ID_111	86.44	20.00	3,576.51	22.57
13	☐	WDNJ_ID_112	47.84	20.00	3,398.15	22.11
14	☐	WDNJ_ID_113	35.00	20.00	3,510.98	70.68
15	☐	WDNJ_ID_114	68.28	20.00	3,598.14	32.57
16	☐	WDNJ_ID_115	68.87	20.00	3,432.07	26.36
17	☐	WDNJ_ID_116	36.04	20.00	4,042.85	69.28
18	☐	WDNJ_ID_117	49.40	20.00	5,042.83	52.82
19	☐	WDNJ_ID_118	99.69	20.00	4,248.89	30.34
20	☐	WDNJ_ID_119	35.55	20.00	3,812.80	53.06
21	☐	WDNJ_ID_12	65.59	20.00	3,392.10	109.04
22	☐	WDNJ_ID_120	74.22	20.00	3,647.31	27.55
23	☐	WDNJ_ID_121	48.05	20.00	3,428.94	32.03
24	☐	WDNJ_ID_122	17.43	20.00	1,473.14	20.00
25	☐	WDNJ_ID_124	64.62	20.00	3,001.24	74.85
26	☐	WDNJ_ID_125	30.94	20.00	1,768.08	38.11
27	☐	WDNJ_ID_126	-36.08	20.00	993.16	20.00
28	☐	WDNJ_ID_127	-25.35	20.00	1,007.64	20.00
29	☐	WDNJ_ID_128	-311.47	20.00	565.54	20.00
30	☐	WDNJ_ID_129	54.59	20.00	2,342.64	64.44
31	☐	WDNJ_ID_130	14.84	20.00	1,423.40	20.00
32	☐	WDNJ_ID_131	34.74	20.00	3,419.43	77.63
33	☐	WDNJ_ID_132	34.64	20.00	3,373.95	81.84
34	☐	WDNJ_ID_133	70.96	20.00	2,806.90	23.74

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
35	☐	WDNJ_ID_134	49.12	20.00	2,873.42	75.26
36	☐	WDNJ_ID_135	49.00	20.00	2,528.84	64.16
37	☐	WDNJ_ID_137	68.93	20.00	3,753.99	87.27
38	☐	WDNJ_ID_138	76.05	20.00	2,448.04	20.00
39	☐	WDNJ_ID_139	-1.30	20.00	1,223.78	32.82
40	☐	WDNJ_ID_140	53.31	20.00	1,961.89	22.24
41	☐	WDNJ_ID_141	68.07	20.00	2,753.39	27.49
42	☐	WDNJ_ID_142	72.84	20.00	2,964.63	24.58
43	☐	WDNJ_ID_143	69.69	20.00	2,458.46	25.98
44	☐	WDNJ_ID_144	33.42	20.00	2,290.54	21.00
45	☐	WDNJ_ID_145	64.30	20.00	2,611.50	23.19
46	☐	WDNJ_ID_146	57.03	20.00	2,412.15	22.38
47	☐	WDNJ_ID_147	49.40	20.00	5,034.50	55.63
48	☐	WDNJ_ID_148	96.21	20.00	3,564.55	27.07
49	☐	WDNJ_ID_149	37.62	20.00	4,796.30	38.21
50	☐	WDNJ_ID_150	73.88	20.00	6,512.58	66.30
51	☐	WDNJ_ID_151	93.83	20.00	4,341.18	30.13
52	☐	WDNJ_ID_152	35.02	20.00	3,540.24	65.27
53	☐	WDNJ_ID_153	35.02	20.00	3,543.59	72.76
54	☐	WDNJ_ID_154	46.81	20.00	1,711.29	20.90
55	☐	WDNJ_ID_156	35.19	20.00	3,636.47	63.11
56	☐	WDNJ_ID_157	73.75	20.00	6,267.94	70.41
57	☐	WDNJ_ID_158	53.03	20.00	2,024.13	21.15
58	☐	WDNJ_ID_159	21.62	20.00	1,535.78	66.97
59	☐	WDNJ_ID_16	63.76	20.00	2,808.18	21.57
60	☐	WDNJ_ID_160	47.22	20.00	2,204.54	80.09
61	☐	WDNJ_ID_161	54.77	20.00	2,415.27	58.42
62	☐	WDNJ_ID_165	58.43	20.00	1,955.54	21.23
63	☐	WDNJ_ID_168	75.27	20.00	2,433.45	25.77
64	☐	WDNJ_ID_169	42.83	20.00	1,995.55	22.45
65	☐	WDNJ_ID_17	-2,637.58	20.00	198.44	20.00
66	☐	WDNJ_ID_170	48.70	20.00	3,240.91	42.99
67	☐	WDNJ_ID_173	49.10	20.00	1,959.58	20.00
68	☐	WDNJ_ID_175	44.96	20.00	1,848.35	20.00

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
69	☐	WDNJ_ID_176	68.45	20.00	3,080.06	24.10
70	☐	WDNJ_ID_178	72.44	20.00	5,153.12	86.10
71	☐	WDNJ_ID_179	70.76	20.00	4,073.85	89.09
72	☐	WDNJ_ID_18	36.02	20.00	4,043.45	70.51
73	☐	WDNJ_ID_180	44.96	20.00	1,848.19	43.06
74	☐	WDNJ_ID_181	44.65	20.00	2,095.24	97.55
75	☐	WDNJ_ID_182	32.25	20.00	2,710.32	32.63
76	☐	WDNJ_ID_183	34.69	20.00	3,401.35	67.36
77	☐	WDNJ_ID_184	46.49	20.00	1,857.58	43.00
78	☐	WDNJ_ID_185	44.96	20.00	1,856.44	50.51
79	☐	WDNJ_ID_186	49.47	20.00	6,276.36	22.91
80	☐	WDNJ_ID_187	49.46	20.00	6,152.05	32.85
81	☐	WDNJ_ID_188	36.95	20.00	4,470.88	50.09
82	☐	WDNJ_ID_189	36.77	20.00	4,411.44	35.06
83	☐	WDNJ_ID_190	36.66	20.00	4,397.03	40.06
84	☐	WDNJ_ID_191	38.16	20.00	5,106.24	30.44
85	☐	WDNJ_ID_192	73.68	20.00	6,076.72	79.24
86	☐	WDNJ_ID_193	37.18	20.00	4,589.82	40.24
87	☐	WDNJ_ID_194	49.41	20.00	5,236.44	48.94
88	☐	WDNJ_ID_195	49.42	20.00	5,333.98	61.44
89	☐	WDNJ_ID_196	35.78	20.00	3,935.03	67.31
90	☐	WDNJ_ID_197	35.77	20.00	3,930.32	68.64
91	☐	WDNJ_ID_198	35.76	20.00	3,931.07	72.93
92	☐	WDNJ_ID_199	35.99	20.00	4,016.99	68.91
93	☐	WDNJ_ID_2	-43.27	20.00	1,035.26	38.11
94	☐	WDNJ_ID_200	34.86	20.00	3,471.35	76.10
95	☐	WDNJ_ID_201	73.12	20.00	5,534.79	54.88
96	☐	WDNJ_ID_202	35.15	20.00	3,591.23	69.16
97	☐	WDNJ_ID_203	36.51	20.00	4,356.53	54.92
98	☐	WDNJ_ID_204	36.63	20.00	4,385.98	41.29
99	☐	WDNJ_ID_205	35.67	20.00	3,895.22	70.29
100	☐	WDNJ_ID_206	76.44	20.00	4,489.07	20.29
101	☐	WDNJ_ID_207	34.87	20.00	3,459.55	82.50
102	☐	WDNJ_ID_208	36.64	20.00	4,388.33	32.51

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
103	☐	WDNJ_ID_209	36.62	20.00	4,403.89	50.37
104	☐	WDNJ_ID_210	36.63	20.00	4,388.52	39.51
105	☐	WDNJ_ID_211	49.49	20.00	6,570.13	22.06
106	☐	WDNJ_ID_212	36.62	20.00	4,386.91	52.06
107	☐	WDNJ_ID_213	36.61	20.00	4,391.65	49.76
108	☐	WDNJ_ID_214	36.27	20.00	4,157.42	62.43
109	☐	WDNJ_ID_215	46.38	20.00	1,855.49	27.32
110	☐	WDNJ_ID_216	35.65	20.00	3,868.52	53.33
111	☐	WDNJ_ID_217	35.67	20.00	3,887.38	71.67
112	☐	WDNJ_ID_218	35.10	20.00	3,613.14	79.18
113	☐	WDNJ_ID_219	44.96	20.00	1,867.64	29.88
114	☐	WDNJ_ID_220	44.96	20.00	1,854.98	31.59
115	☐	WDNJ_ID_221	35.61	20.00	3,846.67	73.60
116	☐	WDNJ_ID_222	34.02	20.00	3,128.63	55.65
117	☐	WDNJ_ID_223	34.98	20.00	3,529.67	71.48
118	☐	WDNJ_ID_224	34.89	20.00	3,469.43	78.41
119	☐	WDNJ_ID_225	53.47	20.00	5,074.34	17.64
120	☐	WDNJ_ID_226	34.15	20.00	3,178.04	63.34
121	☐	WDNJ_ID_227	34.18	20.00	3,196.05	54.11
122	☐	WDNJ_ID_229	34.24	20.00	3,215.15	72.83
123	☐	WDNJ_ID_230	34.32	20.00	3,241.40	71.11
124	☐	WDNJ_ID_231	34.89	20.00	3,482.57	75.10
125	☐	WDNJ_ID_232	49.14	20.00	2,928.89	29.03
126	☐	WDNJ_ID_233	34.04	20.00	3,136.31	60.16
127	☐	WDNJ_ID_234	35.64	20.00	3,865.36	51.11
128	☐	WDNJ_ID_235	29.51	20.00	1,696.85	52.24
129	☐	WDNJ_ID_236	21.62	20.00	1,540.65	63.35
130	☐	WDNJ_ID_237	35.77	20.00	3,995.25	48.07
131	☐	WDNJ_ID_238	34.65	20.00	3,376.14	77.99
132	☐	WDNJ_ID_239	34.65	20.00	3,378.19	34.07
133	☐	WDNJ_ID_24	35.49	20.00	3,716.93	52.80
134	☐	WDNJ_ID_240	34.19	20.00	3,197.36	56.11
135	☐	WDNJ_ID_241	34.76	20.00	3,452.86	76.95
136	☐	WDNJ_ID_242	82.57	20.00	2,561.90	22.11

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
137	☐	WDNJ_ID_244	48.94	20.00	2,461.14	60.58
138	☐	WDNJ_ID_245	34.20	20.00	3,191.44	63.84
139	☐	WDNJ_ID_246	34.66	20.00	3,382.93	83.62
140	☐	WDNJ_ID_247	49.00	20.00	2,511.39	60.66
141	☐	WDNJ_ID_248	34.38	20.00	3,270.59	77.00
142	☐	WDNJ_ID_249	34.27	20.00	3,215.63	74.06
143	☐	WDNJ_ID_250	35.00	20.00	3,538.31	66.73
144	☐	WDNJ_ID_251	35.01	20.00	3,539.02	71.68
145	☐	WDNJ_ID_252	35.76	20.00	3,948.98	69.93
146	☐	WDNJ_ID_254	49.92	20.00	2,075.90	32.21
147	☐	WDNJ_ID_255	34.32	20.00	3,243.95	44.42
148	☐	WDNJ_ID_256	66.73	20.00	2,899.69	28.26
149	☐	WDNJ_ID_258	34.65	20.00	3,369.46	25.39
150	☐	WDNJ_ID_259	48.72	20.00	2,107.26	51.11
151	☐	WDNJ_ID_26	64.16	20.00	3,178.83	101.69
152	☐	WDNJ_ID_260	35.01	20.00	3,543.30	70.68
153	☐	WDNJ_ID_261	35.63	20.00	3,877.62	64.47
154	☐	WDNJ_ID_262	98.09	20.00	3,438.04	36.17
155	☐	WDNJ_ID_263	35.73	20.00	3,903.12	70.72
156	☐	WDNJ_ID_264	35.73	20.00	3,903.12	46.29
157	☐	WDNJ_ID_265	35.01	20.00	3,541.55	69.33
158	☐	WDNJ_ID_266	75.51	20.00	4,073.98	29.20
159	☐	WDNJ_ID_267	48.91	20.00	2,413.78	43.15
160	☐	WDNJ_ID_269	35.64	20.00	3,855.59	46.97
161	☐	WDNJ_ID_27	67.06	20.00	2,006.31	22.20
162	☐	WDNJ_ID_270	91.81	20.00	3,177.88	34.05
163	☐	WDNJ_ID_271	29.51	20.00	1,688.96	38.04
164	☐	WDNJ_ID_272	70.57	20.00	3,706.81	20.77
165	☐	WDNJ_ID_273	35.01	20.00	3,543.35	66.53
166	☐	WDNJ_ID_274	63.72	20.00	2,374.76	26.11
167	☐	WDNJ_ID_275	34.20	20.00	3,196.35	37.06
168	☐	WDNJ_ID_276	53.48	20.00	2,035.94	20.96
169	☐	WDNJ_ID_277	35.64	20.00	3,880.98	52.62
170	☐	WDNJ_ID_278	37.79	20.00	1,773.28	20.45

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
171	☐	WDNJ_ID_279	44.96	20.00	1,851.71	30.57
172	☐	WDNJ_ID_28	62.65	20.00	2,817.30	98.31
173	☐	WDNJ_ID_280	34.19	20.00	3,189.80	38.28
174	☐	WDNJ_ID_281	129.17	20.00	4,800.57	36.94
175	☐	WDNJ_ID_283	-12.39	20.00	1,122.62	20.00
176	☐	WDNJ_ID_284	36.68	20.00	4,415.62	48.76
177	☐	WDNJ_ID_285	43.13	20.00	2,792.10	31.13
178	☐	WDNJ_ID_286	40.92	20.00	2,526.94	21.69
179	☐	WDNJ_ID_287	46.75	20.00	2,917.67	20.44
180	☐	WDNJ_ID_288	39.39	20.00	2,136.23	23.18
181	☐	WDNJ_ID_29	52.28	20.00	2,472.35	72.70
182	☐	WDNJ_ID_290	72.89	20.00	2,483.13	28.69
183	☐	WDNJ_ID_291	76.34	20.00	2,443.08	22.57
184	☐	WDNJ_ID_292	34.89	20.00	3,472.46	56.72
185	☐	WDNJ_ID_293	49.16	20.00	3,036.28	51.12
186	☐	WDNJ_ID_294	49.18	20.00	3,102.83	64.56
187	☐	WDNJ_ID_295	49.18	20.00	3,101.74	41.37
188	☐	WDNJ_ID_296	86.85	20.00	3,154.01	20.00
189	☐	WDNJ_ID_297	35.63	20.00	3,839.60	36.27
190	☐	WDNJ_ID_298	35.73	20.00	3,895.55	32.30
191	☐	WDNJ_ID_299	47.49	20.00	3,058.98	28.89
192	☐	WDNJ_ID_30	37.54	20.00	4,781.59	32.03
193	☐	WDNJ_ID_300	50.24	20.00	2,482.56	25.38
194	☐	WDNJ_ID_301	49.15	20.00	2,958.43	54.33
195	☐	WDNJ_ID_302	69.12	20.00	2,344.15	22.17
196	☐	WDNJ_ID_303	34.60	20.00	1,763.44	109.66
197	☐	WDNJ_ID_304	34.60	20.00	1,740.17	70.35
198	☐	WDNJ_ID_305	76.42	20.00	2,206.57	21.86
199	☐	WDNJ_ID_306	30.55	20.00	1,657.34	102.01
200	☐	WDNJ_ID_307	30.55	20.00	1,656.08	88.19
201	☐	WDNJ_ID_309	30.55	20.00	1,660.32	64.45
202	☐	WDNJ_ID_310	30.55	20.00	1,656.09	106.21
203	☐	WDNJ_ID_313	49.81	20.00	4,131.79	41.39
204	☐	WDNJ_ID_314	47.87	20.00	3,556.79	57.09

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
205	☐	WDNJ_ID_316	49.96	20.00	2,893.54	20.00
206	☐	WDNJ_ID_318	73.65	20.00	6,020.49	79.80
207	☐	WDNJ_ID_32	62.88	20.00	2,003.39	22.55
208	☐	WDNJ_ID_320	49.40	20.00	5,152.02	67.73
209	☐	WDNJ_ID_321	34.65	20.00	3,372.72	76.40
210	☐	WDNJ_ID_322	34.08	20.00	3,158.39	60.22
211	☐	WDNJ_ID_323	49.39	20.00	4,932.64	69.80
212	☐	WDNJ_ID_324	34.27	20.00	3,222.33	72.25
213	☐	WDNJ_ID_326	36.70	20.00	4,412.44	43.84
214	☐	WDNJ_ID_327	34.76	20.00	3,419.30	53.09
215	☐	WDNJ_ID_331	63.14	20.00	5,155.30	45.14
216	☐	WDNJ_ID_333	44.91	20.00	6,536.21	21.20
217	☐	WDNJ_ID_334	37.20	20.00	4,604.30	45.96
218	☐	WDNJ_ID_335	49.42	20.00	5,464.47	53.70
219	☐	WDNJ_ID_34	36.61	20.00	4,321.49	54.84
220	☐	WDNJ_ID_343	48.48	20.00	3,199.53	41.21
221	☐	WDNJ_ID_344	57.15	20.00	2,608.36	26.49
222	☐	WDNJ_ID_345	30.55	20.00	1,656.11	122.06
223	☐	WDNJ_ID_347	-8.44	20.00	1,242.32	20.92
224	☐	WDNJ_ID_348	-18.99	20.00	1,175.08	20.00
225	☐	WDNJ_ID_349	38.34	20.00	1,883.14	73.38
226	☐	WDNJ_ID_35	78.22	20.00	3,664.56	20.68
227	☐	WDNJ_ID_350	38.34	20.00	1,893.90	75.29
228	☐	WDNJ_ID_351	12.39	20.00	1,399.53	59.31
229	☐	WDNJ_ID_352	-2.39	20.00	1,263.57	20.00
230	☐	WDNJ_ID_353	-2.39	20.00	1,272.26	28.31
231	☐	WDNJ_ID_354	10.15	20.00	1,365.33	50.60
232	☐	WDNJ_ID_355	10.15	20.00	1,374.02	49.46
233	☐	WDNJ_ID_356	3.78	20.00	1,293.11	29.61
234	☐	WDNJ_ID_357	-16.02	20.00	1,126.92	20.00
235	☐	WDNJ_ID_358	34.74	20.00	3,398.08	68.15
236	☐	WDNJ_ID_359	34.74	20.00	3,398.08	50.01
237	☐	WDNJ_ID_36	36.06	20.00	4,009.53	42.10
238	☐	WDNJ_ID_360	12.92	20.00	1,406.35	59.09

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
239	☐	WDNJ_ID_361	10.56	20.00	1,398.25	20.00
240	☐	WDNJ_ID_362	34.61	20.00	3,340.12	73.00
241	☐	WDNJ_ID_363	34.61	20.00	3,363.33	42.84
242	☐	WDNJ_ID_364	79.25	20.00	3,020.62	27.42
243	☐	WDNJ_ID_365	64.00	20.00	2,293.89	21.83
244	☐	WDNJ_ID_366	81.96	20.00	2,847.83	24.38
245	☐	WDNJ_ID_368	-95.57	20.00	739.26	20.00
246	☐	WDNJ_ID_37	36.23	20.00	4,099.16	48.41
247	☐	WDNJ_ID_371	58.68	20.00	3,001.75	70.77
248	☐	WDNJ_ID_372	68.56	20.00	2,977.37	35.64
249	☐	WDNJ_ID_373	70.49	20.00	2,865.47	30.33
250	☐	WDNJ_ID_374	65.17	20.00	2,725.16	28.53
251	☐	WDNJ_ID_377	33.93	20.00	3,092.67	50.86
252	☐	WDNJ_ID_378	33.59	20.00	2,988.68	35.57
253	☐	WDNJ_ID_38	-48.72	20.00	1,139.11	20.00
254	☐	WDNJ_ID_381	63.09	20.00	3,035.37	21.90
255	☐	WDNJ_ID_382	61.54	20.00	2,506.04	46.64
256	☐	WDNJ_ID_384	49.40	20.00	5,035.21	36.70
257	☐	WDNJ_ID_385	49.40	20.00	5,035.22	35.71
258	☐	WDNJ_ID_386	49.40	20.00	5,035.30	42.52
259	☐	WDNJ_ID_387	49.40	20.00	5,035.27	47.19
260	☐	WDNJ_ID_388	49.40	20.00	5,035.27	40.37
261	☐	WDNJ_ID_389	49.40	20.00	5,043.14	52.49
262	☐	WDNJ_ID_39	59.21	20.00	5,203.56	23.97
263	☐	WDNJ_ID_390	78.09	20.00	4,464.27	28.91
264	☐	WDNJ_ID_392	62.79	20.00	3,497.14	31.97
265	☐	WDNJ_ID_393	-23.70	20.00	1,227.34	20.00
266	☐	WDNJ_ID_394	75.27	20.00	2,434.85	31.35
267	☐	WDNJ_ID_395	49.21	20.00	3,377.41	73.31
268	☐	WDNJ_ID_40	-34.10	20.00	985.40	20.00
269	☐	WDNJ_ID_41	70.49	20.00	4,164.81	73.31
270	☐	WDNJ_ID_411	49.15	20.00	2,991.74	76.47
271	☐	WDNJ_ID_412	49.13	20.00	2,888.85	60.87
272	☐	WDNJ_ID_413	42.53	20.00	2,567.44	21.51

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
273	☐	WDNJ_ID_414	49.08	20.00	2,718.48	67.71
274	☐	WDNJ_ID_415	44.96	20.00	1,858.70	36.45
275	☐	WDNJ_ID_42	21.22	20.00	1,526.68	20.02
276	☐	WDNJ_ID_421	48.99	20.00	2,505.70	59.58
277	☐	WDNJ_ID_422	48.98	20.00	2,544.17	32.44
278	☐	WDNJ_ID_423	48.96	20.00	2,515.90	36.60
279	☐	WDNJ_ID_424	46.34	20.00	1,865.98	38.55
280	☐	WDNJ_ID_425	35.64	20.00	3,906.60	57.38
281	☐	WDNJ_ID_426	35.64	20.00	3,867.12	33.07
282	☐	WDNJ_ID_427	35.64	20.00	3,866.67	33.84
283	☐	WDNJ_ID_43	38.62	20.00	2,044.12	38.25
284	☐	WDNJ_ID_430	49.00	20.00	3,878.42	46.73
285	☐	WDNJ_ID_432	49.94	20.00	4,221.79	48.50
286	☐	WDNJ_ID_433	48.80	20.00	3,846.00	56.09
287	☐	WDNJ_ID_434	36.62	20.00	4,388.49	36.54
288	☐	WDNJ_ID_435	36.27	20.00	4,214.16	57.17
289	☐	WDNJ_ID_436	36.00	20.00	4,035.21	69.08
290	☐	WDNJ_ID_437	35.87	20.00	3,983.12	63.64
291	☐	WDNJ_ID_438	35.88	20.00	3,989.17	58.78
292	☐	WDNJ_ID_439	35.37	20.00	3,749.23	67.73
293	☐	WDNJ_ID_44	38.76	20.00	2,011.70	22.74
294	☐	WDNJ_ID_440	34.96	20.00	3,504.14	77.27
295	☐	WDNJ_ID_441	35.01	20.00	3,534.13	57.14
296	☐	WDNJ_ID_442	35.01	20.00	3,537.69	56.94
297	☐	WDNJ_ID_443	34.99	20.00	3,536.95	64.16
298	☐	WDNJ_ID_444	34.93	20.00	3,524.24	71.63
299	☐	WDNJ_ID_445	34.83	20.00	3,468.50	71.02
300	☐	WDNJ_ID_446	34.76	20.00	3,417.58	66.27
301	☐	WDNJ_ID_447	34.72	20.00	3,400.25	80.28
302	☐	WDNJ_ID_448	34.88	20.00	3,482.75	74.34
303	☐	WDNJ_ID_45	-123.13	20.00	953.30	20.00
304	☐	WDNJ_ID_451	34.80	20.00	3,438.79	68.82
305	☐	WDNJ_ID_452	34.79	20.00	3,465.36	74.92
306	☐	WDNJ_ID_453	34.68	20.00	3,393.84	43.81

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
307	☐	WDNJ_ID_454	34.54	20.00	3,360.90	64.93
308	☐	WDNJ_ID_455	34.54	20.00	3,330.92	75.93
309	☐	WDNJ_ID_456	34.32	20.00	3,261.08	71.50
310	☐	WDNJ_ID_457	74.02	20.00	2,951.92	31.89
311	☐	WDNJ_ID_458	34.36	20.00	1,802.28	21.66
312	☐	WDNJ_ID_459	28.63	20.00	2,101.70	22.57
313	☐	WDNJ_ID_46	44.96	20.00	1,857.95	31.11
314	☐	WDNJ_ID_461	43.84	20.00	1,903.02	23.04
315	☐	WDNJ_ID_462	55.74	20.00	3,929.03	20.00
316	☐	WDNJ_ID_463	99.11	20.00	3,373.19	26.34
317	☐	WDNJ_ID_464	98.32	20.00	3,249.43	26.08
318	☐	WDNJ_ID_465	96.31	20.00	4,900.97	33.59
319	☐	WDNJ_ID_466	72.35	20.00	4,451.67	101.33
320	☐	WDNJ_ID_467	49.44	20.00	5,747.08	54.86
321	☐	WDNJ_ID_468	73.91	20.00	6,641.87	55.40
322	☐	WDNJ_ID_469	49.49	20.00	6,471.38	43.73
323	☐	WDNJ_ID_471	49.49	20.00	6,535.07	29.63
324	☐	WDNJ_ID_472	69.05	20.00	4,440.95	20.26
325	☐	WDNJ_ID_473	49.30	20.00	3,930.71	75.49
326	☐	WDNJ_ID_474	25.48	20.00	1,557.53	27.85
327	☐	WDNJ_ID_475	77.64	20.00	2,596.47	29.26
328	☐	WDNJ_ID_476	29.87	20.00	1,643.59	90.40
329	☐	WDNJ_ID_477	29.16	20.00	1,630.69	53.68
330	☐	WDNJ_ID_478	-8.44	20.00	1,246.29	62.48
331	☐	WDNJ_ID_479	-2.39	20.00	1,263.88	21.93
332	☐	WDNJ_ID_48	36.50	20.00	4,209.84	26.58
333	☐	WDNJ_ID_480	3.78	20.00	1,293.77	23.31
334	☐	WDNJ_ID_481	44.65	20.00	2,110.82	81.88
335	☐	WDNJ_ID_482	44.65	20.00	1,988.54	75.75
336	☐	WDNJ_ID_483	40.23	20.00	1,856.84	96.13
337	☐	WDNJ_ID_484	51.54	20.00	2,162.89	38.90
338	☐	WDNJ_ID_485	12.39	20.00	1,404.02	66.56
339	☐	WDNJ_ID_486	37.97	20.00	2,193.78	20.00
340	☐	WDNJ_ID_487	72.08	20.00	3,700.71	29.16

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
341	☐	WDNJ_ID_488	43.88	20.00	2,114.11	48.84
342	☐	WDNJ_ID_489	68.50	20.00	4,161.27	55.65
343	☐	WDNJ_ID_49	36.62	20.00	4,294.21	25.33
344	☐	WDNJ_ID_495	61.27	20.00	4,419.65	27.08
345	☐	WDNJ_ID_496	49.47	20.00	6,413.30	21.70
346	☐	WDNJ_ID_497	63.14	20.00	5,160.87	35.73
347	☐	WDNJ_ID_5	-282.86	20.00	695.80	20.00
348	☐	WDNJ_ID_50	36.20	20.00	3,922.95	51.42
349	☐	WDNJ_ID_500	64.68	20.00	6,082.92	22.25
350	☐	WDNJ_ID_501	-126.05	20.00	848.72	20.00
351	☐	WDNJ_ID_502	81.28	20.00	2,902.02	23.37
352	☐	WDNJ_ID_503	41.78	20.00	2,501.71	21.60
353	☐	WDNJ_ID_504	44.96	20.00	1,853.81	40.74
354	☐	WDNJ_ID_505	54.66	20.00	1,846.69	20.00
355	☐	WDNJ_ID_507	43.57	20.00	1,788.96	20.00
356	☐	WDNJ_ID_508	46.77	20.00	1,795.18	20.00
357	☐	WDNJ_ID_509	44.96	20.00	1,860.09	49.96
358	☐	WDNJ_ID_510	48.93	20.00	2,471.45	52.64
359	☐	WDNJ_ID_511	49.03	20.00	2,614.80	58.72
360	☐	WDNJ_ID_512	49.05	20.00	2,679.50	41.74
361	☐	WDNJ_ID_513	48.99	20.00	2,588.44	34.43
362	☐	WDNJ_ID_514	39.82	20.00	2,175.01	20.67
363	☐	WDNJ_ID_515	46.42	20.00	1,855.06	39.77
364	☐	WDNJ_ID_547	63.14	20.00	5,159.44	31.91
365	☐	WDNJ_ID_549	34.27	20.00	3,208.39	34.15
366	☐	WDNJ_ID_550	7.99	20.00	1,278.04	20.00
367	☐	WDNJ_ID_553	61.10	20.00	3,191.51	20.38
368	☐	WDNJ_ID_554	48.58	20.00	1,931.19	20.61
369	☐	WDNJ_ID_555	34.88	20.00	3,463.08	78.63
370	☐	WDNJ_ID_556	34.89	20.00	3,466.17	75.41
371	☐	WDNJ_ID_557	34.91	20.00	3,477.55	71.41
372	☐	WDNJ_ID_558	34.93	20.00	3,487.57	74.53
373	☐	WDNJ_ID_560	34.90	20.00	3,475.21	78.65
374	☐	WDNJ_ID_561	34.90	20.00	3,475.22	63.41

2021 Model - 2026 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
375	☐	WDNJ_ID_563	34.93	20.00	3,486.57	62.46
376	☐	WDNJ_ID_564	36.26	20.00	4,122.72	45.37
377	☐	WDNJ_ID_565	36.25	20.00	4,122.39	43.24
378	☐	WDNJ_ID_567	36.23	20.00	4,117.07	38.59
379	☐	WDNJ_ID_568	36.21	20.00	4,108.02	45.71
380	☐	WDNJ_ID_571	36.25	20.00	4,122.62	33.73
381	☐	WDNJ_ID_573	46.40	20.00	1,833.47	33.87
382	☐	WDNJ_ID_574	-14.42	20.00	1,205.47	20.00
383	☐	WDNJ_ID_575	72.66	20.00	5,253.97	76.02
384	☐	WDNJ_ID_576	49.13	20.00	2,893.83	61.16
385	☐	WDNJ_ID_577	79.63	20.00	3,003.68	20.00
386	☐	WDNJ_ID_578	67.03	20.00	2,994.46	29.67
387	☐	WDNJ_ID_58	49.30	20.00	2,551.43	26.51
388	☐	WDNJ_ID_583	45.20	20.00	2,022.68	22.35
389	☐	WDNJ_ID_585	34.60	20.00	1,736.55	51.77
390	☐	WDNJ_ID_586	34.60	20.00	1,760.13	40.41
391	☐	WDNJ_ID_6	-9,969.44	20.00	126.95	20.00
392	☐	WDNJ_ID_61	44.96	20.00	1,847.32	32.81
393	☐	WDNJ_ID_62	44.96	20.00	1,847.16	23.26
394	☐	WDNJ_ID_63	61.13	20.00	2,609.32	96.81
395	☐	WDNJ_ID_64	54.77	20.00	2,409.52	74.46
396	☐	WDNJ_ID_65	47.22	20.00	2,204.14	96.06
397	☐	WDNJ_ID_66	49.47	20.00	6,056.59	59.73
398	☐	WDNJ_ID_67	95.68	20.00	6,107.35	22.23
399	☐	WDNJ_ID_68	68.47	20.00	4,735.34	20.29
400	☐	WDNJ_ID_69	49.49	20.00	6,310.11	32.51
401	☐	WDNJ_ID_7	49.39	20.00	4,965.02	21.89
402	☐	WDNJ_ID_70	66.70	20.00	3,570.52	73.35
403	☐	WDNJ_ID_71	69.91	20.00	3,865.91	92.37
404	☐	WDNJ_ID_72	34.31	20.00	3,265.11	60.70
405	☐	WDNJ_ID_73	32.89	20.00	2,910.03	46.57
406	☐	WDNJ_ID_74	82.09	20.00	3,985.63	28.46
407	☐	WDNJ_ID_75	34.79	20.00	3,404.37	61.46
408	☐	WDNJ_ID_76	34.76	20.00	3,402.29	37.75

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
409	☐	WDNJ_ID_77	31.37	20.00	2,495.18	41.05
410	☐	WDNJ_ID_78	33.66	20.00	3,039.92	48.70
411	☐	WDNJ_ID_79	64.51	20.00	5,114.04	20.43
412	☐	WDNJ_ID_8	71.11	20.00	2,355.97	22.38
413	☐	WDNJ_ID_80	82.02	20.00	4,722.95	20.32
414	☐	WDNJ_ID_82	36.79	20.00	4,384.77	40.52
415	☐	WDNJ_ID_83	35.09	20.00	3,539.21	61.26
416	☐	WDNJ_ID_84	34.27	20.00	4,327.96	21.27
417	☐	WDNJ_ID_85	35.87	20.00	3,909.01	43.48
418	☐	WDNJ_ID_86	35.49	20.00	3,769.95	38.29
419	☐	WDNJ_ID_87	35.32	20.00	3,701.83	56.81
420	☐	WDNJ_ID_88	37.37	20.00	4,697.07	29.70
421	☐	WDNJ_ID_89	34.87	20.00	4,777.98	28.61
422	☐	WDNJ_ID_90	34.46	20.00	3,298.52	68.76
423	☐	WDNJ_ID_91	35.46	20.00	3,829.07	50.15
424	☐	WDNJ_ID_92	68.64	20.00	3,765.72	29.13
425	☐	WDNJ_ID_93	68.12	20.00	3,534.44	74.08
426	☐	WDNJ_ID_94	34.03	20.00	3,141.63	48.68
427	☐	WDNJ_ID_96	36.60	20.00	4,317.34	54.66
428	☐	WDNJ_ID_97	35.72	20.00	3,863.57	53.39
429	☐	WDNJ_ID_98	35.38	20.00	3,697.43	62.59
430	☐	WDNJ_ID_99	75.63	20.00	2,273.56	21.50
431	☐	WDNJ_NI_545	-659.42	20.00	302.15	20.00

2021 Model - 2031 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	WDNJ_ID_1	0.75	4,676.71	4,939.63	113.92
2	☐	WDNJ_ID_10	0.39	4,691.06	4,941.31	108.43
3	☐	WDNJ_ID_100	0.16	4,813.66	5,097.00	122.77
4	☐	WDNJ_ID_101	2.22	4,897.99	5,097.08	86.27
5	☐	WDNJ_ID_102	1.20	4,909.76	5,097.09	81.17
6	☐	WDNJ_ID_103	1.38	4,724.83	5,096.59	161.08
7	☐	WDNJ_ID_104	1.38	4,722.32	5,096.59	162.17
8	☐	WDNJ_ID_105	0.39	4,722.88	4,939.63	93.92
9	☐	WDNJ_ID_106	1.60	4,620.88	4,816.21	84.64
10	☐	WDNJ_ID_107	0.90	4,836.26	5,097.01	112.98
11	☐	WDNJ_ID_108	4.13	4,833.78	5,097.01	114.06
12	☐	WDNJ_ID_109	12.66	4,526.58	4,816.17	125.48
13	☐	WDNJ_ID_11	0.70	4,554.61	4,816.23	113.36
14	☐	WDNJ_ID_110	1.74	4,536.26	4,816.18	121.29
15	☐	WDNJ_ID_111	1.99	4,540.72	4,816.17	119.35
16	☐	WDNJ_ID_112	0.68	4,934.34	5,096.35	70.20
17	☐	WDNJ_ID_113	6.21	4,548.87	4,816.22	115.84
18	☐	WDNJ_ID_114	1.87	4,905.96	5,096.38	82.51
19	☐	WDNJ_ID_115	1.06	4,895.53	5,097.08	87.33
20	☐	WDNJ_ID_116	3.48	4,553.07	4,816.22	114.02
21	☐	WDNJ_ID_117	1.20	4,809.72	5,097.01	124.48
22	☐	WDNJ_ID_118	2.17	4,822.57	5,097.01	118.91
23	☐	WDNJ_ID_119	2.37	4,528.78	4,816.17	124.53
24	☐	WDNJ_ID_12	0.22	4,768.87	5,096.51	141.97
25	☐	WDNJ_ID_120	0.95	4,884.20	5,097.07	92.24
26	☐	WDNJ_ID_121	1.04	4,915.91	5,096.38	78.20
27	☐	WDNJ_ID_122	1.72	4,936.22	5,096.38	69.40
28	☐	WDNJ_ID_123	0.79	4,587.56	4,816.20	99.07
29	☐	WDNJ_ID_124	0.61	4,836.02	5,096.43	112.84
30	☐	WDNJ_ID_125	1.18	4,599.20	4,816.20	94.03
31	☐	WDNJ_ID_126	2.44	4,934.08	5,097.08	70.63
32	☐	WDNJ_ID_127	1.08	4,948.59	5,097.08	64.34
33	☐	WDNJ_ID_128	0.90	4,740.00	4,939.62	86.50
34	☐	WDNJ_ID_129	1.58	4,896.98	5,096.46	86.43
35	☐	WDNJ_ID_13	1.38	4,737.65	5,096.48	155.48
36	☐	WDNJ_ID_130	2.44	4,935.74	5,096.46	69.64
37	☐	WDNJ_ID_131	2.17	4,514.40	4,816.19	130.76
38	☐	WDNJ_ID_132	1.52	4,523.49	4,816.19	126.83
39	☐	WDNJ_ID_133	0.30	4,867.81	5,097.03	99.32
40	☐	WDNJ_ID_134	1.36	4,884.80	5,097.00	91.95
41	☐	WDNJ_ID_135	0.43	4,895.55	5,097.00	87.29
42	☐	WDNJ_ID_136	0.79	4,589.40	4,816.20	98.27
43	☐	WDNJ_ID_137	1.83	4,838.17	5,096.43	111.90
44	☐	WDNJ_ID_138	1.95	4,817.57	5,096.43	120.83
45	☐	WDNJ_ID_139	2.30	4,605.12	4,816.20	91.46
46	☐	WDNJ_ID_14	0.14	4,738.09	5,096.70	155.39
47	☐	WDNJ_ID_140	2.12	4,538.03	4,816.22	120.54
48	☐	WDNJ_ID_141	0.90	4,867.79	5,096.43	99.07
49	☐	WDNJ_ID_142	1.43	4,869.14	5,097.07	98.76
50	☐	WDNJ_ID_143	1.94	4,544.93	4,816.17	117.53

2021 Model - 2031 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	WDNJ_ID_144	0.32	4,984.51	5,097.00	48.74
52	☐	WDNJ_ID_145	1.15	4,880.13	5,097.07	94.00
53	☐	WDNJ_ID_146	0.54	4,893.54	5,097.08	88.19
54	☐	WDNJ_ID_147	0.50	4,819.82	5,097.01	120.11
55	☐	WDNJ_ID_148	1.00	4,818.67	5,097.01	120.60
56	☐	WDNJ_ID_149	3.84	4,641.32	4,816.35	75.84
57	☐	WDNJ_ID_15	0.27	4,775.66	5,096.70	139.11
58	☐	WDNJ_ID_150	0.65	4,837.49	5,096.95	112.42
59	☐	WDNJ_ID_151	0.68	4,841.27	5,096.95	110.79
60	☐	WDNJ_ID_152	0.00	4,508.55	4,816.17	133.29
61	☐	WDNJ_ID_153	0.00	4,508.72	4,816.17	133.22
62	☐	WDNJ_ID_154	0.38	4,733.70	5,096.46	157.19
63	☐	WDNJ_ID_155	1.87	4,682.35	4,939.63	111.48
64	☐	WDNJ_ID_156	0.16	4,520.43	4,816.17	128.15
65	☐	WDNJ_ID_157	2.46	4,841.17	5,096.95	110.83
66	☐	WDNJ_ID_158	0.66	4,858.12	5,096.95	103.48
67	☐	WDNJ_ID_159	1.40	4,942.94	5,231.16	124.89
68	☐	WDNJ_ID_16	0.11	4,718.53	4,913.58	84.52
69	☐	WDNJ_ID_160	0.41	4,827.12	5,096.46	116.70
70	☐	WDNJ_ID_161	1.38	4,829.39	5,096.46	115.72
71	☐	WDNJ_ID_164	0.00	5,040.72	5,231.17	82.52
72	☐	WDNJ_ID_165	0.20	4,810.50	5,097.00	124.14
73	☐	WDNJ_ID_166	0.04	4,807.28	5,097.00	125.54
74	☐	WDNJ_ID_167	0.04	4,807.38	5,097.00	125.49
75	☐	WDNJ_ID_168	0.04	4,805.39	5,097.00	126.36
76	☐	WDNJ_ID_169	0.11	4,615.25	4,816.31	87.12
77	☐	WDNJ_ID_17	0.11	4,718.78	4,913.58	84.41
78	☐	WDNJ_ID_170	0.07	4,604.27	4,816.31	91.88
79	☐	WDNJ_ID_171	0.41	4,645.37	4,816.21	74.03
80	☐	WDNJ_ID_172	0.00	5,150.51	5,410.17	112.51
81	☐	WDNJ_ID_173	0.00	5,152.13	5,410.15	111.80
82	☐	WDNJ_ID_174	0.00	5,162.66	5,410.15	107.24
83	☐	WDNJ_ID_175	0.39	5,143.15	5,258.39	49.93
84	☐	WDNJ_ID_176	0.04	5,032.58	5,233.45	87.04
85	☐	WDNJ_ID_177	1.58	4,980.58	5,233.45	109.57
86	☐	WDNJ_ID_178	0.56	4,803.00	5,096.84	127.32
87	☐	WDNJ_ID_179	0.72	4,835.91	5,096.45	112.89
88	☐	WDNJ_ID_18	0.65	4,536.56	4,816.21	121.17
89	☐	WDNJ_ID_180	0.65	5,034.51	5,258.39	97.01
90	☐	WDNJ_ID_181	0.36	4,819.60	5,096.46	119.96
91	☐	WDNJ_ID_182	1.58	4,669.93	4,816.30	63.42
92	☐	WDNJ_ID_183	2.92	4,577.74	4,816.24	103.34
93	☐	WDNJ_ID_184	1.76	5,033.57	5,258.39	97.41
94	☐	WDNJ_ID_185	1.45	5,013.51	5,258.39	106.10
95	☐	WDNJ_ID_186	0.20	4,939.28	5,097.13	68.40
96	☐	WDNJ_ID_187	0.20	4,935.16	5,097.13	70.18
97	☐	WDNJ_ID_188	3.73	4,606.30	4,816.30	90.99
98	☐	WDNJ_ID_189	2.01	4,592.72	4,816.28	96.87
99	☐	WDNJ_ID_19	0.00	4,562.55	4,816.21	109.91
100	☐	WDNJ_ID_190	2.21	4,577.41	4,816.27	103.50

2021 Model - 2031 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	WDNJ_ID_191	3.84	4,684.23	4,816.45	57.29
102	☐	WDNJ_ID_192	0.83	4,828.89	5,096.93	116.14
103	☐	WDNJ_ID_193	9.31	4,628.37	4,816.32	81.44
104	☐	WDNJ_ID_194	1.94	4,856.68	5,097.01	104.13
105	☐	WDNJ_ID_195	0.57	4,864.44	5,097.01	100.77
106	☐	WDNJ_ID_196	5.61	4,532.73	4,816.18	122.82
107	☐	WDNJ_ID_197	1.13	4,532.20	4,816.18	123.05
108	☐	WDNJ_ID_198	3.50	4,530.43	4,816.18	123.81
109	☐	WDNJ_ID_199	1.00	4,546.77	4,816.21	116.75
110	☐	WDNJ_ID_2	0.75	4,675.95	4,939.63	114.25
111	☐	WDNJ_ID_20	0.18	4,569.94	4,816.20	106.70
112	☐	WDNJ_ID_200	2.55	4,527.82	4,816.20	124.95
113	☐	WDNJ_ID_201	4.18	4,796.65	5,096.86	130.08
114	☐	WDNJ_ID_202	3.87	4,566.67	4,816.24	108.14
115	☐	WDNJ_ID_203	3.77	4,549.68	4,816.25	115.51
116	☐	WDNJ_ID_204	1.92	4,568.71	4,816.26	107.27
117	☐	WDNJ_ID_205	15.68	4,523.13	4,816.17	126.97
118	☐	WDNJ_ID_206	0.36	4,889.42	5,097.07	89.98
119	☐	WDNJ_ID_207	0.00	4,512.20	4,816.19	131.72
120	☐	WDNJ_ID_208	1.97	4,574.36	4,816.27	104.82
121	☐	WDNJ_ID_209	4.81	4,557.81	4,816.26	111.99
122	☐	WDNJ_ID_21	0.18	4,567.80	4,816.20	107.63
123	☐	WDNJ_ID_210	1.76	4,562.12	4,816.26	110.12
124	☐	WDNJ_ID_211	1.42	4,968.54	5,097.17	55.73
125	☐	WDNJ_ID_212	0.93	4,554.32	4,816.26	113.50
126	☐	WDNJ_ID_213	1.69	4,556.33	4,816.26	112.63
127	☐	WDNJ_ID_214	2.26	4,572.55	4,816.25	105.59
128	☐	WDNJ_ID_215	1.85	5,057.69	5,258.39	86.96
129	☐	WDNJ_ID_216	5.11	4,523.35	4,816.15	126.87
130	☐	WDNJ_ID_217	5.85	4,515.60	4,816.16	130.23
131	☐	WDNJ_ID_218	3.41	4,513.41	4,816.17	131.19
132	☐	WDNJ_ID_219	1.08	5,054.71	5,258.39	88.25
133	☐	WDNJ_ID_220	1.61	5,053.89	5,258.39	88.61
134	☐	WDNJ_ID_221	0.84	4,516.24	4,816.16	129.96
135	☐	WDNJ_ID_222	0.74	4,565.17	4,816.20	108.77
136	☐	WDNJ_ID_223	4.93	4,500.70	4,816.17	136.69
137	☐	WDNJ_ID_224	0.00	4,500.39	4,816.18	136.83
138	☐	WDNJ_ID_225	1.54	4,808.23	5,097.01	125.13
139	☐	WDNJ_ID_226	1.09	4,556.27	4,816.19	112.62
140	☐	WDNJ_ID_227	1.61	4,557.50	4,816.19	112.09
141	☐	WDNJ_ID_228	0.16	4,534.59	4,816.20	122.02
142	☐	WDNJ_ID_229	2.01	4,532.90	4,816.19	122.75
143	☐	WDNJ_ID_230	1.43	4,528.97	4,816.19	124.45
144	☐	WDNJ_ID_231	0.32	4,501.26	4,816.18	136.46
145	☐	WDNJ_ID_232	0.91	4,812.91	5,097.00	123.10
146	☐	WDNJ_ID_233	0.97	4,567.15	4,816.20	107.91
147	☐	WDNJ_ID_234	5.11	4,523.67	4,816.15	126.73
148	☐	WDNJ_ID_235	1.58	4,984.54	5,231.16	106.86
149	☐	WDNJ_ID_236	1.42	4,957.23	5,231.16	118.69
150	☐	WDNJ_ID_237	5.79	4,530.12	4,816.18	123.95

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151		WDNJ_ID_238	2.48	4,532.28	4,816.19	123.02
152		WDNJ_ID_239	2.73	4,528.19	4,816.19	124.79
153		WDNJ_ID_24	1.69	4,587.87	4,816.26	98.96
154		WDNJ_ID_240	1.36	4,547.66	4,816.19	116.35
155		WDNJ_ID_241	3.08	4,500.40	4,816.19	136.83
156		WDNJ_ID_242	2.49	4,804.72	5,097.00	126.65
157		WDNJ_ID_243	0.23	4,912.25	5,097.00	80.05
158		WDNJ_ID_244	0.72	4,937.27	5,097.00	69.21
159		WDNJ_ID_245	0.95	4,534.94	4,816.19	121.87
160		WDNJ_ID_246	2.01	4,517.07	4,816.19	129.61
161		WDNJ_ID_247	0.22	4,920.25	5,097.00	76.59
162		WDNJ_ID_248	3.26	4,524.46	4,816.19	126.41
163		WDNJ_ID_249	0.74	4,523.29	4,816.19	126.91
164		WDNJ_ID_25	1.69	4,588.54	4,816.28	98.68
165		WDNJ_ID_250	9.92	4,506.00	4,816.17	134.40
166		WDNJ_ID_251	0.68	4,504.34	4,816.17	135.12
167		WDNJ_ID_252	8.93	4,528.99	4,816.18	124.44
168		WDNJ_ID_253	0.63	4,652.77	4,913.58	113.01
169		WDNJ_ID_254	1.11	4,681.61	4,913.58	100.51
170		WDNJ_ID_255	1.99	4,540.16	4,816.19	119.60
171		WDNJ_ID_256	1.81	4,588.33	4,816.27	98.76
172		WDNJ_ID_257	1.24	4,538.21	4,816.20	120.45
173		WDNJ_ID_258	2.21	4,542.33	4,816.20	118.67
174		WDNJ_ID_259	0.70	4,969.04	5,097.00	55.45
175		WDNJ_ID_26	1.58	4,789.01	5,096.49	133.23
176		WDNJ_ID_260	0.68	4,506.47	4,816.17	134.19
177		WDNJ_ID_261	1.67	4,510.77	4,816.15	132.32
178		WDNJ_ID_262	9.18	4,505.95	4,816.15	134.41
179		WDNJ_ID_263	1.61	4,522.38	4,816.17	127.30
180		WDNJ_ID_264	1.61	4,526.64	4,816.17	125.45
181		WDNJ_ID_265	1.24	4,503.90	4,816.17	135.31
182		WDNJ_ID_266	1.36	4,887.33	5,097.07	90.88
183		WDNJ_ID_267	0.13	4,975.18	5,097.00	52.79
184		WDNJ_ID_268	0.00	5,050.99	5,258.39	89.86
185		WDNJ_ID_269	1.09	4,521.68	4,816.15	127.59
186		WDNJ_ID_27	0.93	4,765.80	5,096.46	143.28
187		WDNJ_ID_270	0.32	4,515.42	4,816.15	130.31
188		WDNJ_ID_271	1.04	4,998.52	5,231.16	100.80
189		WDNJ_ID_272	2.01	4,598.75	4,816.28	94.26
190		WDNJ_ID_273	1.24	4,506.06	4,816.17	134.37
191		WDNJ_ID_274	0.00	4,561.67	4,816.19	110.28
192		WDNJ_ID_275	0.72	4,538.64	4,816.19	120.26
193		WDNJ_ID_276	0.74	4,683.16	4,913.58	99.84
194		WDNJ_ID_277	6.49	4,523.20	4,816.15	126.94
195		WDNJ_ID_278	0.34	4,708.07	4,913.58	89.05
196		WDNJ_ID_279	1.08	5,045.19	5,258.39	92.38
197		WDNJ_ID_28	1.27	4,811.45	5,096.47	123.50
198		WDNJ_ID_280	1.54	4,547.02	4,816.19	116.63
199		WDNJ_ID_281	0.27	4,752.96	5,096.86	149.01
200		WDNJ_ID_282	2.39	4,619.33	4,816.32	85.36

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201	☐	WDNJ_ID_283	0.75	4,637.74	4,816.20	77.33
202	☐	WDNJ_ID_284	0.93	4,548.29	4,816.27	116.12
203	☐	WDNJ_ID_285	1.15	4,942.21	5,097.00	67.07
204	☐	WDNJ_ID_286	1.42	4,962.57	5,097.00	58.25
205	☐	WDNJ_ID_287	1.08	4,655.67	4,816.31	69.60
206	☐	WDNJ_ID_288	0.43	4,650.84	4,816.31	71.70
207	☐	WDNJ_ID_289	0.16	4,535.63	4,816.20	121.57
208	☐	WDNJ_ID_29	0.41	4,797.00	5,096.46	129.76
209	☐	WDNJ_ID_290	1.79	4,966.37	5,233.45	115.72
210	☐	WDNJ_ID_291	0.74	4,963.92	5,233.45	116.79
211	☐	WDNJ_ID_292	0.00	4,502.14	4,816.18	136.07
212	☐	WDNJ_ID_293	1.52	4,921.79	5,097.00	75.92
213	☐	WDNJ_ID_294	0.84	4,893.51	5,097.01	88.17
214	☐	WDNJ_ID_295	1.08	4,899.47	5,097.01	85.59
215	☐	WDNJ_ID_296	0.61	4,529.97	4,816.19	124.02
216	☐	WDNJ_ID_297	0.00	4,508.97	4,816.15	133.10
217	☐	WDNJ_ID_298	0.00	4,524.99	4,816.17	126.17
218	☐	WDNJ_ID_299	1.60	4,636.27	4,816.31	78.01
219	☐	WDNJ_ID_3	2.92	4,578.05	4,816.24	103.21
220	☐	WDNJ_ID_30	2.10	4,647.19	4,816.39	73.31
221	☐	WDNJ_ID_300	0.68	4,628.17	4,816.31	81.52
222	☐	WDNJ_ID_301	0.93	4,924.16	5,097.00	74.89
223	☐	WDNJ_ID_302	0.74	4,980.86	5,233.45	109.45
224	☐	WDNJ_ID_303	0.38	4,720.55	5,096.46	162.88
225	☐	WDNJ_ID_304	0.34	4,783.30	5,096.46	135.69
226	☐	WDNJ_ID_305	0.00	4,784.46	5,097.00	135.42
227	☐	WDNJ_ID_306	0.04	4,723.11	5,096.46	161.77
228	☐	WDNJ_ID_307	0.00	4,731.42	5,096.46	158.17
229	☐	WDNJ_ID_308	0.04	4,720.44	5,096.46	162.93
230	☐	WDNJ_ID_309	0.04	4,785.62	5,096.46	134.69
231	☐	WDNJ_ID_31	2.10	4,660.52	4,816.45	67.56
232	☐	WDNJ_ID_310	0.00	4,698.23	5,096.46	172.55
233	☐	WDNJ_ID_311	1.76	4,645.74	4,816.26	73.89
234	☐	WDNJ_ID_312	1.76	4,642.65	4,816.26	75.23
235	☐	WDNJ_ID_313	0.05	4,562.67	4,816.28	109.89
236	☐	WDNJ_ID_314	0.43	4,578.91	4,816.31	102.86
237	☐	WDNJ_ID_315	0.00	4,565.65	4,816.28	108.60
238	☐	WDNJ_ID_316	0.41	4,641.09	4,816.21	75.88
239	☐	WDNJ_ID_317	0.00	5,104.82	5,410.18	132.31
240	☐	WDNJ_ID_318	1.94	4,830.61	5,096.93	115.39
241	☐	WDNJ_ID_319	1.65	4,620.39	4,816.36	84.91
242	☐	WDNJ_ID_32	0.41	4,792.78	5,096.46	131.59
243	☐	WDNJ_ID_320	0.61	4,865.83	5,097.02	100.18
244	☐	WDNJ_ID_321	1.24	4,538.76	4,816.20	120.21
245	☐	WDNJ_ID_322	2.19	4,565.71	4,816.20	108.54
246	☐	WDNJ_ID_323	2.35	4,863.04	5,097.02	101.38
247	☐	WDNJ_ID_324	0.16	4,516.42	4,816.19	129.89
248	☐	WDNJ_ID_325	0.00	4,522.94	4,816.15	127.05
249	☐	WDNJ_ID_326	0.05	4,557.06	4,816.27	112.32
250	☐	WDNJ_ID_327	0.00	4,489.34	4,816.19	141.62

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	WDNJ_ID_33	0.84	4,678.58	4,939.63	113.11
252	☐	WDNJ_ID_330	0.00	4,796.18	4,816.57	8.84
253	☐	WDNJ_ID_331	1.18	5,035.87	5,233.45	85.61
254	☐	WDNJ_ID_333	1.58	4,979.91	5,097.20	50.82
255	☐	WDNJ_ID_334	1.85	4,616.21	4,816.32	86.71
256	☐	WDNJ_ID_335	3.14	4,890.28	5,097.06	89.60
257	☐	WDNJ_ID_336	0.00	5,815.00	5,830.00	6.50
258	☐	WDNJ_ID_337	0.00	5,507.00	5,830.00	139.96
259	☐	WDNJ_ID_338	0.00	5,506.00	5,830.00	140.39
260	☐	WDNJ_ID_339	0.00	5,385.23	5,830.00	192.72
261	☐	WDNJ_ID_34	3.62	4,589.41	4,816.27	98.30
262	☐	WDNJ_ID_342	0.05	4,557.65	4,816.27	112.06
263	☐	WDNJ_ID_343	0.07	4,608.31	4,816.31	90.13
264	☐	WDNJ_ID_344	0.23	4,609.89	4,816.31	89.44
265	☐	WDNJ_ID_345	0.00	4,696.88	5,096.46	173.14
266	☐	WDNJ_ID_346	0.00	4,697.94	5,096.46	172.68
267	☐	WDNJ_ID_347	0.00	5,012.29	5,231.16	94.84
268	☐	WDNJ_ID_348	0.00	5,017.75	5,231.16	92.47
269	☐	WDNJ_ID_349	1.26	4,884.08	5,096.46	92.02
270	☐	WDNJ_ID_35	1.24	4,575.01	4,816.26	104.54
271	☐	WDNJ_ID_350	2.10	4,885.64	5,096.46	91.35
272	☐	WDNJ_ID_351	0.45	4,964.87	5,231.16	115.38
273	☐	WDNJ_ID_352	0.00	5,036.73	5,231.16	84.25
274	☐	WDNJ_ID_353	0.00	5,009.94	5,231.16	95.86
275	☐	WDNJ_ID_354	0.07	4,984.55	5,231.16	106.86
276	☐	WDNJ_ID_355	0.07	4,981.46	5,231.16	108.20
277	☐	WDNJ_ID_356	0.00	5,032.13	5,231.16	86.24
278	☐	WDNJ_ID_357	0.05	5,056.90	5,231.16	75.51
279	☐	WDNJ_ID_358	0.16	4,535.82	4,816.20	121.49
280	☐	WDNJ_ID_359	0.16	4,531.83	4,816.20	123.22
281	☐	WDNJ_ID_36	1.60	4,582.38	4,816.25	101.34
282	☐	WDNJ_ID_360	0.45	4,965.47	5,231.16	115.12
283	☐	WDNJ_ID_361	0.45	5,042.24	5,231.16	81.86
284	☐	WDNJ_ID_362	0.14	4,546.83	4,816.20	116.72
285	☐	WDNJ_ID_363	2.28	4,551.32	4,816.20	114.77
286	☐	WDNJ_ID_364	0.81	4,844.98	5,096.98	109.19
287	☐	WDNJ_ID_365	1.04	4,850.47	5,096.98	106.81
288	☐	WDNJ_ID_366	1.13	4,832.98	5,096.98	114.39
289	☐	WDNJ_ID_367	0.97	4,948.84	5,096.13	63.82
290	☐	WDNJ_ID_368	0.18	4,951.51	5,096.13	62.66
291	☐	WDNJ_ID_369	0.97	4,950.13	5,096.12	63.26
292	☐	WDNJ_ID_37	1.60	4,581.98	4,816.25	101.51
293	☐	WDNJ_ID_371	0.52	4,952.80	5,231.17	120.62
294	☐	WDNJ_ID_372	0.18	4,569.87	4,816.20	106.73
295	☐	WDNJ_ID_373	0.00	4,570.48	4,816.20	106.47
296	☐	WDNJ_ID_374	0.68	4,581.10	4,816.20	101.87
297	☐	WDNJ_ID_375	0.79	4,588.79	4,816.20	98.54
298	☐	WDNJ_ID_376	0.79	4,589.16	4,816.20	98.38
299	☐	WDNJ_ID_377	0.79	4,587.95	4,816.20	98.90
300	☐	WDNJ_ID_378	1.60	4,620.53	4,816.21	84.79

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301		WDNJ_ID_379	0.34	4,629.28	4,816.21	81.00
302		WDNJ_ID_38	1.79	4,805.40	5,096.47	126.12
303		WDNJ_ID_380	0.63	4,652.74	4,913.58	113.02
304		WDNJ_ID_381	0.25	4,729.07	4,913.58	79.95
305		WDNJ_ID_382	1.26	4,650.41	4,913.58	114.03
306		WDNJ_ID_384	0.13	4,803.18	5,097.01	127.31
307		WDNJ_ID_385	0.13	4,802.68	5,097.01	127.53
308		WDNJ_ID_386	0.13	4,806.01	5,097.01	126.09
309		WDNJ_ID_387	0.13	4,806.21	5,097.01	126.00
310		WDNJ_ID_388	0.13	4,804.96	5,097.01	126.54
311		WDNJ_ID_389	1.20	4,808.98	5,097.01	124.80
312		WDNJ_ID_39	0.61	4,931.69	5,097.11	71.68
313		WDNJ_ID_390	1.09	4,885.82	5,097.06	91.53
314		WDNJ_ID_391	0.00	5,047.91	5,231.42	79.51
315		WDNJ_ID_392	1.26	5,010.90	5,231.42	95.55
316		WDNJ_ID_393	1.00	4,823.03	5,097.00	118.71
317		WDNJ_ID_394	0.07	4,803.84	5,097.00	127.03
318		WDNJ_ID_395	1.15	4,872.60	5,097.01	97.24
319		WDNJ_ID_397	0.00	5,085.00	5,097.98	5.63
320		WDNJ_ID_398	0.00	5,085.00	5,098.00	5.63
321		WDNJ_ID_399	0.00	5,085.00	5,410.18	140.90
322		WDNJ_ID_4	2.24	4,601.69	4,816.31	93.00
323		WDNJ_ID_40	0.72	4,939.77	5,097.11	68.18
324		WDNJ_ID_400	0.00	5,085.00	5,410.18	140.90
325		WDNJ_ID_402	0.00	5,085.00	5,099.49	6.28
326		WDNJ_ID_403	0.00	5,085.00	5,234.27	64.68
327		WDNJ_ID_404	0.00	5,085.00	5,234.27	64.68
328		WDNJ_ID_405	0.00	5,085.00	5,234.27	64.68
329		WDNJ_ID_406	0.00	5,103.19	5,234.30	56.81
330		WDNJ_ID_407	0.00	5,103.69	5,234.30	56.60
331		WDNJ_ID_408	0.00	5,103.50	5,410.18	132.88
332		WDNJ_ID_409	0.00	5,376.88	5,410.20	14.44
333		WDNJ_ID_41	1.26	4,854.72	5,096.38	104.71
334		WDNJ_ID_410	0.00	5,376.96	5,409.97	14.30
335		WDNJ_ID_411	1.26	4,881.91	5,097.00	93.20
336		WDNJ_ID_412	0.13	4,920.26	5,097.00	76.58
337		WDNJ_ID_413	0.14	4,959.03	5,097.00	59.78
338		WDNJ_ID_414	0.23	4,911.02	5,097.00	80.59
339		WDNJ_ID_415	0.81	5,055.55	5,258.39	87.89
340		WDNJ_ID_416	0.00	5,402.92	5,830.00	185.05
341		WDNJ_ID_417	0.00	5,384.00	5,410.20	11.35
342		WDNJ_ID_418	0.00	5,384.00	5,410.20	11.35
343		WDNJ_ID_419	0.00	5,384.00	5,410.11	11.31
344		WDNJ_ID_42	0.86	4,857.00	5,096.38	103.72
345		WDNJ_ID_420	0.00	5,396.00	5,830.00	188.05
346		WDNJ_ID_421	0.32	4,918.76	5,097.00	77.23
347		WDNJ_ID_422	0.05	4,981.83	5,097.00	49.90
348		WDNJ_ID_423	0.30	4,981.57	5,097.00	50.02
349		WDNJ_ID_424	3.96	5,047.86	5,258.39	91.22
350		WDNJ_ID_425	19.96	4,517.53	4,816.15	129.39

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351		WDNJ_ID_426	5.11	4,530.08	4,816.15	123.95
352		WDNJ_ID_427	5.11	4,527.79	4,816.15	124.95
353		WDNJ_ID_428	0.00	4,543.77	4,816.21	118.05
354		WDNJ_ID_429	0.05	4,562.42	4,816.28	110.00
355		WDNJ_ID_43	1.72	4,597.56	4,816.20	94.74
356		WDNJ_ID_430	0.43	4,569.14	4,816.29	107.09
357		WDNJ_ID_432	2.98	4,599.11	4,816.32	94.12
358		WDNJ_ID_433	1.17	4,580.86	4,816.31	102.02
359		WDNJ_ID_434	2.39	4,563.46	4,816.26	109.54
360		WDNJ_ID_435	1.26	4,543.14	4,816.23	118.33
361		WDNJ_ID_436	1.38	4,540.52	4,816.21	119.46
362		WDNJ_ID_437	1.38	4,536.44	4,816.19	121.22
363		WDNJ_ID_438	2.21	4,540.95	4,816.20	119.27
364		WDNJ_ID_439	3.41	4,512.30	4,816.17	131.66
365		WDNJ_ID_44	2.62	4,632.56	4,816.20	79.57
366		WDNJ_ID_440	0.00	4,509.64	4,816.18	132.82
367		WDNJ_ID_441	0.52	4,507.42	4,816.17	133.78
368		WDNJ_ID_442	0.39	4,501.97	4,816.17	136.14
369		WDNJ_ID_443	0.52	4,498.71	4,816.17	137.56
370		WDNJ_ID_444	5.70	4,500.76	4,816.18	136.67
371		WDNJ_ID_445	0.79	4,499.69	4,816.18	137.14
372		WDNJ_ID_446	1.20	4,492.38	4,816.19	140.30
373		WDNJ_ID_447	0.00	4,505.99	4,816.19	134.41
374		WDNJ_ID_448	0.43	4,507.48	4,816.18	133.76
375		WDNJ_ID_449	0.00	4,516.92	4,816.19	129.67
376		WDNJ_ID_45	0.20	4,783.52	5,096.46	135.60
377		WDNJ_ID_450	1.49	4,537.03	4,816.21	120.97
378		WDNJ_ID_451	0.57	4,527.59	4,816.20	125.05
379		WDNJ_ID_452	0.61	4,514.14	4,816.19	130.88
380		WDNJ_ID_453	1.97	4,521.43	4,816.19	127.72
381		WDNJ_ID_454	4.59	4,531.39	4,816.19	123.40
382		WDNJ_ID_455	1.87	4,517.54	4,816.19	129.40
383		WDNJ_ID_456	3.32	4,519.72	4,816.19	128.46
384		WDNJ_ID_457	1.90	4,558.27	4,816.19	111.76
385		WDNJ_ID_458	1.56	4,619.77	4,816.20	85.11
386		WDNJ_ID_459	0.66	4,701.21	4,816.28	49.86
387		WDNJ_ID_46	1.24	5,049.28	5,258.39	90.61
388		WDNJ_ID_460	2.78	4,766.28	4,941.32	75.84
389		WDNJ_ID_461	1.72	4,702.64	4,913.58	91.40
390		WDNJ_ID_462	2.46	4,770.70	4,913.59	61.91
391		WDNJ_ID_463	1.79	4,801.98	5,097.01	127.83
392		WDNJ_ID_464	1.85	4,799.57	5,097.01	128.88
393		WDNJ_ID_465	1.88	4,840.13	5,097.01	111.30
394		WDNJ_ID_466	0.00	4,771.42	5,096.64	140.92
395		WDNJ_ID_467	0.30	4,858.24	5,096.99	103.45
396		WDNJ_ID_468	2.22	4,861.21	5,096.99	102.17
397		WDNJ_ID_469	2.15	4,883.87	5,097.04	92.37
398		WDNJ_ID_47	1.58	4,981.32	5,258.38	120.05
399		WDNJ_ID_471	1.00	4,942.38	5,097.13	67.05
400		WDNJ_ID_472	2.89	4,908.88	5,097.08	81.55

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401	☐	WDNJ_ID_473	1.51	4,858.30	5,097.01	103.43
402	☐	WDNJ_ID_474	5.65	4,805.19	5,097.00	126.44
403	☐	WDNJ_ID_475	0.20	4,816.39	5,097.00	121.59
404	☐	WDNJ_ID_476	0.00	4,771.32	5,096.46	140.88
405	☐	WDNJ_ID_477	0.00	4,857.66	5,096.46	103.47
406	☐	WDNJ_ID_478	0.05	4,913.79	5,231.16	137.52
407	☐	WDNJ_ID_479	0.04	5,016.96	5,231.16	92.81
408	☐	WDNJ_ID_48	2.96	4,610.67	4,816.33	89.11
409	☐	WDNJ_ID_480	0.09	5,033.25	5,231.16	85.75
410	☐	WDNJ_ID_481	0.00	4,809.96	5,096.46	124.14
411	☐	WDNJ_ID_482	0.00	4,805.65	5,096.46	126.01
412	☐	WDNJ_ID_483	0.00	4,753.74	5,096.46	148.50
413	☐	WDNJ_ID_484	0.30	4,700.28	4,939.63	103.71
414	☐	WDNJ_ID_485	1.04	4,926.68	5,231.16	131.93
415	☐	WDNJ_ID_486	1.35	4,955.08	5,096.37	61.22
416	☐	WDNJ_ID_487	1.31	4,890.14	5,096.36	89.36
417	☐	WDNJ_ID_488	1.85	4,996.14	5,231.16	101.84
418	☐	WDNJ_ID_489	2.94	4,891.16	5,096.25	88.87
419	☐	WDNJ_ID_49	5.09	4,615.63	4,816.30	86.95
420	☐	WDNJ_ID_490	0.18	5,000.11	5,231.17	100.12
421	☐	WDNJ_ID_491	0.00	5,037.67	5,096.04	25.29
422	☐	WDNJ_ID_492	0.18	4,993.66	5,096.08	44.38
423	☐	WDNJ_ID_493	0.00	5,060.40	5,231.92	74.32
424	☐	WDNJ_ID_494	0.00	5,063.08	5,232.43	73.38
425	☐	WDNJ_ID_495	4.14	5,074.54	5,232.94	68.63
426	☐	WDNJ_ID_496	0.20	4,955.71	5,097.17	61.29
427	☐	WDNJ_ID_497	0.30	5,004.81	5,233.45	99.07
428	☐	WDNJ_ID_498	1.18	5,047.31	5,097.72	21.84
429	☐	WDNJ_ID_499	0.30	5,007.27	5,097.46	39.08
430	☐	WDNJ_ID_5	1.26	4,663.87	4,939.62	119.48
431	☐	WDNJ_ID_50	1.65	4,631.95	4,816.38	79.91
432	☐	WDNJ_ID_500	0.56	5,070.20	5,233.86	70.91
433	☐	WDNJ_ID_501	0.04	5,031.41	5,258.38	98.35
434	☐	WDNJ_ID_502	1.99	4,982.18	5,233.45	108.87
435	☐	WDNJ_ID_503	1.36	4,958.24	5,097.00	60.13
436	☐	WDNJ_ID_504	1.54	5,029.02	5,258.39	99.38
437	☐	WDNJ_ID_505	0.66	5,086.93	5,258.39	74.29
438	☐	WDNJ_ID_506	0.00	5,181.07	5,410.17	99.27
439	☐	WDNJ_ID_507	1.09	5,130.89	5,258.39	55.25
440	☐	WDNJ_ID_508	0.74	5,115.99	5,258.39	61.70
441	☐	WDNJ_ID_509	2.04	5,013.06	5,258.39	106.30
442	☐	WDNJ_ID_51	0.00	5,084.43	5,222.88	59.99
443	☐	WDNJ_ID_510	1.65	4,946.29	5,097.00	65.30
444	☐	WDNJ_ID_511	2.12	4,920.74	5,097.00	76.37
445	☐	WDNJ_ID_512	0.38	4,893.42	5,097.00	88.21
446	☐	WDNJ_ID_513	0.93	4,894.53	5,097.00	87.73
447	☐	WDNJ_ID_514	5.25	4,945.18	5,097.00	65.78
448	☐	WDNJ_ID_515	2.04	5,030.10	5,258.39	98.92
449	☐	WDNJ_ID_516	0.00	5,309.12	5,409.38	43.44
450	☐	WDNJ_ID_517	0.00	5,226.79	5,408.79	78.86

2021 Model - 2031 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	WDNJ_ID_518	0.00	5,162.81	5,234.90	31.24
452	☐	WDNJ_ID_519	0.00	5,158.31	5,410.18	109.14
453	☐	WDNJ_ID_520	0.00	5,227.61	5,410.19	79.11
454	☐	WDNJ_ID_521	0.00	5,308.63	5,410.19	44.01
455	☐	WDNJ_ID_522	0.00	5,773.00	5,830.00	24.70
456	☐	WDNJ_ID_523	0.00	5,661.00	5,830.00	73.23
457	☐	WDNJ_ID_524	0.00	5,630.00	5,830.00	86.66
458	☐	WDNJ_ID_525	0.00	5,605.00	5,830.00	97.49
459	☐	WDNJ_ID_526	0.00	5,562.00	5,830.00	116.12
460	☐	WDNJ_ID_527	0.00	5,486.00	5,830.00	149.06
461	☐	WDNJ_ID_528	0.00	5,416.00	5,830.00	179.39
462	☐	WDNJ_ID_529	0.00	4,803.00	4,816.82	5.99
463	☐	WDNJ_ID_53	0.43	4,578.70	4,816.31	102.96
464	☐	WDNJ_ID_530	0.00	4,803.00	5,096.91	127.35
465	☐	WDNJ_ID_531	0.00	4,803.00	5,096.91	127.35
466	☐	WDNJ_ID_532	0.00	4,803.00	5,096.91	127.35
467	☐	WDNJ_ID_533	0.00	4,803.00	4,816.82	5.99
468	☐	WDNJ_ID_534	0.00	4,803.00	5,096.86	127.33
469	☐	WDNJ_ID_535	0.00	4,803.00	5,096.86	127.33
470	☐	WDNJ_ID_536	0.00	4,803.00	4,816.66	5.92
471	☐	WDNJ_ID_537	0.00	4,803.00	4,816.66	5.92
472	☐	WDNJ_ID_54	0.00	4,581.03	4,816.31	101.95
473	☐	WDNJ_ID_546	0.00	5,024.00	5,097.52	31.85
474	☐	WDNJ_ID_547	0.00	5,024.00	5,233.45	90.75
475	☐	WDNJ_ID_548	0.00	4,803.00	5,096.91	127.35
476	☐	WDNJ_ID_549	0.00	4,528.32	4,816.19	124.74
477	☐	WDNJ_ID_55	0.41	4,648.63	4,816.22	72.62
478	☐	WDNJ_ID_550	0.00	4,670.00	4,816.35	63.41
479	☐	WDNJ_ID_551	0.00	4,665.00	4,816.35	65.58
480	☐	WDNJ_ID_552	0.00	4,620.00	4,816.32	85.07
481	☐	WDNJ_ID_553	0.00	4,619.33	4,816.32	85.36
482	☐	WDNJ_ID_554	0.00	4,683.00	4,913.58	99.91
483	☐	WDNJ_ID_555	0.00	4,517.00	4,816.19	129.64
484	☐	WDNJ_ID_556	0.00	4,516.00	4,816.19	130.07
485	☐	WDNJ_ID_557	0.00	4,513.00	4,816.19	131.37
486	☐	WDNJ_ID_558	0.00	4,511.00	4,816.19	132.24
487	☐	WDNJ_ID_559	0.00	4,510.00	4,816.18	132.67
488	☐	WDNJ_ID_56	0.41	4,645.72	4,816.23	73.88
489	☐	WDNJ_ID_560	0.00	4,511.00	4,816.19	132.24
490	☐	WDNJ_ID_561	0.00	4,511.00	4,816.19	132.24
491	☐	WDNJ_ID_563	0.00	4,511.00	4,816.18	132.24
492	☐	WDNJ_ID_564	0.00	4,572.00	4,816.25	105.83
493	☐	WDNJ_ID_565	0.00	4,573.00	4,816.25	105.40
494	☐	WDNJ_ID_566	0.00	4,573.00	4,816.24	105.40
495	☐	WDNJ_ID_567	0.00	4,573.00	4,816.24	105.40
496	☐	WDNJ_ID_568	0.00	4,572.00	4,816.24	105.83
497	☐	WDNJ_ID_569	0.00	4,560.00	4,816.24	111.03
498	☐	WDNJ_ID_57	0.74	4,629.71	4,816.21	80.81
499	☐	WDNJ_ID_570	0.00	4,573.00	4,816.25	105.40
500	☐	WDNJ_ID_571	0.00	4,573.00	4,816.25	105.40

2021 Model - 2031 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501		WDNJ_ID_572	0.00	4,510.44	4,816.18	132.48
502		WDNJ_ID_573	0.00	5,041.91	5,258.39	93.80
503		WDNJ_ID_574	0.00	5,015.82	5,231.16	93.31
504		WDNJ_ID_575	0.00	4,801.49	5,096.84	127.98
505		WDNJ_ID_576	0.00	4,813.50	5,097.00	122.84
506		WDNJ_ID_577	0.00	4,709.16	4,939.63	99.87
507		WDNJ_ID_578	0.00	4,724.00	4,939.63	93.43
508		WDNJ_ID_579	0.00	4,676.24	4,816.35	60.71
509		WDNJ_ID_58	0.74	4,630.97	4,816.21	80.26
510		WDNJ_ID_582	0.00	4,611.17	4,816.30	88.88
511		WDNJ_ID_583	0.00	4,610.00	4,816.30	89.39
512		WDNJ_ID_584	0.00	5,182.00	5,408.39	98.10
513		WDNJ_ID_585	0.00	4,800.00	5,096.46	128.45
514		WDNJ_ID_586	0.00	4,825.00	5,096.46	117.62
515		WDNJ_ID_587	0.00	4,800.00	5,096.46	128.45
516		WDNJ_ID_6	0.70	4,654.53	4,939.61	123.52
517		WDNJ_ID_61	0.45	5,078.12	5,258.39	78.11
518		WDNJ_ID_62	0.45	5,085.43	5,258.39	74.94
519		WDNJ_ID_63	1.11	4,834.00	5,096.46	113.72
520		WDNJ_ID_64	0.18	4,824.54	5,096.46	117.82
521		WDNJ_ID_65	0.59	4,817.59	5,096.46	120.83
522		WDNJ_ID_66	0.50	4,845.49	5,096.97	108.97
523		WDNJ_ID_67	0.50	4,847.45	5,096.98	108.12
524		WDNJ_ID_68	1.08	4,912.99	5,097.09	79.77
525		WDNJ_ID_69	3.14	4,918.07	5,097.09	77.57
526		WDNJ_ID_7	3.34	4,836.59	5,097.01	112.84
527		WDNJ_ID_70	0.39	4,809.70	5,096.49	124.27
528		WDNJ_ID_71	1.72	4,829.72	5,096.45	115.57
529		WDNJ_ID_72	1.27	4,591.96	4,816.23	97.18
530		WDNJ_ID_73	1.74	4,627.14	4,816.29	81.96
531		WDNJ_ID_74	1.51	4,867.73	5,097.03	99.36
532		WDNJ_ID_75	0.70	4,554.19	4,816.23	113.54
533		WDNJ_ID_76	2.21	4,556.44	4,816.22	112.56
534		WDNJ_ID_77	1.76	4,642.62	4,816.26	75.24
535		WDNJ_ID_78	2.26	4,607.33	4,816.23	90.52
536		WDNJ_ID_79	2.58	4,925.45	5,097.10	74.37
537		WDNJ_ID_8	1.79	4,830.02	5,097.00	115.68
538		WDNJ_ID_80	1.58	4,876.58	5,097.07	95.54
539		WDNJ_ID_81	1.67	4,562.92	4,816.21	109.75
540		WDNJ_ID_82	4.05	4,605.22	4,816.30	91.46
541		WDNJ_ID_83	2.24	4,601.47	4,816.31	93.09
542		WDNJ_ID_84	0.27	4,717.29	4,816.48	42.98
543		WDNJ_ID_85	2.65	4,590.41	4,816.26	97.86
544		WDNJ_ID_86	2.67	4,544.23	4,816.21	117.85
545		WDNJ_ID_87	3.50	4,545.96	4,816.23	117.11
546		WDNJ_ID_88	13.79	4,647.85	4,816.35	73.01
547		WDNJ_ID_89	3.08	4,677.08	4,816.41	60.37
548		WDNJ_ID_9	6.92	4,816.84	5,096.89	121.35
549		WDNJ_ID_90	1.67	4,564.20	4,816.22	109.20
550		WDNJ_ID_91	2.85	4,532.34	4,816.18	122.99

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551	☐	WDNJ_ID_92	0.95	4,923.16	5,096.31	75.03
552	☐	WDNJ_ID_93	2.85	4,857.99	5,096.41	103.31
553	☐	WDNJ_ID_94	2.01	4,576.15	4,816.21	104.02
554	☐	WDNJ_ID_95	1.79	4,577.66	4,816.20	103.36
555	☐	WDNJ_ID_96	3.62	4,589.92	4,816.27	98.08
556	☐	WDNJ_ID_97	2.62	4,559.19	4,816.23	111.37
557	☐	WDNJ_ID_98	5.33	4,564.87	4,816.23	108.92
558	☐	WDNJ_ID_99	0.16	4,798.10	5,097.00	129.51
559	☐	WDNJ_NI_538	0.00	4,645.00	4,816.83	74.45
560	☐	WDNJ_NI_539	0.00	4,701.00	4,816.83	50.19
561	☐	WDNJ_NI_540	0.00	4,630.00	4,816.83	80.95
562	☐	WDNJ_NI_541	0.00	4,632.00	4,816.83	80.09
563	☐	WDNJ_NI_542	0.00	4,803.00	4,816.83	5.99
564	☐	WDNJ_NI_545	0.11	4,660.00	4,816.31	67.73

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
1	☐	WDNJ_ID_100	1,500.16	4,415.10	WDNJ_ID_175	10.56
2	☐	WDNJ_ID_101	1,502.22	1,831.98	WDNJ_ID_127	-1.93
3	☐	WDNJ_ID_102	1,501.20	9,327.71	WDNJ_ID_127	3.17
4	☐	WDNJ_ID_103	1,501.38	7,641.54	WDNJ_ID_357	-19.81
5	☐	WDNJ_ID_104	1,501.38	6,216.82	WDNJ_ID_357	-2.04
6	☐	WDNJ_ID_105	1,500.39	4,211.08	WDNJ_ID_128	12.58
7	☐	WDNJ_ID_106	1,501.60	4,590.11	WDNJ_ID_316	19.47
8	☐	WDNJ_ID_107	1,500.90	8,307.16	WDNJ_ID_175	7.20
9	☐	WDNJ_ID_108	1,504.12	6,723.86	WDNJ_ID_108	20.00
10	☐	WDNJ_ID_109	1,512.66	6,268.52	WDNJ_ID_109	20.00
11	☐	WDNJ_ID_110	1,501.74	6,217.47	WDNJ_ID_110	20.00
12	☐	WDNJ_ID_111	1,501.99	4,212.29	WDNJ_ID_143	18.18
13	☐	WDNJ_ID_112	1,500.68	3,589.60	WDNJ_ID_486	19.89
14	☐	WDNJ_ID_113	1,506.21	7,318.33	WDNJ_ID_459	7.37
15	☐	WDNJ_ID_114	1,501.87	4,584.79	WDNJ_ID_486	5.18
16	☐	WDNJ_ID_115	1,501.06	3,614.72	WDNJ_ID_115	20.00
17	☐	WDNJ_ID_116	1,503.48	8,589.52	WDNJ_ID_459	8.69
18	☐	WDNJ_ID_117	1,501.20	7,357.73	WDNJ_ID_393	14.33
19	☐	WDNJ_ID_118	1,502.17	4,443.75	WDNJ_ID_118	20.00
20	☐	WDNJ_ID_119	1,502.37	5,646.42	WDNJ_ID_119	20.00
21	☐	WDNJ_ID_12	1,500.22	7,991.72	WDNJ_ID_357	-35.84
22	☐	WDNJ_ID_120	1,500.95	3,840.41	WDNJ_ID_120	20.00
23	☐	WDNJ_ID_121	1,501.04	4,083.29	WDNJ_ID_486	10.92
24	☐	WDNJ_ID_122	1,501.72	1,541.01	WDNJ_ID_122	20.00
25	☐	WDNJ_ID_124	1,500.61	5,406.63	WDNJ_ID_357	-6.91
26	☐	WDNJ_ID_125	1,501.18	2,491.00	WDNJ_ID_283	3.30
27	☐	WDNJ_ID_126	1,502.44	1,051.43	WDNJ_ID_126	20.00
28	☐	WDNJ_ID_127	1,501.08	1,071.52	WDNJ_ID_127	20.00
29	☐	WDNJ_ID_128	1,500.90	580.83	WDNJ_ID_128	20.00
30	☐	WDNJ_ID_129	1,501.58	4,544.30	WDNJ_ID_357	-13.82
31	☐	WDNJ_ID_130	1,502.44	1,435.07	WDNJ_ID_130	20.00
32	☐	WDNJ_ID_131	1,502.17	6,891.67	WDNJ_ID_459	9.37
33	☐	WDNJ_ID_132	1,501.52	7,965.88	WDNJ_ID_459	-4.25
34	☐	WDNJ_ID_133	1,500.30	2,922.69	WDNJ_ID_133	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
35	☐	WDNJ_ID_134	1,501.36	6,121.59	WDNJ_ID_175	-15.74
36	☐	WDNJ_ID_135	1,500.43	4,543.58	WDNJ_ID_175	1.72
37	☐	WDNJ_ID_137	1,501.83	8,011.18	WDNJ_ID_357	-14.03
38	☐	WDNJ_ID_138	1,501.95	2,488.95	WDNJ_ID_138	20.00
39	☐	WDNJ_ID_139	1,502.30	1,636.19	WDNJ_ID_283	5.87
40	☐	WDNJ_ID_140	1,502.12	2,153.80	WDNJ_ID_140	20.00
41	☐	WDNJ_ID_141	1,500.90	2,796.50	WDNJ_ID_141	20.00
42	☐	WDNJ_ID_142	1,501.43	3,092.45	WDNJ_ID_142	20.00
43	☐	WDNJ_ID_143	1,501.94	2,772.26	WDNJ_ID_143	20.00
44	☐	WDNJ_ID_144	1,500.32	2,442.56	WDNJ_ID_144	20.00
45	☐	WDNJ_ID_145	1,501.15	2,726.96	WDNJ_ID_145	20.00
46	☐	WDNJ_ID_146	1,500.54	2,521.96	WDNJ_ID_146	20.00
47	☐	WDNJ_ID_147	1,500.50	7,649.66	WDNJ_ID_508	15.35
48	☐	WDNJ_ID_148	1,501.00	3,706.15	WDNJ_ID_148	20.00
49	☐	WDNJ_ID_149	1,503.84	8,282.64	WDNJ_ID_550	7.57
50	☐	WDNJ_ID_150	1,500.65	10,628.77	WDNJ_ID_333	9.62
51	☐	WDNJ_ID_151	1,500.68	4,506.89	WDNJ_ID_151	20.00
52	☐	WDNJ_ID_152	1,500.00	5,775.44	WDNJ_ID_152	20.00
53	☐	WDNJ_ID_153	1,500.00	6,430.03	WDNJ_ID_459	17.48
54	☐	WDNJ_ID_154	1,500.38	1,749.33	WDNJ_ID_154	20.00
55	☐	WDNJ_ID_156	1,500.16	5,963.35	WDNJ_ID_156	20.00
56	☐	WDNJ_ID_157	1,502.46	11,027.40	WDNJ_ID_158	12.66
57	☐	WDNJ_ID_158	1,500.66	2,082.22	WDNJ_ID_158	20.00
58	☐	WDNJ_ID_159	1,501.40	2,299.51	WDNJ_ID_357	-23.92
59	☐	WDNJ_ID_16	1,500.11	2,849.02	WDNJ_ID_16	20.00
60	☐	WDNJ_ID_160	1,500.41	3,818.52	WDNJ_ID_357	-19.86
61	☐	WDNJ_ID_161	1,501.38	3,532.28	WDNJ_ID_357	-1.61
62	☐	WDNJ_ID_165	1,500.20	2,018.38	WDNJ_ID_165	20.00
63	☐	WDNJ_ID_168	1,500.04	2,558.14	WDNJ_ID_393	17.98
64	☐	WDNJ_ID_169	1,500.11	2,287.69	WDNJ_ID_169	20.00
65	☐	WDNJ_ID_17	1,500.11	198.78	WDNJ_ID_17	20.00
66	☐	WDNJ_ID_170	1,500.07	5,218.47	WDNJ_ID_287	-2.27
67	☐	WDNJ_ID_173	1,500.00	2,444.57	WDNJ_ID_173	20.00
68	☐	WDNJ_ID_175	1,500.39	2,340.10	WDNJ_ID_175	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
69	☐	WDNJ_ID_176	1,500.04	3,192.90	WDNJ_ID_176	20.00
70	☐	WDNJ_ID_178	1,500.56	9,586.10	WDNJ_ID_357	-7.72
71	☐	WDNJ_ID_179	1,500.72	9,522.52	WDNJ_ID_357	-18.38
72	☐	WDNJ_ID_18	1,500.65	7,912.25	WDNJ_ID_459	14.62
73	☐	WDNJ_ID_180	1,500.65	2,634.02	WDNJ_ID_175	-3.16
74	☐	WDNJ_ID_181	1,500.36	4,581.38	WDNJ_ID_357	-58.03
75	☐	WDNJ_ID_182	1,501.58	4,812.18	WDNJ_ID_459	12.19
76	☐	WDNJ_ID_183	1,502.92	8,285.07	WDNJ_ID_459	-6.53
77	☐	WDNJ_ID_184	1,501.76	2,637.79	WDNJ_ID_507	-5.01
78	☐	WDNJ_ID_185	1,501.45	2,702.28	WDNJ_ID_175	-8.80
79	☐	WDNJ_ID_186	1,500.20	7,890.70	WDNJ_ID_186	20.00
80	☐	WDNJ_ID_187	1,500.20	9,054.50	WDNJ_ID_333	12.65
81	☐	WDNJ_ID_188	1,503.73	8,401.58	WDNJ_NI_545	9.67
82	☐	WDNJ_ID_189	1,502.01	5,958.84	WDNJ_ID_272	17.39
83	☐	WDNJ_ID_190	1,502.21	6,160.41	WDNJ_ID_256	19.71
84	☐	WDNJ_ID_191	1,503.84	8,781.04	WDNJ_ID_459	15.23
85	☐	WDNJ_ID_192	1,500.82	11,674.16	WDNJ_ID_192	20.00
86	☐	WDNJ_ID_193	1,509.31	7,651.47	WDNJ_ID_193	20.00
87	☐	WDNJ_ID_194	1,501.94	7,978.07	WDNJ_ID_508	15.58
88	☐	WDNJ_ID_195	1,500.57	9,688.47	WDNJ_ID_175	1.63
89	☐	WDNJ_ID_196	1,505.61	7,246.58	WDNJ_ID_459	17.94
90	☐	WDNJ_ID_197	1,501.13	7,390.06	WDNJ_ID_459	16.67
91	☐	WDNJ_ID_198	1,503.50	7,956.40	WDNJ_ID_459	11.98
92	☐	WDNJ_ID_199	1,501.00	8,143.16	WDNJ_ID_459	12.14
93	☐	WDNJ_ID_2	1,500.75	1,233.40	WDNJ_ID_128	2.47
94	☐	WDNJ_ID_200	1,502.55	7,220.03	WDNJ_ID_459	7.35
95	☐	WDNJ_ID_201	1,504.18	7,285.08	WDNJ_ID_201	20.00
96	☐	WDNJ_ID_202	1,503.87	8,202.20	WDNJ_ID_459	0.19
97	☐	WDNJ_ID_203	1,503.77	6,836.24	WDNJ_ID_203	20.00
98	☐	WDNJ_ID_204	1,501.92	6,101.60	WDNJ_ID_204	20.00
99	☐	WDNJ_ID_205	1,515.68	7,222.90	WDNJ_ID_459	17.31
100	☐	WDNJ_ID_206	1,500.36	4,764.41	WDNJ_ID_206	20.00
101	☐	WDNJ_ID_207	1,500.02	7,601.04	WDNJ_ID_459	3.64
102	☐	WDNJ_ID_208	1,501.97	5,571.50	WDNJ_ID_256	13.95

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
103	☐	WDNJ_ID_209	1,504.81	6,680.30	WDNJ_ID_256	16.96
104	☐	WDNJ_ID_210	1,501.76	5,869.90	WDNJ_ID_35	15.92
105	☐	WDNJ_ID_211	1,501.42	7,596.20	WDNJ_ID_211	20.00
106	☐	WDNJ_ID_212	1,500.93	6,740.88	WDNJ_NI_545	19.65
107	☐	WDNJ_ID_213	1,501.69	6,576.43	WDNJ_ID_213	20.00
108	☐	WDNJ_ID_214	1,502.26	8,444.89	WDNJ_ID_459	11.78
109	☐	WDNJ_ID_215	1,501.85	2,443.92	WDNJ_ID_507	11.22
110	☐	WDNJ_ID_216	1,505.11	5,756.34	WDNJ_ID_216	20.00
111	☐	WDNJ_ID_217	1,505.85	7,161.57	WDNJ_ID_459	17.57
112	☐	WDNJ_ID_218	1,503.41	7,473.03	WDNJ_ID_459	8.55
113	☐	WDNJ_ID_219	1,501.08	2,461.04	WDNJ_ID_175	10.80
114	☐	WDNJ_ID_220	1,501.61	2,487.70	WDNJ_ID_175	8.75
115	☐	WDNJ_ID_221	1,500.84	7,388.78	WDNJ_ID_459	15.04
116	☐	WDNJ_ID_222	1,500.74	5,501.88	WDNJ_ID_459	16.54
117	☐	WDNJ_ID_223	1,504.93	6,076.14	WDNJ_ID_459	19.99
118	☐	WDNJ_ID_224	1,500.00	6,631.61	WDNJ_ID_459	13.81
119	☐	WDNJ_ID_225	1,501.54	5,526.31	WDNJ_ID_225	20.00
120	☐	WDNJ_ID_226	1,501.09	6,260.55	WDNJ_ID_459	9.34
121	☐	WDNJ_ID_227	1,501.61	5,353.78	WDNJ_ID_459	19.43
122	☐	WDNJ_ID_229	1,502.01	6,639.23	WDNJ_ID_459	5.95
123	☐	WDNJ_ID_230	1,501.43	6,317.46	WDNJ_ID_459	10.61
124	☐	WDNJ_ID_231	1,500.32	6,314.87	WDNJ_ID_459	16.77
125	☐	WDNJ_ID_232	1,500.91	3,198.03	WDNJ_ID_8	12.83
126	☐	WDNJ_ID_233	1,500.97	6,160.14	WDNJ_ID_459	9.37
127	☐	WDNJ_ID_234	1,505.11	5,628.94	WDNJ_ID_234	20.00
128	☐	WDNJ_ID_235	1,501.58	2,343.72	WDNJ_ID_357	-11.35
129	☐	WDNJ_ID_236	1,501.42	2,290.43	WDNJ_ID_357	-23.19
130	☐	WDNJ_ID_237	1,505.79	5,558.28	WDNJ_ID_237	20.00
131	☐	WDNJ_ID_238	1,502.47	7,743.79	WDNJ_ID_459	-1.59
132	☐	WDNJ_ID_239	1,502.73	4,159.67	WDNJ_ID_239	20.00
133	☐	WDNJ_ID_24	1,501.69	6,463.83	WDNJ_ID_459	19.36
134	☐	WDNJ_ID_240	1,501.36	5,302.76	WDNJ_ID_459	20.00
135	☐	WDNJ_ID_241	1,503.08	6,394.21	WDNJ_ID_459	14.57
136	☐	WDNJ_ID_242	1,502.49	2,625.53	WDNJ_ID_242	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
137	☐	WDNJ_ID_244	1,500.72	5,158.96	WDNJ_ID_175	-11.33
138	☐	WDNJ_ID_245	1,500.95	5,659.72	WDNJ_ID_459	16.42
139	☐	WDNJ_ID_246	1,502.01	7,931.78	WDNJ_ID_459	-3.54
140	☐	WDNJ_ID_247	1,500.22	4,839.95	WDNJ_ID_175	-3.32
141	☐	WDNJ_ID_248	1,503.26	6,968.60	WDNJ_ID_459	3.96
142	☐	WDNJ_ID_249	1,500.74	6,417.56	WDNJ_ID_459	8.87
143	☐	WDNJ_ID_250	1,509.92	5,835.58	WDNJ_ID_250	20.00
144	☐	WDNJ_ID_251	1,500.68	6,200.42	WDNJ_ID_459	19.28
145	☐	WDNJ_ID_252	1,508.93	7,469.40	WDNJ_ID_459	16.06
146	☐	WDNJ_ID_254	1,501.11	2,290.24	WDNJ_ID_278	8.53
147	☐	WDNJ_ID_255	1,501.99	4,524.59	WDNJ_ID_255	20.00
148	☐	WDNJ_ID_256	1,501.81	3,356.29	WDNJ_ID_256	20.00
149	☐	WDNJ_ID_258	1,502.21	3,924.39	WDNJ_ID_258	20.00
150	☐	WDNJ_ID_259	1,500.70	4,709.77	WDNJ_ID_175	-9.15
151	☐	WDNJ_ID_26	1,501.58	7,278.52	WDNJ_ID_357	-36.48
152	☐	WDNJ_ID_260	1,500.68	6,169.67	WDNJ_ID_459	19.64
153	☐	WDNJ_ID_261	1,501.67	6,352.75	WDNJ_ID_261	20.00
154	☐	WDNJ_ID_262	1,509.18	3,938.17	WDNJ_ID_262	20.00
155	☐	WDNJ_ID_263	1,501.61	7,275.70	WDNJ_ID_459	17.24
156	☐	WDNJ_ID_264	1,501.61	5,334.24	WDNJ_ID_264	20.00
157	☐	WDNJ_ID_265	1,501.24	5,992.36	WDNJ_ID_265	20.00
158	☐	WDNJ_ID_266	1,501.36	4,301.37	WDNJ_ID_266	20.00
159	☐	WDNJ_ID_267	1,500.13	4,298.09	WDNJ_ID_175	2.13
160	☐	WDNJ_ID_269	1,501.09	5,354.76	WDNJ_ID_269	20.00
161	☐	WDNJ_ID_27	1,500.93	2,060.89	WDNJ_ID_27	20.00
162	☐	WDNJ_ID_270	1,500.32	3,641.90	WDNJ_ID_270	20.00
163	☐	WDNJ_ID_271	1,501.04	2,068.74	WDNJ_ID_357	6.81
164	☐	WDNJ_ID_272	1,502.01	4,401.60	WDNJ_ID_272	20.00
165	☐	WDNJ_ID_273	1,501.24	5,822.02	WDNJ_ID_273	20.00
166	☐	WDNJ_ID_274	1,500.02	2,737.09	WDNJ_ID_274	20.00
167	☐	WDNJ_ID_275	1,500.72	4,136.71	WDNJ_ID_275	20.00
168	☐	WDNJ_ID_276	1,500.74	2,073.23	WDNJ_ID_276	20.00
169	☐	WDNJ_ID_277	1,506.49	5,734.26	WDNJ_ID_277	20.00
170	☐	WDNJ_ID_278	1,500.34	1,807.62	WDNJ_ID_278	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
171	☐	WDNJ_ID_279	1,501.08	2,450.70	WDNJ_ID_175	11.60
172	☐	WDNJ_ID_28	1,501.27	6,576.14	WDNJ_ID_357	-38.91
173	☐	WDNJ_ID_280	1,501.54	4,244.35	WDNJ_ID_280	20.00
174	☐	WDNJ_ID_281	1,500.27	4,944.47	WDNJ_ID_281	20.00
175	☐	WDNJ_ID_283	1,500.75	1,324.04	WDNJ_ID_283	20.00
176	☐	WDNJ_ID_284	1,500.93	6,359.23	WDNJ_ID_326	18.33
177	☐	WDNJ_ID_285	1,501.15	3,372.79	WDNJ_ID_286	11.18
178	☐	WDNJ_ID_286	1,501.42	2,699.09	WDNJ_ID_286	20.00
179	☐	WDNJ_ID_287	1,501.08	3,747.89	WDNJ_ID_287	20.00
180	☐	WDNJ_ID_288	1,500.43	2,599.27	WDNJ_ID_288	20.00
181	☐	WDNJ_ID_29	1,500.41	3,600.01	WDNJ_ID_357	-5.82
182	☐	WDNJ_ID_290	1,501.79	2,640.11	WDNJ_ID_302	13.72
183	☐	WDNJ_ID_291	1,500.74	2,504.53	WDNJ_ID_291	20.00
184	☐	WDNJ_ID_292	1,500.00	5,047.73	WDNJ_ID_292	20.00
185	☐	WDNJ_ID_293	1,501.52	4,779.84	WDNJ_ID_286	2.33
186	☐	WDNJ_ID_294	1,500.84	5,503.29	WDNJ_ID_175	0.73
187	☐	WDNJ_ID_295	1,501.08	3,847.49	WDNJ_ID_295	20.00
188	☐	WDNJ_ID_296	1,500.61	3,625.90	WDNJ_ID_296	20.00
189	☐	WDNJ_ID_297	1,500.00	4,733.19	WDNJ_ID_297	20.00
190	☐	WDNJ_ID_298	1,500.00	4,683.29	WDNJ_ID_298	20.00
191	☐	WDNJ_ID_299	1,501.60	4,280.02	WDNJ_ID_287	11.59
192	☐	WDNJ_ID_30	1,502.10	6,663.75	WDNJ_ID_30	20.00
193	☐	WDNJ_ID_300	1,500.68	2,954.05	WDNJ_ID_300	20.00
194	☐	WDNJ_ID_301	1,500.93	4,952.99	WDNJ_ID_175	5.22
195	☐	WDNJ_ID_302	1,500.74	2,404.63	WDNJ_ID_302	20.00
196	☐	WDNJ_ID_303	1,500.38	3,983.06	WDNJ_ID_348	-85.67
197	☐	WDNJ_ID_304	1,500.34	3,130.33	WDNJ_ID_348	-32.37
198	☐	WDNJ_ID_305	1,500.00	2,264.84	WDNJ_ID_305	20.00
199	☐	WDNJ_ID_306	1,500.04	3,498.97	WDNJ_ID_348	-65.17
200	☐	WDNJ_ID_307	1,500.00	3,083.42	WDNJ_ID_348	-38.83
201	☐	WDNJ_ID_309	1,500.04	2,828.41	WDNJ_ID_348	-24.43
202	☐	WDNJ_ID_310	1,500.00	3,351.93	WDNJ_ID_348	-55.49
203	☐	WDNJ_ID_313	1,500.05	5,791.75	WDNJ_ID_313	20.00
204	☐	WDNJ_ID_314	1,500.43	6,637.27	WDNJ_NI_545	-15.14

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
205	☐	WDNJ_ID_316	1,500.41	3,731.42	WDNJ_ID_316	20.00
206	☐	WDNJ_ID_318	1,501.94	11,796.83	WDNJ_ID_318	20.00
207	☐	WDNJ_ID_32	1,500.41	2,075.44	WDNJ_ID_32	20.00
208	☐	WDNJ_ID_320	1,500.61	10,303.47	WDNJ_ID_175	-7.59
209	☐	WDNJ_ID_321	1,501.24	7,802.21	WDNJ_ID_459	-2.40
210	☐	WDNJ_ID_322	1,502.19	6,153.04	WDNJ_ID_459	9.79
211	☐	WDNJ_ID_323	1,502.35	9,991.60	WDNJ_ID_175	-9.60
212	☐	WDNJ_ID_324	1,500.16	5,982.95	WDNJ_ID_459	13.64
213	☐	WDNJ_ID_326	1,500.05	6,136.01	WDNJ_ID_326	20.00
214	☐	WDNJ_ID_327	1,500.00	4,693.82	WDNJ_ID_327	20.00
215	☐	WDNJ_ID_331	1,501.18	6,376.49	WDNJ_ID_495	3.24
216	☐	WDNJ_ID_333	1,501.58	7,459.43	WDNJ_ID_333	20.00
217	☐	WDNJ_ID_334	1,501.85	8,315.67	WDNJ_NI_545	2.64
218	☐	WDNJ_ID_335	1,503.14	9,701.49	WDNJ_ID_175	3.64
219	☐	WDNJ_ID_34	1,503.62	8,126.02	WDNJ_ID_459	16.49
220	☐	WDNJ_ID_343	1,500.07	5,071.08	WDNJ_ID_287	-0.52
221	☐	WDNJ_ID_344	1,500.23	3,048.61	WDNJ_ID_344	20.00
222	☐	WDNJ_ID_345	1,500.00	4,081.43	WDNJ_ID_348	-107.35
223	☐	WDNJ_ID_347	1,500.00	1,316.41	WDNJ_ID_348	17.63
224	☐	WDNJ_ID_348	1,500.00	1,224.07	WDNJ_ID_348	20.00
225	☐	WDNJ_ID_349	1,501.26	3,566.08	WDNJ_ID_357	-23.56
226	☐	WDNJ_ID_35	1,501.24	4,276.63	WDNJ_ID_35	20.00
227	☐	WDNJ_ID_350	1,502.10	3,731.01	WDNJ_ID_357	-29.89
228	☐	WDNJ_ID_351	1,500.45	2,050.25	WDNJ_ID_357	-19.88
229	☐	WDNJ_ID_352	1,500.00	1,321.71	WDNJ_ID_352	20.00
230	☐	WDNJ_ID_353	1,500.00	1,417.76	WDNJ_ID_352	10.90
231	☐	WDNJ_ID_354	1,500.07	1,812.80	WDNJ_ID_357	-11.35
232	☐	WDNJ_ID_355	1,500.07	1,782.49	WDNJ_ID_357	-8.64
233	☐	WDNJ_ID_356	1,500.00	1,491.07	WDNJ_ID_357	9.27
234	☐	WDNJ_ID_357	200.05	1,183.96	WDNJ_ID_357	20.00
235	☐	WDNJ_ID_358	1,500.16	6,406.24	WDNJ_ID_459	13.95
236	☐	WDNJ_ID_359	1,500.16	4,878.90	WDNJ_ID_359	20.00
237	☐	WDNJ_ID_36	1,501.60	5,768.38	WDNJ_ID_36	20.00
238	☐	WDNJ_ID_360	1,500.45	2,057.53	WDNJ_ID_357	-19.62

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
239	☐	WDNJ_ID_361	1,500.45	1,512.01	WDNJ_ID_361	20.00
240	☐	WDNJ_ID_362	1,500.14	7,521.27	WDNJ_ID_459	0.22
241	☐	WDNJ_ID_363	1,502.28	4,646.63	WDNJ_ID_363	20.00
242	☐	WDNJ_ID_364	1,500.81	3,189.52	WDNJ_ID_365	17.62
243	☐	WDNJ_ID_365	1,501.04	2,369.36	WDNJ_ID_365	20.00
244	☐	WDNJ_ID_366	1,501.13	2,951.43	WDNJ_ID_366	20.00
245	☐	WDNJ_ID_368	1,500.18	740.60	WDNJ_ID_368	20.00
246	☐	WDNJ_ID_37	1,501.60	6,499.26	WDNJ_ID_37	20.00
247	☐	WDNJ_ID_371	1,500.52	4,422.08	WDNJ_ID_357	-25.11
248	☐	WDNJ_ID_372	1,500.18	3,693.98	WDNJ_ID_374	15.13
249	☐	WDNJ_ID_373	1,500.00	3,398.97	WDNJ_ID_373	20.00
250	☐	WDNJ_ID_374	1,500.68	3,232.37	WDNJ_ID_374	20.00
251	☐	WDNJ_ID_377	1,500.79	5,643.88	WDNJ_ID_459	14.14
252	☐	WDNJ_ID_378	1,501.60	4,658.74	WDNJ_ID_316	17.41
253	☐	WDNJ_ID_38	1,501.79	1,156.55	WDNJ_ID_38	20.00
254	☐	WDNJ_ID_381	1,500.25	3,085.14	WDNJ_ID_381	20.00
255	☐	WDNJ_ID_382	1,501.26	3,019.25	WDNJ_ID_278	-4.98
256	☐	WDNJ_ID_384	1,500.13	6,444.95	WDNJ_ID_393	17.26
257	☐	WDNJ_ID_385	1,500.13	6,398.65	WDNJ_ID_393	18.57
258	☐	WDNJ_ID_386	1,500.13	6,734.14	WDNJ_ID_393	12.62
259	☐	WDNJ_ID_387	1,500.13	6,982.13	WDNJ_ID_393	12.71
260	☐	WDNJ_ID_388	1,500.13	6,622.46	WDNJ_ID_393	12.17
261	☐	WDNJ_ID_389	1,501.20	7,328.51	WDNJ_ID_393	13.91
262	☐	WDNJ_ID_39	1,500.61	5,889.62	WDNJ_ID_40	16.50
263	☐	WDNJ_ID_390	1,501.09	4,690.79	WDNJ_ID_390	20.00
264	☐	WDNJ_ID_392	1,501.26	3,760.44	WDNJ_ID_392	20.00
265	☐	WDNJ_ID_393	1,501.00	1,255.43	WDNJ_ID_393	20.00
266	☐	WDNJ_ID_394	1,500.07	2,644.83	WDNJ_ID_393	11.68
267	☐	WDNJ_ID_395	1,501.15	7,003.43	WDNJ_ID_175	-18.73
268	☐	WDNJ_ID_40	1,500.72	1,022.33	WDNJ_ID_40	20.00
269	☐	WDNJ_ID_41	1,501.26	7,622.85	WDNJ_ID_357	-0.64
270	☐	WDNJ_ID_411	1,501.26	6,438.77	WDNJ_ID_175	-17.92
271	☐	WDNJ_ID_412	1,500.13	5,481.33	WDNJ_ID_175	-3.95
272	☐	WDNJ_ID_413	1,500.14	2,710.97	WDNJ_ID_413	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
273	☐	WDNJ_ID_414	1,500.23	5,835.71	WDNJ_ID_175	-15.59
274	☐	WDNJ_ID_415	1,500.81	2,564.76	WDNJ_ID_175	2.53
275	☐	WDNJ_ID_42	1,500.86	1,560.50	WDNJ_ID_42	20.00
276	☐	WDNJ_ID_421	1,500.32	4,663.15	WDNJ_ID_175	-0.58
277	☐	WDNJ_ID_422	1,500.05	3,608.03	WDNJ_ID_508	15.36
278	☐	WDNJ_ID_423	1,500.30	3,934.94	WDNJ_ID_175	8.40
279	☐	WDNJ_ID_424	1,503.96	2,598.26	WDNJ_ID_507	-1.76
280	☐	WDNJ_ID_425	1,519.96	5,987.94	WDNJ_ID_425	20.00
281	☐	WDNJ_ID_426	1,505.11	4,777.51	WDNJ_ID_426	20.00
282	☐	WDNJ_ID_427	1,505.11	4,794.04	WDNJ_ID_427	20.00
283	☐	WDNJ_ID_43	1,501.72	2,841.93	WDNJ_ID_283	7.62
284	☐	WDNJ_ID_430	1,500.43	5,859.04	WDNJ_NI_545	13.07
285	☐	WDNJ_ID_432	1,502.98	7,436.63	WDNJ_NI_545	-3.61
286	☐	WDNJ_ID_433	1,501.17	7,091.89	WDNJ_NI_545	-12.28
287	☐	WDNJ_ID_434	1,502.39	5,692.89	WDNJ_ID_434	20.00
288	☐	WDNJ_ID_435	1,501.26	6,679.69	WDNJ_ID_435	20.00
289	☐	WDNJ_ID_436	1,501.38	7,850.59	WDNJ_ID_459	14.78
290	☐	WDNJ_ID_437	1,501.38	6,905.74	WDNJ_ID_437	20.00
291	☐	WDNJ_ID_438	1,502.21	6,517.10	WDNJ_ID_438	20.00
292	☐	WDNJ_ID_439	1,503.41	6,361.17	WDNJ_ID_439	20.00
293	☐	WDNJ_ID_44	1,502.62	2,453.12	WDNJ_ID_44	20.00
294	☐	WDNJ_ID_440	1,500.00	6,823.07	WDNJ_ID_459	12.85
295	☐	WDNJ_ID_441	1,500.52	5,226.91	WDNJ_ID_441	20.00
296	☐	WDNJ_ID_442	1,500.39	5,152.04	WDNJ_ID_442	20.00
297	☐	WDNJ_ID_443	1,500.52	5,515.72	WDNJ_ID_443	20.00
298	☐	WDNJ_ID_444	1,505.70	6,062.04	WDNJ_ID_459	19.58
299	☐	WDNJ_ID_445	1,500.79	5,897.58	WDNJ_ID_459	19.91
300	☐	WDNJ_ID_446	1,501.20	5,377.13	WDNJ_ID_446	20.00
301	☐	WDNJ_ID_447	1,500.00	6,890.55	WDNJ_ID_459	9.06
302	☐	WDNJ_ID_448	1,500.43	6,397.67	WDNJ_ID_459	15.93
303	☐	WDNJ_ID_45	1,500.20	969.44	WDNJ_ID_45	20.00
304	☐	WDNJ_ID_451	1,500.57	6,250.06	WDNJ_ID_459	16.32
305	☐	WDNJ_ID_452	1,500.61	6,602.97	WDNJ_ID_459	12.89
306	☐	WDNJ_ID_453	1,501.97	4,512.91	WDNJ_ID_453	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
307	☐	WDNJ_ID_454	1,504.59	5,907.82	WDNJ_ID_459	17.11
308	☐	WDNJ_ID_455	1,501.87	6,615.37	WDNJ_ID_459	9.83
309	☐	WDNJ_ID_456	1,503.32	6,062.97	WDNJ_ID_459	13.41
310	☐	WDNJ_ID_457	1,501.90	3,492.90	WDNJ_ID_274	18.53
311	☐	WDNJ_ID_458	1,501.56	2,146.03	WDNJ_ID_458	20.00
312	☐	WDNJ_ID_459	1,500.66	3,089.92	WDNJ_ID_459	20.00
313	☐	WDNJ_ID_46	1,501.24	2,459.37	WDNJ_ID_175	10.94
314	☐	WDNJ_ID_461	1,501.72	1,977.86	WDNJ_ID_278	17.65
315	☐	WDNJ_ID_462	1,502.46	4,294.95	WDNJ_ID_462	20.00
316	☐	WDNJ_ID_463	1,501.79	3,499.67	WDNJ_ID_463	20.00
317	☐	WDNJ_ID_464	1,501.85	3,372.74	WDNJ_ID_464	20.00
318	☐	WDNJ_ID_465	1,501.88	5,172.24	WDNJ_ID_465	20.00
319	☐	WDNJ_ID_466	1,500.00	9,114.83	WDNJ_ID_357	-11.12
320	☐	WDNJ_ID_467	1,500.30	9,406.33	WDNJ_ID_175	10.10
321	☐	WDNJ_ID_468	1,502.22	10,089.20	WDNJ_ID_333	12.16
322	☐	WDNJ_ID_469	1,502.15	9,418.91	WDNJ_ID_333	14.26
323	☐	WDNJ_ID_471	1,501.00	8,020.43	WDNJ_ID_333	19.48
324	☐	WDNJ_ID_472	1,502.89	4,727.05	WDNJ_ID_472	20.00
325	☐	WDNJ_ID_473	1,501.51	8,092.55	WDNJ_ID_175	-15.60
326	☐	WDNJ_ID_474	1,505.65	1,673.49	WDNJ_ID_393	12.27
327	☐	WDNJ_ID_475	1,500.20	2,785.20	WDNJ_ID_8	14.21
328	☐	WDNJ_ID_476	1,500.00	3,674.08	WDNJ_ID_348	-79.30
329	☐	WDNJ_ID_477	1,500.00	3,141.18	WDNJ_ID_348	-45.48
330	☐	WDNJ_ID_478	1,500.05	1,658.97	WDNJ_ID_348	-23.10
331	☐	WDNJ_ID_479	1,500.04	1,351.32	WDNJ_ID_352	17.25
332	☐	WDNJ_ID_48	1,502.96	5,031.75	WDNJ_ID_48	20.00
333	☐	WDNJ_ID_480	1,500.09	1,406.14	WDNJ_ID_357	16.23
334	☐	WDNJ_ID_481	1,500.00	4,022.07	WDNJ_ID_357	-44.86
335	☐	WDNJ_ID_482	1,500.00	3,753.20	WDNJ_ID_357	-39.73
336	☐	WDNJ_ID_483	1,500.00	3,892.94	WDNJ_ID_357	-52.06
337	☐	WDNJ_ID_484	1,500.30	2,523.97	WDNJ_ID_128	2.79
338	☐	WDNJ_ID_485	1,501.04	2,031.17	WDNJ_ID_357	-18.17
339	☐	WDNJ_ID_486	1,501.35	2,297.47	WDNJ_ID_486	20.00
340	☐	WDNJ_ID_487	1,501.31	3,795.41	WDNJ_ID_487	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
341	☐	WDNJ_ID_488	1,501.85	2,802.53	WDNJ_ID_357	-6.33
342	☐	WDNJ_ID_489	1,502.94	6,789.75	WDNJ_ID_357	9.84
343	☐	WDNJ_ID_49	1,505.09	5,205.81	WDNJ_ID_49	20.00
344	☐	WDNJ_ID_495	1,504.14	4,680.24	WDNJ_ID_495	20.00
345	☐	WDNJ_ID_496	1,500.20	8,045.47	WDNJ_ID_333	17.81
346	☐	WDNJ_ID_497	1,500.30	6,048.93	WDNJ_ID_495	9.38
347	☐	WDNJ_ID_5	1,501.26	722.58	WDNJ_ID_5	20.00
348	☐	WDNJ_ID_50	1,501.65	9,132.98	WDNJ_ID_459	-5.40
349	☐	WDNJ_ID_500	1,500.56	6,476.54	WDNJ_ID_495	18.12
350	☐	WDNJ_ID_501	1,500.04	867.35	WDNJ_ID_501	20.00
351	☐	WDNJ_ID_502	1,501.99	2,975.54	WDNJ_ID_502	20.00
352	☐	WDNJ_ID_503	1,501.36	2,659.13	WDNJ_ID_503	20.00
353	☐	WDNJ_ID_504	1,501.54	2,566.51	WDNJ_ID_175	2.44
354	☐	WDNJ_ID_505	1,500.66	2,319.73	WDNJ_ID_505	20.00
355	☐	WDNJ_ID_507	1,501.09	2,266.32	WDNJ_ID_507	20.00
356	☐	WDNJ_ID_508	1,500.74	2,286.71	WDNJ_ID_508	20.00
357	☐	WDNJ_ID_509	1,502.04	2,681.53	WDNJ_ID_175	-7.00
358	☐	WDNJ_ID_510	1,501.65	4,489.68	WDNJ_ID_175	-0.26
359	☐	WDNJ_ID_511	1,502.12	4,843.65	WDNJ_ID_175	-1.80
360	☐	WDNJ_ID_512	1,500.38	3,465.19	WDNJ_ID_512	20.00
361	☐	WDNJ_ID_513	1,500.93	2,871.84	WDNJ_ID_513	20.00
362	☐	WDNJ_ID_514	1,505.25	2,250.96	WDNJ_ID_514	20.00
363	☐	WDNJ_ID_515	1,502.04	2,571.30	WDNJ_ID_507	0.59
364	☐	WDNJ_ID_547	1,500.00	5,943.00	WDNJ_ID_495	11.30
365	☐	WDNJ_ID_549	1,500.00	3,994.31	WDNJ_ID_296	19.28
366	☐	WDNJ_ID_550	1,500.00	1,478.44	WDNJ_ID_550	20.00
367	☐	WDNJ_ID_553	1,500.00	3,749.56	WDNJ_ID_553	20.00
368	☐	WDNJ_ID_554	1,500.00	1,958.34	WDNJ_ID_554	20.00
369	☐	WDNJ_ID_555	1,500.00	7,172.99	WDNJ_ID_459	8.22
370	☐	WDNJ_ID_556	1,500.00	6,713.82	WDNJ_ID_459	12.89
371	☐	WDNJ_ID_557	1,500.00	6,222.64	WDNJ_ID_459	17.78
372	☐	WDNJ_ID_558	1,500.00	6,510.63	WDNJ_ID_459	15.37
373	☐	WDNJ_ID_560	1,500.00	6,985.04	WDNJ_ID_459	10.49
374	☐	WDNJ_ID_561	1,500.00	5,536.79	WDNJ_ID_561	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
375	☐	WDNJ_ID_563	1,500.00	5,489.93	WDNJ_ID_563	20.00
376	☐	WDNJ_ID_564	1,500.00	6,042.72	WDNJ_ID_564	20.00
377	☐	WDNJ_ID_565	1,500.00	5,883.08	WDNJ_ID_565	20.00
378	☐	WDNJ_ID_567	1,500.00	5,531.47	WDNJ_ID_567	20.00
379	☐	WDNJ_ID_568	1,500.00	6,059.03	WDNJ_ID_568	20.00
380	☐	WDNJ_ID_571	1,500.00	5,233.43	WDNJ_ID_571	20.00
381	☐	WDNJ_ID_573	1,500.00	2,508.56	WDNJ_ID_507	5.72
382	☐	WDNJ_ID_574	1,500.00	1,255.19	WDNJ_ID_348	19.16
383	☐	WDNJ_ID_575	1,500.00	8,551.72	WDNJ_ID_575	20.00
384	☐	WDNJ_ID_576	1,500.00	4,064.03	WDNJ_ID_8	13.23
385	☐	WDNJ_ID_577	1,500.00	3,135.81	WDNJ_ID_577	20.00
386	☐	WDNJ_ID_578	1,500.00	3,164.10	WDNJ_ID_128	13.06
387	☐	WDNJ_ID_58	1,500.74	3,200.71	WDNJ_ID_58	20.00
388	☐	WDNJ_ID_583	1,500.00	2,268.04	WDNJ_ID_583	20.00
389	☐	WDNJ_ID_585	1,500.00	2,708.15	WDNJ_ID_348	-11.04
390	☐	WDNJ_ID_586	1,500.00	2,577.29	WDNJ_ID_348	-5.30
391	☐	WDNJ_ID_587	1,500.00	2,882.44	WDNJ_ID_348	-19.22
392	☐	WDNJ_ID_6	1,500.70	127.89	WDNJ_ID_6	20.00
393	☐	WDNJ_ID_61	1,500.45	2,546.31	WDNJ_ID_175	3.98
394	☐	WDNJ_ID_62	1,500.45	2,407.36	WDNJ_ID_175	14.91
395	☐	WDNJ_ID_63	1,501.11	6,592.24	WDNJ_ID_357	-47.98
396	☐	WDNJ_ID_64	1,500.18	4,105.64	WDNJ_ID_357	-13.95
397	☐	WDNJ_ID_65	1,500.59	4,666.27	WDNJ_ID_357	-51.37
398	☐	WDNJ_ID_66	1,500.50	10,207.99	WDNJ_ID_175	10.54
399	☐	WDNJ_ID_67	1,500.50	6,488.02	WDNJ_ID_365	18.69
400	☐	WDNJ_ID_68	1,501.08	5,045.66	WDNJ_ID_68	20.00
401	☐	WDNJ_ID_69	1,503.14	8,753.29	WDNJ_ID_333	16.29
402	☐	WDNJ_ID_7	1,503.34	5,793.59	WDNJ_ID_7	20.00
403	☐	WDNJ_ID_70	1,500.39	6,079.04	WDNJ_ID_357	-5.07
404	☐	WDNJ_ID_71	1,501.72	9,276.06	WDNJ_ID_357	-22.60
405	☐	WDNJ_ID_72	1,501.27	7,603.20	WDNJ_ID_459	-3.21
406	☐	WDNJ_ID_73	1,501.74	5,573.32	WDNJ_ID_459	8.83
407	☐	WDNJ_ID_74	1,501.51	4,176.59	WDNJ_ID_74	20.00
408	☐	WDNJ_ID_75	1,500.70	6,039.57	WDNJ_ID_459	17.48

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
409	☐	WDNJ_ID_76	1,502.21	4,448.86	WDNJ_ID_76	20.00
410	☐	WDNJ_ID_77	1,501.76	4,716.52	WDNJ_ID_459	7.50
411	☐	WDNJ_ID_78	1,502.26	5,697.39	WDNJ_ID_459	12.10
412	☐	WDNJ_ID_79	1,502.58	5,522.25	WDNJ_ID_79	20.00
413	☐	WDNJ_ID_8	1,501.79	2,438.22	WDNJ_ID_8	20.00
414	☐	WDNJ_ID_80	1,501.58	5,001.94	WDNJ_ID_80	20.00
415	☐	WDNJ_ID_82	1,504.05	6,557.41	WDNJ_ID_82	20.00
416	☐	WDNJ_ID_83	1,502.24	8,344.13	WDNJ_ID_459	-1.63
417	☐	WDNJ_ID_84	1,500.27	6,651.62	WDNJ_ID_84	20.00
418	☐	WDNJ_ID_85	1,502.65	5,839.99	WDNJ_ID_85	20.00
419	☐	WDNJ_ID_86	1,502.67	4,830.08	WDNJ_ID_86	20.00
420	☐	WDNJ_ID_87	1,503.50	5,840.72	WDNJ_ID_87	20.00
421	☐	WDNJ_ID_88	1,513.79	6,566.40	WDNJ_ID_88	20.00
422	☐	WDNJ_ID_89	1,503.08	7,685.16	WDNJ_ID_84	17.22
423	☐	WDNJ_ID_90	1,501.67	7,522.19	WDNJ_ID_459	-1.65
424	☐	WDNJ_ID_91	1,502.85	5,480.80	WDNJ_ID_91	20.00
425	☐	WDNJ_ID_92	1,500.95	4,507.44	WDNJ_ID_92	20.00
426	☐	WDNJ_ID_93	1,502.85	7,289.89	WDNJ_ID_357	-10.30
427	☐	WDNJ_ID_94	1,502.01	5,056.38	WDNJ_ID_94	20.00
428	☐	WDNJ_ID_96	1,503.62	8,116.60	WDNJ_ID_459	16.52
429	☐	WDNJ_ID_97	1,502.62	6,106.73	WDNJ_ID_97	20.00
430	☐	WDNJ_ID_98	1,505.33	7,087.16	WDNJ_ID_459	13.89
431	☐	WDNJ_ID_99	1,500.16	2,324.78	WDNJ_ID_99	20.00
432	☐	WDNJ_NI_545	1,500.11	355.29	WDNJ_NI_545	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
1	☐	WDNJ_ID_100	49.72	20.00	4,047.48	30.71
2	☐	WDNJ_ID_101	17.95	20.00	1,464.59	41.85
3	☐	WDNJ_ID_102	60.85	20.00	7,838.18	37.39
4	☐	WDNJ_ID_103	74.53	20.00	5,037.56	98.72
5	☐	WDNJ_ID_104	74.53	20.00	5,037.55	67.61
6	☐	WDNJ_ID_105	82.79	20.00	4,085.50	28.82
7	☐	WDNJ_ID_106	67.99	20.00	4,562.76	26.64
8	☐	WDNJ_ID_107	49.89	20.00	7,356.27	32.03
9	☐	WDNJ_ID_108	106.73	20.00	6,723.87	20.24
10	☐	WDNJ_ID_109	116.97	20.00	6,263.43	31.31
11	☐	WDNJ_ID_110	113.03	20.00	6,211.75	31.53
12	☐	WDNJ_ID_111	101.99	20.00	4,168.67	26.89
13	☐	WDNJ_ID_112	52.02	20.00	3,574.52	25.19
14	☐	WDNJ_ID_113	46.90	20.00	5,990.23	49.57
15	☐	WDNJ_ID_114	52.72	20.00	3,784.80	42.28
16	☐	WDNJ_ID_115	72.85	20.00	3,614.72	20.00
17	☐	WDNJ_ID_116	47.56	20.00	7,150.46	47.14
18	☐	WDNJ_ID_117	111.68	20.00	7,133.47	25.96
19	☐	WDNJ_ID_118	104.33	20.00	4,443.72	28.74
20	☐	WDNJ_ID_119	114.60	20.00	5,643.02	29.51
21	☐	WDNJ_ID_12	74.38	20.00	4,496.79	103.11
22	☐	WDNJ_ID_120	78.27	20.00	3,840.41	20.00
23	☐	WDNJ_ID_121	52.08	20.00	3,609.50	35.86
24	☐	WDNJ_ID_122	22.29	20.00	1,541.01	20.02
25	☐	WDNJ_ID_124	73.98	20.00	3,988.63	59.66
26	☐	WDNJ_ID_125	47.82	20.00	2,164.85	37.47
27	☐	WDNJ_ID_126	-26.30	20.00	1,051.30	20.00
28	☐	WDNJ_ID_127	-17.30	20.00	1,071.33	20.00
29	☐	WDNJ_ID_128	-298.39	20.00	580.83	20.00
30	☐	WDNJ_ID_129	70.91	20.00	3,053.81	57.49
31	☐	WDNJ_ID_130	16.59	20.00	1,435.07	20.00
32	☐	WDNJ_ID_131	46.75	20.00	5,797.25	50.31
33	☐	WDNJ_ID_132	46.67	20.00	5,690.54	68.82
34	☐	WDNJ_ID_133	75.15	20.00	2,922.69	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
35	☐	WDNJ_ID_134	49.71	20.00	3,995.37	68.40
36	☐	WDNJ_ID_135	49.65	20.00	3,582.58	45.86
37	☐	WDNJ_ID_137	73.83	20.00	5,051.96	73.82
38	☐	WDNJ_ID_138	80.68	20.00	2,488.39	21.40
39	☐	WDNJ_ID_139	16.21	20.00	1,450.67	34.09
40	☐	WDNJ_ID_140	68.64	20.00	2,153.79	20.60
41	☐	WDNJ_ID_141	70.94	20.00	2,789.28	28.06
42	☐	WDNJ_ID_142	76.93	20.00	3,092.45	20.00
43	☐	WDNJ_ID_143	85.60	20.00	2,772.17	21.76
44	☐	WDNJ_ID_144	35.65	20.00	2,442.56	20.00
45	☐	WDNJ_ID_145	68.42	20.00	2,726.96	20.00
46	☐	WDNJ_ID_146	61.11	20.00	2,521.96	20.00
47	☐	WDNJ_ID_147	61.47			
48	☐	WDNJ_ID_148	100.49	20.00	3,706.15	20.00
49	☐	WDNJ_ID_149	60.41	20.00	7,194.26	32.65
50	☐	WDNJ_ID_150	48.41	20.00	9,122.16	45.80
51	☐	WDNJ_ID_151	97.61	20.00	4,503.00	28.87
52	☐	WDNJ_ID_152	122.98	20.00	5,771.88	30.53
53	☐	WDNJ_ID_153	46.99	20.00	6,139.13	30.00
54	☐	WDNJ_ID_154	52.63	20.00	1,749.33	20.00
55	☐	WDNJ_ID_156	118.81	20.00	5,959.27	30.63
56	☐	WDNJ_ID_157	99.57	20.00	10,592.19	27.62
57	☐	WDNJ_ID_158	57.20	20.00	2,082.22	20.00
58	☐	WDNJ_ID_159	31.10	20.00	1,688.08	65.93
59	☐	WDNJ_ID_16	64.78	20.00	2,849.02	20.23
60	☐	WDNJ_ID_160	61.05	20.00	2,593.05	81.15
61	☐	WDNJ_ID_161	68.09	20.00	3,040.26	44.16
62	☐	WDNJ_ID_165	63.29	20.00	2,018.40	21.24
63	☐	WDNJ_ID_168	80.13	20.00	2,529.80	25.02
64	☐	WDNJ_ID_169	56.08	20.00	2,287.66	20.67
65	☐	WDNJ_ID_17	-2,634.55	20.00	198.78	20.00
66	☐	WDNJ_ID_170	61.80	20.00	4,249.52	45.98
67	☐	WDNJ_ID_173	74.19	20.00	2,444.54	21.10
68	☐	WDNJ_ID_175	49.11	20.00	2,340.09	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
69	☐	WDNJ_ID_176	70.32	20.00	3,192.90	20.00
70	☐	WDNJ_ID_178	74.94	20.00	7,184.46	66.75
71	☐	WDNJ_ID_179	73.94	20.00	5,510.23	80.36
72	☐	WDNJ_ID_18	47.58	20.00	7,195.95	36.94
73	☐	WDNJ_ID_180	49.11	20.00	2,340.35	47.65
74	☐	WDNJ_ID_181	58.44	20.00	2,403.52	104.19
75	☐	WDNJ_ID_182	44.90	20.00	4,219.21	32.86
76	☐	WDNJ_ID_183	46.74	20.00	5,781.98	59.85
77	☐	WDNJ_ID_184	51.94	20.00	2,338.02	48.33
78	☐	WDNJ_ID_185	49.11	20.00	2,341.15	54.97
79	☐	WDNJ_ID_186	64.73	20.00	7,890.62	20.46
80	☐	WDNJ_ID_187	48.19	20.00	7,982.39	30.67
81	☐	WDNJ_ID_188	64.63	20.00	7,526.48	33.07
82	☐	WDNJ_ID_189	87.55	20.00	5,841.50	30.35
83	☐	WDNJ_ID_190	92.20	20.00	6,142.09	29.84
84	☐	WDNJ_ID_191	48.06	20.00	8,071.94	25.54
85	☐	WDNJ_ID_192	112.35	20.00	11,655.27	20.00
86	☐	WDNJ_ID_193	77.76	20.00	7,636.48	30.43
87	☐	WDNJ_ID_194	61.51			
88	☐	WDNJ_ID_195	49.90	20.00	7,843.97	41.17
89	☐	WDNJ_ID_196	47.47	20.00	6,975.10	27.92
90	☐	WDNJ_ID_197	47.46	20.00	6,956.00	31.70
91	☐	WDNJ_ID_198	47.46	20.00	6,945.42	43.40
92	☐	WDNJ_ID_199	47.55	20.00	7,124.72	41.55
93	☐	WDNJ_ID_2	-34.21	20.00	1,086.54	39.52
94	☐	WDNJ_ID_200	46.84	20.00	5,907.51	52.43
95	☐	WDNJ_ID_201	122.41	20.00	7,285.08	20.00
96	☐	WDNJ_ID_202	47.00	20.00	6,144.45	56.10
97	☐	WDNJ_ID_203	108.94	20.00	6,830.03	31.19
98	☐	WDNJ_ID_204	99.99	20.00	6,097.04	29.03
99	☐	WDNJ_ID_205	47.41	20.00	6,875.39	30.12
100	☐	WDNJ_ID_206	80.36	20.00	4,762.36	29.78
101	☐	WDNJ_ID_207	46.85	20.00	5,931.25	60.81
102	☐	WDNJ_ID_208	90.54	20.00	5,345.53	32.92

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
103	☐	WDNJ_ID_209	92.81	20.00	6,534.31	34.67
104	☐	WDNJ_ID_210	96.68	20.00	5,715.60	32.21
105	☐	WDNJ_ID_211	52.46	20.00	7,595.95	20.52
106	☐	WDNJ_ID_212	64.05	20.00	6,713.19	21.14
107	☐	WDNJ_ID_213	105.83	20.00	6,570.75	30.50
108	☐	WDNJ_ID_214	47.65	20.00	7,349.05	39.73
109	☐	WDNJ_ID_215	51.84	20.00	2,335.29	30.53
110	☐	WDNJ_ID_216	116.88	20.00	5,751.55	31.32
111	☐	WDNJ_ID_217	47.41	20.00	6,848.16	29.64
112	☐	WDNJ_ID_218	47.04	20.00	6,212.44	52.18
113	☐	WDNJ_ID_219	49.11	20.00	2,340.77	31.58
114	☐	WDNJ_ID_220	49.11	20.00	2,341.32	33.97
115	☐	WDNJ_ID_221	47.37	20.00	6,766.99	37.09
116	☐	WDNJ_ID_222	46.18	20.00	5,155.59	43.27
117	☐	WDNJ_ID_223	46.95	20.00	6,074.75	20.99
118	☐	WDNJ_ID_224	46.87	20.00	5,956.61	41.39
119	☐	WDNJ_ID_225	114.31	20.00	5,519.85	33.23
120	☐	WDNJ_ID_226	46.28	20.00	5,266.63	45.16
121	☐	WDNJ_ID_227	46.31	20.00	5,296.11	22.28
122	☐	WDNJ_ID_229	46.35	20.00	5,337.23	53.82
123	☐	WDNJ_ID_230	46.42	20.00	5,409.79	46.00
124	☐	WDNJ_ID_231	46.87	20.00	5,955.63	32.55
125	☐	WDNJ_ID_232	88.74	20.00	3,073.09	32.62
126	☐	WDNJ_ID_233	46.20	20.00	5,169.46	54.67
127	☐	WDNJ_ID_234	116.36	20.00	5,624.42	31.02
128	☐	WDNJ_ID_235	38.20	20.00	1,848.95	50.67
129	☐	WDNJ_ID_236	31.10	20.00	1,688.09	62.84
130	☐	WDNJ_ID_237	113.80	20.00	5,555.27	28.94
131	☐	WDNJ_ID_238	46.67	20.00	5,691.58	64.16
132	☐	WDNJ_ID_239	108.16	20.00	4,159.01	24.57
133	☐	WDNJ_ID_24	47.17	20.00	6,386.32	22.39
134	☐	WDNJ_ID_240	46.32	20.00	5,302.24	20.55
135	☐	WDNJ_ID_241	46.77	20.00	5,814.73	39.19
136	☐	WDNJ_ID_242	87.36	20.00	2,625.53	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
137	☐	WDNJ_ID_244	49.62	20.00	3,407.99	55.11
138	☐	WDNJ_ID_245	46.33	20.00	5,307.50	31.70
139	☐	WDNJ_ID_246	46.68	20.00	5,708.36	69.33
140	☐	WDNJ_ID_247	49.64	20.00	3,560.15	49.76
141	☐	WDNJ_ID_248	46.47	20.00	5,462.82	58.21
142	☐	WDNJ_ID_249	46.38	20.00	5,362.75	50.07
143	☐	WDNJ_ID_250	124.13	20.00	5,832.41	30.01
144	☐	WDNJ_ID_251	46.98	20.00	6,116.88	23.75
145	☐	WDNJ_ID_252	47.46	20.00	6,958.58	33.52
146	☐	WDNJ_ID_254	52.15	20.00	2,107.54	31.59
147	☐	WDNJ_ID_255	105.88	20.00	4,523.38	25.75
148	☐	WDNJ_ID_256	80.44	20.00	3,356.01	22.37
149	☐	WDNJ_ID_258	101.30	20.00	3,923.86	23.93
150	☐	WDNJ_ID_259	49.56	20.00	3,087.91	48.14
151	☐	WDNJ_ID_26	74.13	20.00	4,140.46	96.56
152	☐	WDNJ_ID_260	46.99	20.00	6,127.54	22.37
153	☐	WDNJ_ID_261	123.40	20.00	6,345.60	34.11
154	☐	WDNJ_ID_262	114.17	20.00	3,937.55	24.89
155	☐	WDNJ_ID_263	47.44	20.00	6,916.06	30.47
156	☐	WDNJ_ID_264	114.42	20.00	5,331.38	28.94
157	☐	WDNJ_ID_265	125.44	20.00	5,988.33	31.28
158	☐	WDNJ_ID_266	79.46	20.00	4,301.37	20.00
159	☐	WDNJ_ID_267	49.61	20.00	3,370.68	35.67
160	☐	WDNJ_ID_269	116.27	20.00	5,350.98	30.35
161	☐	WDNJ_ID_27	72.45	20.00	2,060.89	20.00
162	☐	WDNJ_ID_270	108.05	20.00	3,641.37	24.44
163	☐	WDNJ_ID_271	38.20	20.00	1,848.40	34.67
164	☐	WDNJ_ID_272	83.49	20.00	4,400.43	24.28
165	☐	WDNJ_ID_273	124.10	20.00	5,818.44	30.63
166	☐	WDNJ_ID_274	80.08	20.00	2,736.99	21.67
167	☐	WDNJ_ID_275	104.15	20.00	4,135.93	24.78
168	☐	WDNJ_ID_276	55.89	20.00	2,073.23	20.12
169	☐	WDNJ_ID_277	116.84	20.00	5,729.41	31.38
170	☐	WDNJ_ID_278	40.10	20.00	1,807.61	20.07

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
171	☐	WDNJ_ID_279	49.11	20.00	2,340.78	30.96
172	☐	WDNJ_ID_28	73.46	20.00	3,684.50	91.69
173	☐	WDNJ_ID_280	101.74	20.00	4,243.40	25.03
174	☐	WDNJ_ID_281	133.30	20.00	4,942.35	32.43
175	☐	WDNJ_ID_283	5.22	20.00	1,324.03	20.00
176	☐	WDNJ_ID_284	105.08			
177	☐	WDNJ_ID_285	46.18	20.00	2,999.41	33.19
178	☐	WDNJ_ID_286	44.01	20.00	2,699.09	20.00
179	☐	WDNJ_ID_287	59.94	20.00	3,746.84	22.76
180	☐	WDNJ_ID_288	52.62	20.00	2,599.16	21.04
181	☐	WDNJ_ID_29	65.78	20.00	2,874.13	52.43
182	☐	WDNJ_ID_290	75.55	20.00	2,545.75	26.91
183	☐	WDNJ_ID_291	79.04	20.00	2,504.53	20.00
184	☐	WDNJ_ID_292	122.93	20.00	5,046.12	27.60
185	☐	WDNJ_ID_293	50.34	20.00	3,994.71	37.67
186	☐	WDNJ_ID_294	49.75	20.00	4,350.72	47.37
187	☐	WDNJ_ID_295	72.51	20.00	3,847.37	27.80
188	☐	WDNJ_ID_296	103.01	20.00	3,625.53	23.48
189	☐	WDNJ_ID_297	118.60	20.00	4,731.36	27.91
190	☐	WDNJ_ID_298	112.37	20.00	4,681.74	26.87
191	☐	WDNJ_ID_299	60.67	20.00	3,924.27	31.47
192	☐	WDNJ_ID_30	69.46	20.00	6,657.24	26.43
193	☐	WDNJ_ID_300	63.52	20.00	2,953.88	21.52
194	☐	WDNJ_ID_301	49.73	20.00	4,149.51	36.95
195	☐	WDNJ_ID_302	71.81	20.00	2,404.63	20.00
196	☐	WDNJ_ID_303	54.21	20.00	2,058.95	134.83
197	☐	WDNJ_ID_304	54.21	20.00	2,058.89	91.10
198	☐	WDNJ_ID_305	80.48	20.00	2,264.84	20.00
199	☐	WDNJ_ID_306	45.85	20.00	1,909.91	132.43
200	☐	WDNJ_ID_307	45.85	20.00	1,910.18	115.93
201	☐	WDNJ_ID_309	45.85	20.00	1,909.91	92.19
202	☐	WDNJ_ID_310	45.85	20.00	1,910.18	134.92
203	☐	WDNJ_ID_313	101.81	20.00	5,791.75	20.00
204	☐	WDNJ_ID_314	61.74	20.00	4,885.18	60.05

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
205	☐	WDNJ_ID_316	64.86	20.00	3,730.16	23.37
206	☐	WDNJ_ID_318	111.65	20.00	11,776.29	20.00
207	☐	WDNJ_ID_32	68.02	20.00	2,075.44	20.00
208	☐	WDNJ_ID_320	49.90	20.00	7,564.87	53.59
209	☐	WDNJ_ID_321	46.67	20.00	5,683.76	63.84
210	☐	WDNJ_ID_322	46.22	20.00	5,194.21	54.38
211	☐	WDNJ_ID_323	49.89	20.00	7,227.64	56.80
212	☐	WDNJ_ID_324	46.38	20.00	5,362.17	40.30
213	☐	WDNJ_ID_326	104.77	20.00	6,136.01	20.00
214	☐	WDNJ_ID_327	126.08	20.00	4,692.80	26.46
215	☐	WDNJ_ID_331	64.31	20.00	5,444.05	35.00
216	☐	WDNJ_ID_333	47.78	20.00	7,459.43	20.00
217	☐	WDNJ_ID_334	64.28	20.00	6,990.79	38.06
218	☐	WDNJ_ID_335	49.91	20.00	8,065.22	35.46
219	☐	WDNJ_ID_34	47.78	20.00	7,625.05	29.36
220	☐	WDNJ_ID_343	61.60	20.00	4,186.37	44.11
221	☐	WDNJ_ID_344	70.30	20.00	3,048.45	21.67
222	☐	WDNJ_ID_345	45.85	20.00	1,909.87	154.69
223	☐	WDNJ_ID_347	-3.21	20.00	1,294.19	22.70
224	☐	WDNJ_ID_348	-13.76	20.00	1,224.08	20.44
225	☐	WDNJ_ID_349	56.66	20.00	2,266.59	74.13
226	☐	WDNJ_ID_35	91.72	20.00	4,275.75	24.25
227	☐	WDNJ_ID_350	56.66	20.00	2,267.49	76.69
228	☐	WDNJ_ID_351	22.59	20.00	1,538.67	59.81
229	☐	WDNJ_ID_352	2.67	20.00	1,321.71	20.29
230	☐	WDNJ_ID_353	2.67	20.00	1,321.71	29.71
231	☐	WDNJ_ID_354	14.74	20.00	1,430.05	51.47
232	☐	WDNJ_ID_355	14.74	20.00	1,430.05	50.12
233	☐	WDNJ_ID_356	8.52	20.00	1,358.19	30.97
234	☐	WDNJ_ID_357	72.75	20.00	1,183.96	20.00
235	☐	WDNJ_ID_358	46.73	20.00	5,767.77	38.15
236	☐	WDNJ_ID_359	110.80	20.00	4,877.41	26.52
237	☐	WDNJ_ID_36	93.89	20.00	5,764.65	27.71
238	☐	WDNJ_ID_360	23.09	20.00	1,546.37	59.54

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
239	☐	WDNJ_ID_361	20.89	20.00	1,511.99	20.00
240	☐	WDNJ_ID_362	46.63	20.00	5,640.38	59.42
241	☐	WDNJ_ID_363	102.31	20.00	4,645.33	25.64
242	☐	WDNJ_ID_364	83.61	20.00	3,142.77	26.50
243	☐	WDNJ_ID_365	68.65	20.00	2,369.36	20.00
244	☐	WDNJ_ID_366	86.33	20.00	2,951.43	20.00
245	☐	WDNJ_ID_368	-93.59	20.00	740.55	20.00
246	☐	WDNJ_ID_37	95.36	20.00	6,493.01	29.63
247	☐	WDNJ_ID_371	63.20	20.00	3,226.57	59.84
248	☐	WDNJ_ID_372	84.80	20.00	3,578.12	28.19
249	☐	WDNJ_ID_373	86.78	20.00	3,398.60	22.94
250	☐	WDNJ_ID_374	81.45	20.00	3,232.07	22.54
251	☐	WDNJ_ID_377	46.11	20.00	5,085.50	44.32
252	☐	WDNJ_ID_378	67.93	20.00	4,539.30	28.65
253	☐	WDNJ_ID_38	-44.15	20.00	1,156.38	20.00
254	☐	WDNJ_ID_381	64.10	20.00	3,085.14	20.28
255	☐	WDNJ_ID_382	63.17	20.00	2,554.60	45.19
256	☐	WDNJ_ID_384	110.37	20.00	6,347.84	23.18
257	☐	WDNJ_ID_385	110.37	20.00	6,347.84	21.82
258	☐	WDNJ_ID_386	110.60	20.00	6,470.26	27.64
259	☐	WDNJ_ID_387	111.03	20.00	6,711.66	27.56
260	☐	WDNJ_ID_388	110.37	20.00	6,347.84	28.10
261	☐	WDNJ_ID_389	111.61	20.00	7,089.33	26.37
262	☐	WDNJ_ID_39	62.66	20.00	5,660.28	23.88
263	☐	WDNJ_ID_390	81.61	20.00	4,690.79	20.00
264	☐	WDNJ_ID_392	82.92	20.00	3,760.44	20.00
265	☐	WDNJ_ID_393	-17.86	20.00	1,255.44	20.00
266	☐	WDNJ_ID_394	80.13	20.00	2,529.84	31.05
267	☐	WDNJ_ID_395	49.76	20.00	4,555.65	71.42
268	☐	WDNJ_ID_40	-29.35	20.00	1,022.31	20.00
269	☐	WDNJ_ID_41	73.50	20.00	5,569.46	57.24
270	☐	WDNJ_ID_411	49.73	20.00	4,156.89	70.18
271	☐	WDNJ_ID_412	49.72	20.00	4,050.17	50.07
272	☐	WDNJ_ID_413	45.11	20.00	2,710.97	20.00

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
273	☐	WDNJ_ID_414	49.68	20.00	3,790.81	63.06
274	☐	WDNJ_ID_415	49.11	20.00	2,340.51	40.47
275	☐	WDNJ_ID_42	25.80	20.00	1,560.50	20.03
276	☐	WDNJ_ID_421	49.64	20.00	3,553.98	46.40
277	☐	WDNJ_ID_422	60.07			
278	☐	WDNJ_ID_423	49.63	20.00	3,482.65	25.97
279	☐	WDNJ_ID_424	51.81	20.00	2,336.32	44.20
280	☐	WDNJ_ID_425	119.75	20.00	5,983.32	31.23
281	☐	WDNJ_ID_426	110.69	20.00	4,775.35	27.83
282	☐	WDNJ_ID_427	111.64	20.00	4,791.86	27.91
283	☐	WDNJ_ID_43	55.32	20.00	2,551.90	34.76
284	☐	WDNJ_ID_430	62.66	20.00	5,425.61	40.86
285	☐	WDNJ_ID_432	63.33	20.00	5,935.65	51.78
286	☐	WDNJ_ID_433	62.50	20.00	5,317.90	59.01
287	☐	WDNJ_ID_434	101.20	20.00	5,689.76	27.87
288	☐	WDNJ_ID_435	111.31	20.00	6,673.82	31.29
289	☐	WDNJ_ID_436	47.56	20.00	7,158.95	36.23
290	☐	WDNJ_ID_437	114.29	20.00	6,897.62	33.34
291	☐	WDNJ_ID_438	111.81	20.00	6,510.85	31.72
292	☐	WDNJ_ID_439	122.96	20.00	6,355.76	32.38
293	☐	WDNJ_ID_44	55.07	20.00	2,453.03	21.13
294	☐	WDNJ_ID_440	46.93	20.00	6,037.64	43.13
295	☐	WDNJ_ID_441	121.56	20.00	5,224.68	28.63
296	☐	WDNJ_ID_442	123.38	20.00	5,150.04	28.37
297	☐	WDNJ_ID_443	126.04	20.00	5,513.03	29.65
298	☐	WDNJ_ID_444	46.91	20.00	6,014.14	22.57
299	☐	WDNJ_ID_445	46.82	20.00	5,887.60	21.24
300	☐	WDNJ_ID_446	128.10	20.00	5,375.19	28.51
301	☐	WDNJ_ID_447	46.73	20.00	5,770.66	51.97
302	☐	WDNJ_ID_448	46.87	20.00	5,947.75	34.86
303	☐	WDNJ_ID_45	-117.65	20.00	969.44	20.00
304	☐	WDNJ_ID_451	46.80	20.00	5,849.82	32.56
305	☐	WDNJ_ID_452	46.79	20.00	5,847.44	42.55
306	☐	WDNJ_ID_453	112.89	20.00	4,511.93	25.63

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
307	☐	WDNJ_ID_454	46.60	20.00	5,605.71	29.98
308	☐	WDNJ_ID_455	46.59	20.00	5,601.38	48.95
309	☐	WDNJ_ID_456	46.43	20.00	5,413.93	40.63
310	☐	WDNJ_ID_457	90.37	20.00	3,461.67	24.53
311	☐	WDNJ_ID_458	51.12	20.00	2,146.00	20.73
312	☐	WDNJ_ID_459	41.55	20.00	3,088.94	21.64
313	☐	WDNJ_ID_46	49.11	20.00	2,340.93	31.62
314	☐	WDNJ_ID_461	46.13	20.00	1,942.33	22.43
315	☐	WDNJ_ID_462	56.10	20.00	4,172.51	20.00
316	☐	WDNJ_ID_463	104.11	20.00	3,499.67	20.00
317	☐	WDNJ_ID_464	103.35	20.00	3,372.74	20.00
318	☐	WDNJ_ID_465	100.70	20.00	5,169.98	31.44
319	☐	WDNJ_ID_466	74.49	20.00	6,076.65	83.01
320	☐	WDNJ_ID_467	49.92	20.00	8,305.96	28.87
321	☐	WDNJ_ID_468	48.19	20.00	8,833.14	39.29
322	☐	WDNJ_ID_469	48.10	20.00	8,509.33	33.33
323	☐	WDNJ_ID_471	47.95	20.00	7,943.69	21.66
324	☐	WDNJ_ID_472	72.83	20.00	4,727.05	20.00
325	☐	WDNJ_ID_473	49.83	20.00	5,437.59	69.38
326	☐	WDNJ_ID_474	30.89	20.00	1,605.65	27.94
327	☐	WDNJ_ID_475	81.96	20.00	2,696.44	29.74
328	☐	WDNJ_ID_476	43.97	20.00	1,878.24	124.16
329	☐	WDNJ_ID_477	41.91	20.00	1,843.32	88.42
330	☐	WDNJ_ID_478	-3.21	20.00	1,294.25	64.16
331	☐	WDNJ_ID_479	2.67	20.00	1,321.75	23.30
332	☐	WDNJ_ID_48	81.23	20.00	5,030.21	24.43
333	☐	WDNJ_ID_480	8.52	20.00	1,358.28	24.43
334	☐	WDNJ_ID_481	55.24	20.00	2,189.06	99.65
335	☐	WDNJ_ID_482	53.07	20.00	2,144.73	99.38
336	☐	WDNJ_ID_483	51.06	20.00	2,134.00	112.70
337	☐	WDNJ_ID_484	54.47	20.00	2,228.32	37.36
338	☐	WDNJ_ID_485	22.59	20.00	1,539.26	65.42
339	☐	WDNJ_ID_486	42.21	20.00	2,297.45	20.57
340	☐	WDNJ_ID_487	75.88	20.00	3,790.81	25.03

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
341	☐	WDNJ_ID_488	50.72	20.00	2,282.27	44.52
342	☐	WDNJ_ID_489	72.75	20.00	5,565.39	36.98
343	☐	WDNJ_ID_49	79.65	20.00	5,203.44	25.22
344	☐	WDNJ_ID_495	63.41	20.00	4,680.24	20.00
345	☐	WDNJ_ID_496	48.04	20.00	7,731.67	23.56
346	☐	WDNJ_ID_497	64.31	20.00	5,443.20	31.81
347	☐	WDNJ_ID_5	-265.06	20.00	722.57	20.00
348	☐	WDNJ_ID_50	47.26	20.00	6,449.50	47.95
349	☐	WDNJ_ID_500	65.01	20.00	6,377.10	25.77
350	☐	WDNJ_ID_501	-117.31	20.00	867.35	20.00
351	☐	WDNJ_ID_502	83.64	20.00	2,975.54	20.00
352	☐	WDNJ_ID_503	44.89	20.00	2,659.13	20.00
353	☐	WDNJ_ID_504	49.11	20.00	2,341.24	42.34
354	☐	WDNJ_ID_505	61.86	20.00	2,319.73	20.00
355	☐	WDNJ_ID_507	49.35	20.00	2,266.31	20.00
356	☐	WDNJ_ID_508	53.61	20.00	2,286.70	20.00
357	☐	WDNJ_ID_509	49.11	20.00	2,341.74	53.31
358	☐	WDNJ_ID_510	49.62	20.00	3,415.04	42.71
359	☐	WDNJ_ID_511	49.66	20.00	3,649.45	48.04
360	☐	WDNJ_ID_512	72.00	20.00	3,465.19	20.00
361	☐	WDNJ_ID_513	65.68	20.00	2,871.84	20.00
362	☐	WDNJ_ID_514	42.80	20.00	2,250.96	20.00
363	☐	WDNJ_ID_515	51.87	20.00	2,336.35	43.24
364	☐	WDNJ_ID_547	64.31	20.00	5,442.90	28.58
365	☐	WDNJ_ID_549	106.18	20.00	3,978.72	25.12
366	☐	WDNJ_ID_550	18.83	20.00	1,478.44	20.00
367	☐	WDNJ_ID_553	72.87	20.00	3,749.05	22.63
368	☐	WDNJ_ID_554	51.07	20.00	1,958.34	20.11
369	☐	WDNJ_ID_555	46.86	20.00	5,937.50	52.30
370	☐	WDNJ_ID_556	46.86	20.00	5,945.40	42.42
371	☐	WDNJ_ID_557	46.88	20.00	5,972.67	28.80
372	☐	WDNJ_ID_558	46.90	20.00	5,996.70	36.30
373	☐	WDNJ_ID_560	46.88	20.00	5,968.36	48.44
374	☐	WDNJ_ID_561	121.37	20.00	5,534.30	28.89

2021 Model - 2031 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
375	☐	WDNJ_ID_563	121.21	20.00	5,487.53	28.76
376	☐	WDNJ_ID_564	98.56	20.00	6,038.17	28.90
377	☐	WDNJ_ID_565	97.84	20.00	5,879.00	28.44
378	☐	WDNJ_ID_567	97.03	20.00	5,528.38	27.47
379	☐	WDNJ_ID_568	98.58	20.00	6,054.34	29.01
380	☐	WDNJ_ID_571	96.23	20.00	5,231.05	26.67
381	☐	WDNJ_ID_573	51.86	20.00	2,333.87	37.20
382	☐	WDNJ_ID_574	-10.03	20.00	1,247.59	21.24
383	☐	WDNJ_ID_575	121.88	20.00	8,551.16	20.00
384	☐	WDNJ_ID_576	97.73	20.00	3,913.26	35.98
385	☐	WDNJ_ID_577	80.00	20.00	3,102.68	20.00
386	☐	WDNJ_ID_578	68.83	20.00	3,074.38	27.18
387	☐	WDNJ_ID_58	64.81	20.00	3,200.19	22.42
388	☐	WDNJ_ID_583	56.84	20.00	2,268.02	20.61
389	☐	WDNJ_ID_585	54.21	20.00	2,058.52	67.75
390	☐	WDNJ_ID_586	54.21	20.00	2,058.53	56.66
391	☐	WDNJ_ID_587	54.21	20.00	2,058.52	76.68
392	☐	WDNJ_ID_6	-9,767.37	20.00	127.89	20.00
393	☐	WDNJ_ID_61	49.11	20.00	2,340.15	37.59
394	☐	WDNJ_ID_62	49.11	20.00	2,340.15	25.92
395	☐	WDNJ_ID_63	73.11	20.00	3,365.63	94.39
396	☐	WDNJ_ID_64	68.09	20.00	3,039.08	65.80
397	☐	WDNJ_ID_65	61.05	20.00	2,593.22	100.42
398	☐	WDNJ_ID_66	49.92	20.00	9,201.89	23.82
399	☐	WDNJ_ID_67	99.52	20.00	6,434.31	21.49
400	☐	WDNJ_ID_68	72.05	20.00	5,045.62	20.19
401	☐	WDNJ_ID_69	48.03	20.00	8,172.49	27.36
402	☐	WDNJ_ID_7	103.78	20.00	5,784.49	34.14
403	☐	WDNJ_ID_70	74.25	20.00	4,742.60	60.34
404	☐	WDNJ_ID_71	73.93	20.00	5,224.86	83.93
405	☐	WDNJ_ID_72	46.49	20.00	5,491.89	54.29
406	☐	WDNJ_ID_73	45.59	20.00	4,652.79	43.22
407	☐	WDNJ_ID_74	86.15	20.00	4,176.59	20.00
408	☐	WDNJ_ID_75	46.73	20.00	5,766.63	28.14

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
409	☐	WDNJ_ID_76	99.47	20.00	4,447.88	24.85
410	☐	WDNJ_ID_77	44.14	20.00	3,874.65	40.14
411	☐	WDNJ_ID_78	45.98	20.00	4,976.13	44.04
412	☐	WDNJ_ID_79	68.08	20.00	5,522.25	20.00
413	☐	WDNJ_ID_8	75.44	20.00	2,438.22	20.00
414	☐	WDNJ_ID_80	86.00	20.00	4,993.70	30.69
415	☐	WDNJ_ID_82	86.12	20.00	6,550.71	28.71
416	☐	WDNJ_ID_83	46.98	20.00	6,125.48	51.46
417	☐	WDNJ_ID_84	41.13	20.00	6,651.56	20.13
418	☐	WDNJ_ID_85	90.88	20.00	5,836.18	27.44
419	☐	WDNJ_ID_86	105.86	20.00	4,828.75	25.87
420	☐	WDNJ_ID_87	108.49	20.00	5,837.71	28.32
421	☐	WDNJ_ID_88	68.98	20.00	6,558.73	26.84
422	☐	WDNJ_ID_89	41.34	20.00	7,205.91	24.64
423	☐	WDNJ_ID_90	46.53	20.00	5,525.72	58.23
424	☐	WDNJ_ID_91	112.74	20.00	5,478.03	28.55
425	☐	WDNJ_ID_92	67.01	20.00	4,498.33	25.46
426	☐	WDNJ_ID_93	73.67	20.00	4,866.81	64.75
427	☐	WDNJ_ID_94	94.36	20.00	5,056.38	20.00
428	☐	WDNJ_ID_96	47.78	20.00	7,619.83	29.27
429	☐	WDNJ_ID_97	103.80	20.00	6,102.52	29.08
430	☐	WDNJ_ID_98	47.14	20.00	6,372.94	36.19
431	☐	WDNJ_ID_99	79.68	20.00	2,324.78	20.00
432	☐	WDNJ_NI_545	-616.93	20.00	355.29	20.00

2021 Model - 2041 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1	☐	WDNJ_ID_1	0.84	4,676.71	4,939.62	113.92
2	☐	WDNJ_ID_10	0.44	4,691.06	4,941.26	108.41
3	☐	WDNJ_ID_100	0.18	4,813.66	5,096.93	122.74
4	☐	WDNJ_ID_101	2.48	4,897.99	5,097.02	86.24
5	☐	WDNJ_ID_102	1.34	4,909.76	5,097.02	81.14
6	☐	WDNJ_ID_103	1.54	4,724.83	5,096.53	161.06
7	☐	WDNJ_ID_104	1.54	4,722.32	5,096.53	162.14
8	☐	WDNJ_ID_105	0.44	4,722.88	4,939.63	93.92
9	☐	WDNJ_ID_106	1.78	4,620.88	4,816.11	84.59
10	☐	WDNJ_ID_107	1.00	4,836.26	5,096.94	112.95
11	☐	WDNJ_ID_108	4.60	4,833.78	5,096.93	114.02
12	☐	WDNJ_ID_109	14.12	4,526.58	4,816.05	125.43
13	☐	WDNJ_ID_11	0.78	4,554.61	4,816.13	113.32
14	☐	WDNJ_ID_110	1.94	4,536.26	4,816.06	121.24
15	☐	WDNJ_ID_111	2.22	4,540.72	4,816.06	119.31
16	☐	WDNJ_ID_112	0.76	4,934.34	5,096.31	70.18
17	☐	WDNJ_ID_113	6.92	4,548.87	4,816.12	115.80
18	☐	WDNJ_ID_114	2.08	4,905.96	5,096.34	82.49
19	☐	WDNJ_ID_115	1.18	4,895.53	5,097.01	87.30
20	☐	WDNJ_ID_116	3.88	4,553.07	4,816.12	113.98
21	☐	WDNJ_ID_117	1.34	4,809.72	5,096.93	124.45
22	☐	WDNJ_ID_118	2.42	4,822.57	5,096.93	118.88
23	☐	WDNJ_ID_119	2.64	4,528.78	4,816.06	124.48
24	☐	WDNJ_ID_12	0.24	4,768.87	5,096.45	141.94
25	☐	WDNJ_ID_120	1.06	4,884.20	5,097.01	92.21
26	☐	WDNJ_ID_121	1.16	4,915.91	5,096.34	78.18
27	☐	WDNJ_ID_122	1.92	4,936.22	5,096.34	69.38
28	☐	WDNJ_ID_123	0.88	4,587.56	4,816.09	99.02
29	☐	WDNJ_ID_124	0.68	4,836.02	5,096.38	112.81
30	☐	WDNJ_ID_125	1.32	4,599.20	4,816.09	93.98
31	☐	WDNJ_ID_126	2.72	4,934.08	5,097.01	70.60
32	☐	WDNJ_ID_127	1.20	4,948.59	5,097.02	64.31
33	☐	WDNJ_ID_128	1.00	4,740.00	4,939.62	86.50
34	☐	WDNJ_ID_129	1.76	4,896.98	5,096.40	86.41
35	☐	WDNJ_ID_13	1.54	4,737.65	5,096.42	155.45
36	☐	WDNJ_ID_130	2.72	4,935.74	5,096.40	69.61
37	☐	WDNJ_ID_131	2.42	4,514.40	4,816.08	130.72
38	☐	WDNJ_ID_132	1.70	4,523.49	4,816.08	126.78
39	☐	WDNJ_ID_133	0.34	4,867.81	5,096.97	99.29
40	☐	WDNJ_ID_134	1.52	4,884.80	5,096.93	91.91
41	☐	WDNJ_ID_135	0.48	4,895.55	5,096.93	87.26
42	☐	WDNJ_ID_136	0.88	4,589.40	4,816.09	98.23
43	☐	WDNJ_ID_137	2.04	4,838.17	5,096.38	111.88
44	☐	WDNJ_ID_138	2.18	4,817.57	5,096.38	120.81
45	☐	WDNJ_ID_139	2.56	4,605.12	4,816.09	91.41
46	☐	WDNJ_ID_14	0.16	4,738.09	5,096.64	155.36
47	☐	WDNJ_ID_140	2.36	4,538.03	4,816.12	120.50
48	☐	WDNJ_ID_141	1.00	4,867.79	5,096.38	99.05
49	☐	WDNJ_ID_142	1.60	4,869.14	5,097.00	98.73
50	☐	WDNJ_ID_143	2.16	4,544.93	4,816.06	117.48

2021 Model - 2041 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
51	☐	WDNJ_ID_144	0.36	4,984.51	5,096.93	48.71
52	☐	WDNJ_ID_145	1.28	4,880.13	5,097.01	93.97
53	☐	WDNJ_ID_146	0.60	4,893.54	5,097.01	88.16
54	☐	WDNJ_ID_147	0.56	4,819.82	5,096.94	120.07
55	☐	WDNJ_ID_148	1.12	4,818.67	5,096.94	120.57
56	☐	WDNJ_ID_149	4.28	4,641.32	4,816.28	75.81
57	☐	WDNJ_ID_15	0.30	4,775.66	5,096.64	139.08
58	☐	WDNJ_ID_150	0.72	4,837.49	5,096.88	112.39
59	☐	WDNJ_ID_151	0.76	4,841.27	5,096.88	110.76
60	☐	WDNJ_ID_152	0.00	4,508.55	4,816.06	133.24
61	☐	WDNJ_ID_153	0.00	4,508.72	4,816.06	133.17
62	☐	WDNJ_ID_154	0.42	4,733.70	5,096.41	157.16
63	☐	WDNJ_ID_155	2.08	4,682.35	4,939.63	111.48
64	☐	WDNJ_ID_156	0.18	4,520.43	4,816.06	128.10
65	☐	WDNJ_ID_157	2.74	4,841.17	5,096.88	110.80
66	☐	WDNJ_ID_158	0.74	4,858.12	5,096.88	103.46
67	☐	WDNJ_ID_159	1.56	4,942.94	5,231.14	124.88
68	☐	WDNJ_ID_16	0.12	4,718.53	4,913.58	84.52
69	☐	WDNJ_ID_160	0.46	4,827.12	5,096.40	116.68
70	☐	WDNJ_ID_161	1.54	4,829.39	5,096.40	115.70
71	☐	WDNJ_ID_164	0.00	5,040.72	5,231.15	82.51
72	☐	WDNJ_ID_165	0.22	4,810.50	5,096.93	124.11
73	☐	WDNJ_ID_166	0.04	4,807.28	5,096.93	125.50
74	☐	WDNJ_ID_167	0.04	4,807.38	5,096.93	125.46
75	☐	WDNJ_ID_168	0.04	4,805.39	5,096.93	126.32
76	☐	WDNJ_ID_169	0.12	4,615.25	4,816.23	87.08
77	☐	WDNJ_ID_17	0.12	4,718.78	4,913.58	84.41
78	☐	WDNJ_ID_170	0.08	4,604.27	4,816.23	91.84
79	☐	WDNJ_ID_171	0.46	4,645.37	4,816.11	73.98
80	☐	WDNJ_ID_172	0.00	5,150.51	5,410.16	112.51
81	☐	WDNJ_ID_173	0.00	5,152.13	5,410.14	111.80
82	☐	WDNJ_ID_174	0.00	5,162.66	5,410.14	107.23
83	☐	WDNJ_ID_175	0.44	5,143.15	5,258.39	49.93
84	☐	WDNJ_ID_176	0.04	5,032.58	5,233.44	87.03
85	☐	WDNJ_ID_177	1.76	4,980.58	5,233.44	109.56
86	☐	WDNJ_ID_178	0.62	4,803.00	5,096.77	127.29
87	☐	WDNJ_ID_179	0.80	4,835.91	5,096.40	112.87
88	☐	WDNJ_ID_18	0.72	4,536.56	4,816.11	121.13
89	☐	WDNJ_ID_180	0.72	5,034.51	5,258.38	97.00
90	☐	WDNJ_ID_181	0.40	4,819.60	5,096.40	119.94
91	☐	WDNJ_ID_182	1.76	4,669.93	4,816.22	63.39
92	☐	WDNJ_ID_183	3.26	4,577.74	4,816.14	103.30
93	☐	WDNJ_ID_184	1.96	5,033.57	5,258.38	97.41
94	☐	WDNJ_ID_185	1.62	5,013.51	5,258.38	106.10
95	☐	WDNJ_ID_186	0.22	4,939.28	5,097.07	68.37
96	☐	WDNJ_ID_187	0.22	4,935.16	5,097.07	70.15
97	☐	WDNJ_ID_188	4.16	4,606.30	4,816.21	90.96
98	☐	WDNJ_ID_189	2.24	4,592.72	4,816.19	96.83
99	☐	WDNJ_ID_19	0.00	4,562.55	4,816.11	109.87
100	☐	WDNJ_ID_190	2.46	4,577.41	4,816.17	103.46

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
101	☐	WDNJ_ID_191	4.28	4,684.23	4,816.40	57.27
102	☐	WDNJ_ID_192	0.92	4,828.89	5,096.86	116.11
103	☐	WDNJ_ID_193	10.38	4,628.37	4,816.24	81.40
104	☐	WDNJ_ID_194	2.16	4,856.68	5,096.93	104.10
105	☐	WDNJ_ID_195	0.64	4,864.44	5,096.93	100.74
106	☐	WDNJ_ID_196	6.26	4,532.73	4,816.07	122.77
107	☐	WDNJ_ID_197	1.26	4,532.20	4,816.07	123.00
108	☐	WDNJ_ID_198	3.90	4,530.43	4,816.07	123.77
109	☐	WDNJ_ID_199	1.12	4,546.77	4,816.11	116.70
110	☐	WDNJ_ID_2	0.84	4,675.95	4,939.62	114.25
111	☐	WDNJ_ID_20	0.20	4,569.94	4,816.09	106.66
112	☐	WDNJ_ID_200	2.84	4,527.82	4,816.09	124.91
113	☐	WDNJ_ID_201	4.66	4,796.65	5,096.79	130.05
114	☐	WDNJ_ID_202	4.32	4,566.67	4,816.14	108.09
115	☐	WDNJ_ID_203	4.20	4,549.68	4,816.16	115.47
116	☐	WDNJ_ID_204	2.14	4,568.71	4,816.17	107.23
117	☐	WDNJ_ID_205	17.48	4,523.13	4,816.05	126.92
118	☐	WDNJ_ID_206	0.40	4,889.42	5,097.01	89.95
119	☐	WDNJ_ID_207	0.00	4,512.20	4,816.08	131.67
120	☐	WDNJ_ID_208	2.20	4,574.36	4,816.17	104.78
121	☐	WDNJ_ID_209	5.36	4,557.81	4,816.17	111.95
122	☐	WDNJ_ID_21	0.20	4,567.80	4,816.09	107.58
123	☐	WDNJ_ID_210	1.96	4,562.12	4,816.17	110.08
124	☐	WDNJ_ID_211	1.58	4,968.54	5,097.11	55.71
125	☐	WDNJ_ID_212	1.04	4,554.32	4,816.17	113.46
126	☐	WDNJ_ID_213	1.88	4,556.33	4,816.17	112.59
127	☐	WDNJ_ID_214	2.52	4,572.55	4,816.15	105.55
128	☐	WDNJ_ID_215	2.06	5,057.69	5,258.38	86.96
129	☐	WDNJ_ID_216	5.70	4,523.35	4,816.04	126.82
130	☐	WDNJ_ID_217	6.52	4,515.60	4,816.05	130.18
131	☐	WDNJ_ID_218	3.80	4,513.41	4,816.06	131.14
132	☐	WDNJ_ID_219	1.20	5,054.71	5,258.38	88.25
133	☐	WDNJ_ID_220	1.80	5,053.89	5,258.38	88.61
134	☐	WDNJ_ID_221	0.94	4,516.24	4,816.05	129.91
135	☐	WDNJ_ID_222	0.82	4,565.17	4,816.09	108.72
136	☐	WDNJ_ID_223	5.50	4,500.70	4,816.06	136.65
137	☐	WDNJ_ID_224	0.00	4,500.39	4,816.07	136.78
138	☐	WDNJ_ID_225	1.72	4,808.23	5,096.93	125.10
139	☐	WDNJ_ID_226	1.22	4,556.27	4,816.09	112.58
140	☐	WDNJ_ID_227	1.80	4,557.50	4,816.08	112.04
141	☐	WDNJ_ID_228	0.18	4,534.59	4,816.09	121.97
142	☐	WDNJ_ID_229	2.24	4,532.90	4,816.08	122.70
143	☐	WDNJ_ID_230	1.60	4,528.97	4,816.08	124.41
144	☐	WDNJ_ID_231	0.36	4,501.26	4,816.07	136.41
145	☐	WDNJ_ID_232	1.02	4,812.91	5,096.93	123.06
146	☐	WDNJ_ID_233	1.08	4,567.15	4,816.09	107.87
147	☐	WDNJ_ID_234	5.70	4,523.67	4,816.03	126.68
148	☐	WDNJ_ID_235	1.76	4,984.54	5,231.14	106.85
149	☐	WDNJ_ID_236	1.58	4,957.23	5,231.14	118.69
150	☐	WDNJ_ID_237	6.46	4,530.12	4,816.07	123.90

2021 Model - 2041 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
151	☐	WDNJ_ID_238	2.76	4,532.28	4,816.09	122.97
152	☐	WDNJ_ID_239	3.04	4,528.19	4,816.09	124.75
153	☐	WDNJ_ID_24	1.88	4,587.87	4,816.17	98.92
154	☐	WDNJ_ID_240	1.52	4,547.66	4,816.08	116.31
155	☐	WDNJ_ID_241	3.44	4,500.40	4,816.08	136.78
156	☐	WDNJ_ID_242	2.78	4,804.72	5,096.93	126.61
157	☐	WDNJ_ID_243	0.26	4,912.25	5,096.93	80.02
158	☐	WDNJ_ID_244	0.80	4,937.27	5,096.93	69.18
159	☐	WDNJ_ID_245	1.06	4,534.94	4,816.08	121.82
160	☐	WDNJ_ID_246	2.24	4,517.07	4,816.08	129.56
161	☐	WDNJ_ID_247	0.24	4,920.25	5,096.93	76.55
162	☐	WDNJ_ID_248	3.64	4,524.46	4,816.08	126.36
163	☐	WDNJ_ID_249	0.82	4,523.29	4,816.08	126.87
164	☐	WDNJ_ID_25	1.88	4,588.54	4,816.20	98.64
165	☐	WDNJ_ID_250	11.06	4,506.00	4,816.06	134.35
166	☐	WDNJ_ID_251	0.76	4,504.34	4,816.06	135.07
167	☐	WDNJ_ID_252	9.96	4,528.99	4,816.06	124.39
168	☐	WDNJ_ID_253	0.70	4,652.77	4,913.58	113.01
169	☐	WDNJ_ID_254	1.24	4,681.61	4,913.58	100.51
170	☐	WDNJ_ID_255	2.22	4,540.16	4,816.08	119.56
171	☐	WDNJ_ID_256	2.02	4,588.33	4,816.17	98.72
172	☐	WDNJ_ID_257	1.38	4,538.21	4,816.09	120.41
173	☐	WDNJ_ID_258	2.46	4,542.33	4,816.09	118.62
174	☐	WDNJ_ID_259	0.78	4,969.04	5,096.93	55.41
175	☐	WDNJ_ID_26	1.76	4,789.01	5,096.44	133.21
176	☐	WDNJ_ID_260	0.76	4,506.47	4,816.06	134.14
177	☐	WDNJ_ID_261	1.86	4,510.77	4,816.04	132.27
178	☐	WDNJ_ID_262	10.24	4,505.95	4,816.03	134.36
179	☐	WDNJ_ID_263	1.80	4,522.38	4,816.06	127.25
180	☐	WDNJ_ID_264	1.80	4,526.64	4,816.06	125.40
181	☐	WDNJ_ID_265	1.38	4,503.90	4,816.06	135.26
182	☐	WDNJ_ID_266	1.52	4,887.33	5,097.01	90.85
183	☐	WDNJ_ID_267	0.14	4,975.18	5,096.93	52.75
184	☐	WDNJ_ID_268	0.00	5,050.99	5,258.38	89.86
185	☐	WDNJ_ID_269	1.22	4,521.68	4,816.03	127.54
186	☐	WDNJ_ID_27	1.04	4,765.80	5,096.41	143.25
187	☐	WDNJ_ID_270	0.36	4,515.42	4,816.03	130.26
188	☐	WDNJ_ID_271	1.16	4,998.52	5,231.14	100.79
189	☐	WDNJ_ID_272	2.24	4,598.75	4,816.19	94.22
190	☐	WDNJ_ID_273	1.38	4,506.06	4,816.06	134.32
191	☐	WDNJ_ID_274	0.00	4,561.67	4,816.08	110.24
192	☐	WDNJ_ID_275	0.80	4,538.64	4,816.08	120.22
193	☐	WDNJ_ID_276	0.82	4,683.16	4,913.58	99.84
194	☐	WDNJ_ID_277	7.24	4,523.20	4,816.03	126.88
195	☐	WDNJ_ID_278	0.38	4,708.07	4,913.58	89.05
196	☐	WDNJ_ID_279	1.20	5,045.19	5,258.38	92.38
197	☐	WDNJ_ID_28	1.42	4,811.45	5,096.42	123.48
198	☐	WDNJ_ID_280	1.72	4,547.02	4,816.08	116.59
199	☐	WDNJ_ID_281	0.30	4,752.96	5,096.79	148.98
200	☐	WDNJ_ID_282	2.66	4,619.33	4,816.25	85.32

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
201		WDNJ_ID_283	0.84	4,637.74	4,816.09	77.28
202		WDNJ_ID_284	1.04	4,548.29	4,816.18	116.08
203		WDNJ_ID_285	1.28	4,942.21	5,096.93	67.04
204		WDNJ_ID_286	1.58	4,962.57	5,096.93	58.22
205		WDNJ_ID_287	1.20	4,655.67	4,816.23	69.57
206		WDNJ_ID_288	0.48	4,650.84	4,816.23	71.66
207		WDNJ_ID_289	0.18	4,535.63	4,816.09	121.52
208		WDNJ_ID_29	0.46	4,797.00	5,096.40	129.73
209		WDNJ_ID_290	2.00	4,966.37	5,233.44	115.72
210		WDNJ_ID_291	0.82	4,963.92	5,233.44	116.78
211		WDNJ_ID_292	0.00	4,502.14	4,816.07	136.03
212		WDNJ_ID_293	1.70	4,921.79	5,096.93	75.89
213		WDNJ_ID_294	0.94	4,893.51	5,096.93	88.14
214		WDNJ_ID_295	1.20	4,899.47	5,096.93	85.56
215		WDNJ_ID_296	0.68	4,529.97	4,816.08	123.97
216		WDNJ_ID_297	0.00	4,508.97	4,816.04	133.05
217		WDNJ_ID_298	0.00	4,524.99	4,816.06	126.12
218		WDNJ_ID_299	1.78	4,636.27	4,816.23	77.97
219		WDNJ_ID_3	3.26	4,578.05	4,816.14	103.16
220		WDNJ_ID_30	2.34	4,647.19	4,816.33	73.29
221		WDNJ_ID_300	0.76	4,628.17	4,816.23	81.48
222		WDNJ_ID_301	1.04	4,924.16	5,096.93	74.86
223		WDNJ_ID_302	0.82	4,980.86	5,233.44	109.44
224		WDNJ_ID_303	0.42	4,720.55	5,096.40	162.86
225		WDNJ_ID_304	0.38	4,783.30	5,096.40	135.67
226		WDNJ_ID_305	0.00	4,784.46	5,096.93	135.39
227		WDNJ_ID_306	0.04	4,723.11	5,096.40	161.75
228		WDNJ_ID_307	0.00	4,731.42	5,096.40	158.15
229		WDNJ_ID_308	0.04	4,720.44	5,096.40	162.90
230		WDNJ_ID_309	0.04	4,785.62	5,096.40	134.66
231		WDNJ_ID_31	2.34	4,660.52	4,816.40	67.54
232		WDNJ_ID_310	0.00	4,698.23	5,096.40	172.53
233		WDNJ_ID_311	1.96	4,645.74	4,816.17	73.85
234		WDNJ_ID_312	1.96	4,642.65	4,816.17	75.19
235		WDNJ_ID_313	0.06	4,562.67	4,816.19	109.85
236		WDNJ_ID_314	0.48	4,578.91	4,816.23	102.83
237		WDNJ_ID_315	0.00	4,565.65	4,816.19	108.56
238		WDNJ_ID_316	0.46	4,641.09	4,816.11	75.84
239		WDNJ_ID_317	0.00	5,104.82	5,410.17	132.31
240		WDNJ_ID_318	2.16	4,830.61	5,096.86	115.37
241		WDNJ_ID_319	1.84	4,620.39	4,816.29	84.88
242		WDNJ_ID_32	0.46	4,792.78	5,096.41	131.56
243		WDNJ_ID_320	0.68	4,865.83	5,096.95	100.15
244		WDNJ_ID_321	1.38	4,538.76	4,816.09	120.17
245		WDNJ_ID_322	2.44	4,565.71	4,816.09	108.49
246		WDNJ_ID_323	2.62	4,863.04	5,096.95	101.35
247		WDNJ_ID_324	0.18	4,516.42	4,816.08	129.84
248		WDNJ_ID_325	0.00	4,522.94	4,816.03	127.00
249		WDNJ_ID_326	0.06	4,557.06	4,816.18	112.28
250		WDNJ_ID_327	0.00	4,489.34	4,816.08	141.57

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
251	☐	WDNJ_ID_33	0.94	4,678.58	4,939.63	113.11
252	☐	WDNJ_ID_330	0.00	4,796.18	4,816.55	8.83
253	☐	WDNJ_ID_331	1.32	5,035.87	5,233.44	85.61
254	☐	WDNJ_ID_333	1.76	4,979.91	5,097.15	50.80
255	☐	WDNJ_ID_334	2.06	4,616.21	4,816.24	86.67
256	☐	WDNJ_ID_335	3.50	4,890.28	5,096.99	89.57
257	☐	WDNJ_ID_336	0.00	5,815.00	5,830.00	6.50
258	☐	WDNJ_ID_337	0.00	5,507.00	5,830.00	139.96
259	☐	WDNJ_ID_338	0.00	5,506.00	5,830.00	140.39
260	☐	WDNJ_ID_339	0.00	5,385.23	5,830.00	192.72
261	☐	WDNJ_ID_34	4.04	4,589.41	4,816.18	98.26
262	☐	WDNJ_ID_342	0.06	4,557.65	4,816.18	112.02
263	☐	WDNJ_ID_343	0.08	4,608.31	4,816.23	90.09
264	☐	WDNJ_ID_344	0.26	4,609.89	4,816.23	89.41
265	☐	WDNJ_ID_345	0.00	4,696.88	5,096.40	173.11
266	☐	WDNJ_ID_346	0.00	4,697.94	5,096.40	172.65
267	☐	WDNJ_ID_347	0.00	5,012.29	5,231.14	94.83
268	☐	WDNJ_ID_348	0.00	5,017.75	5,231.14	92.46
269	☐	WDNJ_ID_349	1.40	4,884.08	5,096.40	92.00
270	☐	WDNJ_ID_35	1.38	4,575.01	4,816.17	104.50
271	☐	WDNJ_ID_350	2.34	4,885.64	5,096.40	91.32
272	☐	WDNJ_ID_351	0.50	4,964.87	5,231.14	115.38
273	☐	WDNJ_ID_352	0.00	5,036.73	5,231.14	84.24
274	☐	WDNJ_ID_353	0.00	5,009.94	5,231.14	95.85
275	☐	WDNJ_ID_354	0.08	4,984.55	5,231.14	106.85
276	☐	WDNJ_ID_355	0.08	4,981.46	5,231.14	108.19
277	☐	WDNJ_ID_356	0.00	5,032.13	5,231.14	86.23
278	☐	WDNJ_ID_357	0.06	5,056.90	5,231.14	75.50
279	☐	WDNJ_ID_358	0.18	4,535.82	4,816.09	121.44
280	☐	WDNJ_ID_359	0.18	4,531.83	4,816.09	123.17
281	☐	WDNJ_ID_36	1.78	4,582.38	4,816.15	101.29
282	☐	WDNJ_ID_360	0.50	4,965.47	5,231.14	115.12
283	☐	WDNJ_ID_361	0.50	5,042.24	5,231.14	81.85
284	☐	WDNJ_ID_362	0.16	4,546.83	4,816.10	116.67
285	☐	WDNJ_ID_363	2.54	4,551.32	4,816.10	114.73
286	☐	WDNJ_ID_364	0.90	4,844.98	5,096.91	109.16
287	☐	WDNJ_ID_365	1.16	4,850.47	5,096.91	106.78
288	☐	WDNJ_ID_366	1.26	4,832.98	5,096.91	114.36
289	☐	WDNJ_ID_367	1.08	4,948.84	5,096.11	63.81
290	☐	WDNJ_ID_368	0.20	4,951.51	5,096.11	62.66
291	☐	WDNJ_ID_369	1.08	4,950.13	5,096.11	63.25
292	☐	WDNJ_ID_37	1.78	4,581.98	4,816.16	101.47
293	☐	WDNJ_ID_371	0.58	4,952.80	5,231.15	120.61
294	☐	WDNJ_ID_372	0.20	4,569.87	4,816.09	106.69
295	☐	WDNJ_ID_373	0.00	4,570.48	4,816.09	106.42
296	☐	WDNJ_ID_374	0.76	4,581.10	4,816.09	101.82
297	☐	WDNJ_ID_375	0.88	4,588.79	4,816.09	98.49
298	☐	WDNJ_ID_376	0.88	4,589.16	4,816.09	98.33
299	☐	WDNJ_ID_377	0.88	4,587.95	4,816.09	98.85
300	☐	WDNJ_ID_378	1.78	4,620.53	4,816.11	84.74

2021 Model - 2041 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
301	☐	WDNJ_ID_379	0.38	4,629.28	4,816.11	80.95
302	☐	WDNJ_ID_38	2.00	4,805.40	5,096.42	126.10
303	☐	WDNJ_ID_380	0.70	4,652.74	4,913.58	113.02
304	☐	WDNJ_ID_381	0.28	4,729.07	4,913.58	79.95
305	☐	WDNJ_ID_382	1.40	4,650.41	4,913.58	114.03
306	☐	WDNJ_ID_384	0.14	4,803.18	5,096.93	127.28
307	☐	WDNJ_ID_385	0.14	4,802.68	5,096.93	127.50
308	☐	WDNJ_ID_386	0.14	4,806.01	5,096.93	126.06
309	☐	WDNJ_ID_387	0.14	4,806.21	5,096.93	125.97
310	☐	WDNJ_ID_388	0.14	4,804.96	5,096.93	126.51
311	☐	WDNJ_ID_389	1.34	4,808.98	5,096.93	124.77
312	☐	WDNJ_ID_39	0.68	4,931.69	5,097.05	71.65
313	☐	WDNJ_ID_390	1.22	4,885.82	5,096.99	91.50
314	☐	WDNJ_ID_391	0.00	5,047.91	5,231.40	79.51
315	☐	WDNJ_ID_392	1.40	5,010.90	5,231.40	95.54
316	☐	WDNJ_ID_393	1.12	4,823.03	5,096.92	118.68
317	☐	WDNJ_ID_394	0.08	4,803.84	5,096.93	127.00
318	☐	WDNJ_ID_395	1.28	4,872.60	5,096.93	97.20
319	☐	WDNJ_ID_397	0.00	5,085.00	5,097.98	5.62
320	☐	WDNJ_ID_398	0.00	5,085.00	5,098.00	5.63
321	☐	WDNJ_ID_399	0.00	5,085.00	5,410.17	140.90
322	☐	WDNJ_ID_4	2.50	4,601.69	4,816.23	92.96
323	☐	WDNJ_ID_40	0.80	4,939.77	5,097.05	68.15
324	☐	WDNJ_ID_400	0.00	5,085.00	5,410.17	140.90
325	☐	WDNJ_ID_402	0.00	5,085.00	5,099.49	6.28
326	☐	WDNJ_ID_403	0.00	5,085.00	5,234.27	64.68
327	☐	WDNJ_ID_404	0.00	5,085.00	5,234.27	64.68
328	☐	WDNJ_ID_405	0.00	5,085.00	5,234.27	64.68
329	☐	WDNJ_ID_406	0.00	5,103.19	5,234.29	56.81
330	☐	WDNJ_ID_407	0.00	5,103.69	5,234.30	56.59
331	☐	WDNJ_ID_408	0.00	5,103.50	5,410.17	132.88
332	☐	WDNJ_ID_409	0.00	5,376.88	5,410.20	14.44
333	☐	WDNJ_ID_41	1.40	4,854.72	5,096.34	104.69
334	☐	WDNJ_ID_410	0.00	5,376.96	5,409.97	14.30
335	☐	WDNJ_ID_411	1.40	4,881.91	5,096.93	93.17
336	☐	WDNJ_ID_412	0.14	4,920.26	5,096.93	76.55
337	☐	WDNJ_ID_413	0.16	4,959.03	5,096.93	59.75
338	☐	WDNJ_ID_414	0.26	4,911.02	5,096.93	80.55
339	☐	WDNJ_ID_415	0.90	5,055.55	5,258.38	87.89
340	☐	WDNJ_ID_416	0.00	5,402.92	5,830.00	185.05
341	☐	WDNJ_ID_417	0.00	5,384.00	5,410.20	11.35
342	☐	WDNJ_ID_418	0.00	5,384.00	5,410.20	11.35
343	☐	WDNJ_ID_419	0.00	5,384.00	5,410.11	11.31
344	☐	WDNJ_ID_42	0.96	4,857.00	5,096.34	103.71
345	☐	WDNJ_ID_420	0.00	5,396.00	5,830.00	188.05
346	☐	WDNJ_ID_421	0.36	4,918.76	5,096.93	77.20
347	☐	WDNJ_ID_422	0.06	4,981.83	5,096.93	49.87
348	☐	WDNJ_ID_423	0.34	4,981.57	5,096.93	49.98
349	☐	WDNJ_ID_424	4.42	5,047.86	5,258.38	91.22
350	☐	WDNJ_ID_425	22.26	4,517.53	4,816.03	129.34

2021 Model - 2041 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
351	☐	WDNJ_ID_426	5.70	4,530.08	4,816.03	123.90
352	☐	WDNJ_ID_427	5.70	4,527.79	4,816.03	124.90
353	☐	WDNJ_ID_428	0.00	4,543.77	4,816.11	118.00
354	☐	WDNJ_ID_429	0.06	4,562.42	4,816.19	109.96
355	☐	WDNJ_ID_43	1.92	4,597.56	4,816.09	94.69
356	☐	WDNJ_ID_430	0.48	4,569.14	4,816.21	107.05
357	☐	WDNJ_ID_432	3.32	4,599.11	4,816.24	94.08
358	☐	WDNJ_ID_433	1.30	4,580.86	4,816.23	101.99
359	☐	WDNJ_ID_434	2.66	4,563.46	4,816.17	109.50
360	☐	WDNJ_ID_435	1.40	4,543.14	4,816.13	118.29
361	☐	WDNJ_ID_436	1.54	4,540.52	4,816.11	119.41
362	☐	WDNJ_ID_437	1.54	4,536.44	4,816.09	121.17
363	☐	WDNJ_ID_438	2.46	4,540.95	4,816.09	119.22
364	☐	WDNJ_ID_439	3.80	4,512.30	4,816.05	131.62
365	☐	WDNJ_ID_44	2.92	4,632.56	4,816.10	79.53
366	☐	WDNJ_ID_440	0.00	4,509.64	4,816.07	132.78
367	☐	WDNJ_ID_441	0.58	4,507.42	4,816.06	133.73
368	☐	WDNJ_ID_442	0.44	4,501.97	4,816.06	136.09
369	☐	WDNJ_ID_443	0.58	4,498.71	4,816.06	137.51
370	☐	WDNJ_ID_444	6.36	4,500.76	4,816.06	136.62
371	☐	WDNJ_ID_445	0.88	4,499.69	4,816.07	137.09
372	☐	WDNJ_ID_446	1.34	4,492.38	4,816.08	140.26
373	☐	WDNJ_ID_447	0.00	4,505.99	4,816.08	134.36
374	☐	WDNJ_ID_448	0.48	4,507.48	4,816.07	133.71
375	☐	WDNJ_ID_449	0.00	4,516.92	4,816.08	129.63
376	☐	WDNJ_ID_45	0.22	4,783.52	5,096.41	135.57
377	☐	WDNJ_ID_450	1.66	4,537.03	4,816.11	120.92
378	☐	WDNJ_ID_451	0.64	4,527.59	4,816.09	125.01
379	☐	WDNJ_ID_452	0.68	4,514.14	4,816.08	130.83
380	☐	WDNJ_ID_453	2.20	4,521.43	4,816.08	127.67
381	☐	WDNJ_ID_454	5.12	4,531.39	4,816.08	123.36
382	☐	WDNJ_ID_455	2.08	4,517.54	4,816.08	129.36
383	☐	WDNJ_ID_456	3.70	4,519.72	4,816.08	128.41
384	☐	WDNJ_ID_457	2.12	4,558.27	4,816.08	111.71
385	☐	WDNJ_ID_458	1.74	4,619.77	4,816.09	85.07
386	☐	WDNJ_ID_459	0.74	4,701.21	4,816.19	49.82
387	☐	WDNJ_ID_46	1.38	5,049.28	5,258.38	90.61
388	☐	WDNJ_ID_460	3.10	4,766.28	4,941.26	75.82
389	☐	WDNJ_ID_461	1.92	4,702.64	4,913.58	91.40
390	☐	WDNJ_ID_462	2.74	4,770.70	4,913.58	61.91
391	☐	WDNJ_ID_463	2.00	4,801.98	5,096.93	127.80
392	☐	WDNJ_ID_464	2.06	4,799.57	5,096.93	128.85
393	☐	WDNJ_ID_465	2.10	4,840.13	5,096.93	111.27
394	☐	WDNJ_ID_466	0.00	4,771.42	5,096.58	140.89
395	☐	WDNJ_ID_467	0.34	4,858.24	5,096.92	103.42
396	☐	WDNJ_ID_468	2.48	4,861.21	5,096.93	102.14
397	☐	WDNJ_ID_469	2.40	4,883.87	5,096.98	92.34
398	☐	WDNJ_ID_47	1.76	4,981.32	5,258.38	120.05
399	☐	WDNJ_ID_471	1.12	4,942.38	5,097.07	67.03
400	☐	WDNJ_ID_472	3.22	4,908.88	5,097.02	81.52

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
401		WDNJ_ID_473	1.68	4,858.30	5,096.94	103.40
402		WDNJ_ID_474	6.30	4,805.19	5,096.92	126.41
403		WDNJ_ID_475	0.22	4,816.39	5,096.93	121.56
404		WDNJ_ID_476	0.00	4,771.32	5,096.40	140.86
405		WDNJ_ID_477	0.00	4,857.66	5,096.40	103.45
406		WDNJ_ID_478	0.06	4,913.79	5,231.14	137.51
407		WDNJ_ID_479	0.04	5,016.96	5,231.14	92.80
408		WDNJ_ID_48	3.30	4,610.67	4,816.26	89.08
409		WDNJ_ID_480	0.10	5,033.25	5,231.14	85.75
410		WDNJ_ID_481	0.00	4,809.96	5,096.40	124.11
411		WDNJ_ID_482	0.00	4,805.65	5,096.40	125.98
412		WDNJ_ID_483	0.00	4,753.74	5,096.40	148.47
413		WDNJ_ID_484	0.34	4,700.28	4,939.63	103.71
414		WDNJ_ID_485	1.16	4,926.68	5,231.14	131.92
415		WDNJ_ID_486	1.50	4,955.08	5,096.32	61.20
416		WDNJ_ID_487	1.46	4,890.14	5,096.32	89.34
417		WDNJ_ID_488	2.06	4,996.14	5,231.14	101.83
418		WDNJ_ID_489	3.28	4,891.16	5,096.22	88.85
419		WDNJ_ID_49	5.68	4,615.63	4,816.22	86.91
420		WDNJ_ID_490	0.20	5,000.11	5,231.15	100.11
421		WDNJ_ID_491	0.00	5,037.67	5,096.04	25.29
422		WDNJ_ID_492	0.20	4,993.66	5,096.07	44.38
423		WDNJ_ID_493	0.00	5,060.40	5,231.91	74.31
424		WDNJ_ID_494	0.00	5,063.08	5,232.41	73.37
425		WDNJ_ID_495	4.62	5,074.54	5,232.92	68.63
426		WDNJ_ID_496	0.22	4,955.71	5,097.11	61.27
427		WDNJ_ID_497	0.34	5,004.81	5,233.44	99.06
428		WDNJ_ID_498	1.32	5,047.31	5,097.70	21.83
429		WDNJ_ID_499	0.34	5,007.27	5,097.42	39.06
430		WDNJ_ID_5	1.40	4,663.87	4,939.62	119.48
431		WDNJ_ID_50	1.84	4,631.95	4,816.31	79.88
432		WDNJ_ID_500	0.62	5,070.20	5,233.85	70.91
433		WDNJ_ID_501	0.04	5,031.41	5,258.38	98.35
434		WDNJ_ID_502	2.22	4,982.18	5,233.44	108.87
435		WDNJ_ID_503	1.52	4,958.24	5,096.93	60.09
436		WDNJ_ID_504	1.72	5,029.02	5,258.38	99.38
437		WDNJ_ID_505	0.74	5,086.93	5,258.39	74.29
438		WDNJ_ID_506	0.00	5,181.07	5,410.17	99.27
439		WDNJ_ID_507	1.22	5,130.89	5,258.39	55.25
440		WDNJ_ID_508	0.82	5,115.99	5,258.39	61.70
441		WDNJ_ID_509	2.28	5,013.06	5,258.38	106.30
442		WDNJ_ID_51	0.00	5,084.43	5,222.88	59.99
443		WDNJ_ID_510	1.84	4,946.29	5,096.93	65.27
444		WDNJ_ID_511	2.36	4,920.74	5,096.93	76.34
445		WDNJ_ID_512	0.42	4,893.42	5,096.93	88.18
446		WDNJ_ID_513	1.04	4,894.53	5,096.92	87.70
447		WDNJ_ID_514	5.86	4,945.18	5,096.92	65.75
448		WDNJ_ID_515	2.28	5,030.10	5,258.38	98.92
449		WDNJ_ID_516	0.00	5,309.12	5,409.37	43.44
450		WDNJ_ID_517	0.00	5,226.79	5,408.78	78.85

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
451	☐	WDNJ_ID_518	0.00	5,162.81	5,234.90	31.24
452	☐	WDNJ_ID_519	0.00	5,158.31	5,410.18	109.13
453	☐	WDNJ_ID_520	0.00	5,227.61	5,410.18	79.11
454	☐	WDNJ_ID_521	0.00	5,308.63	5,410.19	44.01
455	☐	WDNJ_ID_522	0.00	5,773.00	5,830.00	24.70
456	☐	WDNJ_ID_523	0.00	5,661.00	5,830.00	73.23
457	☐	WDNJ_ID_524	0.00	5,630.00	5,830.00	86.66
458	☐	WDNJ_ID_525	0.00	5,605.00	5,830.00	97.49
459	☐	WDNJ_ID_526	0.00	5,562.00	5,830.00	116.12
460	☐	WDNJ_ID_527	0.00	5,486.00	5,830.00	149.06
461	☐	WDNJ_ID_528	0.00	5,416.00	5,830.00	179.39
462	☐	WDNJ_ID_529	0.00	4,803.00	4,816.82	5.99
463	☐	WDNJ_ID_53	0.48	4,578.70	4,816.23	102.92
464	☐	WDNJ_ID_530	0.00	4,803.00	5,096.85	127.32
465	☐	WDNJ_ID_531	0.00	4,803.00	5,096.85	127.32
466	☐	WDNJ_ID_532	0.00	4,803.00	5,096.85	127.32
467	☐	WDNJ_ID_533	0.00	4,803.00	4,816.82	5.99
468	☐	WDNJ_ID_534	0.00	4,803.00	5,096.79	127.30
469	☐	WDNJ_ID_535	0.00	4,803.00	5,096.79	127.30
470	☐	WDNJ_ID_536	0.00	4,803.00	4,816.66	5.92
471	☐	WDNJ_ID_537	0.00	4,803.00	4,816.65	5.92
472	☐	WDNJ_ID_54	0.00	4,581.03	4,816.23	101.91
473	☐	WDNJ_ID_546	0.00	5,024.00	5,097.48	31.84
474	☐	WDNJ_ID_547	0.00	5,024.00	5,233.44	90.75
475	☐	WDNJ_ID_548	0.00	4,803.00	5,096.85	127.32
476	☐	WDNJ_ID_549	0.00	4,528.32	4,816.08	124.69
477	☐	WDNJ_ID_55	0.46	4,648.63	4,816.11	72.57
478	☐	WDNJ_ID_550	0.00	4,670.00	4,816.28	63.38
479	☐	WDNJ_ID_551	0.00	4,665.00	4,816.28	65.55
480	☐	WDNJ_ID_552	0.00	4,620.00	4,816.25	85.03
481	☐	WDNJ_ID_553	0.00	4,619.33	4,816.25	85.32
482	☐	WDNJ_ID_554	0.00	4,683.00	4,913.58	99.91
483	☐	WDNJ_ID_555	0.00	4,517.00	4,816.08	129.59
484	☐	WDNJ_ID_556	0.00	4,516.00	4,816.08	130.02
485	☐	WDNJ_ID_557	0.00	4,513.00	4,816.08	131.32
486	☐	WDNJ_ID_558	0.00	4,511.00	4,816.08	132.19
487	☐	WDNJ_ID_559	0.00	4,510.00	4,816.07	132.62
488	☐	WDNJ_ID_56	0.46	4,645.72	4,816.13	73.84
489	☐	WDNJ_ID_560	0.00	4,511.00	4,816.08	132.19
490	☐	WDNJ_ID_561	0.00	4,511.00	4,816.08	132.19
491	☐	WDNJ_ID_563	0.00	4,511.00	4,816.07	132.19
492	☐	WDNJ_ID_564	0.00	4,572.00	4,816.15	105.79
493	☐	WDNJ_ID_565	0.00	4,573.00	4,816.15	105.36
494	☐	WDNJ_ID_566	0.00	4,573.00	4,816.15	105.36
495	☐	WDNJ_ID_567	0.00	4,573.00	4,816.15	105.36
496	☐	WDNJ_ID_568	0.00	4,572.00	4,816.14	105.79
497	☐	WDNJ_ID_569	0.00	4,560.00	4,816.14	110.99
498	☐	WDNJ_ID_57	0.82	4,629.71	4,816.11	80.77
499	☐	WDNJ_ID_570	0.00	4,573.00	4,816.15	105.36
500	☐	WDNJ_ID_571	0.00	4,573.00	4,816.15	105.36

2021 Model - 2041 Flows - Standard Junction Report

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
501	☐	WDNJ_ID_572	0.00	4,510.44	4,816.07	132.43
502	☐	WDNJ_ID_573	0.00	5,041.91	5,258.38	93.80
503	☐	WDNJ_ID_574	0.00	5,015.82	5,231.14	93.30
504	☐	WDNJ_ID_575	0.00	4,801.49	5,096.78	127.95
505	☐	WDNJ_ID_576	0.00	4,813.50	5,096.93	122.81
506	☐	WDNJ_ID_577	0.00	4,709.16	4,939.63	99.87
507	☐	WDNJ_ID_578	0.00	4,724.00	4,939.63	93.43
508	☐	WDNJ_ID_579	0.00	4,676.24	4,816.28	60.68
509	☐	WDNJ_ID_58	0.82	4,630.97	4,816.10	80.22
510	☐	WDNJ_ID_582	0.00	4,611.17	4,816.21	88.85
511	☐	WDNJ_ID_583	0.00	4,610.00	4,816.21	89.35
512	☐	WDNJ_ID_584	0.00	5,182.00	5,408.38	98.09
513	☐	WDNJ_ID_585	0.00	4,800.00	5,096.40	128.43
514	☐	WDNJ_ID_586	0.00	4,825.00	5,096.40	117.60
515	☐	WDNJ_ID_587	0.00	4,800.00	5,096.40	128.43
516	☐	WDNJ_ID_6	0.78	4,654.53	4,939.60	123.52
517	☐	WDNJ_ID_61	0.50	5,078.12	5,258.39	78.11
518	☐	WDNJ_ID_62	0.50	5,085.43	5,258.39	74.94
519	☐	WDNJ_ID_63	1.24	4,834.00	5,096.40	113.70
520	☐	WDNJ_ID_64	0.20	4,824.54	5,096.40	117.80
521	☐	WDNJ_ID_65	0.66	4,817.59	5,096.40	120.81
522	☐	WDNJ_ID_66	0.56	4,845.49	5,096.90	108.94
523	☐	WDNJ_ID_67	0.56	4,847.45	5,096.91	108.09
524	☐	WDNJ_ID_68	1.20	4,912.99	5,097.02	79.74
525	☐	WDNJ_ID_69	3.50	4,918.07	5,097.02	77.54
526	☐	WDNJ_ID_7	3.72	4,836.59	5,096.94	112.81
527	☐	WDNJ_ID_70	0.44	4,809.70	5,096.44	124.24
528	☐	WDNJ_ID_71	1.92	4,829.72	5,096.40	115.55
529	☐	WDNJ_ID_72	1.42	4,591.96	4,816.13	97.13
530	☐	WDNJ_ID_73	1.94	4,627.14	4,816.20	81.92
531	☐	WDNJ_ID_74	1.68	4,867.73	5,096.97	99.33
532	☐	WDNJ_ID_75	0.78	4,554.19	4,816.13	113.50
533	☐	WDNJ_ID_76	2.46	4,556.44	4,816.12	112.52
534	☐	WDNJ_ID_77	1.96	4,642.62	4,816.17	75.20
535	☐	WDNJ_ID_78	2.52	4,607.33	4,816.13	90.47
536	☐	WDNJ_ID_79	2.88	4,925.45	5,097.03	74.35
537	☐	WDNJ_ID_8	2.00	4,830.02	5,096.93	115.65
538	☐	WDNJ_ID_80	1.76	4,876.58	5,097.00	95.51
539	☐	WDNJ_ID_81	1.86	4,562.92	4,816.11	109.71
540	☐	WDNJ_ID_82	4.52	4,605.22	4,816.21	91.42
541	☐	WDNJ_ID_83	2.50	4,601.47	4,816.23	93.06
542	☐	WDNJ_ID_84	0.30	4,717.29	4,816.44	42.96
543	☐	WDNJ_ID_85	2.96	4,590.41	4,816.16	97.82
544	☐	WDNJ_ID_86	2.98	4,544.23	4,816.11	117.81
545	☐	WDNJ_ID_87	3.90	4,545.96	4,816.12	117.06
546	☐	WDNJ_ID_88	15.38	4,647.85	4,816.27	72.98
547	☐	WDNJ_ID_89	3.44	4,677.08	4,816.35	60.35
548	☐	WDNJ_ID_9	7.72	4,816.84	5,096.83	121.32
549	☐	WDNJ_ID_90	1.86	4,564.20	4,816.12	109.16
550	☐	WDNJ_ID_91	3.18	4,532.34	4,816.06	122.94

		ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
551	☐	WDNJ_ID_92	1.06	4,923.16	5,096.28	75.01
552	☐	WDNJ_ID_93	3.18	4,857.99	5,096.36	103.29
553	☐	WDNJ_ID_94	2.24	4,576.15	4,816.10	103.97
554	☐	WDNJ_ID_95	2.00	4,577.66	4,816.10	103.31
555	☐	WDNJ_ID_96	4.04	4,589.92	4,816.18	98.04
556	☐	WDNJ_ID_97	2.92	4,559.19	4,816.13	111.33
557	☐	WDNJ_ID_98	5.94	4,564.87	4,816.13	108.87
558	☐	WDNJ_ID_99	0.18	4,798.10	5,096.93	129.48
559	☐	WDNJ_NI_538	0.00	4,645.00	4,816.83	74.45
560	☐	WDNJ_NI_539	0.00	4,701.00	4,816.83	50.19
561	☐	WDNJ_NI_540	0.00	4,630.00	4,816.83	80.95
562	☐	WDNJ_NI_541	0.00	4,632.00	4,816.83	80.09
563	☐	WDNJ_NI_542	0.00	4,803.00	4,816.83	5.99
564	☐	WDNJ_NI_545	0.12	4,660.00	4,816.23	67.69

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
1	☐	WDNJ_ID_100	1,500.18	4,411.23	WDNJ_ID_175	10.42
2	☐	WDNJ_ID_101	1,502.48	1,830.98	WDNJ_ID_127	-1.93
3	☐	WDNJ_ID_102	1,501.34	9,312.99	WDNJ_ID_127	3.17
4	☐	WDNJ_ID_103	1,501.54	7,637.05	WDNJ_ID_357	-19.90
5	☐	WDNJ_ID_104	1,501.54	6,213.04	WDNJ_ID_357	-2.19
6	☐	WDNJ_ID_105	1,500.44	4,209.49	WDNJ_ID_128	12.58
7	☐	WDNJ_ID_106	1,501.78	4,574.31	WDNJ_ID_316	19.43
8	☐	WDNJ_ID_107	1,501.00	8,296.05	WDNJ_ID_175	7.04
9	☐	WDNJ_ID_108	1,504.60	6,718.91	WDNJ_ID_108	20.00
10	☐	WDNJ_ID_109	1,514.12	6,250.51	WDNJ_ID_109	20.00
11	☐	WDNJ_ID_110	1,501.94	6,198.45	WDNJ_ID_110	20.00
12	☐	WDNJ_ID_111	1,502.22	4,202.54	WDNJ_ID_143	18.18
13	☐	WDNJ_ID_112	1,500.76	3,587.88	WDNJ_ID_486	19.88
14	☐	WDNJ_ID_113	1,506.92	7,296.22	WDNJ_ID_459	7.15
15	☐	WDNJ_ID_114	1,502.08	4,583.10	WDNJ_ID_486	5.17
16	☐	WDNJ_ID_115	1,501.18	3,612.20	WDNJ_ID_115	20.00
17	☐	WDNJ_ID_116	1,503.88	8,557.39	WDNJ_ID_459	8.48
18	☐	WDNJ_ID_117	1,501.34	7,351.23	WDNJ_ID_393	14.33
19	☐	WDNJ_ID_118	1,502.42	4,441.05	WDNJ_ID_118	20.00
20	☐	WDNJ_ID_119	1,502.64	5,631.07	WDNJ_ID_119	20.00
21	☐	WDNJ_ID_12	1,500.24	7,986.23	WDNJ_ID_357	-35.91
22	☐	WDNJ_ID_120	1,501.06	3,837.68	WDNJ_ID_120	20.00
23	☐	WDNJ_ID_121	1,501.16	4,081.76	WDNJ_ID_486	10.91
24	☐	WDNJ_ID_122	1,501.92	1,540.10	WDNJ_ID_122	20.00
25	☐	WDNJ_ID_124	1,500.68	5,403.06	WDNJ_ID_357	-7.02
26	☐	WDNJ_ID_125	1,501.32	2,485.68	WDNJ_ID_283	3.30
27	☐	WDNJ_ID_126	1,502.72	1,050.53	WDNJ_ID_126	20.00
28	☐	WDNJ_ID_127	1,501.20	1,070.36	WDNJ_ID_127	20.00
29	☐	WDNJ_ID_128	1,501.00	580.69	WDNJ_ID_128	20.00
30	☐	WDNJ_ID_129	1,501.76	4,540.21	WDNJ_ID_357	-13.89
31	☐	WDNJ_ID_130	1,502.72	1,434.88	WDNJ_ID_130	20.00
32	☐	WDNJ_ID_131	1,502.42	6,871.95	WDNJ_ID_459	9.14
33	☐	WDNJ_ID_132	1,501.70	7,939.41	WDNJ_ID_459	-4.42
34	☐	WDNJ_ID_133	1,500.34	2,921.22	WDNJ_ID_133	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
35	☐	WDNJ_ID_134	1,501.52	6,112.88	WDNJ_ID_175	-15.83
36	☐	WDNJ_ID_135	1,500.48	4,538.18	WDNJ_ID_175	1.61
37	☐	WDNJ_ID_137	1,502.04	8,005.75	WDNJ_ID_357	-14.12
38	☐	WDNJ_ID_138	1,502.18	2,488.62	WDNJ_ID_138	20.00
39	☐	WDNJ_ID_139	1,502.56	1,633.56	WDNJ_ID_283	5.87
40	☐	WDNJ_ID_140	1,502.36	2,151.33	WDNJ_ID_140	20.00
41	☐	WDNJ_ID_141	1,501.00	2,796.07	WDNJ_ID_141	20.00
42	☐	WDNJ_ID_142	1,501.60	3,090.80	WDNJ_ID_142	20.00
43	☐	WDNJ_ID_143	1,502.16	2,767.54	WDNJ_ID_143	20.00
44	☐	WDNJ_ID_144	1,500.36	2,440.98	WDNJ_ID_144	20.00
45	☐	WDNJ_ID_145	1,501.28	2,725.56	WDNJ_ID_145	20.00
46	☐	WDNJ_ID_146	1,500.60	2,520.65	WDNJ_ID_146	20.00
47	☐	WDNJ_ID_147	1,500.56	7,640.13	WDNJ_ID_508	15.17
48	☐	WDNJ_ID_148	1,501.12	3,704.16	WDNJ_ID_148	20.00
49	☐	WDNJ_ID_149	1,504.28	8,247.32	WDNJ_ID_550	7.57
50	☐	WDNJ_ID_150	1,500.72	10,614.66	WDNJ_ID_333	9.53
51	☐	WDNJ_ID_151	1,500.76	4,504.94	WDNJ_ID_151	20.00
52	☐	WDNJ_ID_152	1,500.00	5,760.02	WDNJ_ID_152	20.00
53	☐	WDNJ_ID_153	1,500.00	6,411.37	WDNJ_ID_459	17.23
54	☐	WDNJ_ID_154	1,500.42	1,749.01	WDNJ_ID_154	20.00
55	☐	WDNJ_ID_156	1,500.18	5,947.03	WDNJ_ID_156	20.00
56	☐	WDNJ_ID_157	1,502.74	11,012.69	WDNJ_ID_158	12.66
57	☐	WDNJ_ID_158	1,500.74	2,081.61	WDNJ_ID_158	20.00
58	☐	WDNJ_ID_159	1,501.56	2,298.48	WDNJ_ID_357	-23.93
59	☐	WDNJ_ID_16	1,500.12	2,848.31	WDNJ_ID_16	20.00
60	☐	WDNJ_ID_160	1,500.46	3,816.22	WDNJ_ID_357	-19.94
61	☐	WDNJ_ID_161	1,501.54	3,529.72	WDNJ_ID_357	-1.73
62	☐	WDNJ_ID_165	1,500.22	2,017.25	WDNJ_ID_165	20.00
63	☐	WDNJ_ID_168	1,500.04	2,556.44	WDNJ_ID_393	17.97
64	☐	WDNJ_ID_169	1,500.12	2,284.12	WDNJ_ID_169	20.00
65	☐	WDNJ_ID_17	1,500.12	198.77	WDNJ_ID_17	20.00
66	☐	WDNJ_ID_170	1,500.08	5,204.23	WDNJ_ID_287	-2.27
67	☐	WDNJ_ID_173	1,500.00	2,441.53	WDNJ_ID_173	20.00
68	☐	WDNJ_ID_175	1,500.44	2,337.10	WDNJ_ID_175	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
69	☐	WDNJ_ID_176	1,500.04	3,191.64	WDNJ_ID_176	20.00
70	☐	WDNJ_ID_178	1,500.62	9,578.59	WDNJ_ID_357	-7.80
71	☐	WDNJ_ID_179	1,500.80	9,515.72	WDNJ_ID_357	-18.48
72	☐	WDNJ_ID_18	1,500.72	7,885.45	WDNJ_ID_459	14.38
73	☐	WDNJ_ID_180	1,500.72	2,631.23	WDNJ_ID_175	-3.17
74	☐	WDNJ_ID_181	1,500.40	4,577.75	WDNJ_ID_357	-58.07
75	☐	WDNJ_ID_182	1,501.76	4,793.07	WDNJ_ID_459	12.13
76	☐	WDNJ_ID_183	1,503.26	8,254.36	WDNJ_ID_459	-6.67
77	☐	WDNJ_ID_184	1,501.96	2,635.09	WDNJ_ID_507	-5.02
78	☐	WDNJ_ID_185	1,501.62	2,699.61	WDNJ_ID_175	-8.82
79	☐	WDNJ_ID_186	1,500.22	7,880.82	WDNJ_ID_186	20.00
80	☐	WDNJ_ID_187	1,500.22	9,043.14	WDNJ_ID_333	12.64
81	☐	WDNJ_ID_188	1,504.16	8,368.71	WDNJ_NI_545	9.59
82	☐	WDNJ_ID_189	1,502.24	5,941.25	WDNJ_ID_272	17.39
83	☐	WDNJ_ID_190	1,502.46	6,142.34	WDNJ_ID_256	19.68
84	☐	WDNJ_ID_191	1,504.28	8,739.75	WDNJ_ID_459	15.13
85	☐	WDNJ_ID_192	1,500.92	11,658.95	WDNJ_ID_192	20.00
86	☐	WDNJ_ID_193	1,510.38	7,622.43	WDNJ_ID_193	20.00
87	☐	WDNJ_ID_194	1,502.16	7,967.80	WDNJ_ID_508	15.39
88	☐	WDNJ_ID_195	1,500.64	9,674.78	WDNJ_ID_175	1.47
89	☐	WDNJ_ID_196	1,506.26	7,221.89	WDNJ_ID_459	17.71
90	☐	WDNJ_ID_197	1,501.26	7,364.75	WDNJ_ID_459	16.44
91	☐	WDNJ_ID_198	1,503.90	7,927.57	WDNJ_ID_459	11.77
92	☐	WDNJ_ID_199	1,501.12	8,113.55	WDNJ_ID_459	11.92
93	☐	WDNJ_ID_2	1,500.84	1,232.95	WDNJ_ID_128	2.47
94	☐	WDNJ_ID_200	1,502.84	7,198.61	WDNJ_ID_459	7.12
95	☐	WDNJ_ID_201	1,504.66	7,281.54	WDNJ_ID_201	20.00
96	☐	WDNJ_ID_202	1,504.32	8,173.88	WDNJ_ID_459	-0.00
97	☐	WDNJ_ID_203	1,504.20	6,817.17	WDNJ_ID_203	20.00
98	☐	WDNJ_ID_204	1,502.14	6,084.45	WDNJ_ID_204	20.00
99	☐	WDNJ_ID_205	1,517.48	7,199.75	WDNJ_ID_459	17.08
100	☐	WDNJ_ID_206	1,500.40	4,760.89	WDNJ_ID_206	20.00
101	☐	WDNJ_ID_207	1,500.02	7,577.45	WDNJ_ID_459	3.42
102	☐	WDNJ_ID_208	1,502.20	5,556.51	WDNJ_ID_256	13.95

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
103	☐	WDNJ_ID_209	1,505.36	6,661.44	WDNJ_ID_256	16.91
104	☐	WDNJ_ID_210	1,501.96	5,854.40	WDNJ_ID_35	15.91
105	☐	WDNJ_ID_211	1,501.58	7,584.57	WDNJ_ID_211	20.00
106	☐	WDNJ_ID_212	1,501.04	6,721.90	WDNJ_NI_545	19.46
107	☐	WDNJ_ID_213	1,501.88	6,557.94	WDNJ_ID_213	20.00
108	☐	WDNJ_ID_214	1,502.52	8,413.60	WDNJ_ID_459	11.57
109	☐	WDNJ_ID_215	1,502.06	2,441.39	WDNJ_ID_507	11.20
110	☐	WDNJ_ID_216	1,505.70	5,738.39	WDNJ_ID_216	20.00
111	☐	WDNJ_ID_217	1,506.52	7,137.50	WDNJ_ID_459	17.34
112	☐	WDNJ_ID_218	1,503.80	7,449.19	WDNJ_ID_459	8.33
113	☐	WDNJ_ID_219	1,501.20	2,458.44	WDNJ_ID_175	10.77
114	☐	WDNJ_ID_220	1,501.80	2,485.10	WDNJ_ID_175	8.73
115	☐	WDNJ_ID_221	1,500.94	7,362.47	WDNJ_ID_459	14.82
116	☐	WDNJ_ID_222	1,500.82	5,485.49	WDNJ_ID_459	16.34
117	☐	WDNJ_ID_223	1,505.50	6,060.24	WDNJ_ID_459	19.74
118	☐	WDNJ_ID_224	1,500.00	6,613.21	WDNJ_ID_459	13.56
119	☐	WDNJ_ID_225	1,501.72	5,523.06	WDNJ_ID_225	20.00
120	☐	WDNJ_ID_226	1,501.22	6,240.31	WDNJ_ID_459	9.16
121	☐	WDNJ_ID_227	1,501.80	5,338.33	WDNJ_ID_459	19.22
122	☐	WDNJ_ID_229	1,502.24	6,618.97	WDNJ_ID_459	5.76
123	☐	WDNJ_ID_230	1,501.60	6,299.20	WDNJ_ID_459	10.39
124	☐	WDNJ_ID_231	1,500.36	6,298.21	WDNJ_ID_459	16.52
125	☐	WDNJ_ID_232	1,501.02	3,196.80	WDNJ_ID_8	12.83
126	☐	WDNJ_ID_233	1,501.08	6,139.62	WDNJ_ID_459	9.19
127	☐	WDNJ_ID_234	1,505.70	5,611.35	WDNJ_ID_234	20.00
128	☐	WDNJ_ID_235	1,501.76	2,342.55	WDNJ_ID_357	-11.35
129	☐	WDNJ_ID_236	1,501.58	2,289.35	WDNJ_ID_357	-23.19
130	☐	WDNJ_ID_237	1,506.46	5,543.69	WDNJ_ID_237	20.00
131	☐	WDNJ_ID_238	1,502.76	7,718.13	WDNJ_ID_459	-1.76
132	☐	WDNJ_ID_239	1,503.04	4,151.49	WDNJ_ID_239	20.00
133	☐	WDNJ_ID_24	1,501.88	6,444.82	WDNJ_ID_459	19.13
134	☐	WDNJ_ID_240	1,501.52	5,288.21	WDNJ_ID_459	19.78
135	☐	WDNJ_ID_241	1,503.44	6,377.77	WDNJ_ID_459	14.33
136	☐	WDNJ_ID_242	1,502.78	2,624.82	WDNJ_ID_242	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
137	☐	WDNJ_ID_244	1,500.80	5,150.96	WDNJ_ID_175	-11.40
138	☐	WDNJ_ID_245	1,501.06	5,644.25	WDNJ_ID_459	16.20
139	☐	WDNJ_ID_246	1,502.24	7,906.04	WDNJ_ID_459	-3.72
140	☐	WDNJ_ID_247	1,500.24	4,833.15	WDNJ_ID_175	-3.41
141	☐	WDNJ_ID_248	1,503.64	6,947.48	WDNJ_ID_459	3.76
142	☐	WDNJ_ID_249	1,500.82	6,399.12	WDNJ_ID_459	8.66
143	☐	WDNJ_ID_250	1,511.06	5,820.96	WDNJ_ID_250	20.00
144	☐	WDNJ_ID_251	1,500.76	6,183.16	WDNJ_ID_459	19.03
145	☐	WDNJ_ID_252	1,509.96	7,443.84	WDNJ_ID_459	15.84
146	☐	WDNJ_ID_254	1,501.24	2,289.65	WDNJ_ID_278	8.53
147	☐	WDNJ_ID_255	1,502.22	4,514.15	WDNJ_ID_255	20.00
148	☐	WDNJ_ID_256	1,502.02	3,349.77	WDNJ_ID_256	20.00
149	☐	WDNJ_ID_258	1,502.46	3,916.65	WDNJ_ID_258	20.00
150	☐	WDNJ_ID_259	1,500.78	4,701.81	WDNJ_ID_175	-9.19
151	☐	WDNJ_ID_26	1,501.76	7,273.68	WDNJ_ID_357	-36.55
152	☐	WDNJ_ID_260	1,500.76	6,152.49	WDNJ_ID_459	19.39
153	☐	WDNJ_ID_261	1,501.86	6,331.87	WDNJ_ID_261	20.00
154	☐	WDNJ_ID_262	1,510.24	3,929.94	WDNJ_ID_262	20.00
155	☐	WDNJ_ID_263	1,501.80	7,250.71	WDNJ_ID_459	17.01
156	☐	WDNJ_ID_264	1,501.80	5,319.79	WDNJ_ID_264	20.00
157	☐	WDNJ_ID_265	1,501.38	5,976.25	WDNJ_ID_265	20.00
158	☐	WDNJ_ID_266	1,501.52	4,298.03	WDNJ_ID_266	20.00
159	☐	WDNJ_ID_267	1,500.14	4,290.65	WDNJ_ID_175	2.07
160	☐	WDNJ_ID_269	1,501.22	5,338.32	WDNJ_ID_269	20.00
161	☐	WDNJ_ID_27	1,501.04	2,060.47	WDNJ_ID_27	20.00
162	☐	WDNJ_ID_270	1,500.36	3,633.87	WDNJ_ID_270	20.00
163	☐	WDNJ_ID_271	1,501.16	2,067.70	WDNJ_ID_357	6.80
164	☐	WDNJ_ID_272	1,502.24	4,391.02	WDNJ_ID_272	20.00
165	☐	WDNJ_ID_273	1,501.38	5,806.62	WDNJ_ID_273	20.00
166	☐	WDNJ_ID_274	1,500.02	2,732.20	WDNJ_ID_274	20.00
167	☐	WDNJ_ID_275	1,500.80	4,127.76	WDNJ_ID_275	20.00
168	☐	WDNJ_ID_276	1,500.82	2,072.70	WDNJ_ID_276	20.00
169	☐	WDNJ_ID_277	1,507.24	5,716.17	WDNJ_ID_277	20.00
170	☐	WDNJ_ID_278	1,500.38	1,807.08	WDNJ_ID_278	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
171	☐	WDNJ_ID_279	1,501.20	2,448.18	WDNJ_ID_175	11.57
172	☐	WDNJ_ID_28	1,501.42	6,571.72	WDNJ_ID_357	-38.97
173	☐	WDNJ_ID_280	1,501.72	4,234.66	WDNJ_ID_280	20.00
174	☐	WDNJ_ID_281	1,500.30	4,942.63	WDNJ_ID_281	20.00
175	☐	WDNJ_ID_283	1,500.84	1,321.58	WDNJ_ID_283	20.00
176	☐	WDNJ_ID_284	1,501.04	6,342.94	WDNJ_ID_326	18.32
177	☐	WDNJ_ID_285	1,501.28	3,370.56	WDNJ_ID_286	11.18
178	☐	WDNJ_ID_286	1,501.58	2,697.18	WDNJ_ID_286	20.00
179	☐	WDNJ_ID_287	1,501.20	3,736.44	WDNJ_ID_287	20.00
180	☐	WDNJ_ID_288	1,500.48	2,593.46	WDNJ_ID_288	20.00
181	☐	WDNJ_ID_29	1,500.46	3,597.49	WDNJ_ID_357	-5.93
182	☐	WDNJ_ID_290	1,502.00	2,639.45	WDNJ_ID_302	13.72
183	☐	WDNJ_ID_291	1,500.82	2,503.82	WDNJ_ID_291	20.00
184	☐	WDNJ_ID_292	1,500.00	5,036.56	WDNJ_ID_292	20.00
185	☐	WDNJ_ID_293	1,501.70	4,773.22	WDNJ_ID_286	2.33
186	☐	WDNJ_ID_294	1,500.94	5,495.80	WDNJ_ID_175	0.61
187	☐	WDNJ_ID_295	1,501.20	3,845.61	WDNJ_ID_295	20.00
188	☐	WDNJ_ID_296	1,500.68	3,619.12	WDNJ_ID_296	20.00
189	☐	WDNJ_ID_297	1,500.00	4,720.94	WDNJ_ID_297	20.00
190	☐	WDNJ_ID_298	1,500.00	4,671.86	WDNJ_ID_298	20.00
191	☐	WDNJ_ID_299	1,501.78	4,267.71	WDNJ_ID_287	11.59
192	☐	WDNJ_ID_30	1,502.34	6,643.63	WDNJ_ID_30	20.00
193	☐	WDNJ_ID_300	1,500.76	2,947.99	WDNJ_ID_300	20.00
194	☐	WDNJ_ID_301	1,501.04	4,945.85	WDNJ_ID_175	5.12
195	☐	WDNJ_ID_302	1,500.82	2,403.92	WDNJ_ID_302	20.00
196	☐	WDNJ_ID_303	1,500.42	3,980.00	WDNJ_ID_348	-85.70
197	☐	WDNJ_ID_304	1,500.38	3,128.19	WDNJ_ID_348	-32.43
198	☐	WDNJ_ID_305	1,500.00	2,264.33	WDNJ_ID_305	20.00
199	☐	WDNJ_ID_306	1,500.04	3,496.69	WDNJ_ID_348	-65.23
200	☐	WDNJ_ID_307	1,500.00	3,081.65	WDNJ_ID_348	-38.90
201	☐	WDNJ_ID_309	1,500.04	2,827.33	WDNJ_ID_348	-24.47
202	☐	WDNJ_ID_310	1,500.00	3,349.97	WDNJ_ID_348	-55.56
203	☐	WDNJ_ID_313	1,500.06	5,777.35	WDNJ_ID_313	20.00
204	☐	WDNJ_ID_314	1,500.48	6,618.46	WDNJ_NI_545	-15.14

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
205	☐	WDNJ_ID_316	1,500.46	3,718.84	WDNJ_ID_316	20.00
206	☐	WDNJ_ID_318	1,502.16	11,781.48	WDNJ_ID_318	20.00
207	☐	WDNJ_ID_32	1,500.46	2,074.93	WDNJ_ID_32	20.00
208	☐	WDNJ_ID_320	1,500.68	10,287.86	WDNJ_ID_175	-7.73
209	☐	WDNJ_ID_321	1,501.38	7,775.73	WDNJ_ID_459	-2.57
210	☐	WDNJ_ID_322	1,502.44	6,132.78	WDNJ_ID_459	9.62
211	☐	WDNJ_ID_323	1,502.62	9,976.78	WDNJ_ID_175	-9.73
212	☐	WDNJ_ID_324	1,500.18	5,967.11	WDNJ_ID_459	13.41
213	☐	WDNJ_ID_326	1,500.06	6,120.07	WDNJ_ID_326	20.00
214	☐	WDNJ_ID_327	1,500.00	4,684.56	WDNJ_ID_327	20.00
215	☐	WDNJ_ID_331	1,501.32	6,373.77	WDNJ_ID_495	3.24
216	☐	WDNJ_ID_333	1,501.76	7,446.83	WDNJ_ID_333	20.00
217	☐	WDNJ_ID_334	1,502.06	8,282.79	WDNJ_NI_545	2.62
218	☐	WDNJ_ID_335	1,503.50	9,686.86	WDNJ_ID_175	3.49
219	☐	WDNJ_ID_34	1,504.04	8,096.26	WDNJ_ID_459	16.27
220	☐	WDNJ_ID_343	1,500.08	5,057.19	WDNJ_ID_287	-0.52
221	☐	WDNJ_ID_344	1,500.26	3,042.94	WDNJ_ID_344	20.00
222	☐	WDNJ_ID_345	1,500.00	4,078.58	WDNJ_ID_348	-107.36
223	☐	WDNJ_ID_347	1,500.00	1,315.79	WDNJ_ID_348	17.63
224	☐	WDNJ_ID_348	1,500.00	1,223.51	WDNJ_ID_348	20.00
225	☐	WDNJ_ID_349	1,501.40	3,562.19	WDNJ_ID_357	-23.62
226	☐	WDNJ_ID_35	1,501.38	4,267.32	WDNJ_ID_35	20.00
227	☐	WDNJ_ID_350	1,502.34	3,726.78	WDNJ_ID_357	-29.95
228	☐	WDNJ_ID_351	1,500.50	2,049.22	WDNJ_ID_357	-19.88
229	☐	WDNJ_ID_352	1,500.00	1,320.99	WDNJ_ID_352	20.00
230	☐	WDNJ_ID_353	1,500.00	1,417.06	WDNJ_ID_352	10.89
231	☐	WDNJ_ID_354	1,500.08	1,811.85	WDNJ_ID_357	-11.35
232	☐	WDNJ_ID_355	1,500.08	1,781.59	WDNJ_ID_357	-8.64
233	☐	WDNJ_ID_356	1,500.00	1,490.20	WDNJ_ID_357	9.27
234	☐	WDNJ_ID_357	200.06	1,183.28	WDNJ_ID_357	20.00
235	☐	WDNJ_ID_358	1,500.18	6,387.91	WDNJ_ID_459	13.72
236	☐	WDNJ_ID_359	1,500.18	4,867.88	WDNJ_ID_359	20.00
237	☐	WDNJ_ID_36	1,501.78	5,752.31	WDNJ_ID_36	20.00
238	☐	WDNJ_ID_360	1,500.50	2,056.48	WDNJ_ID_357	-19.62

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
239	☐	WDNJ_ID_361	1,500.50	1,511.10	WDNJ_ID_361	20.00
240	☐	WDNJ_ID_362	1,500.16	7,495.98	WDNJ_ID_459	0.05
241	☐	WDNJ_ID_363	1,502.54	4,635.95	WDNJ_ID_363	20.00
242	☐	WDNJ_ID_364	1,500.90	3,187.95	WDNJ_ID_365	17.62
243	☐	WDNJ_ID_365	1,501.16	2,368.46	WDNJ_ID_365	20.00
244	☐	WDNJ_ID_366	1,501.26	2,950.18	WDNJ_ID_366	20.00
245	☐	WDNJ_ID_368	1,500.20	740.45	WDNJ_ID_368	20.00
246	☐	WDNJ_ID_37	1,501.78	6,479.56	WDNJ_ID_37	20.00
247	☐	WDNJ_ID_371	1,500.58	4,420.25	WDNJ_ID_357	-25.11
248	☐	WDNJ_ID_372	1,500.20	3,685.57	WDNJ_ID_374	15.13
249	☐	WDNJ_ID_373	1,500.00	3,391.68	WDNJ_ID_373	20.00
250	☐	WDNJ_ID_374	1,500.76	3,225.39	WDNJ_ID_374	20.00
251	☐	WDNJ_ID_377	1,500.88	5,624.44	WDNJ_ID_283	3.05
252	☐	WDNJ_ID_378	1,501.78	4,642.52	WDNJ_ID_316	17.37
253	☐	WDNJ_ID_38	1,502.00	1,156.15	WDNJ_ID_38	20.00
254	☐	WDNJ_ID_381	1,500.28	3,084.27	WDNJ_ID_381	20.00
255	☐	WDNJ_ID_382	1,501.40	3,018.56	WDNJ_ID_278	-4.98
256	☐	WDNJ_ID_384	1,500.14	6,439.52	WDNJ_ID_393	17.25
257	☐	WDNJ_ID_385	1,500.14	6,393.29	WDNJ_ID_393	18.56
258	☐	WDNJ_ID_386	1,500.14	6,728.29	WDNJ_ID_393	12.62
259	☐	WDNJ_ID_387	1,500.14	6,976.00	WDNJ_ID_393	12.71
260	☐	WDNJ_ID_388	1,500.14	6,616.76	WDNJ_ID_393	12.17
261	☐	WDNJ_ID_389	1,501.34	7,322.05	WDNJ_ID_393	13.91
262	☐	WDNJ_ID_39	1,500.68	5,883.63	WDNJ_ID_40	16.50
263	☐	WDNJ_ID_390	1,501.22	4,687.60	WDNJ_ID_390	20.00
264	☐	WDNJ_ID_392	1,501.40	3,758.99	WDNJ_ID_392	20.00
265	☐	WDNJ_ID_393	1,501.12	1,254.78	WDNJ_ID_393	20.00
266	☐	WDNJ_ID_394	1,500.08	2,643.03	WDNJ_ID_393	11.68
267	☐	WDNJ_ID_395	1,501.28	6,993.82	WDNJ_ID_175	-18.82
268	☐	WDNJ_ID_40	1,500.80	1,021.64	WDNJ_ID_40	20.00
269	☐	WDNJ_ID_41	1,501.40	7,618.81	WDNJ_ID_357	-0.73
270	☐	WDNJ_ID_411	1,501.40	6,430.18	WDNJ_ID_175	-18.00
271	☐	WDNJ_ID_412	1,500.14	5,472.83	WDNJ_ID_175	-4.04
272	☐	WDNJ_ID_413	1,500.16	2,709.46	WDNJ_ID_413	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
273	☐	WDNJ_ID_414	1,500.26	5,826.70	WDNJ_ID_175	-15.66
274	☐	WDNJ_ID_415	1,500.90	2,561.97	WDNJ_ID_175	2.51
275	☐	WDNJ_ID_42	1,500.96	1,560.06	WDNJ_ID_42	20.00
276	☐	WDNJ_ID_421	1,500.36	4,656.82	WDNJ_ID_175	-0.68
277	☐	WDNJ_ID_422	1,500.06	3,602.04	WDNJ_ID_508	15.27
278	☐	WDNJ_ID_423	1,500.34	3,927.96	WDNJ_ID_175	8.33
279	☐	WDNJ_ID_424	1,504.42	2,595.78	WDNJ_ID_507	-1.76
280	☐	WDNJ_ID_425	1,522.26	5,970.46	WDNJ_ID_425	20.00
281	☐	WDNJ_ID_426	1,505.70	4,764.14	WDNJ_ID_426	20.00
282	☐	WDNJ_ID_427	1,505.70	4,780.69	WDNJ_ID_427	20.00
283	☐	WDNJ_ID_43	1,501.92	2,835.51	WDNJ_ID_283	7.59
284	☐	WDNJ_ID_430	1,500.48	5,844.32	WDNJ_NI_545	12.93
285	☐	WDNJ_ID_432	1,503.32	7,411.95	WDNJ_NI_545	-3.64
286	☐	WDNJ_ID_433	1,501.30	7,070.88	WDNJ_NI_545	-12.29
287	☐	WDNJ_ID_434	1,502.66	5,678.19	WDNJ_ID_434	20.00
288	☐	WDNJ_ID_435	1,501.40	6,660.99	WDNJ_ID_435	20.00
289	☐	WDNJ_ID_436	1,501.54	7,823.74	WDNJ_ID_459	14.54
290	☐	WDNJ_ID_437	1,501.54	6,884.04	WDNJ_ID_437	20.00
291	☐	WDNJ_ID_438	1,502.46	6,497.57	WDNJ_ID_438	20.00
292	☐	WDNJ_ID_439	1,503.80	6,342.90	WDNJ_ID_439	20.00
293	☐	WDNJ_ID_44	1,502.92	2,447.10	WDNJ_ID_44	20.00
294	☐	WDNJ_ID_440	1,500.00	6,803.64	WDNJ_ID_459	12.61
295	☐	WDNJ_ID_441	1,500.58	5,214.05	WDNJ_ID_441	20.00
296	☐	WDNJ_ID_442	1,500.44	5,139.81	WDNJ_ID_442	20.00
297	☐	WDNJ_ID_443	1,500.58	5,502.03	WDNJ_ID_443	20.00
298	☐	WDNJ_ID_444	1,506.36	6,046.57	WDNJ_ID_459	19.33
299	☐	WDNJ_ID_445	1,500.88	5,883.04	WDNJ_ID_459	19.66
300	☐	WDNJ_ID_446	1,501.34	5,365.31	WDNJ_ID_446	20.00
301	☐	WDNJ_ID_447	1,500.00	6,871.09	WDNJ_ID_459	8.82
302	☐	WDNJ_ID_448	1,500.48	6,380.47	WDNJ_ID_459	15.68
303	☐	WDNJ_ID_45	1,500.22	969.29	WDNJ_ID_45	20.00
304	☐	WDNJ_ID_451	1,500.64	6,233.29	WDNJ_ID_459	16.08
305	☐	WDNJ_ID_452	1,500.68	6,584.63	WDNJ_ID_459	12.65
306	☐	WDNJ_ID_453	1,502.20	4,503.51	WDNJ_ID_453	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
307	☐	WDNJ_ID_454	1,505.12	5,892.03	WDNJ_ID_459	16.88
308	☐	WDNJ_ID_455	1,502.08	6,596.78	WDNJ_ID_459	9.60
309	☐	WDNJ_ID_456	1,503.70	6,046.86	WDNJ_ID_459	13.18
310	☐	WDNJ_ID_457	1,502.12	3,485.71	WDNJ_ID_274	18.53
311	☐	WDNJ_ID_458	1,501.74	2,141.47	WDNJ_ID_458	20.00
312	☐	WDNJ_ID_459	1,500.74	3,076.09	WDNJ_ID_459	20.00
313	☐	WDNJ_ID_46	1,501.38	2,456.88	WDNJ_ID_175	10.91
314	☐	WDNJ_ID_461	1,501.92	1,977.40	WDNJ_ID_278	17.65
315	☐	WDNJ_ID_462	1,502.74	4,292.13	WDNJ_ID_462	20.00
316	☐	WDNJ_ID_463	1,502.00	3,497.94	WDNJ_ID_463	20.00
317	☐	WDNJ_ID_464	1,502.06	3,371.17	WDNJ_ID_464	20.00
318	☐	WDNJ_ID_465	1,502.10	5,168.99	WDNJ_ID_465	20.00
319	☐	WDNJ_ID_466	1,500.00	9,109.62	WDNJ_ID_357	-11.22
320	☐	WDNJ_ID_467	1,500.34	9,394.70	WDNJ_ID_175	9.93
321	☐	WDNJ_ID_468	1,502.48	10,080.57	WDNJ_ID_333	12.11
322	☐	WDNJ_ID_469	1,502.40	9,410.46	WDNJ_ID_333	14.22
323	☐	WDNJ_ID_471	1,501.12	8,010.23	WDNJ_ID_333	19.45
324	☐	WDNJ_ID_472	1,503.22	4,723.55	WDNJ_ID_472	20.00
325	☐	WDNJ_ID_473	1,501.68	8,081.55	WDNJ_ID_175	-15.72
326	☐	WDNJ_ID_474	1,506.30	1,672.92	WDNJ_ID_393	12.27
327	☐	WDNJ_ID_475	1,500.22	2,784.12	WDNJ_ID_8	14.21
328	☐	WDNJ_ID_476	1,500.00	3,671.26	WDNJ_ID_348	-79.31
329	☐	WDNJ_ID_477	1,500.00	3,138.38	WDNJ_ID_348	-45.49
330	☐	WDNJ_ID_478	1,500.06	1,658.36	WDNJ_ID_348	-23.10
331	☐	WDNJ_ID_479	1,500.04	1,350.66	WDNJ_ID_352	17.25
332	☐	WDNJ_ID_48	1,503.30	5,020.54	WDNJ_ID_48	20.00
333	☐	WDNJ_ID_480	1,500.10	1,405.35	WDNJ_ID_357	16.23
334	☐	WDNJ_ID_481	1,500.00	4,019.33	WDNJ_ID_357	-44.92
335	☐	WDNJ_ID_482	1,500.00	3,749.93	WDNJ_ID_357	-39.82
336	☐	WDNJ_ID_483	1,500.00	3,889.93	WDNJ_ID_357	-52.14
337	☐	WDNJ_ID_484	1,500.34	2,523.34	WDNJ_ID_128	2.79
338	☐	WDNJ_ID_485	1,501.16	2,030.35	WDNJ_ID_357	-18.18
339	☐	WDNJ_ID_486	1,501.50	2,295.24	WDNJ_ID_486	20.00
340	☐	WDNJ_ID_487	1,501.46	3,794.26	WDNJ_ID_487	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
341	☐	WDNJ_ID_488	1,502.06	2,801.21	WDNJ_ID_357	-6.33
342	☐	WDNJ_ID_489	1,503.28	6,787.18	WDNJ_ID_357	9.72
343	☐	WDNJ_ID_49	1,505.68	5,192.13	WDNJ_ID_49	20.00
344	☐	WDNJ_ID_495	1,504.62	4,678.10	WDNJ_ID_495	20.00
345	☐	WDNJ_ID_496	1,500.22	8,034.14	WDNJ_ID_333	17.79
346	☐	WDNJ_ID_497	1,500.34	6,046.60	WDNJ_ID_495	9.37
347	☐	WDNJ_ID_5	1,501.40	722.38	WDNJ_ID_5	20.00
348	☐	WDNJ_ID_50	1,501.84	9,096.24	WDNJ_ID_459	-5.49
349	☐	WDNJ_ID_500	1,500.62	6,473.73	WDNJ_ID_495	18.12
350	☐	WDNJ_ID_501	1,500.04	867.09	WDNJ_ID_501	20.00
351	☐	WDNJ_ID_502	1,502.22	2,974.73	WDNJ_ID_502	20.00
352	☐	WDNJ_ID_503	1,501.52	2,657.36	WDNJ_ID_503	20.00
353	☐	WDNJ_ID_504	1,501.72	2,563.99	WDNJ_ID_175	2.42
354	☐	WDNJ_ID_505	1,500.74	2,317.15	WDNJ_ID_505	20.00
355	☐	WDNJ_ID_507	1,501.22	2,263.57	WDNJ_ID_507	20.00
356	☐	WDNJ_ID_508	1,500.82	2,283.92	WDNJ_ID_508	20.00
357	☐	WDNJ_ID_509	1,502.28	2,678.96	WDNJ_ID_175	-7.02
358	☐	WDNJ_ID_510	1,501.84	4,483.27	WDNJ_ID_175	-0.34
359	☐	WDNJ_ID_511	1,502.36	4,837.10	WDNJ_ID_175	-1.89
360	☐	WDNJ_ID_512	1,500.42	3,464.01	WDNJ_ID_512	20.00
361	☐	WDNJ_ID_513	1,501.04	2,870.85	WDNJ_ID_513	20.00
362	☐	WDNJ_ID_514	1,505.86	2,250.33	WDNJ_ID_514	20.00
363	☐	WDNJ_ID_515	1,502.28	2,568.77	WDNJ_ID_507	0.57
364	☐	WDNJ_ID_547	1,500.00	5,940.52	WDNJ_ID_495	11.29
365	☐	WDNJ_ID_549	1,500.00	3,986.24	WDNJ_ID_296	19.28
366	☐	WDNJ_ID_550	1,500.00	1,476.16	WDNJ_ID_550	20.00
367	☐	WDNJ_ID_553	1,500.00	3,741.55	WDNJ_ID_553	20.00
368	☐	WDNJ_ID_554	1,500.00	1,957.78	WDNJ_ID_554	20.00
369	☐	WDNJ_ID_555	1,500.00	7,151.78	WDNJ_ID_459	7.99
370	☐	WDNJ_ID_556	1,500.00	6,695.02	WDNJ_ID_459	12.65
371	☐	WDNJ_ID_557	1,500.00	6,206.28	WDNJ_ID_459	17.52
372	☐	WDNJ_ID_558	1,500.00	6,492.88	WDNJ_ID_459	15.12
373	☐	WDNJ_ID_560	1,500.00	6,964.88	WDNJ_ID_459	10.25
374	☐	WDNJ_ID_561	1,500.00	5,523.57	WDNJ_ID_561	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
375	☐	WDNJ_ID_563	1,500.00	5,476.88	WDNJ_ID_563	20.00
376	☐	WDNJ_ID_564	1,500.00	6,025.44	WDNJ_ID_564	20.00
377	☐	WDNJ_ID_565	1,500.00	5,866.53	WDNJ_ID_565	20.00
378	☐	WDNJ_ID_567	1,500.00	5,516.62	WDNJ_ID_567	20.00
379	☐	WDNJ_ID_568	1,500.00	6,041.51	WDNJ_ID_568	20.00
380	☐	WDNJ_ID_571	1,500.00	5,220.03	WDNJ_ID_571	20.00
381	☐	WDNJ_ID_573	1,500.00	2,505.82	WDNJ_ID_507	5.69
382	☐	WDNJ_ID_574	1,500.00	1,254.62	WDNJ_ID_348	19.16
383	☐	WDNJ_ID_575	1,500.00	8,545.01	WDNJ_ID_357	2.19
384	☐	WDNJ_ID_576	1,500.00	4,062.36	WDNJ_ID_8	13.22
385	☐	WDNJ_ID_577	1,500.00	3,134.67	WDNJ_ID_577	20.00
386	☐	WDNJ_ID_578	1,500.00	3,162.74	WDNJ_ID_128	13.06
387	☐	WDNJ_ID_58	1,500.82	3,191.43	WDNJ_ID_58	20.00
388	☐	WDNJ_ID_583	1,500.00	2,264.82	WDNJ_ID_583	20.00
389	☐	WDNJ_ID_585	1,500.00	2,707.08	WDNJ_ID_348	-11.09
390	☐	WDNJ_ID_586	1,500.00	2,576.25	WDNJ_ID_348	-5.35
391	☐	WDNJ_ID_587	1,500.00	2,880.49	WDNJ_ID_348	-19.29
392	☐	WDNJ_ID_6	1,500.78	127.88	WDNJ_ID_6	20.00
393	☐	WDNJ_ID_61	1,500.50	2,543.41	WDNJ_ID_175	3.98
394	☐	WDNJ_ID_62	1,500.50	2,404.62	WDNJ_ID_175	14.88
395	☐	WDNJ_ID_63	1,501.24	6,587.43	WDNJ_ID_357	-48.02
396	☐	WDNJ_ID_64	1,500.20	4,103.05	WDNJ_ID_357	-14.03
397	☐	WDNJ_ID_65	1,500.66	4,662.61	WDNJ_ID_357	-51.43
398	☐	WDNJ_ID_66	1,500.56	10,195.94	WDNJ_ID_175	10.35
399	☐	WDNJ_ID_67	1,500.56	6,483.69	WDNJ_ID_365	18.69
400	☐	WDNJ_ID_68	1,501.20	5,041.77	WDNJ_ID_68	20.00
401	☐	WDNJ_ID_69	1,503.50	8,744.23	WDNJ_ID_333	16.26
402	☐	WDNJ_ID_7	1,503.72	5,789.78	WDNJ_ID_7	20.00
403	☐	WDNJ_ID_70	1,500.44	6,075.05	WDNJ_ID_357	-5.20
404	☐	WDNJ_ID_71	1,501.92	9,269.45	WDNJ_ID_357	-22.69
405	☐	WDNJ_ID_72	1,501.42	7,573.57	WDNJ_ID_459	-3.33
406	☐	WDNJ_ID_73	1,501.94	5,555.14	WDNJ_ID_459	8.70
407	☐	WDNJ_ID_74	1,501.68	4,173.88	WDNJ_ID_74	20.00
408	☐	WDNJ_ID_75	1,500.78	6,023.38	WDNJ_ID_459	17.23

		ID	Total Demand (gpm)	Hydrant Available Flow (gpm)	Critical Node ID for Design Run	Critical Node Pressure at Available Flow (psi)
409	☐	WDNJ_ID_76	1,502.46	4,439.28	WDNJ_ID_76	20.00
410	☐	WDNJ_ID_77	1,501.96	4,699.89	WDNJ_ID_459	7.44
411	☐	WDNJ_ID_78	1,502.52	5,677.67	WDNJ_ID_459	11.94
412	☐	WDNJ_ID_79	1,502.88	5,517.06	WDNJ_ID_79	20.00
413	☐	WDNJ_ID_8	1,502.00	2,437.48	WDNJ_ID_8	20.00
414	☐	WDNJ_ID_80	1,501.76	4,998.42	WDNJ_ID_80	20.00
415	☐	WDNJ_ID_82	1,504.52	6,537.02	WDNJ_ID_82	20.00
416	☐	WDNJ_ID_83	1,502.50	8,315.02	WDNJ_ID_459	-1.81
417	☐	WDNJ_ID_84	1,500.30	6,614.24	WDNJ_ID_84	20.00
418	☐	WDNJ_ID_85	1,502.96	5,823.74	WDNJ_ID_85	20.00
419	☐	WDNJ_ID_86	1,502.98	4,819.50	WDNJ_ID_86	20.00
420	☐	WDNJ_ID_87	1,503.90	5,826.41	WDNJ_ID_87	20.00
421	☐	WDNJ_ID_88	1,515.38	6,544.16	WDNJ_ID_88	20.00
422	☐	WDNJ_ID_89	1,503.44	7,649.14	WDNJ_ID_84	17.19
423	☐	WDNJ_ID_90	1,501.86	7,496.15	WDNJ_ID_459	-1.81
424	☐	WDNJ_ID_91	1,503.18	5,466.68	WDNJ_ID_91	20.00
425	☐	WDNJ_ID_92	1,501.06	4,505.77	WDNJ_ID_92	20.00
426	☐	WDNJ_ID_93	1,503.18	7,284.94	WDNJ_ID_357	-10.38
427	☐	WDNJ_ID_94	1,502.24	5,042.31	WDNJ_ID_94	20.00
428	☐	WDNJ_ID_96	1,504.04	8,086.78	WDNJ_ID_459	16.30
429	☐	WDNJ_ID_97	1,502.92	6,090.15	WDNJ_ID_97	20.00
430	☐	WDNJ_ID_98	1,505.94	7,065.46	WDNJ_ID_459	13.65
431	☐	WDNJ_ID_99	1,500.18	2,324.23	WDNJ_ID_99	20.00
432	☐	WDNJ_NI_545	1,500.12	355.02	WDNJ_NI_545	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
1	☐	WDNJ_ID_100	49.71	20.00	4,035.61	31.01
2	☐	WDNJ_ID_101	17.89	20.00	1,463.69	41.84
3	☐	WDNJ_ID_102	60.82	20.00	7,826.80	37.41
4	☐	WDNJ_ID_103	74.47	20.00	5,024.87	99.29
5	☐	WDNJ_ID_104	74.47	20.00	5,024.87	68.53
6	☐	WDNJ_ID_105	82.79	20.00	4,083.90	28.82
7	☐	WDNJ_ID_106	67.82	20.00	4,543.99	27.23
8	☐	WDNJ_ID_107	49.89	20.00	7,325.24	32.41
9	☐	WDNJ_ID_108	106.69	20.00	6,718.92	20.25
10	☐	WDNJ_ID_109	116.76	20.00	6,244.32	32.30
11	☐	WDNJ_ID_110	112.84	20.00	6,191.49	32.56
12	☐	WDNJ_ID_111	101.79	20.00	4,158.70	27.38
13	☐	WDNJ_ID_112	51.96	20.00	3,572.14	25.33
14	☐	WDNJ_ID_113	46.76	20.00	5,946.74	50.09
15	☐	WDNJ_ID_114	52.66	20.00	3,782.36	42.40
16	☐	WDNJ_ID_115	72.82	20.00	3,612.20	20.00
17	☐	WDNJ_ID_116	47.43	20.00	7,094.10	47.69
18	☐	WDNJ_ID_117	111.63	20.00	7,126.93	25.97
19	☐	WDNJ_ID_118	104.29	20.00	4,440.95	28.73
20	☐	WDNJ_ID_119	114.41	20.00	5,626.93	30.38
21	☐	WDNJ_ID_12	74.32	20.00	4,483.32	103.20
22	☐	WDNJ_ID_120	78.23	20.00	3,837.68	20.00
23	☐	WDNJ_ID_121	52.02	20.00	3,607.05	35.98
24	☐	WDNJ_ID_122	22.22	20.00	1,540.10	20.02
25	☐	WDNJ_ID_124	73.91	20.00	3,989.45	60.13
26	☐	WDNJ_ID_125	47.62	20.00	2,159.45	37.55
27	☐	WDNJ_ID_126	-26.38	20.00	1,050.38	20.00
28	☐	WDNJ_ID_127	-17.37	20.00	1,070.15	20.00
29	☐	WDNJ_ID_128	-298.51	20.00	580.68	20.00
30	☐	WDNJ_ID_129	70.80	20.00	3,042.31	57.75
31	☐	WDNJ_ID_130	16.56	20.00	1,434.88	20.00
32	☐	WDNJ_ID_131	46.61	20.00	5,755.27	50.97
33	☐	WDNJ_ID_132	46.53	20.00	5,649.73	69.16
34	☐	WDNJ_ID_133	75.12	20.00	2,921.22	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
35	☐	WDNJ_ID_134	49.71	20.00	3,983.84	68.42
36	☐	WDNJ_ID_135	49.64	20.00	3,573.14	45.93
37	☐	WDNJ_ID_137	73.77	20.00	5,042.59	74.13
38	☐	WDNJ_ID_138	80.62	20.00	2,488.05	21.48
39	☐	WDNJ_ID_139	15.99	20.00	1,447.99	34.08
40	☐	WDNJ_ID_140	68.46	20.00	2,151.32	20.67
41	☐	WDNJ_ID_141	70.90	20.00	2,788.72	28.07
42	☐	WDNJ_ID_142	76.90	20.00	3,090.80	20.00
43	☐	WDNJ_ID_143	85.40	20.00	2,767.42	21.94
44	☐	WDNJ_ID_144	35.63	20.00	2,440.98	20.00
45	☐	WDNJ_ID_145	68.39	20.00	2,725.56	20.00
46	☐	WDNJ_ID_146	61.08	20.00	2,520.65	20.00
47	☐	WDNJ_ID_147	61.46			
48	☐	WDNJ_ID_148	100.44	20.00	3,704.14	26.16
49	☐	WDNJ_ID_149	60.29	20.00	7,158.78	32.70
50	☐	WDNJ_ID_150	48.39	20.00	9,104.81	45.98
51	☐	WDNJ_ID_151	97.59	20.00	4,501.11	28.80
52	☐	WDNJ_ID_152	122.78	20.00	5,755.67	31.51
53	☐	WDNJ_ID_153	46.85	20.00	6,092.61	31.01
54	☐	WDNJ_ID_154	52.59	20.00	1,749.01	20.00
55	☐	WDNJ_ID_156	118.62	20.00	5,942.06	31.61
56	☐	WDNJ_ID_157	99.55	20.00	10,580.65	27.60
57	☐	WDNJ_ID_158	57.17	20.00	2,081.61	20.00
58	☐	WDNJ_ID_159	31.03	20.00	1,686.98	65.95
59	☐	WDNJ_ID_16	64.76	20.00	2,848.31	20.25
60	☐	WDNJ_ID_160	60.94	20.00	2,587.39	81.24
61	☐	WDNJ_ID_161	67.97	20.00	3,031.82	44.49
62	☐	WDNJ_ID_165	63.21	20.00	2,017.26	21.25
63	☐	WDNJ_ID_168	80.05	20.00	2,527.99	25.05
64	☐	WDNJ_ID_169	55.94	20.00	2,284.09	20.75
65	☐	WDNJ_ID_17	-2,634.60	20.00	198.77	20.00
66	☐	WDNJ_ID_170	61.66	20.00	4,234.67	46.33
67	☐	WDNJ_ID_173	74.05	20.00	2,441.48	21.21
68	☐	WDNJ_ID_175	49.11	20.00	2,337.10	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
69	☐	WDNJ_ID_176	70.31	20.00	3,191.64	20.00
70	☐	WDNJ_ID_178	74.88	20.00	7,113.65	61.14
71	☐	WDNJ_ID_179	73.88	20.00	5,499.48	80.64
72	☐	WDNJ_ID_18	47.45	20.00	7,138.62	37.78
73	☐	WDNJ_ID_180	49.11	20.00	2,337.37	47.64
74	☐	WDNJ_ID_181	58.33	20.00	2,399.58	104.13
75	☐	WDNJ_ID_182	44.75	20.00	4,194.89	33.23
76	☐	WDNJ_ID_183	46.59	20.00	5,740.16	60.06
77	☐	WDNJ_ID_184	51.93	20.00	2,335.20	48.34
78	☐	WDNJ_ID_185	49.11	20.00	2,338.28	54.97
79	☐	WDNJ_ID_186	64.71	20.00	7,880.73	20.48
80	☐	WDNJ_ID_187	48.17	20.00	7,968.01	30.71
81	☐	WDNJ_ID_188	64.49	20.00	7,487.29	33.23
82	☐	WDNJ_ID_189	87.40	20.00	5,822.89	31.06
83	☐	WDNJ_ID_190	92.04	20.00	6,121.57	30.72
84	☐	WDNJ_ID_191	47.96	20.00	8,015.57	25.71
85	☐	WDNJ_ID_192	112.33	20.00	11,640.36	20.00
86	☐	WDNJ_ID_193	77.62	20.00	7,622.41	20.26
87	☐	WDNJ_ID_194	61.50			
88	☐	WDNJ_ID_195	49.90	20.00	7,808.35	41.45
89	☐	WDNJ_ID_196	47.34	20.00	6,920.43	28.85
90	☐	WDNJ_ID_197	47.33	20.00	6,900.95	32.61
91	☐	WDNJ_ID_198	47.32	20.00	6,890.73	44.11
92	☐	WDNJ_ID_199	47.42	20.00	7,068.26	42.22
93	☐	WDNJ_ID_2	-34.29	20.00	1,086.06	39.51
94	☐	WDNJ_ID_200	46.70	20.00	5,864.46	53.01
95	☐	WDNJ_ID_201	122.34	20.00	7,281.54	20.00
96	☐	WDNJ_ID_202	46.86	20.00	6,098.51	56.44
97	☐	WDNJ_ID_203	108.78	20.00	6,809.61	32.20
98	☐	WDNJ_ID_204	99.83	20.00	6,078.88	29.85
99	☐	WDNJ_ID_205	47.28	20.00	6,822.91	31.05
100	☐	WDNJ_ID_206	80.33	20.00	4,757.91	29.70
101	☐	WDNJ_ID_207	46.71	20.00	5,887.43	61.35
102	☐	WDNJ_ID_208	90.38	20.00	5,329.84	33.56

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
103	☐	WDNJ_ID_209	92.65	20.00	6,511.45	35.70
104	☐	WDNJ_ID_210	96.52	20.00	5,699.04	32.96
105	☐	WDNJ_ID_211	52.45	20.00	7,584.31	20.54
106	☐	WDNJ_ID_212	63.91	20.00	6,679.50	21.60
107	☐	WDNJ_ID_213	105.67	20.00	6,551.01	31.45
108	☐	WDNJ_ID_214	47.52	20.00	7,290.84	40.32
109	☐	WDNJ_ID_215	51.83	20.00	2,332.48	30.54
110	☐	WDNJ_ID_216	116.65	20.00	5,732.56	32.32
111	☐	WDNJ_ID_217	47.27	20.00	6,794.75	30.62
112	☐	WDNJ_ID_218	46.90	20.00	6,165.33	52.84
113	☐	WDNJ_ID_219	49.11	20.00	2,337.86	31.59
114	☐	WDNJ_ID_220	49.11	20.00	2,338.44	33.97
115	☐	WDNJ_ID_221	47.23	20.00	6,713.88	37.94
116	☐	WDNJ_ID_222	46.04	20.00	5,134.90	30.45
117	☐	WDNJ_ID_223	46.81	20.00	6,029.73	22.18
118	☐	WDNJ_ID_224	46.73	20.00	5,912.37	42.28
119	☐	WDNJ_ID_225	114.27	20.00	5,516.52	33.23
120	☐	WDNJ_ID_226	46.14	20.00	5,230.35	45.59
121	☐	WDNJ_ID_227	46.17	20.00	5,259.59	23.03
122	☐	WDNJ_ID_229	46.21	20.00	5,300.30	54.28
123	☐	WDNJ_ID_230	46.28	20.00	5,371.94	46.60
124	☐	WDNJ_ID_231	46.73	20.00	5,911.51	33.58
125	☐	WDNJ_ID_232	88.70	20.00	3,071.83	32.60
126	☐	WDNJ_ID_233	46.05	20.00	5,148.79	44.19
127	☐	WDNJ_ID_234	116.13	20.00	5,605.86	32.00
128	☐	WDNJ_ID_235	38.14	20.00	1,847.77	50.68
129	☐	WDNJ_ID_236	31.03	20.00	1,687.02	62.85
130	☐	WDNJ_ID_237	113.61	20.00	5,540.01	29.76
131	☐	WDNJ_ID_238	46.53	20.00	5,650.94	64.51
132	☐	WDNJ_ID_239	107.97	20.00	4,150.69	25.02
133	☐	WDNJ_ID_24	47.03	20.00	6,339.00	23.13
134	☐	WDNJ_ID_240	46.18	20.00	5,265.59	21.38
135	☐	WDNJ_ID_241	46.62	20.00	5,772.64	40.10
136	☐	WDNJ_ID_242	87.32	20.00	2,624.82	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
137	☐	WDNJ_ID_244	49.61	20.00	3,399.28	55.09
138	☐	WDNJ_ID_245	46.18	20.00	5,270.76	32.45
139	☐	WDNJ_ID_246	46.54	20.00	5,667.40	69.69
140	☐	WDNJ_ID_247	49.64	20.00	3,550.83	49.77
141	☐	WDNJ_ID_248	46.33	20.00	5,424.64	58.67
142	☐	WDNJ_ID_249	46.24	20.00	5,325.36	50.64
143	☐	WDNJ_ID_250	123.92	20.00	5,817.09	30.92
144	☐	WDNJ_ID_251	46.84	20.00	6,070.75	24.88
145	☐	WDNJ_ID_252	47.33	20.00	6,904.48	34.38
146	☐	WDNJ_ID_254	52.12	20.00	2,106.94	31.60
147	☐	WDNJ_ID_255	105.69	20.00	4,512.67	26.31
148	☐	WDNJ_ID_256	80.28	20.00	3,349.42	22.62
149	☐	WDNJ_ID_258	101.12	20.00	3,916.00	24.32
150	☐	WDNJ_ID_259	49.55	20.00	3,080.79	48.10
151	☐	WDNJ_ID_26	74.05	20.00	4,130.20	96.68
152	☐	WDNJ_ID_260	46.85	20.00	6,081.27	23.52
153	☐	WDNJ_ID_261	123.18	20.00	6,323.19	35.33
154	☐	WDNJ_ID_262	113.93	20.00	3,929.18	25.36
155	☐	WDNJ_ID_263	47.31	20.00	6,861.43	31.43
156	☐	WDNJ_ID_264	114.21	20.00	5,316.30	29.77
157	☐	WDNJ_ID_265	125.24	20.00	5,971.35	32.31
158	☐	WDNJ_ID_266	79.43	20.00	4,298.03	20.00
159	☐	WDNJ_ID_267	49.61	20.00	3,361.97	35.66
160	☐	WDNJ_ID_269	116.04	20.00	5,333.72	31.29
161	☐	WDNJ_ID_27	72.41	20.00	2,060.47	20.00
162	☐	WDNJ_ID_270	107.82	20.00	3,633.22	24.88
163	☐	WDNJ_ID_271	38.14	20.00	1,847.17	34.70
164	☐	WDNJ_ID_272	83.33	20.00	4,389.58	24.70
165	☐	WDNJ_ID_273	123.90	20.00	5,802.26	31.61
166	☐	WDNJ_ID_274	79.89	20.00	2,732.08	21.84
167	☐	WDNJ_ID_275	103.96	20.00	4,126.80	25.25
168	☐	WDNJ_ID_276	55.86	20.00	2,072.70	20.14
169	☐	WDNJ_ID_277	116.61	20.00	5,710.27	32.38
170	☐	WDNJ_ID_278	40.07	20.00	1,807.08	20.07

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
171	☐	WDNJ_ID_279	49.11	20.00	2,337.86	30.98
172	☐	WDNJ_ID_28	73.36	20.00	3,681.66	91.88
173	☐	WDNJ_ID_280	101.55	20.00	4,233.49	25.52
174	☐	WDNJ_ID_281	133.22	20.00	4,940.48	32.70
175	☐	WDNJ_ID_283	5.00	20.00	1,321.58	20.00
176	☐	WDNJ_ID_284	104.93	20.00	6,274.71	32.22
177	☐	WDNJ_ID_285	46.15	20.00	2,997.02	33.15
178	☐	WDNJ_ID_286	43.98	20.00	2,697.18	20.00
179	☐	WDNJ_ID_287	59.80	20.00	3,735.15	23.04
180	☐	WDNJ_ID_288	52.48	20.00	2,593.32	21.15
181	☐	WDNJ_ID_29	65.68	20.00	2,868.03	52.82
182	☐	WDNJ_ID_290	75.52	20.00	2,545.08	26.90
183	☐	WDNJ_ID_291	79.01	20.00	2,503.82	20.00
184	☐	WDNJ_ID_292	122.74	20.00	5,034.59	28.34
185	☐	WDNJ_ID_293	50.31	20.00	3,991.19	37.68
186	☐	WDNJ_ID_294	49.74	20.00	4,336.32	47.49
187	☐	WDNJ_ID_295	72.48	20.00	3,845.45	27.74
188	☐	WDNJ_ID_296	102.82	20.00	3,618.68	23.83
189	☐	WDNJ_ID_297	118.38	20.00	4,718.71	28.66
190	☐	WDNJ_ID_298	112.17	20.00	4,669.98	27.53
191	☐	WDNJ_ID_299	60.53	20.00	3,911.61	31.76
192	☐	WDNJ_ID_30	69.36	20.00	6,635.65	27.03
193	☐	WDNJ_ID_300	63.37	20.00	2,947.77	21.68
194	☐	WDNJ_ID_301	49.72	20.00	4,137.06	37.04
195	☐	WDNJ_ID_302	71.79	20.00	2,403.92	20.00
196	☐	WDNJ_ID_303	54.09	20.00	2,056.31	134.90
197	☐	WDNJ_ID_304	54.09	20.00	2,056.27	91.21
198	☐	WDNJ_ID_305	80.44	20.00	2,264.34	22.33
199	☐	WDNJ_ID_306	45.70	20.00	1,907.25	132.52
200	☐	WDNJ_ID_307	45.70	20.00	1,907.52	116.06
201	☐	WDNJ_ID_309	45.70	20.00	1,907.24	92.32
202	☐	WDNJ_ID_310	45.70	20.00	1,907.52	135.03
203	☐	WDNJ_ID_313	101.66	20.00	5,777.35	20.00
204	☐	WDNJ_ID_314	61.60	20.00	4,865.19	60.49

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
205	☐	WDNJ_ID_316	64.68	20.00	3,717.30	23.68
206	☐	WDNJ_ID_318	111.63	20.00	11,761.29	20.00
207	☐	WDNJ_ID_32	67.98	20.00	2,074.93	20.00
208	☐	WDNJ_ID_320	49.89	20.00	7,532.25	53.78
209	☐	WDNJ_ID_321	46.53	20.00	5,643.07	64.16
210	☐	WDNJ_ID_322	46.08	20.00	5,173.56	43.69
211	☐	WDNJ_ID_323	49.89	20.00	7,197.70	56.96
212	☐	WDNJ_ID_324	46.24	20.00	5,324.72	41.06
213	☐	WDNJ_ID_326	104.62	20.00	6,115.21	29.84
214	☐	WDNJ_ID_327	125.89	20.00	4,683.32	27.10
215	☐	WDNJ_ID_331	64.31	20.00	5,441.33	34.95
216	☐	WDNJ_ID_333	47.77	20.00	7,446.83	20.00
217	☐	WDNJ_ID_334	64.15	20.00	6,956.26	38.13
218	☐	WDNJ_ID_335	49.90	20.00	8,028.54	35.71
219	☐	WDNJ_ID_34	47.66	20.00	7,565.45	30.01
220	☐	WDNJ_ID_343	61.46	20.00	4,171.90	44.46
221	☐	WDNJ_ID_344	70.15	20.00	3,042.74	21.85
222	☐	WDNJ_ID_345	45.70	20.00	1,907.20	154.75
223	☐	WDNJ_ID_347	-3.28	20.00	1,293.56	22.69
224	☐	WDNJ_ID_348	-13.83	20.00	1,223.51	20.43
225	☐	WDNJ_ID_349	56.53	20.00	2,262.54	74.13
226	☐	WDNJ_ID_35	91.56	20.00	4,266.24	24.67
227	☐	WDNJ_ID_350	56.53	20.00	2,263.56	76.69
228	☐	WDNJ_ID_351	22.52	20.00	1,537.64	59.82
229	☐	WDNJ_ID_352	2.60	20.00	1,320.98	20.29
230	☐	WDNJ_ID_353	2.60	20.00	1,320.98	29.71
231	☐	WDNJ_ID_354	14.66	20.00	1,429.10	51.47
232	☐	WDNJ_ID_355	14.66	20.00	1,429.10	50.12
233	☐	WDNJ_ID_356	8.44	20.00	1,357.32	30.96
234	☐	WDNJ_ID_357	72.74	20.00	1,183.29	20.00
235	☐	WDNJ_ID_358	46.59	20.00	5,726.01	38.87
236	☐	WDNJ_ID_359	110.62	20.00	4,866.06	27.16
237	☐	WDNJ_ID_36	93.73	20.00	5,747.76	28.43
238	☐	WDNJ_ID_360	23.02	20.00	1,545.32	59.54

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
239	☐	WDNJ_ID_361	20.82	20.00	1,511.10	20.00
240	☐	WDNJ_ID_362	46.49	20.00	5,600.06	59.77
241	☐	WDNJ_ID_363	102.13	20.00	4,634.37	26.19
242	☐	WDNJ_ID_364	83.57	20.00	3,141.18	26.46
243	☐	WDNJ_ID_365	68.61	20.00	2,368.46	20.00
244	☐	WDNJ_ID_366	86.29	20.00	2,950.18	20.00
245	☐	WDNJ_ID_368	-93.60	20.00	740.44	20.00
246	☐	WDNJ_ID_37	95.21	20.00	6,471.93	30.49
247	☐	WDNJ_ID_371	63.17	20.00	3,224.75	59.90
248	☐	WDNJ_ID_372	84.61	20.00	3,569.57	28.52
249	☐	WDNJ_ID_373	86.59	20.00	3,391.23	23.24
250	☐	WDNJ_ID_374	81.27	20.00	3,225.01	22.80
251	☐	WDNJ_ID_377	69.86	20.00	4,859.50	45.45
252	☐	WDNJ_ID_378	67.75	20.00	4,520.71	29.19
253	☐	WDNJ_ID_38	-44.23	20.00	1,155.97	20.00
254	☐	WDNJ_ID_381	64.09	20.00	3,084.27	20.31
255	☐	WDNJ_ID_382	63.15	20.00	2,553.92	45.21
256	☐	WDNJ_ID_384	110.31	20.00	6,342.12	23.20
257	☐	WDNJ_ID_385	110.31	20.00	6,342.12	21.84
258	☐	WDNJ_ID_386	110.55	20.00	6,464.40	27.65
259	☐	WDNJ_ID_387	110.98	20.00	6,705.51	27.57
260	☐	WDNJ_ID_388	110.31	20.00	6,342.12	28.11
261	☐	WDNJ_ID_389	111.56	20.00	7,082.83	26.38
262	☐	WDNJ_ID_39	62.64	20.00	5,654.32	23.88
263	☐	WDNJ_ID_390	81.57	20.00	4,687.60	20.00
264	☐	WDNJ_ID_392	82.89	20.00	3,758.99	20.00
265	☐	WDNJ_ID_393	-17.99	20.00	1,254.79	20.00
266	☐	WDNJ_ID_394	80.05	20.00	2,528.03	31.07
267	☐	WDNJ_ID_395	49.76	20.00	4,540.39	71.47
268	☐	WDNJ_ID_40	-29.39	20.00	1,021.61	20.00
269	☐	WDNJ_ID_41	73.45	20.00	5,564.14	57.77
270	☐	WDNJ_ID_411	49.72	20.00	4,143.40	70.22
271	☐	WDNJ_ID_412	49.71	20.00	4,038.27	50.10
272	☐	WDNJ_ID_413	45.09	20.00	2,709.46	20.00

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
273	☐	WDNJ_ID_414	49.68	20.00	3,780.49	63.04
274	☐	WDNJ_ID_415	49.11	20.00	2,337.55	40.47
275	☐	WDNJ_ID_42	25.75	20.00	1,560.06	20.03
276	☐	WDNJ_ID_421	49.64	20.00	3,544.69	46.43
277	☐	WDNJ_ID_422	60.03			
278	☐	WDNJ_ID_423	49.63	20.00	3,473.64	25.97
279	☐	WDNJ_ID_424	51.80	20.00	2,333.76	44.20
280	☐	WDNJ_ID_425	119.52	20.00	5,964.87	32.20
281	☐	WDNJ_ID_426	110.46	20.00	4,761.50	28.55
282	☐	WDNJ_ID_427	111.41	20.00	4,778.03	28.64
283	☐	WDNJ_ID_43	55.12	20.00	2,544.79	34.93
284	☐	WDNJ_ID_430	62.52	20.00	5,401.16	41.89
285	☐	WDNJ_ID_432	63.19	20.00	5,907.31	52.40
286	☐	WDNJ_ID_433	62.36	20.00	5,294.60	59.53
287	☐	WDNJ_ID_434	101.04	20.00	5,674.36	28.61
288	☐	WDNJ_ID_435	111.15	20.00	6,653.83	32.31
289	☐	WDNJ_ID_436	47.43	20.00	7,102.03	37.05
290	☐	WDNJ_ID_437	114.10	20.00	6,874.15	34.49
291	☐	WDNJ_ID_438	111.63	20.00	6,489.94	32.75
292	☐	WDNJ_ID_439	122.76	20.00	6,336.30	33.48
293	☐	WDNJ_ID_44	54.87	20.00	2,446.98	21.24
294	☐	WDNJ_ID_440	46.79	20.00	5,992.51	43.95
295	☐	WDNJ_ID_441	121.36	20.00	5,211.32	29.45
296	☐	WDNJ_ID_442	123.18	20.00	5,137.37	29.16
297	☐	WDNJ_ID_443	125.84	20.00	5,498.76	30.56
298	☐	WDNJ_ID_444	46.77	20.00	5,969.94	23.73
299	☐	WDNJ_ID_445	46.68	20.00	5,844.31	22.44
300	☐	WDNJ_ID_446	127.91	20.00	5,362.95	29.33
301	☐	WDNJ_ID_447	46.59	20.00	5,728.72	52.66
302	☐	WDNJ_ID_448	46.73	20.00	5,903.77	35.81
303	☐	WDNJ_ID_45	-117.70	20.00	969.29	20.00
304	☐	WDNJ_ID_451	46.66	20.00	5,807.16	33.43
305	☐	WDNJ_ID_452	46.65	20.00	5,804.63	43.34
306	☐	WDNJ_ID_453	112.70	20.00	4,502.31	26.18

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
307	☐	WDNJ_ID_454	46.45	20.00	5,566.17	30.81
308	☐	WDNJ_ID_455	46.45	20.00	5,561.54	49.60
309	☐	WDNJ_ID_456	46.28	20.00	5,376.26	41.36
310	☐	WDNJ_ID_457	90.18	20.00	3,454.40	24.84
311	☐	WDNJ_ID_458	50.92	20.00	2,141.43	20.80
312	☐	WDNJ_ID_459	41.41	20.00	3,074.89	21.79
313	☐	WDNJ_ID_46	49.11	20.00	2,338.03	31.64
314	☐	WDNJ_ID_461	46.09	20.00	1,941.87	22.44
315	☐	WDNJ_ID_462	56.09	20.00	4,168.95	20.00
316	☐	WDNJ_ID_463	104.06	20.00	3,497.94	25.45
317	☐	WDNJ_ID_464	103.30	20.00	3,371.18	25.00
318	☐	WDNJ_ID_465	100.66	20.00	5,166.06	31.42
319	☐	WDNJ_ID_466	74.43	20.00	6,074.46	83.70
320	☐	WDNJ_ID_467	49.91	20.00	8,272.39	29.36
321	☐	WDNJ_ID_468	48.18	20.00	8,816.59	39.49
322	☐	WDNJ_ID_469	48.09	20.00	8,493.82	33.49
323	☐	WDNJ_ID_471	47.94	20.00	7,929.02	21.74
324	☐	WDNJ_ID_472	72.80	20.00	4,722.90	29.21
325	☐	WDNJ_ID_473	49.82	20.00	5,417.42	69.46
326	☐	WDNJ_ID_474	30.76	20.00	1,605.09	27.94
327	☐	WDNJ_ID_475	81.92	20.00	2,695.34	29.73
328	☐	WDNJ_ID_476	43.81	20.00	1,875.69	124.21
329	☐	WDNJ_ID_477	41.75	20.00	1,840.83	88.46
330	☐	WDNJ_ID_478	-3.28	20.00	1,293.63	64.15
331	☐	WDNJ_ID_479	2.60	20.00	1,321.02	23.30
332	☐	WDNJ_ID_48	81.10	20.00	5,018.66	24.87
333	☐	WDNJ_ID_480	8.44	20.00	1,357.41	24.43
334	☐	WDNJ_ID_481	55.13	20.00	2,186.47	99.73
335	☐	WDNJ_ID_482	52.95	20.00	2,141.61	99.47
336	☐	WDNJ_ID_483	50.94	20.00	2,130.40	112.88
337	☐	WDNJ_ID_484	54.44	20.00	2,227.69	37.37
338	☐	WDNJ_ID_485	22.52	20.00	1,538.28	65.44
339	☐	WDNJ_ID_486	42.15	20.00	2,295.21	20.58
340	☐	WDNJ_ID_487	75.83	20.00	3,789.52	25.14

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
341	☐	WDNJ_ID_488	50.67	20.00	2,280.94	44.55
342	☐	WDNJ_ID_489	72.69	20.00	5,522.14	37.88
343	☐	WDNJ_ID_49	79.51	20.00	5,189.22	25.72
344	☐	WDNJ_ID_495	63.39	20.00	4,678.10	20.00
345	☐	WDNJ_ID_496	48.02	20.00	7,718.19	23.59
346	☐	WDNJ_ID_497	64.31	20.00	5,440.39	31.76
347	☐	WDNJ_ID_5	-265.22	20.00	722.38	20.00
348	☐	WDNJ_ID_50	47.13	20.00	6,404.08	48.07
349	☐	WDNJ_ID_500	65.00	20.00	6,374.14	25.75
350	☐	WDNJ_ID_501	-117.38	20.00	867.09	20.00
351	☐	WDNJ_ID_502	83.61	20.00	2,974.73	20.00
352	☐	WDNJ_ID_503	44.86	20.00	2,657.36	20.00
353	☐	WDNJ_ID_504	49.11	20.00	2,338.38	42.35
354	☐	WDNJ_ID_505	61.84	20.00	2,317.15	20.00
355	☐	WDNJ_ID_507	49.34	20.00	2,263.56	20.00
356	☐	WDNJ_ID_508	53.59	20.00	2,283.92	20.00
357	☐	WDNJ_ID_509	49.11	20.00	2,338.93	53.31
358	☐	WDNJ_ID_510	49.61	20.00	3,406.32	42.72
359	☐	WDNJ_ID_511	49.65	20.00	3,639.87	48.06
360	☐	WDNJ_ID_512	71.98	20.00	3,464.01	20.00
361	☐	WDNJ_ID_513	65.66	20.00	2,870.85	20.00
362	☐	WDNJ_ID_514	42.77	20.00	2,250.33	20.00
363	☐	WDNJ_ID_515	51.86	20.00	2,333.56	43.25
364	☐	WDNJ_ID_547	64.31	20.00	5,440.07	28.54
365	☐	WDNJ_ID_549	105.99	20.00	3,970.51	25.56
366	☐	WDNJ_ID_550	18.71	20.00	1,476.16	20.00
367	☐	WDNJ_ID_553	72.73	20.00	3,740.91	22.90
368	☐	WDNJ_ID_554	51.04	20.00	1,957.78	20.12
369	☐	WDNJ_ID_555	46.72	20.00	5,893.64	52.95
370	☐	WDNJ_ID_556	46.72	20.00	5,901.41	43.22
371	☐	WDNJ_ID_557	46.74	20.00	5,928.35	29.82
372	☐	WDNJ_ID_558	46.76	20.00	5,952.07	37.23
373	☐	WDNJ_ID_560	46.74	20.00	5,924.09	49.17
374	☐	WDNJ_ID_561	121.18	20.00	5,520.53	29.73

2021 Model - 2041 Flows - Fire Flow Junction Report

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
375	☐	WDNJ_ID_563	121.02	20.00	5,473.95	29.59
376	☐	WDNJ_ID_564	98.40	20.00	6,019.87	29.72
377	☐	WDNJ_ID_565	97.68	20.00	5,861.54	29.23
378	☐	WDNJ_ID_567	96.87	20.00	5,512.85	28.18
379	☐	WDNJ_ID_568	98.42	20.00	6,035.77	29.83
380	☐	WDNJ_ID_571	96.07	20.00	5,217.13	27.31
381	☐	WDNJ_ID_573	51.85	20.00	2,330.85	37.21
382	☐	WDNJ_ID_574	-10.11	20.00	1,247.01	21.23
383	☐	WDNJ_ID_575	74.92	20.00	7,335.03	48.62
384	☐	WDNJ_ID_576	97.69	20.00	3,911.50	35.94
385	☐	WDNJ_ID_577	80.00	20.00	3,101.28	20.00
386	☐	WDNJ_ID_578	68.81	20.00	3,073.68	27.21
387	☐	WDNJ_ID_58	64.62	20.00	3,190.81	22.66
388	☐	WDNJ_ID_583	56.70	20.00	2,264.80	20.67
389	☐	WDNJ_ID_585	54.09	20.00	2,055.83	67.90
390	☐	WDNJ_ID_586	54.09	20.00	2,055.84	56.82
391	☐	WDNJ_ID_587	54.09	20.00	2,055.84	76.81
392	☐	WDNJ_ID_6	-9,768.48	20.00	127.88	20.00
393	☐	WDNJ_ID_61	49.11	20.00	2,337.16	37.59
394	☐	WDNJ_ID_62	49.11	20.00	2,337.15	25.93
395	☐	WDNJ_ID_63	73.00	20.00	3,354.98	94.34
396	☐	WDNJ_ID_64	67.97	20.00	3,030.50	66.02
397	☐	WDNJ_ID_65	60.94	20.00	2,587.58	100.45
398	☐	WDNJ_ID_66	49.92	20.00	9,190.49	23.66
399	☐	WDNJ_ID_67	99.49	20.00	6,429.86	21.50
400	☐	WDNJ_ID_68	72.02	20.00	5,031.47	30.24
401	☐	WDNJ_ID_69	48.02	20.00	8,158.17	27.48
402	☐	WDNJ_ID_7	103.74	20.00	5,780.63	34.13
403	☐	WDNJ_ID_70	74.19	20.00	4,731.03	60.86
404	☐	WDNJ_ID_71	73.87	20.00	5,214.83	84.18
405	☐	WDNJ_ID_72	46.35	20.00	5,452.90	54.46
406	☐	WDNJ_ID_73	45.45	20.00	4,623.16	43.86
407	☐	WDNJ_ID_74	86.12	20.00	4,173.88	20.00
408	☐	WDNJ_ID_75	46.59	20.00	5,724.61	28.95

		ID	Critical Node Pressure at Fire Demand (psi)	Critical Pressure for Design Run (psi)	Hydrant Design Flow (gpm)	Hydrant Pressure at Design Flow (psi)
409	☐	WDNJ_ID_76	99.30	20.00	4,438.08	25.33
410	☐	WDNJ_ID_77	43.99	20.00	3,853.01	40.53
411	☐	WDNJ_ID_78	45.83	20.00	4,940.57	44.95
412	☐	WDNJ_ID_79	68.06	20.00	5,517.06	20.00
413	☐	WDNJ_ID_8	75.39	20.00	2,437.48	20.00
414	☐	WDNJ_ID_80	85.97	20.00	4,989.66	30.62
415	☐	WDNJ_ID_82	85.98	20.00	6,528.86	29.49
416	☐	WDNJ_ID_83	46.84	20.00	6,079.48	51.73
417	☐	WDNJ_ID_84	41.05	20.00	6,614.17	20.16
418	☐	WDNJ_ID_85	90.73	20.00	5,819.08	28.13
419	☐	WDNJ_ID_86	105.69	20.00	4,817.87	26.45
420	☐	WDNJ_ID_87	108.32	20.00	5,822.73	29.10
421	☐	WDNJ_ID_88	68.86	20.00	6,534.81	27.44
422	☐	WDNJ_ID_89	41.26	20.00	7,163.52	24.75
423	☐	WDNJ_ID_90	46.38	20.00	5,486.55	58.51
424	☐	WDNJ_ID_91	112.55	20.00	5,463.31	29.34
425	☐	WDNJ_ID_92	66.97	20.00	4,496.48	25.56
426	☐	WDNJ_ID_93	73.62	20.00	4,857.82	65.04
427	☐	WDNJ_ID_94	94.18	20.00	5,039.27	27.33
428	☐	WDNJ_ID_96	47.65	20.00	7,560.24	29.92
429	☐	WDNJ_ID_97	103.63	20.00	6,085.02	29.91
430	☐	WDNJ_ID_98	47.00	20.00	6,324.69	36.86
431	☐	WDNJ_ID_99	79.65	20.00	2,324.23	20.00
432	☐	WDNJ_NI_545	-617.09	20.00	355.02	20.00

Appendix D – Preliminary Engineer's Cost Estimates for Culinary Water System Capital Improvement Projects (CIP)

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project: New Well Development Project — Project No: **S08308**

Time Period: 2021-2026 — Date: 16-May-22

Priority: 5, Magnitude: 5

Owner: Providence City — By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Test Wells (3)					
1	Mobilization	8.0%	1	L.S.	$ 30,000	$ 30,000
2	6" Test Borehole Drilling & Casing		1,200	LN.FT.	$ 100	$ 120,000
3	8" Test Borehole Drilling & Casing		600	LN.FT.	$ 125	$ 75,000
4	Water Sampling		3	EA	$ 8,000	$ 24,000
5	Geophysical Logging		3	EA	$ 16,000	$ 48,000
6	Test Pumping		144	HR.	$ 400	$ 57,600
7	Perforation and Well Development		60	HR.	$ 650	$ 39,000
8	Clear and Grub		3	EA	$ 56,000	$ 168,000
9	Stand By		30	HR.	$ 530	$ 15,900
10	**Subtotal**					$ 394,000
	Production Well					
11	Mobilization	8.0%	1	L.S.	$ 52,000	$ 52,000
12	Clear and Grub		1	L.S.	$ 8,500	$ 9,000
13	Conductor Hole Drilling		100	LN.FT.	$ 600	$ 60,000
14	24" Well Drilling		500	LN.FT.	$ 600	$ 300,000
15	16" Casing		500	LN.FT.	$ 100	$ 50,000
16	Temporary Pipe		250	LN.FT.	$ 20	$ 5,000
17	1" Water Level Tube		250	LN.FT.	$ 10	$ 3,000
18	Well Head Appurtenances		1	L.S.	$ 2,000	$ 2,000
19	Grout		108	EA	$ 50	$ 6,000
20	Swabbing and Developing Aquifer		120	HR.	$ 650	$ 78,000
21	Test Pumping (step test and 24 hour test)		48	HR.	$ 400	$ 20,000
22	Disinfection and Capping		1	L.S.	$ 3,300	$ 4,000
23	Stand By		10	HR.	$ 500	$ 5,000
24	16" Screen		100	LN.FT.	$ 600	$ 60,000
25	Gravel Packing		20	CU.YD.	$ 2,300	$ 46,000
26	Silica Sand		5	CU.YD.	$ 10	$ 1,000
27	**Subtotal**					$ 701,000
	Well House					
28	Mobilization	8.0%	1	L.S.	$ 49,000	$ 49,000
29	Boring and Jacking (14" Steel Casing)		40	LN.FT.	$ 900	$ 36,000
30	Well House Site Work		1	L.S.	$ 30,000	$ 30,000
31	Wellhouse Building and Appurtenances		1	L.S.	$ 350,000	$ 350,000
32	Wellhouse Electrical Equipment		1	L.S.	$ 150,000	$ 150,000
33	Electrical Service		1	L.S.	$ 45,000	$ 45,000
34	3-Phase Power		2,500	LN.FT.	$ 30	$ 75,000
35	Surface Restoration		500	SQ.FT.	$ 20	$ 10,000
36	**Subtotal**					$ 745,000
	Transmission Line					
37	Mobilization	8.0%	1	L.S.	$ 14,000	$ 14,000
38	Traffic Control		1	L.S.	$ 30,000	$ 30,000
39	Subsurface Investigation		20	HR.	$ 150	$ 3,000
40	8" C-900 PVC Pipe		2,000	LN.FT.	$ 50	$ 100,000
41	Connection to Existing System		1	L.S.	$ 5,000	$ 5,000
42	Replace 6" Gravel Driveways		75	SQ.FT.	$ 50	$ 4,000
43	8" Gate Valve		5	EA	$ 3,000	$ 15,000
44	Flush Hydrant Assembly		1	EA	$ 8,000	$ 8,000
45	Combination Air/Vacuum Relief Valve (2")		1	EA	$ 4,000	$ 4,000
46	**Subtotal**					$ 183,000
47	**Construction Subtotal**					**$ 2,023,000**
48	Contingency	18.0%	1	L.S.	$ 365,000	$ 365,000
49	**Construction Total**					**$ 2,388,000**
	Professional Services & Project Incidentals					
50	Professional Services	20.0%	1	L.S.	$ 478,000	$ 478,000
51	**Professional Services Total**					$ 478,000
52	**TOTAL**					**$ 2,866,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project:	Redds Tank #2 Roof Restoration	Project No:	**S08308**
	Time Period: 2021-2026	Date:	16-May-22
	Priority: 5, Magnitude: 4		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 11,000	$ 11,000
2	Clean Roof		40	HR.	$ 500	$ 20,000
3	Bladder Materials		1	L.S.	$ 70,000	$ 70,000
4	Bladder Installation		1	L.S.	$ 30,000	$ 30,000
5	Replace Soil Cover		1	L.S.	$ 10,000	$ 10,000
6	**Construction Subtotal**					**$ 141,000**
7	Contingency	18.0%	1	L.S.	$ 26,000	$ 26,000
8	**Construction Total**					**$ 167,000**
	Professional Services & Project Incidentals					
9	Professional Services	20.0%	1	L.S.	$ 34,000	$ 34,000
10	**Professional Services Total**					$ 34,000
11	**TOTAL**					**$ 201,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project: Fire Hydrant Valve Installation Project
Time Period: 2021-2026
Priority: 4, Magnitude: 5
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 2,000	$ 2,000
2	Fire Hydrants		2	EA	$ 8,000	$ 16,000
3	Traffic Control		1	L.S.	$ 1,000	$ 1,000
4	Connection to Existing Water Main		2	EA	$ 1,000	$ 2,000
5	Subsurface Investigation		5	HR.	$ 150	$ 1,000
6	**Construction Subtotal**					**$ 22,000**
7	Contingency	10.0%	1	L.S.	$ 3,000	$ 3,000
8	**Construction Total**					**$ 25,000**
	Professional Services & Project Incidentals					
	Professional Services	0%	1	L.S.	$ -	$ -
	Professional Services Total					$ -
9	**TOTAL**					**$ 25,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project:	Stonehenge Service Replacement Project	Project No:	**S08308**
	Time Period: 2021-2026	Date:	16-May-22
	Priority: 4, Magnitude: 4		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 20,000	$ 20,000
2	10" C-900 PVC Pipe		1,700	LN.FT.	$ 60	$ 102,000
3	1" Service Connections		27	EA	$ 2,000	$ 54,000
4	10" Gate Valve		2	EA	$ 3,000	$ 6,000
5	Traffic Control		1	L.S.	$ 7,000	$ 7,000
6	Subsurface Investigation		10	HR.	$ 150	$ 2,000
7	Aphalt Replacement		1,000	SQ.YD	$ 12	$ 12,000
8	Asphalt Removal		1,000	SQ.YD	$ 5	$ 5,000
9	Saw Cut Asphalt		3,410	LN.FT.	$ 5	$ 18,000
10	Connection to Existing Culinary Water		2	EA	$ 4,000	$ 8,000
11	Pipe Bedding		1,700	LN.FT.	$ 20	$ 34,000
12	**Construction Subtotal**					**$ 234,000**
13	Contingency	18.0%	1	L.S.	$ 43,000	$ 43,000
14	**Construction Total**					**$ 277,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 56,000	$ 56,000
16	**Professional Services Total**					$ 56,000
17	**TOTAL**					**$ 333,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

SUNRISE ENGINEERING

Project:	Alder Well Upgrade Project	Project No:	**S08308**
	Time Period: 2021-2026	Date:	16-May-22
	Priority: 4, Magnitude: 3		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 9,000	$ 9,000
2	Pumping Tests		48	HR.	$ 500	$ 24,000
3	Replace Pump, Motor, and Bowls		1	L.S.	$ 60,000	$ 60,000
4	Clean and Repair Components		1	L.S.	$ 20,000	$ 20,000
5	**Construction Subtotal**					**$ 113,000**
6	Contingency	18.0%	1	L.S.	$ 21,000	$ 21,000
7	**Construction Total**					**$ 134,000**
	Professional Services & Project Incidentals					
8	Professional Services	20%	1	L.S.	$ 27,000	$ 27,000
9	**Professional Services Total**					$ 27,000
10	**TOTAL**					**$ 161,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project: Von Way Meter & Main Replacement Project
Time Period: 2021-2026
Priority: 4, Magnitude: 3
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 23,000	$ 23,000
2	8" C-900 PVC Pipe		2,900	LN.FT.	$ 50	$ 145,000
3	8" Gate Valve		14	EA	$ 3,000	$ 42,000
4	1" Water Connections		35	EA	$ 2,000	$ 70,000
5	Subsurface Investigation		20	HR.	$ 150	$ 3,000
6	Connection to Existing Culinary Water		5	EA	$ 4,000	$ 20,000
7	Asphalt Removal		1,700	SQ.YD	$ 5	$ 9,000
8	Asphalt Replacement		1,700	SQ.YD	$ 12	$ 21,000
9	Saw Cut Asphalt		5,900	LN.FT.	$ 5	$ 30,000
10	Traffic Control		1	L.S.	$ 12,000	$ 12,000
11	Pipe Bedding		2,900	LN.FT.	$ 20	$ 58,000
12	**Construction Subtotal**					**$ 433,000**
13	Contingency	18.0%	1	L.S.	$ 78,000	$ 78,000
14	**Construction Total**					**$ 511,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 103,000	$ 103,000
16	**Professional Services Total**					$ 103,000
17	**TOTAL**					**$ 614,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project:	Water Meter System Upgrade Project	Project No:	**S08308**
	Time Period: 2021-2026	Date:	16-May-22
	Priority: 3, Magnitude: 5		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 410,000	$ 410,000
2	1" Main Line Cellular Connection and Installation		2,400	EA	$ 2,000	$ 4,800,000
3	1 1/2" Cellular Water Meter and Installation		20	EA	$ 2,500	$ 50,000
4	2" Cellular Water Meter and Installation		45	EA	$ 4,000	$ 180,000
5	4" Cellular Water Meter and Installation		10	EA	$ 6,500	$ 65,000
6	Cellular Software		1	L.S.	$ 21,000	$ 21,000
7	**Construction Subtotal**					**$ 5,526,000**
8	Contingency	18.0%	1	L.S.	$ 995,000	$ 995,000
9	**Construction Total**					**$ 6,521,000**
	Professional Services & Project Incidentals					
10	Professional Services	10.0%	1	L.S.	$ 653,000	$ 653,000
11	**Professional Services Total**					$ 653,000
12	**TOTAL**					**$ 7,174,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

SUNRISE ENGINEERING

Project: Von Park Water Main Replacement Project — Project No: **S08308**

Time Period: 2021-2026 — Date: 16-May-22

Priority: 3, Magnitude: 4

Owner: Providence City — By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction (Phase 1)					
1	Mobilization	8.0%	1	L.S.	$ 9,000	$ 9,000
2	10" C-900 PVC Pipe		700	LN.FT.	$ 60	$ 42,000
3	10" Gate Valve		8	EA	$ 3,000	$ 24,000
4	Pipe Bedding		1,750	LN.FT.	$ 20	$ 35,000
5	Subsurface Investigation		10	HR.	$ 150	$ 2,000
6	Connection to Existing Water Main		1	EA	$ 4,000	$ 4,000
7	**Phase 1 Subtotal**					**$ 116,000**
	Construction (Phase 2)					
	Section 1 (Von Park)					
8	Mobilization	8.0%	1	L.S.	$ 7,000	$ 7,000
9	10" C-900 PVC Pipe		200	LN.FT.	$ 60	$ 12,000
10	10" Gate Valve		3	EA	$ 3,000	$ 9,000
11	Pipe Bedding		500	LN.FT.	$ 20	$ 10,000
12	Subsurface Investigation		5	HR.	$ 150	$ 1,000
13	Connection to Existing Water Main		1	EA	$ 4,000	$ 4,000
14	Restoration		2,000	SQ.FT	$ 25	$ 50,000
	Section 2 (Parking Lot)					
15	Mobilization		1	L.S.	$ 4,000	$ 4,000
16	10" C-900 PVC Pipe		200	LN.FT.	$ 60	$ 12,000
17	10" Gate Valve		3	EA	$ 3,000	$ 9,000
18	Pipe Bedding		500	LN.FT.	$ 20	$ 10,000
19	Subsurface Investigation		5	HR.	$ 150	$ 1,000
20	Connection to Existing Water Main		1	EA	$ 4,000	$ 4,000
21	Saw Cut Concrete		410	LN.FT.	$ 5	$ 3,000
22	Remove Concrete		120	SQ.YD	$ 5	$ 1,000
23	Replace Concrete		120	SQ.YD	$ 14	$ 2,000
24	**Phase 2 Subtotal**					**$ 139,000**
25	**Construction Subtotal**					**$ 255,000**
26	Contingency	18.0%	1	L.S.	$ 46,000	$ 46,000
27	**Construction Total**					**$ 301,000**
	Professional Services & Project Incidentals					
28	Professional Services	20.0%	1	L.S.	$ 61,000	$ 61,000
29	**Professional Services Total**					**$ 61,000**
30	**TOTAL**					**$ 362,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

SUNRISE ENGINEERING

Project:	100 South Water Main Replacement	Project No:	**S08308**
	Time Period: 2021-2026	Date:	16-May-22
	Priority: 2, Magnitude: 1		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 9,000	$ 9,000
2	8" C-900 PVC Pipe		700	LN.FT.	$ 50	$ 35,000
3	8" Gate Valves		7	EA	$ 3,000	$ 21,000
4	1" Water Connection		4	EA	$ 2,000	$ 8,000
5	Pipe Bedding		700	LN.FT.	$ 20	$ 14,000
6	Traffic Control		1	L.S.	$ 3,000	$ 3,000
7	Subsurface Investigation		5	HR.	$ 150	$ 1,000
8	Connections to Existing Water Main		2	EA	$ 2,500	$ 5,000
9	Asphalt Removal		400	SQ.YD	$ 5	$ 2,000
10	Asphalt Replacement		400	SQ.YD	$ 14	$ 5,600
11	Saw Cut Asphalt		1,410	LN.FT.	$ 5	$ 8,000
12	**Construction Subtotal**					**$ 111,600**
13	Contingency	18.0%	1	L.S.	$ 21,000	$ 21,000
14	**Construction Total**					**$ 132,600**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 27,000	$ 27,000
18	**Professional Services Total**					$ 47,000
19	**TOTAL**					**$ 179,600**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project:	Zone 1 Tank Project	Project No:	**S08308**
	Time Period: 2021-2041	Date:	16-May-22
	Priority: 1,3,5 Magnitude: 5		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 129,000	$ 129,000
2	Site Preparation		1	L.S.	$ 50,000	$ 50,000
3	1.0 MG Tank		1	L.S.	$ 1,190,000	$ 1,190,000
4	Tank Excavation		1	L.S.	$ 250,000	$ 250,000
5	Interconnecting/ Site Piping		1	L.S.	$ 42,000	$ 42,000
6	Site Grading		1	L.S.	$ 40,000	$ 40,000
7	16" Transmission Line		250	LN.FT.	$ 100	$ 25,000
8	Acces Road		1	L.S.	$ 14,000	$ 14,000
9	**Construction Subtotal**					**$ 1,740,000**
10	Contingency	18.0%	1	L.S.	$ 314,000	$ 314,000
11	**Construction Total**					**$ 2,054,000**
	Professional Services & Project Incidentals					
12	Professional Services	20.0%	1	L.S.	$ 411,000	$ 411,000
13	**Professional Services Total**					$ 411,000
14	**TOTAL**					**$ 2,465,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project:	Canyon PRV Upgrade Project	Project No:	**S08308**
	Time Period: 2026-2031	Date:	16-May-22
	Priority: 5, Magnitude: 5		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization		1	L.S.	$ 10,000	$ 10,000
2	Pressure Reducing Valve (PRV) & Parts		1	EA	$ 75,000	$ 75,000
3	PRV Vault		1	EA	$ 25,000	$ 25,000
4	Replaced 12" C-900 PVC Pipe		40	LN.FT.	$ 80	$ 4,000
5	Traffic Control		1	L.S.	$ 10,000	$ 10,000
6	Subsurface Investigation		10	HR.	$ 150	$ 2,000
7	Repair and Restore Gravel Road		1	L.S.	$ 8,000	$ 8,000
8	**Construction Subtotal**					**$ 134,000**
9	Contingency	18.0%	1	L.S.	$ 25,000	$ 25,000
10	**Construction Total**					**$ 159,000**
	Professional Services & Project Incidentals					
11	Professional Services	20.0%	1	L.S.	$ 32,000	$ 32,000
12	**Professional Services Total**					$ 32,000
13	**TOTAL**					**$ 191,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

SUNRISE ENGINEERING

Project:	Dales Well Upgrade Project	Project No:	**S08308**
	Time Period: 2026 - 2031	Date:	16-May-22
	Priority: 5, Magnitude: 5		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 16,000	$ 16,000
2	Pumping Tests		48	HR.	$ 500	$ 24,000
3	Replace Pumps, Motors, Parts		1	L.S.	$ 120,000	$ 120,000
4	Clean and Repair Components		1	L.S.	$ 45,000	$ 45,000
5	**Construction Subtotal**					**$ 205,000**
6	Contingency	18.0%	1	L.S.	$ 37,000	$ 37,000
7	**Construction Total**					**$ 242,000**
	Professional Services & Project Incidentals					
8	Professional Services	20.0%	1	L.S.	$ 49,000	$ 49,000
9	**Professional Services Total**					$ 49,000
10	**TOTAL**					**$ 291,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

SUNRISE ENGINEERING

Project: Edgewood Water Main Replacement Project — Project No: **S08308**
Time Period: 2026-2031 — Date: 16-May-22
Priority: 4, Magnitude: 2
Owner: Providence City — By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 31,000	$ 31,000
2	8" C-900 PVC Pipe		2,500	LN.FT.	$ 50	$ 125,000
3	8" Gate Valves		20	EA	$ 3,000	$ 60,000
4	1" Water Connection		40	EA	$ 2,000	$ 80,000
5	Pipe Bedding		2,500	LN.FT.	$ 20	$ 50,000
6	Traffic Control		1	L.S.	$ 10,000	$ 10,000
7	Subsurface Investigation		15	HR.	$ 150	$ 3,000
8	Connections to Existing Water Main		2	EA	$ 4,000	$ 8,000
9	Saw Cut Asphalt		5,100	LN.FT.	$ 5	$ 26,000
10	Asphalt Removal		1,400	SQ.YD	$ 5	$ 7,000
11	Asphalt Replacement		1,400	SQ.YD	$ 12	$ 17,000
12	**Construction Subtotal**					**$ 417,000**
13	Contingency	18.0%	1	L.S.	$ 76,000	$ 76,000
14	**Construction Total**					**$ 493,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 99,000	$ 99,000
16	**Professional Services Total**					$ 99,000
17	**TOTAL**					**$ 592,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project:	400 East Water Main Replacement	Project No:	**S08308**
	Time Period: 2026-2031	Date:	16-May-22
	Priority: 4, Magnitude:2		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 17,000	$ 17,000
2	8" C-900 PVC Pipe		1,700	LN.FT.	$ 50	$ 85,000
3	8" Gate Valves		9	EA	$ 3,000	$ 27,000
4	1" Water Connection		10	EA	$ 2,000	$ 20,000
5	Pipe Bedding		1,700	LN.FT.	$ 20	$ 34,000
6	Traffic Control		1	L.S.	$ 7,000	$ 7,000
7	Subsurface Investigation		10	HR.	$ 150	$ 2,000
8	Connections to Existing Water Main		2	EA	$ 2,500	$ 5,000
9	Saw Cut Asphalt		3,500	LN.FT.	$ 5	$ 18,000
10	Asphalt Removal		300	SQ.YD	$ 5	$ 2,000
11	Asphalt Replacement		300	SQ.YD	$ 12	$ 4,000
12	**Construction Subtotal**					**$ 221,000**
13	Contingency	18.0%	1	L.S.	$ 40,000	$ 40,000
14	**Construction Total**					**$ 261,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 53,000	$ 53,000
16	**Professional Services Total**					$ 53,000
17	**TOTAL**					**$ 314,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project:	Cottonwood Water Main Replacement Project	Project No:	**S08308**
	Time Period: 2026-2031	Date:	16-May-22
	Priority: 3, Magnitude: 2		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 25,000	$ 25,000
2	8" C-900 PVC Pipe		2,100	LN.FT.	$ 50	$ 105,000
3	8" Gate Valves		9	EA	$ 3,000	$ 27,000
4	1" Water Connection		40	EA	$ 2,000	$ 80,000
5	Pipe Bedding		2,100	LN.FT.	$ 20	$ 42,000
6	Traffic Control		1	L.S.	$ 8,000	$ 8,000
7	Subsurface Investigation		10	HR.	$ 150	$ 2,000
8	Connections to Existing Water Main		2	EA	$ 2,500	$ 5,000
9	Saw Cut Asphalt		4,200	LN.FT.	$ 5	$ 21,000
10	Asphalt Removal		1,200	SQ.YD	$ 5	$ 6,000
11	Asphalt Replacement		1,200	SQ.YD	$ 12	$ 15,000
12	**Construction Subtotal**					**$ 336,000**
13	Contingency	18.0%	1	L.S.	$ 61,000	$ 61,000
14	**Construction Total**					**$ 397,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 80,000	$ 80,000
16	**Professional Services Total**					$ 80,000
17	**TOTAL**					**$ 477,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project: Jay's Well Upgrade Project
Time Period: 2031-2041
Priority: 5, Magnitude: 5
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 16,000	$ 16,000
2	Pumping Tests		48	HR.	$ 500	$ 24,000
3	Replace Pump, Motor, Parts		1	L.S.	$ 120,000	$ 120,000
4	Clean and Repair Components		1	L.S.	$ 45,000	$ 45,000
5	**Construction Subtotal**					**$ 205,000**
6	Contingency	18.0%	1	L.S.	$ 37,000	$ 37,000
7	**Construction Total**					**$ 242,000**
	Professional Services & Project Incidentals					
8	Professional Services	20%	1	L.S.	$ 49,000	$ 49,000
9	**Professional Services Total**					$ 49,000
10	**TOTAL**					**$ 291,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

SUNRISE ENGINEERING

Project:	200 West Water Main Replacement Project	Project No:	**S08308**
	Time Period: 2031-2041	Date:	16-May-22
	Priority: 5, Magnitude: 4		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 45,000	$ 45,000
2	8" C-900 PVC Pipe		4,200	LN.FT.	$ 50	$ 210,000
3	8" Gate Valves		28	EA	$ 3,000	$ 84,000
4	1" Water Connection		50	EA	$ 2,000	$ 100,000
5	Pipe Bedding		4,200	LN.FT.	$ 20	$ 84,000
6	Traffic Control		1	L.S.	$ 17,000	$ 17,000
7	Subsurface Investigation		25	HR.	$ 150	$ 4,000
8	Connections to Existing Water Main		2	EA	$ 4,000	$ 8,000
9	Saw Cut Asphalt		8,410	LN.FT.	$ 5	$ 43,000
10	Asphalt Removal		2,400	SQ.YD	$ 5	$ 12,000
11	Asphalt Replacement		2,400	SQ.YD	$ 12	$ 29,000
12	**Construction Subtotal**					**$ 636,000**
13	Contingency	18.0%	1	L.S.	$ 115,000	$ 115,000
14	**Construction Total**					**$ 751,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 151,000	$ 151,000
16	**Professional Services Total**					$ 151,000
17	**TOTAL**					**$ 902,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project: Intercity PRV Upgrade Project
Time Period: 2031-2041
Priority: 4, Magnitude: 2
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 50,000	$ 50,000
2	Pressure Reducing Valve (PRV) & Parts		6	EA	$ 75,000	$ 450,000
3	PRV Vault		6	EA	$ 25,000	$ 150,000
4	Replaced C-900 PVC Pipe		60	LN.FT.	$ 50	$ 3,000
5	Traffic Control		6	EA	$ 1,000	$ 6,000
6	Subsurface Investigation		20	HR.	$ 150	$ 3,000
7	Saw Cut Asphalt		240	LN.FT.	$ 5	$ 2,000
8	Asphalt Removal		70	SQ.YD	$ 5	$ 1,000
9	Asphalt Replacement		70	SQ.YD	$ 14	$ 1,000
10	**Construction Subtotal**					**$ 666,000**
11	Contingency	18.0%	1	L.S.	$ 120,000	$ 120,000
12	**Construction Total**					**$ 786,000**
	Professional Services & Project Incidentals					
13	Professional Services	20.0%	1	L.S.	$ 158,000	$ 158,000
14	**Professional Services Total**					$ 158,000
15	**TOTAL**					**$ 944,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project:	300 West Hot Soils Project	Project No:	**S08308**
	Time Period: 2031-2041	Date:	16-May-22
	Priority: 4, Magnitude: 1		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 32,000	$ 32,000
2	8" C-900 PVC Pipe		2,700	LN.FT.	$ 50	$ 135,000
3	8" Gate Valves		15	EA	$ 3,000	$ 45,000
4	1" Water Connection		55	EA	$ 2,000	$ 110,000
5	Pipe Bedding		2,700	LN.FT.	$ 20	$ 54,000
6	Traffic Control		1	L.S.	$ 12,000	$ 12,000
7	Subsurface Investigation		15	HR.	$ 150	$ 3,000
8	Connections to Existing Water Main		3	EA	$ 4,000	$ 12,000
9	Saw Cut Asphalt		5,410	LN.FT.	$ 5	$ 28,000
10	Asphalt Removal		1,500	SQ.YD	$ 5	$ 8,000
11	Asphalt Replacement		1,500	SQ.YD	$ 12	$ 18,000
12	**Construction Subtotal**					**$ 457,000**
13	Contingency	18.0%	1	L.S.	$ 83,000	$ 83,000
14	**Construction Total**					**$ 540,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 108,000	$ 108,000
16	**Professional Services Total**					$ 108,000
17	**TOTAL**					**$ 648,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

SUNRISE ENGINEERING

Project: 100 North Water Main Replacement Project
Time Period: 2031-2041
Priority: 3, Magnitude: 4
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 51,000	$ 51,000
2	8" C-900 PVC Pipe		4,300	LN.FT.	$ 50	$ 215,000
3	8" Gate Valves		26	EA	$ 3,000	$ 78,000
4	1" Water Connection		50	EA	$ 2,000	$ 100,000
5	Pipe Bedding		4,300	LN.FT.	$ 20	$ 86,000
6	Traffic Control		1	L.S.	$ 20,000	$ 20,000
7	Subsurface Investigation		25	HR.	$ 150	$ 4,000
8	Connections to Existing Water Main		20	EA	$ 4,000	$ 80,000
9	Saw Cut Asphalt		8,610	LN.FT.	$ 5	$ 44,000
10	Asphalt Removal		1,200	SQ.YD.	$ 5	$ 6,000
11	Asphalt Replacement		1,200	SQ.YD.	$ 12	$ 15,000
12	**Construction Subtotal**					**$ 699,000**
13	Contingency	18.0%	1	L.S.	$ 126,000	$ 126,000
14	**Construction Total**					**$ 825,000**
	Professional Services & Project Incidentals					
15	Professional Services	20.0%	1	L.S.	$ 165,000	$ 165,000
16	**Professional Services Total**					$ 165,000
17	**TOTAL**					**$ 990,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project:	Deer Fence/Zone 4 Mainline Project	Project No:	**S08308**
	Time Period: 2031-2041	Date:	16-May-22
	Priority: 2. Magnitude: 5		
Owner:	Providence City	By:	SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 100,000	$ 100,000
2	12" C-900 PVC Pipe		10,000	LN.FT.	$ 80	$ 800,000
3	12" Gate Valves		6	EA	$ 5,000	$ 30,000
4	Pipe Bedding		10,000	LN.FT.	$ 20	$ 200,000
5	Traffic Control		1	L.S.	$ 3,000	$ 3,000
6	Subsurface Investigation		8	HR.	$ 150	$ 2,000
7	Connections to Existing Water Main		2	EA	$ 4,000	$ 8,000
8	Saw Cut Asphalt		20,010	LN.FT.	$ 5	$ 101,000
9	Asphalt Removal		5,600	SQ.YD.	$ 5	$ 28,000
10	Asphalt Replacement		5,600	SQ.YD.	$ 12	$ 67,200
11	**Construction Subtotal**					**$ 1,340,000**
12	Contingency	18.0%	1	L.S.	$ 242,000	$ 242,000
13	**Construction Total**					**$ 1,582,000**
	Professional Services & Project Incidentals					
14	Professional Services	20.0%	1	L.S.	$ 317,000	$ 317,000
15	Land Acquisition & Easements		1	L.S.	$ 45,000	$ 45,000
16	**Professional Services Total**					$ 362,000
17	**TOTAL**					**$ 1,944,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project: Zone 3 Looping Project
Time Period: 2031-2041
Priority: 2, Magnitude: 3
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 44,000	$ 44,000
2	8" C-900 PVC Pipe		7,000	LN.FT.	$ 50	$ 350,000
3	8" Gate Valves		12	EA	$ 3,000	$ 36,000
4	Pipe Bedding		7,000	LN.FT	$ 20	$ 140,000
5	Connections to Existing Water Main		5	EA	$ 4,000	$ 20,000
6	**Construction Subtotal**					**$ 590,000**
7	Contingency	18.0%	1	L.S.	$ 107,000	$ 107,000
8	**Construction Total**					**$ 697,000**
	Professional Services & Project Incidentals					
9	Professional Services	20.0%	1	L.S.	$ 140,000	$ 140,000
10	**Professional Services Total**					$ 140,000
11	**TOTAL**					**$ 837,000**

SUNRISE ENGINEERING, INC.

CONSULTING ENGINEERS AND SURVEYORS

Detailed Project Budget

Project: City Well Drain Line Installation Project
Time Period: 2031-2041
Priority: 2 Magnitude: 3
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 37,000	$ 37,000
2	24" ABS Drain Pipe		2,850	LN.FT.	$ 120	$ 342,000
3	Pipe Bedding		2,850	LN.FT.	$ 20	$ 57,000
4	Traffic Control		1	L.S.	$ 21,000	$ 21,000
5	Subsurface Investigation		15	HR.	$ 150	$ 3,000
6	Connections to Existing Collections Pipe		2	EA	$ 4,000	$ 8,000
7	Saw Cut Asphalt		5,710	LN.FT.	$ 5	$ 29,000
8	Asphalt Removal		1,600	SQ.YD	$ 5	$ 8,000
9	Asphalt Replacement		1,600	SQ.YD	$ 12	$ 20,000
10	**Construction Subtotal**					**$ 525,000**
11	Contingency	18.0%	1	L.S.	$ 95,000	$ 95,000
12	**Construction Total**					**$ 620,000**
	Professional Services & Project Incidentals					
13	Professional Services	20.0%	1	L.S.	$ 124,000	$ 124,000
14	**Professional Services Total**					$ 124,000
15	**TOTAL**					**$ 744,000**

SUNRISE ENGINEERING, INC.
CONSULTING ENGINEERS AND SURVEYORS
Detailed Project Budget

Project: Water Master Plan
Time Period: Every 5 Years
Priority: 5, Magnitude: 5
Owner: Providence City

Project No: **S08308**
Date: 16-May-22
By: SDW & CMB

ITEM NO.	ITEM		QUANTITY	UNIT	UNIT PRICE	TOTAL PROJECT AMOUNT
	Construction					
1	Mobilization	8.0%	1	L.S.	$ 8,000	$ 8,000
2	Collection Systems Data & Mapping		1	L.S.	$ 32,000	$ 32,000
3	Water System Model		1	L.S.	$ 20,000	$ 20,000
4	Capital Facility & Impact Facilities Plan		1	L.S.	$ 18,000	$ 18,000
5	Report Preparation		1	L.S.	$ 18,000	$ 18,000
6	**Construction Subtotal**					**$ 96,000**
7	Contingency	18.0%	1	L.S.	$ 18,000	$ 18,000
8	**Construction Total**					**$ 114,000**
	Professional Services & Project Incidentals					
9	Professional Services	20.0%	1	L.S.	$ 23,000	$ 23,000
10	**Professional Services Total**					**$ 23,000**
11	**TOTAL**					**$ 137,000**

Providence City
Full City
Five Point Analysis
Complete System
DDW Standards

SUNRISE ENGINEERING

Table 1

System User Analysis	
Projected Growth Rate	2.48%
Current Year	2021
Planning Period (years)	20
Planning Year	2041
Population	8,353
Current Residential ERU's	2,544
Current Commercial ERU's	440
Total Current ERU's	2,984
Project System Parameters	
Projected Population	13,634
Projected Residential ERU's	4,152
Projected Commercial ERU's	718
Total Projected ERU's	4,871
Existing System Capacities	
Water Right (gpm)	5,914
Water Right (AF/YR)	8,457
Water Source (gpm)	4,691
Water Storage (gal)	5,630,000

Table 2

Utah DEQ Division of Drinking Water Minimum Sizing Standards for Providence City	
Effective Date	3/22/2021
Peak Day Source Demand / ERU (gal/day)	2,573
Average Annual Demand per ERU (gal/year)	398,057
Average Day Demand per ERU (gpm)	0.757
Equalization Storage per ERC (gal/day)	1,091
Number of Storage Tank Zones	3
Fire Flow per Tank (gpm)	1,500
Fire Duration Per Tank (min)	120
Fire Storage Required per Tank (gal)	180,000
Total Fire Storage Required (gal)	540,000

Table 3

Seasonal Impacts	
ndoor Average Day Demand per ERC (gal/day	209
Indoor Peak Day Demand per ERC (gal/day)	784
utdoor Average Day Demand per ERC (gal/da	882
Outdoor Peak Day Demand per ERC (gal/day)	1,789

Table 4 Average Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	2,984	209	gal/day/conn	433		
Existing Outdoor Need		882	gal/day/conn	1,827		
Existing Total WS Need		1,091	gal/day/conn	2,260	4,691	2,432
Projected Indoor Need	4,871	209	gal/day/conn	707		
Projected Outdoor Need		882	gal/day/conn	2,982		
Projected Total WS Need		1,091	gal/day/conn	3,689	4,691	1,003

Table 5 Peak Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	2,984	784	gal/day/conn	1,625		
Existing Outdoor Need		1,789	gal/day/conn	3,707		
Existing Total WS Need		2,573	gal/day/conn	5,332	4,691	(640)
Projected Indoor Need	4,871	784	gal/day/conn	2,652		
Projected Outdoor Need		1,789	gal/day/conn	6,051		
Projected Total WS Need		2,573	gal/day/conn	8,703	4,691	(4,011)

Table 6 Water Right Demand

Water Right	Number of ERCs	DDW Factor	Unit	Total Need (ac-ft/yr)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	2,984	0.234	ac-ft/yr/conn	699		
Existing Outdoor Need		0.987	ac-ft/yr/conn	2,947		
Existing Total WS Need		1.222	ac-ft/yr/conn	3,645	8,457	4,812
Projected Indoor Need	4,871	0.234	ac-ft/yr/conn	1,140		
Projected Outdoor Need		0.987	ac-ft/yr/conn	4,810		
Projected Total WS Need		1.222	ac-ft/yr/conn	5,950	8,457	2,507

Table 7 Water Storage

Water Storage	Number of ERCs	DDW Factor	Unit	Total Need (gal)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	2,984	209	gal/day/conn	623,656		
Existing Outdoor Need		882	gal/day/conn	2,630,596		
Fire Protection		1,500	gpm/120min/tank	540,000		
Existing Total Storage Need				3,794,252	5,630,000	1,835,748
Projected Indoor Need	4871	209	gal/day/conn	1,017,952		
Projected Outdoor Need		882	gal/day/conn	4,293,748		
Fire Protection		1500	gpm/120min/tank	540,000		
Projected Total Storage Need				5,851,700	5,630,000	(221,700)

Table 8 Tank Zone Distribution

Tank Zone	Number of ERC's	Percentage of City	Average Day Demand Surplus	Peak Day Demand Surplus (Deficit)	Water Right Demand Surplus	Water Storage Surplus (Deficit)
Existing Tank Zone 1	1,516	50.8%	2,197	636	4,559	166,700
Existing Tank Zone 2	1,119	37.5%	2,432	(640)	(1,367)	1,229,655
Existing Tank Zone 3	349	11.7%	1,082	723	791	439,392
Existing Total	2,984	100%				
Projected Tank Zone 1	2489	51.1%	1,460	(1,102)	3,370	(894,422)
Projected Tank Zone 2	1813	37.2%	1,002	(4,012)	(2,215)	472,802
Projected Tank Zone 3	569	11.7%	916	330	522	199,467
Projected Total	4,871	100%				

Providence City
Tank Zone #1
Five Point Analysis
Complete System
DDW Standards

SUNRISE ENGINEERING

Table 1

System User Analysis	
Projected Growth Rate	2.48%
Current Year	2021
Planning Period (years)	20
Planning Year	2041
Population (Tank Zone 1)	4,243
Current Residential ERU's (Tank Zone 1)	1,262
Current Commercial ERU's (Tank Zone 1)	254
Total Current ERU's (Tank Zone 1)	1,516
Project System Parameters	
Projected Population (Tank Zone 1)	6,926
Projected Residential ERU's (Tank Zone 1)	2,019
Projected Commercial ERU's (Tank Zone 1)	470
Total Projected ERU's (Tank Zone 1)	2,489
Existing System Capacities	
Water Right (gpm)	3,974
Water Right (AF/YR)	6,411
Water Source for Tank Zone (gpm)	3,345
Water Storage for Tank Zone (gal)	2,000,000

Table 2

Utah DEQ Division of Drinking Water Minimum Sizing Standards for Providence City	
Effective Date	3/22/2021
Peak Day Source Demand / ERU (gal/day)	2,573
Average Annual Demand per ERU (gal/year)	398,057
Average Day Demand per ERU (gpm)	0.757
Equalization Storage per ERC (gal/day)	1,091
Number of Storage Tank Zones	1
Fire Flow per Tank (gpm)	1,500
Fire Duration Per Tank (min)	120
Fire Storage Required per Tank (gal)	180,000
Total Fire Storage Required (gal)	180,000

Table 3

Seasonal Impacts	
ndoor Average Day Demand per ERC (gal/day	209
Indoor Peak Day Demand per ERC (gal/day)	784
utdoor Average Day Demand per ERC (gal/day	882
Outdoor Peak Day Demand per ERC (gal/day)	1,789

Table 4 Average Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,516	209	gal/day/conn	220		
Existing Outdoor Need		882	gal/day/conn	928		
Existing Total WS Need		1,091	gal/day/conn	1,148	3,345	2,197
Projected Indoor Need	2,489	209	gal/day/conn	361		
Projected Outdoor Need		882	gal/day/conn	1,524		
Projected Total WS Need		1,091	gal/day/conn	1,885	3,345	1,460

Table 5 Peak Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,516	784	gal/day/conn	825		
Existing Outdoor Need		1,789	gal/day/conn	1,883		
Existing Total WS Need		2,573	gal/day/conn	2,709	3,345	636
Projected Indoor Need	2,489	784	gal/day/conn	1,355		
Projected Outdoor Need		1,789	gal/day/conn	3,092		
Projected Total WS Need		2,573	gal/day/conn	4,447	3,345	(1,102)

Table 6 Water Right Demands

Water Right	Number of ERCs	DDW Factor	Unit	Total Need (ac-ft/yr)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,516	0.234	ac-ft/yr/conn	355		
Existing Outdoor Need		0.987	ac-ft/yr/conn	1,497		
Existing Total WS Need		1.222	ac-ft/yr/conn	1,852	6,411	4,559
Projected Indoor Need	2,489	0.234	ac-ft/yr/conn	583		
Projected Outdoor Need		0.987	ac-ft/yr/conn	2,458		
Projected Total WS Need		1.222	ac-ft/yr/conn	3,041	6,411	3,370

Table 7 Water Storage

Water Storage	Number of ERCs	DDW Factor	Unit	Total Need (gal)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,516	209	gal/day/conn	316,844		
Existing Outdoor Need		882	gal/day/conn	1,336,456		
Fire Protection		1,500	gpm/120min/tank	180,000		
Existing Total Storage Need				1,833,300	2,000,000	166,700
Projected Indoor Need	2489	209	gal/day/conn	520,201		
Projected Outdoor Need		882	gal/day/conn	2,194,221		
Fire Protection		1500	gpm/120min/tank	180,000		
Projected Total Storage Need				2,894,422	2,000,000	(894,422)

Table 8 Distribution Main Line

Distribution	Flow Required	Unit	Equivilant Pipe Area @ V = 5 ft/sec	Pipe Size Required (Diameter)	Existing Capacity	Condition
Existing Flow Need for Residents	1,172	gpm	0.52 ft2	10"	12"	Good
Existing Flow Need for Fire Flow	1,500	gpm	0.67 ft2	12"	12"	Good
Existing Total Storage Need	2,672	gpm	1.19 ft	16"	16"	Good
Existing Flow Need for Residents	1,610	gpm	0.72 ft2	12"	12"	Good
Existing Flow Need for Fire Flow	1,500	gpm	0.67 ft2	12"	12"	Good
Existing Total Storage Need	3110	gpm	1.39 ft2	16"	16"	Good

Providence City
Tank Zone #2
Five Point Analysis
Complete System
DDW Standards

SUNRISE ENGINEERING

Table 1

System User Analysis	
Projected Growth Rate	2.48%
Current Year	2021
Planning Period (years)	20
Planning Year	2041
Population (Tank Zone 2)	3,132
Current Residential ERU's (Tank Zone 2)	985
Current Commercial ERU's (Tank Zone 2)	134
Total Current ERU's (Tank Zone 2)	1,119
Project System Parameters	
Projected Population (Tank Zone 2)	5,112
Projected Residential ERU's (Tank Zone 2)	1,649
Projected Commercial ERU's (Tank Zone 2)	164
Total Projected ERU's (Tank Zone 2)	1,813
Existing System Capacities	
Water Right for Tank Zone (gpm)	0
Water Right for tank Zone (AF/YR)	0
Water Source for Tank Zone (gpm)	Remainder
Water Storage for Tank Zone (gal)	2,630,000

Table 2

Utah DEQ Division of Drinking Water Minimum Sizing Standards for Providence City	
Effective Date	3/22/2021
Peak Day Source Demand / ERU (gal/day)	2,573
Average Annual Demand per ERU (gal/year)	398,057
Average Day Demand per ERU (gpm)	0.757
Equalization Storage per ERC (gal/day)	1,091
Number of Storage Tank Zones	1
Fire Flow per Tank (gpm)	1,500
Fire Duration Per Tank (min)	120
Fire Storage Required per Tank (gal)	180,000
Total Fire Storage Required (gal)	180,000

Table 3

Seasonal Impacts	
ndoor Average Day Demand per ERC (gal/day	209
Indoor Peak Day Demand per ERC (gal/day)	784
utdoor Average Day Demand per ERC (gal/day	882
Outdoor Peak Day Demand per ERC (gal/day)	1,789

Table 4 Average Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,119	209	gal/day/conn	162		
Existing Outdoor Need		882	gal/day/conn	685		
Existing Total WS Need		1,091	gal/day/conn	847	3,279	2,432
Projected Indoor Need	1,813	209	gal/day/conn	263		
Projected Outdoor Need		882	gal/day/conn	1,110		
Projected Total WS Need		1,091	gal/day/conn	1,373	2,376	1,002

Table 5 Peak Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,119	784	gal/day/conn	609		
Existing Outdoor Need		1,789	gal/day/conn	1,390		
Existing Total WS Need		2,573	gal/day/conn	1,999	1,359	(640)
Projected Indoor Need	1,813	784	gal/day/conn	987		
Projected Outdoor Need		1,789	gal/day/conn	2,252		
Projected Total WS Need		2,573	gal/day/conn	3,239	-773	(4,012)

Table 6 Water Right Demands

Water Right	Number of ERCs	DDW Factor	Unit	Total Need (ac-ft/yr)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,119	0.234	ac-ft/yr/conn	262		
Existing Outdoor Need		0.987	ac-ft/yr/conn	1,105		
Existing Total WS Need		1.222	ac-ft/yr/conn	1,367	0	(1,367)
Projected Indoor Need	1,813	0.234	ac-ft/yr/conn	424		
Projected Outdoor Need		0.987	ac-ft/yr/conn	1,790		
Projected Total WS Need		1.222	ac-ft/yr/conn	2,215	0	(2,215)

Table 7 Water Storage

Water Storage	Number of ERCs	DDW Factor	Unit	Total Need (gal)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	1,119	209	gal/day/conn	233,871		
Existing Outdoor Need		882	gal/day/conn	986,474		
Fire Protection		1,500	gpm/120min/tank	180,000		
Existing Total Storage Need				1,400,345	2,630,000	1,229,655
Projected Indoor Need	1813	209	gal/day/conn	378,917		
Projected Outdoor Need		882	gal/day/conn	1,598,281		
Fire Protection		1500	gpm/120min/tank	180,000		
Projected Total Storage Need				2,157,198	2,630,000	472,802

Table 8 Distribution Main Line

Distribution	Flow Required	Unit	Equivilant Pipe Area @ V = 5 ft/sec	Pipe Size Required (Diameter)	Existing Capacity	Condition
Existing Flow Need for Residents	965	gpm	0.43 ft2	10"	12"	Good
Existing Flow Need for Fire Flow	1,500	gpm	0.67 ft2	12"	12"	Good
Existing Total Storage Need	2,465	gpm	1.10 ft	16"	16"	Good
Existing Flow Need for Residents	1,315	gpm	0.59 ft2	12"	12"	Good
Existing Flow Need for Fire Flow	1,500	gpm	0.67 ft2	12"	12"	Good
Existing Total Storage Need	2815	gpm	1.25 ft2	16"	16"	Good

Providence City
Tank Zone #3
Five Point Analysis
Complete System
DDW Standards

Table 1

System User Analysis	
Projected Growth Rate	2.48%
Current Year	2021
Planning Period (years)	20
Planning Year	2041
Population (Tank Zone 3)	977
Current Residential ERU's (Tank Zone 3)	297
Current Commercial ERU's (Tank Zone 3)	52
Total Current ERU's (Tank Zone 3)	349
Project System Parameters	
Projected Population (Tank Zone 3)	1,595
Projected Residential ERU's (Tank Zone 3)	485
Projected Commercial ERU's (Tank Zone 3)	84
Total Projected ERU's (Tank Zone 3)	569
Existing System Capacities	
Water Right for Tank Zone (gpm)	1,388
Water Right for Tank Zone (AF/YR)	1,218
Water Source for Tank Zone (gpm)	1,346
Water Storage for Tank Zone (gal)	1,000,000

Table 2

Utah DEQ Division of Drinking Water Minimum Sizing Standards for Providence City	
Effective Date	3/22/2021
Peak Day Source Demand / ERU (gal/day)	2,573
Average Annual Demand per ERU (gal/year)	398,057
Average Day Demand per ERU (gpm)	0.757
Equalization Storage per ERC (gal/day)	1,091
Number of Storage Tank Zones	1
Fire Flow per Tank (gpm)	1,500
Fire Duration Per Tank (min)	120
Fire Storage Required per Tank (gal)	180,000
Total Fire Storage Required (gal)	180,000

Table 3

Seasonal Impacts	
ndoor Average Day Demand per ERC (gal/day	209
Indoor Peak Day Demand per ERC (gal/day)	784
utdoor Average Day Demand per ERC (gal/day	882
Outdoor Peak Day Demand per ERC (gal/day)	1,789

Table 4 Average Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	349	209	gal/day/conn	51		
Existing Outdoor Need		882	gal/day/conn	214		
Existing Total WS Need		1,091	gal/day/conn	264	1,346	1,082
Projected Indoor Need	569	209	gal/day/conn	83		
Projected Outdoor Need		882	gal/day/conn	348		
Projected Total WS Need		1,091	gal/day/conn	431	1,346	916

Table 5 Peak Day Demand

Water Source	Number of ERCs	DDW Factor	Unit	Total Need (gpm)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	349	784	gal/day/conn	190		
Existing Outdoor Need		1,789	gal/day/conn	434		
Existing Total WS Need		2,573	gal/day/conn	624	1,346	723
Projected Indoor Need	569	784	gal/day/conn	310		
Projected Outdoor Need		1,789	gal/day/conn	707		
Projected Total WS Need		2,573	gal/day/conn	1,017	1,346	330

Table 6 Water Right Demands

Water Right	Number of ERCs	DDW Factor	Unit	Total Need (ac-ft/yr)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	349	0.234	ac-ft/yr/conn	82		
Existing Outdoor Need		0.987	ac-ft/yr/conn	345		
Existing Total WS Need		1.222	ac-ft/yr/conn	426	1,218	791
Projected Indoor Need	569	0.234	ac-ft/yr/conn	133		
Projected Outdoor Need		0.987	ac-ft/yr/conn	562		
Projected Total WS Need		1.222	ac-ft/yr/conn	695	1,218	522

Table 7 Water Storage

Water Storage	Number of ERCs	DDW Factor	Unit	Total Need (gal)	Existing Capacity	Surplus (Deficit)
Existing Indoor Need	349	209	gal/day/conn	72,941		
Existing Outdoor Need		882	gal/day/conn	307,667		
Fire Protection		1,500	gpm/120min/tank	180,000		
Existing Total Storage Need				560,608	1,000,000	439,392
Projected Indoor Need	569	209	gal/day/conn	118,921		
Projected Outdoor Need		882	gal/day/conn	501,612		
Fire Protection		1500	gpm/120min/tank	180,000		
Projected Total Storage Need				800,533	1,000,000	199,467

Table 8 Distribution Main Line

Distribution	Flow Required	Unit	Equivilant Pipe Area @ V = 5 ft/sec	Pipe Size Required (Diameter)	Existing Capacity	Condition
Existing Flow Need for Residents	458	gpm	0.20 ft2	8"	10"	Good
Existing Flow Need for Fire Flow	1,500	gpm	0.67 ft2	12"	12"	Good
Existing Total Storage Need	1,958	gpm	0.87 ft	16"	16"	Good
Existing Flow Need for Residents	626	gpm	0.28 ft2	8"	10"	Good
Existing Flow Need for Fire Flow	1,500	gpm	0.67 ft2	12"	12"	Good
Existing Total Storage Need	2126	gpm	0.95 ft2	16"	16"	Good

Appendix F – Department of Environmental Quality's Division of Drinking Water Minimum Sizing Standards for Providence City, Utah

Utah Department of Environmental Quality
Division of Drinking Water
Minimum Sizing Standards

Providence City	PWS ID: UTAH03017

ROBERT D. STAPLEY
164 NORTH GATEWAY DR
PROVIDENCE, UT 84332
Phone: 435-881-8214
Emergency Phone:
RSTAPLEY@PROVIDENCE.UTAH.GOV

System Type: COMMUNITY
Population: 7,300

DRAFT

MINIMUM SIZING STANDARD

Date Standard effective	3/22/2021
Peak Day Source Demand per ERC (gal/day)	**2,573**
Average Annual Demand per ERC (gal/day)	**398,057**
Equalization Storage per ERC (gal/day)	**1,091**

MINIMUM SIZING STANDARD CALCULATIONS

			Variability Factor		
Data from these reporting years	2018	to	2020		
Max Peak Day Source Demand per ERC (gal/day)	2,380	x	8%	=	2,573
Max Average Annual Demand per ERC (gal/day)	348,804	x	14%	=	398,057
Max Equalization Storage per ERC (gal/day)	956	x	14%	=	1,091

DWRi WATER USE DATA REPORTED

Data Year	Peak Day Source Demand (gal/day)	Average Annual Demand (gallons)	ERCs	Peak Demand per ERC (gal/day)	Avg Annual Demand per ERC (gal/year)	Equalization Storage per ERC (gal/day)	Op Days
2020	5,601,379	849,392,543	2,544	2,202	333,878	915	365
2019	5,816,440	763,491,703	2,498	2,328	305,645	837	365
2018	5,777,338	846,714,048	2,427	2,380	348,804	956	365
Variability			5%	8%	14%	14%	

Data Year	Peak Month Average (gal/day)	Peak Month Average per ERC (gal/day)	Ratio of PD/ERC to Peak Month Avg/ERC
2020	5,030,929	1,978	1.1
2019	5,536,629	2,216	1.1
2018	5,662,134	2,333	1.0

CAPACITY CALCULATIONS FOR STORAGE			
STORAGE CALCULATION			
Equalization per ERC (gal):	1,091		
Existing Storage (gal):	4,130,000		
ERCs:	2,544		
Required Storage w/o Fire Flow (gal)	2,774,424		
Required Fire Storage (gal):	900,000		
Required Storage w/ Fire (gal):	3,674,424		
Storage Deficiency:	0	0.0%	
No Storage Deficiency			

CAPACITY CALCULATIONS FOR SOURCES			
STORAGE CALCULATION			
Peak Day Source Demand per ERC (gpm)	1.79		
Existing Source Capacity (gmp):	4,562		
ERCs:	2,544		
Required Source Capacity (gpm)	4,545		
Source Deficiency (gpm):	0	0.0%	
No Source Deficiency			

SYSTEM STORAGE AND SOURCE INVENTORY							
SYSTEM STORAGE DETAILS				SYSTEM SOURCE DETAILS			
ST005	ECK Reservoir #2	500,000	GAL	WS001	Broad Hollow Spring	512	GPM
ST001	Coombe Reservoir	1,000,000	GAL	WS002	Dales Well 100 E 20(	2,000	GPM
ST002	Redds Reservoir #1	1,000,000	GAL	WS003	Alder-West Well	550	GPM
ST003	Redds Reservoir #2	130,000	GAL	WS004	400 S Providence We	1,500	GPM
ST004	ECK Reservoir #1	1,500,000	GAL				
	Storage Totals:	**4,130,000**	**GAL**		**Source Totals:**	**4,562**	**GPM**

Appendix G – Existing and Project Cash Flows

PROVIDENCE WATER CASH FLOW - "Do Nothing Alternative"
Existing Cash Flow Model

Water Service Size	Monthly Rate	Year Rate	Connection Fee	Impact Fee
	Current Water User Rates			
1" Connection	$ 21.00	$ 252.00	$ 500.90	$ 2,500.00
1 1/2" Connection	$ 47.31	$ 567.72	$ 1,457.50	$ 2,500.00
2" Connection	$ 81.00	$ 972.00	$ 1,531.34	$ 2,500.00
4" Connection	$ 312.00	$ 3,744.00	$ 2,628.39	$ 2,500.00
Average Yearly Overage		$ 200.00		

Interest Rate on Cash on Hand	0.32%
Inflation	3.0%

Existing Water Improvements Debt - Dew Water Tank	
Loan Amount	$ 1,990,000
Interest Rate	1.50%
Term	30
Year Start	2022
Reserve Accour	0.00%

	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**
Yearly Growth Rate Residential	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Yearly Growth Rate Commercial	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Indexed Inflation Multiplier				1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702	1.754	1.806
General Information																								
Connections																								
RESIDENTIAL - 1"			2173	2257	2313	2371	2429	2490	2551	2615	2680	2746	2814	2884	2956	3029	3104	3181	3260	3341	3424	3509	3596	3685
RESIDENTIAL - 1 1/2"			3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5
RESIDENTIAL - 2"			3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5
RESIDENTIAL - 4"			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMERCIAL - 1"			47	52	53	55	56	57	59	60	62	63	65	66	68	70	72	73	75	77	79	81	83	85
COMMERCIAL - 1 1/2"			10	9	9	9	10	10	10	10	11	11	11	11	12	12	12	13	13	13	14	14	14	15
COMMERCIAL - 2"			13	13	13	14	14	14	15	15	15	16	16	17	17	17	18	18	19	19	20	20	21	21
COMMERCIAL - 4"			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MULTI-FAMILY - 1"			7	8	8	8	9	9	9	9	9	10	10	10	10	11	11	11	12	12	12	12	13	13
MULTI-FAMILY - 1 1/2"			7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	11	11	11	11
MULTI-FAMILY - 2"			6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10
MULTI-FAMILY - 4"			6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10
CITY - 1"			21	19	19	20	20	21	21	22	23	23	24	24	25	25	26	27	27	28	29	30	30	31
CITY - 2"			6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10
CITY - 2"			3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5
RELIGIOUS - 2"			9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	13	13	13	14	14	14	15
EDUCATIONAL - 1"			4	4	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7
EDUCATIONAL - 2"			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EDUCATIONAL - 4"			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CEMETARY - 4"			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Number of Connections			**2321**	**2408**	**2468**	**2529**	**2591**	**2656**	**2721**	**2789**	**2859**	**2929**	**3002**	**3076**	**3153**	**3231**	**3311**	**3393**	**3477**	**3563**	**3651**	**3742**	**3835**	**3930**
Connection Sizes and Quantities																								
1" Connection			2252	2340	2398	2458	2518	2582	2645	2711	2779	2847	2917	2990	3065	3140	3218	3298	3380	3464	3550	3638	3728	3820
1 1/2" Connection			20	19	19	20	20	21	21	22	23	23	24	24	25	25	26	27	27	28	29	30	30	31
2" Connection			29	29	31	31	32	33	34	34	35	36	37	38	39	40	41	41	42	43	44	46	47	48
4" Connection			11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	15	15	15	16	16	16	17
Total Number of ERUs				**2399**	**2459**	**2520**	**2582**	**2648**	**2712**	**2779**	**2850**	**2919**	**2991**	**3065**	**3143**	**3219**	**3299**	**3381**	**3464**	**3550**	**3639**	**3730**	**3821**	**3916**
New Connections																								
New 1" Connections				88	58	60	60	64	63	66	68	68	70	73	75	75	78	80	82	84	86	88	90	92
New 1 1/2" Connections				0	0	1	0	1	0	1	1	0	1	0	1	0	1	1	0	1	1	1	0	1
New 2" Connections				0	2	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	2	1	1
New 4" Connections				0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0	1
Total Number of New ERUs					**60**	**61**	**62**	**66**	**64**	**67**	**71**	**69**	**72**	**74**	**78**	**76**	**80**	**82**	**83**	**86**	**89**	**91**	**91**	**95**
Revenue																								
Operating Income																								
51-3710 - WATER SALES	**1,135,747**	**1,107,443**	**1,158,404**	**1,157,678**	**1,178,199**	**1,206,086**	**1,238,322**	**1,269,190**	**1,298,838**	**1,329,438**	**1,366,058**	**1,397,966**	**1,431,545**	**1,465,713**	**1,505,497**	**1,540,569**	**1,577,765**	**1,618,636**	**1,656,872**	**1,696,780**	**1,741,536**	**1,784,424**	**1,826,276**	**1,873,743**
1" Connection Water Sales					1,083,896	1,111,016	1,138,136	1,167,064	1,195,540	1,225,372	1,256,108	1,286,844	1,318,484	1,351,480	1,385,380	1,419,280	1,454,536	1,490,696	1,527,760	1,565,728	1,604,600	1,644,376	1,685,056	1,726,640
1 1/2" Connection Water Sales					14,587	15,354	15,354	16,122	16,122	16,890	17,658	17,658	18,425	18,425	19,193	19,193	19,961	20,728	20,728	21,496	22,264	23,032	23,032	23,799
2" Connection Water Sales					36,332	36,332	37,504	38,676	39,848	39,848	41,020	42,192	43,364	44,536	45,708	46,880	48,052	48,052	49,224	50,396	51,568	53,912	55,084	56,256
4" Connection Water Sales					43,384	43,384	47,328	47,328	47,328	47,328	51,272	51,272	51,272	51,272	55,216	55,216	55,216	59,160	59,160	59,160	63,104	63,104	63,104	67,048
51-3711 - EXCESS WATER		-	-	-	-	-	-	-	-															
51-3715 - CONTRIBUTION FROM OTHERS		**184,539**	-	-	-	-	-	-	-															
51-3720 - CONNECTION FEES	**19,767**	**14,733**	**27,944**	**8,043**	**32,115**	**31,512**	**34,214**	**35,046**	**33,088**	**34,517**	**39,678**	**35,593**	**38,052**	**38,097**	**43,185**	**39,099**	**42,059**	**44,158**	**42,605**	**45,064**	**48,695**	**48,599**	**46,612**	**51,700**
1" Connection Fees					29,052	30,054	30,054	32,058	31,557	33,059	34,061	34,061	35,063	36,566	37,568	37,568	39,070	40,072	41,074	42,076	43,077	44,079	45,081	46,083
1 1/2" Connection Fees					-	1,458	-	1,458	-	1,458	1,458	-	1,458	-	1,458	-	1,458	1,458	-	1,458	1,458	1,458	-	1,458
2" Connection Fees					3,063	-	1,531	1,531	1,531	-	1,531	1,531	1,531	1,531	1,531	1,531	1,531	-	1,531	1,531	1,531	3,063	1,531	1,531
4" Connection Fees					-	-	2,628	-	-	-	2,628	-	-	-	2,628	-	-	2,628	-	-	2,628	-	-	2,628
51-3730 - FIRE PROTECTIN CONNECTION		-				-																		
51-3740 - WATER SHARE FEE (IN LEIU OF)	**171,120**	**273,300**		**107,481**	**158,517**	**163,273**	**168,171**	**173,216**	**178,412**	**183,765**	**189,278**	**194,956**	**200,805**	**206,829**	**213,034**	**219,425**	**226,007**	**232,788**	**239,771**	**246,964**	**254,373**	**262,004**	**269,865**	**277,961**
51-3745 - WATER SHARE - SEASON PURCHASE	**3,025**	**3,883**		**1,657**	**2,039**	**2,100**	**2,163**	**2,228**	**2,295**	**2,364**	**2,435**	**2,508**	**2,583**	**2,661**	**2,741**	**2,823**	**2,907**	**2,995**	**3,085**	**3,177**	**3,272**	**3,371**	**3,472**	**3,576**
51-3792 - PRIOR YEAR REVENUE																								
Subtotal Operating Income	**$ 1,329,659**	**$ 1,399,359**	**$ 1,186,348**	**$ 1,274,859**	**$ 1,370,870**	**$ 1,402,971**	**$ 1,442,870**	**$ 1,479,681**	**$ 1,512,634**	**$ 1,550,083**	**$ 1,597,449**	**$ 1,631,022**	**$ 1,672,985**	**$ 1,713,300**	**$ 1,764,456**	**$ 1,801,915**	**$ 1,848,739**	**$ 1,898,577**	**$ 1,942,333**	**$ 1,991,986**	**$ 2,047,876**	**$ 2,098,398**	**$ 2,146,224**	**$ 2,206,980**
Non-Operating Income																								
51-3810 - INTEREST EARNINGS	$ 32,669	$ 53,000	$ 49,109	$ 41,118	$ 44,313	$ 45,642	$ 47,011	$ 48,422	$ 49,874	$ 51,371	$ 52,912	$ 54,499	$ 56,134	$ 57,818	$ 59,553	$ 61,339	$ 63,179	$ 65,075	$ 67,027	$ 69,038	$ 71,109	$ 73,242	$ 75,439	$ 77,703
51-3811 - INTEREST EARNINGS - BONDS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3890 - MISCELLANEOUS	$ 3,674	$ 2,099	$ 39,140	$ 88,601	$ 53,340	$ 54,940	$ 56,588	$ 58,286	$ 60,034	$ 61,835	$ 63,690	$ 65,601	$ 67,569	$ 69,596	$ 71,684	$ 73,834	$ 76,049	$ 78,331	$ 80,681	$ 83,101	$ 85,594	$ 88,162	$ 90,807	$ 93,531
51-3891 - Gain or loss on asset disposition		$ -	$ 62,111		$ 10,662	$ 10,982	$ 11,312	$ 11,651	$ 12,001	$ 12,361	$ 12,731	$ 13,113	$ 13,507	$ 13,912	$ 14,329	$ 14,759	$ 15,202	$ 15,658	$ 16,128	$ 16,612	$ 17,110	$ 17,623	$ 18,152	$ 18,697
51-3892 - WATER IMPACT FEE	**$ 133,376**	**$ 91,696**	**$ 191,728**	**$ 43,748**	**$ 150,000**	**$ 152,500**	**$ 155,000**	**$ 165,000**	**$ 160,000**	**$ 167,500**	**$ 177,500**	**$ 172,500**	**$ 180,000**	**$ 185,000**	**$ 195,000**	**$ 190,000**	**$ 200,000**	**$ 205,000**	**$ 207,500**	**$ 215,000**	**$ 222,500**	**$ 227,500**	**$ 227,500**	**$ 237,500**
1" Connection Impact Fees					$ 145,000.00	$ 150,000.00	$ 150,000.00	$ 160,000.00	$ 157,500.00	$ 165,000.00	$ 170,000.00	$ 170,000.00	$ 175,000.00	$ 182,500.00	$ 187,500.00	$ 187,500.00	$ 195,000.00	$ 200,000.00	$ 205,000.00	$ 210,000.00	$ 215,000.00	$ 220,000.00	$ 225,000.00	$ 230,000.00
1 1/2" Connection Impact Fees					$ -	$ 2,500.00	$ -	$ 2,500.00	$ -	$ 2,500.00	$ 2,500.00	$ -	$ 2,500.00	$ -	$ 2,500.00	$ -	$ 2,500.00	$ 2,500.00	$ -	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ -	$ 2,500.00
2" Connection Impact Fees					$ 5,000.00	$ -	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ -	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ -	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 5,000.00	$ 2,500.00	$ 2,500.00
4" Connection Impact Fees					$ -	$ -	$ 2,500.00	$ -	$ -	$ -	$ 2,500.00	$ -	$ -	$ -	$ 2,500.00	$ -	$ -	$ 2,500.00	$ -	$ -	$ 2,500.00	$ -	$ -	$ 2,500.00
51-3895 - SERIES 2 - - - BONDS		$ -	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3896 - PRIOR YEAR FUNDS - IMPACT FEES		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3897 - PRIOR YEAR FUNDS - BONDS		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Non-Operating Income	**$ 169,719**	**$ 146,795**	**$ 342,088**	**$ 173,466**	**$ 258,315**	**$ 264,064**	**$ 269,911**	**$ 283,358**	**$ 281,909**	**$ 293,066**	**$ 306,833**	**$ 305,713**	**$ 317,210**	**$ 326,326**	**$ 340,566**	**$ 339,933**	**$ 354,431**	**$ 364,064**	**$ 371,336**	**$ 383,751**	**$ 396,313**	**$ 406,528**	**$ 411,898**	**$ 427,430**
Total Revenue	**$ 1,499,379**	**$ 1,546,154**	**$ 1,528,436**	**$ 1,448,325**	**$ 1,629,184**	**$ 1,667,035**	**$ 1,712,781**	**$ 1,763,039**	**$ 1,794,543**	**$ 1,843,150**	**$ 1,904,282**	**$ 1,936,735**	**$ 1,990,195**	**$ 2,039,626**	**$ 2,105,022**	**$ 2,141,848**	**$ 2,203,169**	**$ 2,262,640**	**$ 2,313,669**	**$ 2,375,737**	**$ 2,444,189**	**$ 2,504,926**	**$ 2,558,123**	**$ 2,634,410**
Expenses																								
Operating Expenses																								
51-4010 - SALARIES - COUNCILMAN		$ -	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4011 - SALARIES & WAGES-TRAN TO ADMIN	$ 72,248	$ 73,089	$ 72,906	$ 79,456	$ 79,096	$ 81,469	$ 83,913	$ 86,430	$ 89,023	$ 91,694	$ 94,445	$ 97,278	$ 100,196	$ 103,202	$ 106,298	$ 109,487	$ 112,772	$ 116,155	$ 119,639	$ 123,229	$ 126,926	$ 130,733	$ 134,655	$ 138,695
51-4013 - EMP BENEFITS-TRANSFER TO ADMIN	$ 36,771	$ 42,539	$ 41,987	$ 45,452	$ 46,858	$ 48,263	$ 49,711	$ 51,203	$ 52,739	$ 54,321	$ 55,950	$ 57,629	$ 59,358	$ 61,139	$ 62,973	$ 64,862	$ 66,808	$ 68,812	$ 70,876	$ 73,003	$ 75,193	$ 77,448	$ 79,772	$ 82,165
51-4020 - BAD DEBT - WRITE OFF		$ -	$ 135,145		$ 22,975	$ 23,664	$ 24,374	$ 25,105	$ 25,858	$ 26,634	$ 27,433	$ 28,256	$ 29,104	$ 29,977	$ 30,876	$ 31,802	$ 32,756	$ 33,739	$ 34,751	$ 35,794	$ 36,868	$ 37,974	$ 39,113	$ 40,286
51-4021 - BOOKS, SUBSCRIPTIONS & MEMBERS	$ 1,362	$ 1,520	$ 1,984	$ 1,557	$ 1,621	$ 1,670	$ 1,720	$ 1,772	$ 1,825	$ 1,880	$ 1,936	$ 1,994	$ 2,054	$ 2,115	$ 2,179	$ 2,244	$ 2,312	$ 2,381	$ 2,452	$ 2,526	$ 2,602	$ 2,680	$ 2,760	$ 2,843
51-4023 - TRAVEL	$ 2,205	$ 1,252	$ 1,824	$ 2,364	$ 2,103	$ 2,167	$ 2,232	$ 2,298	$ 2,367	$ 2,438	$ 2,512	$ 2,587	$ 2,665	$ 2,744	$ 2,827	$ 2,912	$ 2,999	$ 3,089	$ 3,182	$ 3,277	$ 3,375	$ 3,477	$ 3,581	$ 3,688
51-4024 - OFFICE SUPPLIES AND EXPENSE	$ 6,232	$ 7,954	$ 5,667	$ 7,984	$ 7,447	$ 7,670	$ 7,900	$ 8,137	$ 8,381	$ 8,633	$ 8,892	$ 9,159	$ 9,433	$ 9,716	$ 10,008	$ 10,308	$ 10,617	$ 10,936	$ 11,264	$ 11,602	$ 11,950	$ 12,309	$ 12,678	$ 13,058
51-4025 - VEHICLE, EQUIP. SUPPLY/MAINT.	$ 2,058	$ 7,982	$ 3,629	$ 4,484	$ 4,611	$ 4,749	$ 4,891	$ 5,038	$ 5,189	$ 5,345	$ 5,505	$ 5,670	$ 5,841	$ 6,016	$ 6,196	$ 6,382	$ 6,574	$ 6,771	$ 6,974	$ 7,183	$ 7,399	$ 7,621	$ 7,849	$ 8,085
51-4027 - UTILITIES	$ 121,491	$ 127,698	$ 113,238	$ 131,428	$ 128,641	$ 132,500	$ 136,475	$ 140,569	$ 144,786	$ 149,130	$ 153,604	$ 158,212	$ 162,958	$ 167,847	$ 172,883	$ 178,069	$ 183,411	$ 188,913	$ 194,581	$ 200,418	$ 206,431	$ 212,624	$ 219,002	$ 225,573
51-4028 - TELEPHONE	$ 4,432	$ 2,738	$ 3,284	$ 4,787	$ 4,219	$ 4,345	$ 4,475	$ 4,610	$ 4,748	$ 4,890	$ 5,037	$ 5,188	$ 5,344	$ 5,504	$ 5,669	$ 5,839	$ 6,015	$ 6,195	$ 6,381	$ 6,572	$ 6,770	$ 6,973	$ 7,182	$ 7,397
51-4029 - TREATMENT/EQUIPMENT - CHLORINE	$ 4,824	$ 5,749	$ 12,134	$ 12,986	$ 10,483	$ 10,798	$ 11,121	$ 11,455	$ 11,799	$ 12,153	$ 12,517	$ 12,893	$ 13,280	$ 13,678	$ 14,088	$ 14,511	$ 14,946	$ 15,395	$ 15,857	$ 16,332	$ 16,822	$ 17,327	$ 17,847	$ 18,382
51-4031 - PROFESSIONAL & TECHNICAL SERVI	$ 16,917	$ 35,419	$ 33,216	$ 35,978	$ 32,893	$ 33,879	$ 34,896	$ 35,943	$ 37,021	$ 38,132	$ 39,276	$ 40,454	$ 41,667	$ 42,917	$ 44,205	$ 45,531	$ 46,897	$ 48,304	$ 49,753	$ 51,246	$ 52,783	$ 54,366	$ 55,997	$ 57,677
51-4033 - EDUCATION AND TRAINING	$ 2,343	$ 540	$ 810	$ 1,962	$ 1,628	$ 1,677	$ 1,728	$ 1,779	$ 1,833	$ 1,888	$ 1,944	$ 2,003	$ 2,063	$ 2,125	$ 2,188	$ 2,254	$ 2,322	$ 2,391	$ 2,463	$ 2,537	$ 2,613	$ 2,692	$ 2,772	$ 2,855
51-4034 - ENGINEERING	$ 7,593	$ 15,789	$ 11,346	$ 19,165	$ 15,678	$ 16,148	$ 16,633	$ 17,132	$ 17,646	$ 18,175	$ 18,720	$ 19,282	$ 19,860	$ 20,456	$ 21,070	$ 21,702	$ 22,353	$ 23,024	$ 23,714	$ 24,426	$ 25,158	$ 25,913	$ 26,691	$ 27,491
51-4035 - ATTORNEY	$ 23,133	$ 24,608	$ 70,266	$ 30,000	$ 10,000	$ 10,300	$ 10,609	$ 10,927	$ 11,255	$ 11,593	$ 11,941	$ 12,299	$ 12,668	$ 13,048	$ 13,439	$ 13,842	$ 14,258	$ 14,685	$ 15,126	$ 15,580	$ 16,047	$ 16,528	$ 17,024	$ 17,535
51-4040 - LINE - REPAIR & REPLACE	$ 22,091	$ 11,491	$ 18,274	$ 22,493	$ 20,287	$ 20,896	$ 21,522	$ 22,168	$ 22,833	$ 23,518	$ 24,224	$ 24,950	$ 25,699	$ 26,470	$ 27,264	$ 28,082	$ 28,924	$ 29,792	$ 30,686	$ 31,606	$ 32,555	$ 33,531	$ 34,537	$ 35,573
51-4048 - MISC. SUPPLIES	$ 4,672	$ 4,614	$ 2,097	$ 4,619	$ 4,277	$ 4,406	$ 4,538	$ 4,674	$ 4,814	$ 4,958	$ 5,107	$ 5,260	$ 5,418	$ 5,581	$ 5,748	$ 5,921	$ 6,098	$ 6,281	$ 6,470	$ 6,664	$ 6,864	$ 7,070	$ 7,282	$ 7,500
51-4049 - WATER METER INVENTORY & REPLAC	$ 97,719	$ 98,155	$ 73,500	$ 92,865	$ 93,155	$ 95,949	$ 98,828	$ 101,793	$ 104,846	$ 107,992	$ 111,232	$ 114,569	$ 118,006	$ 121,546	$ 125,192	$ 128,948	$ 132,816	$ 136,801	$ 140,905	$ 145,132	$ 149,486	$ 153,971	$ 158,590	$ 163,347
51-4052 - WATER SHARE PURCHASE		$ -	$ (5,075)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4053 - WATER SHARE FEES	$ 19,816	$ 37,442	$ 35,254	$ 37,790	$ 38,994	$ 40,164	$ 41,369	$ 42,610	$ 43,888	$ 45,205	$ 46,561	$ 47,958	$ 49,396	$ 50,878	$ 52,405	$ 53,977	$ 55,596	$ 57,264	$ 58,982	$ 60,751	$ 62,574	$ 64,451	$ 66,385	$ 68,376
51-4061 - MISC. SERVICES		$ 5,836	$ -	$ 5,167	$ 3,627	$ 3,736	$ 3,848	$ 3,964	$ 4,083	$ 4,205	$ 4,331	$ 4,461	$ 4,595	$ 4,733	$ 4,875	$ 5,021	$ 5,172	$ 5,327	$ 5,487	$ 5,651	$ 5,821	$ 5,995	$ 6,175	$ 6,360
51-4062 - REFUNDS	$ 2,026	$ 236	$ 788	$ 1,483	$ 1,275	$ 1,313	$ 1,352	$ 1,393	$ 1,435	$ 1,478	$ 1,522	$ 1,568	$ 1,615	$ 1,663	$ 1,713	$ 1,765	$ 1,818	$ 1,872	$ 1,928	$ 1,986	$ 2,046	$ 2,107	$ 2,170	$ 2,235
51-4065 - DEPRECIATION EXPENSE	$ 195,390	$ 192,801	$ 203,870	$ 198,166	$ 442,236	$ 455,503	$ 469,168	$ 483,243	$ 497,741	$ 512,673	$ 528,053	$ 543,894	$ 560,211	$ 577,018	$ 594,328	$ 612,158	$ 630,523	$ 649,438	$ 668,922	$ 688,989	$ 709,659	$ 730,949	$ 752,877	$ 775,464
51-4069 - REDD'S BOOSTER	$ 1,489	$ 1,925	$ 3,473	$ 2,161	$ 2,273	$ 2,341	$ 2,411	$ 2,484	$ 2,558	$ 2,635	$ 2,714	$ 2,795	$ 2,879	$ 2,966	$ 3,055	$ 3,146	$ 3,241	$ 3,338	$ 3,438	$ 3,541	$ 3,647	$ 3,757	$ 3,869	$ 3,986
51-4070 - REDD'S RESERVOIR	$ 4,000	$ -	$ 9,967	$ 8,074	$ 3,492	$ 3,597	$ 3,705	$ 3,816	$ 3,930	$ 4,048	$ 4,170	$ 4,295	$ 4,424	$ 4,556	$ 4,693	$ 4,834	$ 4,979	$ 5,128	$ 5,282	$ 5,441	$ 5,604	$ 5,772	$ 5,945	$ 6,123
51-4072 - ALDER WELL - GROUNDS & MAINTEN		$ 748	$ 2,850	$ 1,657	$ 7,512	$ 7,738	$ 7,970	$ 8,209	$ 8,455	$ 8,709	$ 8,970	$ 9,239	$ 9,517	$ 9,802	$ 10,096	$ 10,399	$ 10,711	$ 11,032	$ 11,363	$ 11,704	$ 12,055	$ 12,417	$ 12,789	$ 13,173
51-4073 - DALES WELL	$ 195	$ 316	$ 4,899	$ 6,973	$ 9,476	$ 9,760	$ 10,053	$ 10,355	$ 10,665	$ 10,985	$ 11,315	$ 11,654	$ 12,004	$ 12,364	$ 12,735	$ 13,117	$ 13,510	$ 13,916	$ 14,333	$ 14,763	$ 15,206	$ 15,662	$ 16,132	$ 16,616
51-4074 - BLACKSMITH FORK BOOSTER		$ -	$ 819	$ 515	$ 402	$ 414	$ 426	$ 439	$ 452	$ 466	$ 480	$ 494	$ 509	$ 524	$ 540	$ 556	$ 573	$ 590	$ 608	$ 626	$ 645	$ 664	$ 684	$ 705
51-4076 - ECK RESERVOIR	$ 533	$ 508	$ 930	$ 5,459	$ 3,119	$ 3,213	$ 3,309	$ 3,408	$ 3,511	$ 3,616	$ 3,724	$ 3,836	$ 3,951	$ 4,070	$ 4,192	$ 4,318	$ 4,447	$ 4,581	$ 4,718	$ 4,860	$ 5,005	$ 5,155	$ 5,310	$ 5,469
51-4077 - ECK BOOSTER	$ 228	$ 231	$ -	$ 591	$ 379	$ 391	$ 403	$ 415	$ 427	$ 440	$ 453	$ 467	$ 481	$ 495	$ 510	$ 525	$ 541	$ 557	$ 574	$ 591	$ 609	$ 627	$ 646	$ 665
51-4079 - CAPITAL OUTLAY - OTHER		$ -	$ -	**$ 1,510,000**	$ 5,100	$ 5,253	$ 5,411	$ 5,573	$ 5,740	$ 5,912	$ 6,090	$ 6,272	$ 6,461	$ 6,654	$ 6,854	$ 7,060	$ 7,271	$ 7,490	$ 7,714	$ 7,946	$ 8,184	$ 8,430	$ 8,682	$ 8,943
51-4082 - DEBT SERVICE - INTEREST	$ 14,747	$ 11,861	$ 8,889	$ -	$ -					$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4084 - INTEREST EXPENSE		$ -	$ -	$ 5,703	$ -					$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4085 - INTERFUND LOAN PAYMENT		$ -	$ -	$ 16,415	$ -					$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4086 - ZION'S 53 - LOAN PRINCIPAL		$ -	$ -		$ 53,000	$ 54,000	$ 55,000	$ 55,000	$ 56,000	$ 57,680	$ 59,410	$ 61,193	$ 63,028	$ 64,919	$ 66,867	$ 68,873	$ 70,939	$ 73,067	$ 75,259	$ 77,517	$ 79,843	$ 82,238	$ 84,705	$ 87,246
51-4092 - DOWNTOWN WATER PROJECT		$ (1)	$ -	$ -	$ -	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
51-4093 - NEW COMB FLAT RESERVOIR	$ 2,791	$ 719	$ 319	$ -	$ 4,151	$ 4,275	$ 4,404	$ 4,536	$ 4,672	$ 4,812	$ 4,956	$ 5,105	$ 5,258	$ 5,416	$ 5,579	$ 5,746	$ 5,918	$ 6,096	$ 6,279	$ 6,467	$ 6,661	$ 6,861	$ 7,067	$ 7,279
51-4094 - 400 S MAIN WELL (JAY'S)	$ 51,513	$ 859	$ 10,840	$ 5,000	$ 5,000	$ 5,150	$ 5,305	$ 5,464	$ 5,628	$ 5,796	$ 5,970	$ 6,149	$ 6,334	$ 6,524	$ 6,720	$ 6,921	$ 7,129	$ 7,343	$ 7,563	$ 7,790	$ 8,024	$ 8,264	$ 8,512	$ 8,768
Subtotal Operating Expenses	**$ 718,817**	**$ 714,618**	**$ 879,130**	**$ 2,302,735**	**$ 1,066,007**	**$ 1,097,397**	**$ 1,129,699**	**$ 1,161,940**	**$ 1,196,149**	**$ 1,232,033**	**$ 1,268,994**	**$ 1,307,064**	**$ 1,346,276**	**$ 1,386,664**	**$ 1,428,264**	**$ 1,471,112**	**$ 1,515,245**	**$ 1,560,703**	**$ 1,607,524**	**$ 1,655,749**	**$ 1,705,422**	**$ 1,756,584**	**$ 1,809,282**	**$ 1,863,560**
Debt Service																								
Debt Payment	$ -	$ -	$ -	$ -	$ 53,000	$ 54,000	$ 55,000	$ 55,000	$ 56,000	$ 57,000	$ 58,000	$ 59,000	$ 60,000	$ 61,000	$ 62,000	$ 62,000	$ 63,000	$ 64,000	$ 65,000	$ 66,000	$ 67,000	$ 68,000	$ 69,000	$ 70,000
Reserve Amount (0% Payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ 53,000**	**$ 54,000**	**$ 55,000**	**$ 55,000**	**$ 56,000**	**$ 57,000**	**$ 58,000**	**$ 59,000**	**$ 60,000**	**$ 61,000**	**$ 62,000**	**$ 62,000**	**$ 63,000**	**$ 64,000**	**$ 65,000**	**$ 66,000**	**$ 67,000**	**$ 68,000**	**$ 69,000**	**$ 70,000**
Out of Pocket Project Expenses	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Expense	**$ 718,817**	**$ 714,618**	**$ 879,130**	**$ 2,302,735**	**$ 1,119,007**	**$ 1,151,397**	**$ 1,184,699**	**$ 1,216,940**	**$ 1,252,149**	**$ 1,289,033**	**$ 1,326,994**	**$ 1,366,064**	**$ 1,406,276**	**$ 1,447,664**	**$ 1,490,264**	**$ 1,533,112**	**$ 1,578,245**	**$ 1,624,703**	**$ 1,672,524**	**$ 1,721,749**	**$ 1,772,422**	**$ 1,824,584**	**$ 1,878,282**	**$ 1,933,560**
Debt Coverage Ratio					**10.63**	**10.55**	**10.60**	**10.93**	**10.69**	**10.72**	**10.95**	**10.67**	**10.73**	**10.70**	**10.92**	**10.82**	**10.92**	**10.97**	**10.86**	**10.91**	**11.03**	**11.01**	**10.85**	**11.01**
PROFIT/LOSS ( )	**$ 780,561**	**$ 831,536**	**$ 649,306**	**$ (854,410)**	**$ 510,177**	**$ 515,637**	**$ 528,082**	**$ 546,099**	**$ 542,394**	**$ 554,117**	**$ 577,288**	**$ 570,672**	**$ 583,919**	**$ 591,962**	**$ 614,758**	**$ 608,736**	**$ 624,924**	**$ 637,938**	**$ 641,145**	**$ 653,987**	**$ 671,767**	**$ 680,341**	**$ 679,841**	**$ 700,850**
Impact Fee Account		**$ 91,696**	**$ 283,424**	**$ 327,172**	**$ 424,172**	**$ 522,672**	**$ 622,672**	**$ 732,672**	**$ 836,672**	**$ 947,172**	**$ 1,066,672**	**$ 1,180,172**	**$ 1,300,172**	**$ 1,424,172**	**$ 1,557,172**	**$ 1,685,172**	**$ 1,822,172**	**$ 1,963,172**	**$ 2,105,672**	**$ 2,254,672**	**$ 2,410,172**	**$ 2,569,672**	**$ 2,728,172**	**$ 2,895,672**
Total Water Fund	**$ 4,873,106**	**$ 5,704,642**	**$ 6,353,948**	**$ 5,499,538**	**$ 6,009,715**	**$ 6,525,353**	**$ 7,053,435**	**$ 7,599,533**	**$ 8,141,927**	**$ 8,696,044**	**$ 9,273,332**	**$ 9,844,003**	**$ 10,427,922**	**$ 11,019,884**	**$ 11,634,642**	**$ 12,243,378**	**$ 12,868,302**	**$ 13,506,240**	**$ 14,147,385**	**$ 14,801,372**	**$ 15,473,140**	**$ 16,153,481**	**$ 16,833,321**	**$ 17,534,171**
Total Cash on Hand	**$ 4,873,106**	**$ 5,612,946**	**$ 6,070,524**	**$ 5,172,366**	**$ 5,585,543**	**$ 6,002,681**	**$ 6,430,763**	**$ 6,866,861**	**$ 7,305,256**	**$ 7,748,872**	**$ 8,206,660**	**$ 8,663,832**	**$ 9,127,751**	**$ 9,595,712**	**$ 10,077,470**	**$ 10,558,206**	**$ 11,046,130**	**$ 11,543,068**	**$ 12,041,713**	**$ 12,546,701**	**$ 13,062,968**	**$ 13,583,809**	**$ 14,105,150**	**$ 14,638,499**

PROVIDENCE WATER CASH FLOW - Alternative #1
Projected Cash Flow Model - Tank Constructed in Time Period 1

	Current Water User Rates			
Water Service Size	Monthly Rate	Year Rate	Connection Fee	Impact Fee
1" Connection	$ 21.00	$ 252.00	$ 500.90	$ 2,500.00
1 1/2" Connection	$ 47.31	$ 567.72	$ 1,457.50	$ 2,500.00
2" Connection	$ 81.00	$ 972.00	$ 1,531.34	$ 2,500.00
4" Connection	$ 312.00	$ 3,744.00	$ 2,628.39	$ 2,500.00
Average Yearly Overage per Connection		$ 200.00		

Interest Rate on Cash on Hand	0.32%
Inflation	3.0%
Capital Improvement Inflation	4.0%

Existing Water Improvements Debt - Dew Water Tank	
Loan Amount	$ 1,900,000
Interest Rate	1.50%
Term	30
Year Start	2022
Reserve Acc. %	0.00%

CIP for Period 1	
Total Cost	$ 14,380,600
Impact Fee %	33%
Start Year	2021
End Year	2026
Duration (Yrs)	5
Cost per Year	$ 949,120
New Impact Fee	$ 7,121.00

CIP for Period 2	
Total Cost	$ 1,865,000
Impact Fee %	39%
Start Year	2026
End Year	2031
Duration (Yrs)	5
Cost per Year	$ 145,470
New Impact Fee	$ 2,961.00

CIP for Period 3	
Total Cost	$ 7,437,000
Impact Fee %	52%
Start Year	2031
End Year	2041
Duration (Yrs)	10
Cost per Year	$ 386,724
New Impact Fee	$ 4,938.00

	0	0	0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**
Yearly Growth Rate Residential	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Yearly Growth Rate Commercial	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Indexed Inflation Multiplier				1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702	1.754	1.806
General Information																								
Connections																								
RESIDENTIAL - 1"			2173	2257	2313	2371	2429	2490	2551	2615	2680	2746	2814	2884	2956	3029	3104	3181	3260	3341	3424	3509	3596	3685
RESIDENTIAL - 1 1/2"			3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5
RESIDENTIAL - 2"			3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5
RESIDENTIAL - 4"			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COMMERCIAL - 1"			47	52	53	55	56	57	59	60	62	63	65	66	68	70	72	73	75	77	79	81	83	85
COMMERCIAL - 1 1/2"			10	9	9	9	10	10	10	10	11	11	11	11	12	12	12	13	13	13	14	14	14	15
COMMERCIAL - 2"			13	13	13	14	14	14	15	15	15	16	16	17	17	17	18	18	19	19	20	20	21	21
COMMERCIAL - 4"			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MULTI-FAMILY - 1"			7	8	8	8	9	9	9	9	9	10	10	10	10	11	11	11	12	12	12	12	13	13
MULTI-FAMILY - 1 1/2"			7	7	7	7	8	8	8	8	8	9	9	9	9	9	10	10	10	10	11	11	11	11
MULTI-FAMILY - 2"			6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10
MULTI-FAMILY - 4"			6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10
CITY - 1"			21	19	19	20	20	21	21	22	23	23	24	24	25	25	26	27	27	28	29	30	30	31
CITY - 2"			6	6	6	6	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	10	10
CITY - 2"			3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	5	5	5	5
RELIGIOUS - 2"			9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	13	13	13	14	14	14	15
EDUCATIONAL - 1"			4	4	4	4	4	4	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7
EDUCATIONAL - 2"			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EDUCATIONAL - 4"			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CEMETARY - 4"			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Number of Connections			**2321**	**2408**	**2468**	**2529**	**2591**	**2656**	**2721**	**2789**	**2859**	**2929**	**3002**	**3076**	**3153**	**3231**	**3311**	**3393**	**3477**	**3563**	**3651**	**3742**	**3835**	**3930**
Connection Sizes and Quantities																								
1" Connection			2252	2340	2398	2458	2518	2582	2645	2711	2779	2847	2917	2990	3065	3140	3218	3298	3380	3464	3550	3638	3728	3820
1 1/2" Connection			20	19	19	20	20	21	21	22	23	23	24	24	25	25	26	27	27	28	29	30	30	31
2" Connection			29	29	31	31	32	33	34	34	35	36	37	38	39	40	41	41	42	43	44	46	47	48
4" Connection			11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	15	15	15	16	16	16	17
Total Number of ERUs				**2399**	**2459**	**2520**	**2582**	**2648**	**2712**	**2779**	**2850**	**2919**	**2991**	**3065**	**3143**	**3219**	**3299**	**3381**	**3464**	**3550**	**3639**	**3730**	**3821**	**3916**
New Connections																								
New 1" Connections				88	58	60	60	64	63	66	68	68	70	73	75	75	78	80	82	84	86	88	90	92
New 1 1/2" Connections				0	0	1	0	1	0	1	1	0	1	0	1	0	1	1	0	1	1	1	0	1
New 2" Connections				0	2	0	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	2	1	1
New 4" Connections				0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0	1
Total Number of New ERUs					**60**	**61**	**62**	**66**	**64**	**67**	**71**	**69**	**72**	**74**	**78**	**76**	**80**	**82**	**83**	**86**	**89**	**91**	**91**	**95**
Revenue																								
Operating Income																								
51-3710 - WATER SALES	**1,135,747**	**1,107,443**	**1,158,404**	**1,157,678**	**1,178,199**	**1,206,086**	**1,238,322**	**1,269,190**	**1,298,838**	**1,329,438**	**1,366,058**	**1,397,966**	**1,431,545**	**1,465,713**	**1,505,497**	**1,540,569**	**1,577,765**	**1,618,636**	**1,656,872**	**1,696,780**	**1,741,536**	**1,784,424**	**1,826,276**	**1,873,743**
1" Connection Water Sales					1,083,896	1,111,016	1,138,136	1,167,064	1,195,540	1,225,372	1,256,108	1,286,844	1,318,484	1,351,480	1,385,380	1,419,280	1,454,536	1,490,696	1,527,760	1,565,728	1,604,600	1,644,376	1,685,056	1,726,640
1 1/2" Connection Water Sales					14,587	15,354	15,354	16,122	16,122	16,890	17,658	17,658	18,425	18,425	19,193	19,193	19,961	20,728	20,728	21,496	22,264	23,032	23,032	23,799
2" Connection Water Sales					36,332	36,332	37,504	38,676	39,848	39,848	41,020	42,192	43,364	44,536	45,708	46,880	48,052	48,052	49,224	50,396	51,568	53,912	55,084	56,256
4" Connection Water Sales					43,384	43,384	47,328	47,328	47,328	47,328	51,272	51,272	51,272	51,272	55,216	55,216	55,216	59,160	59,160	59,160	63,104	63,104	63,104	67,048
51-3711 - EXCESS WATER		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**															
51-3715 - CONTRIBUTION FROM OTHERS		**184,539**	**-**	**-**	**-**	**-**	**-**	**-**	**-**															
51-3720 - CONNECTION FEES	**19,767**	**14,733**	**27,944**	**8,043**	**32,115**	**31,512**	**34,214**	**35,046**	**33,088**	**34,517**	**39,678**	**35,593**	**38,052**	**38,097**	**43,185**	**39,099**	**42,059**	**44,158**	**42,605**	**45,064**	**48,695**	**48,599**	**46,612**	**51,700**
1" Connection Fees					29,052	30,054	30,054	32,058	31,557	33,059	34,061	34,061	35,063	36,566	37,568	37,568	39,070	40,072	41,074	42,076	43,077	44,079	45,081	46,083
1 1/2" Connection Fees					-	1,458	-	1,458	-	1,458	1,458	-	1,458	-	1,458	-	1,458	1,458	-	1,458	1,458	1,458	-	1,458
2" Connection Fees					3,063	-	1,531	1,531	1,531	-	1,531	1,531	1,531	1,531	1,531	1,531	1,531	-	1,531	1,531	1,531	3,063	1,531	1,531
4" Connection Fees					-	-	2,628	-	-	-	2,628	-	-	-	2,628	-	-	2,628	-	-	2,628	-	-	2,628
51-3730 - FIRE PROTECTIN CONNECTION		-				-																		
51-3740 - WATER SHARE FEE (IN LEIU OF)	**171,120**	**273,300**		**107,481**	**158,517**	**163,273**	**168,171**	**173,216**	**178,412**	**183,765**	**189,278**	**194,956**	**200,805**	**206,829**	**213,034**	**219,425**	**226,007**	**232,788**	**239,771**	**246,964**	**254,373**	**262,004**	**269,865**	**277,961**
51-3745 - WATER SHARE - SEASON PURCHASE	**3,025**	**3,883**		**1,657**	**2,039**	**2,100**	**2,163**	**2,228**	**2,295**	**2,364**	**2,435**	**2,508**	**2,583**	**2,661**	**2,741**	**2,823**	**2,907**	**2,995**	**3,085**	**3,177**	**3,272**	**3,371**	**3,472**	**3,576**
51-3792 - PRIOR YEAR REVENUE																								
Subtotal Operating Income	**$ 1,329,659**	**$ 1,399,359**	**$ 1,186,348**	**$ 1,274,859**	**$ 1,370,870**	**$ 1,402,971**	**$ 1,442,870**	**$ 1,479,681**	**$ 1,512,634**	**$ 1,550,083**	**$ 1,597,449**	**$ 1,631,022**	**$ 1,672,985**	**$ 1,713,300**	**$ 1,764,456**	**$ 1,801,915**	**$ 1,848,739**	**$ 1,898,577**	**$ 1,942,333**	**$ 1,991,986**	**$ 2,047,876**	**$ 2,098,398**	**$ 2,146,224**	**$ 2,206,980**
Non-Operating Income																								
51-3810 - INTEREST EARNINGS	$ 32,669	$ 53,000	$ 49,109	$ 41,118	$ 44,313	$ 45,642	$ 47,011	$ 48,422	$ 49,874	$ 51,371	$ 52,912	$ 54,499	$ 56,134	$ 57,818	$ 59,553	$ 61,339	$ 63,179	$ 65,075	$ 67,027	$ 69,038	$ 71,109	$ 73,242	$ 75,439	$ 77,703
51-3811 - INTEREST EARNINGS - BONDS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3890 - MISCELLANEOUS	$ 3,674	$ 2,099	$ 39,140	$ 88,601	$ 53,340	$ 54,940	$ 56,588	$ 58,286	$ 60,034	$ 61,835	$ 63,690	$ 65,601	$ 67,569	$ 69,596	$ 71,684	$ 73,834	$ 76,049	$ 78,331	$ 80,681	$ 83,101	$ 85,594	$ 88,162	$ 90,807	$ 93,531
51-3891 - Gain or loss on asset disposition		$ -	$ 62,111		$ 10,662	$ 10,982	$ 11,312	$ 11,651	$ 12,001	$ 12,361	$ 12,731	$ 13,113	$ 13,507	$ 13,912	$ 14,329	$ 14,759	$ 15,202	$ 15,658	$ 16,128	$ 16,612	$ 17,110	$ 17,623	$ 18,152	$ 18,697
51-3892 - WATER IMPACT FEE	**$ 133,376**	**$ 91,696**	**$ 191,728**	**$ 43,748**	**$ 427,260**	**$ 434,381**	**$ 441,502**	**$ 469,986**	**$ 455,744**	**$ 477,107**	**$ 505,591**	**$ 491,349**	**$ 512,712**	**$ 526,954**	**$ 555,438**	**$ 541,196**	**$ 569,680**	**$ 583,922**	**$ 591,043**	**$ 612,406**	**$ 633,769**	**$ 648,011**	**$ 648,011**	**$ 676,495**
1" Connection Impact Fees					$ 413,018.00	$ 427,260.00	$ 427,260.00	$ 455,744.00	$ 448,623.00	$ 469,986.00	$ 484,228.00	$ 484,228.00	$ 498,470.00	$ 519,833.00	$ 534,075.00	$ 534,075.00	$ 555,438.00	$ 569,680.00	$ 583,922.00	$ 598,164.00	$ 612,406.00	$ 626,648.00	$ 640,890.00	$ 655,132.00
1 1/2" Connection Impact Fees					$ -	$ 7,121.00	$ -	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ -	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00
2" Connection Impact Fees					$ 14,242.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 14,242.00	$ 7,121.00	$ 7,121.00
4" Connection Impact Fees					$ -	$ -	$ 7,121.00	$ -	$ -	$ -	$ 7,121.00	$ -	$ -	$ -	$ 7,121.00	$ -	$ -	$ 7,121.00	$ -	$ -	$ 7,121.00	$ -	$ -	$ 7,121.00
51-3895 - SERIES 2 - - - BONDS		$ -	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3896 - PRIOR YEAR FUNDS - IMPACT FEES		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3897 - PRIOR YEAR FUNDS - BONDS		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Non-Operating Income	**$ 169,719**	**$ 146,795**	**$ 342,088**	**$ 173,466**	**$ 535,575**	**$ 545,945**	**$ 556,413**	**$ 588,344**	**$ 577,653**	**$ 602,673**	**$ 634,924**	**$ 624,562**	**$ 649,922**	**$ 668,280**	**$ 701,004**	**$ 691,129**	**$ 724,111**	**$ 742,986**	**$ 754,879**	**$ 781,157**	**$ 807,582**	**$ 827,039**	**$ 832,409**	**$ 866,425**
Total Revenue	**$ 1,499,379**	**$ 1,546,154**	**$ 1,528,436**	**$ 1,448,325**	**$ 1,906,444**	**$ 1,948,916**	**$ 1,999,283**	**$ 2,068,025**	**$ 2,090,287**	**$ 2,152,757**	**$ 2,232,373**	**$ 2,255,584**	**$ 2,322,907**	**$ 2,381,580**	**$ 2,465,460**	**$ 2,493,044**	**$ 2,572,849**	**$ 2,641,562**	**$ 2,697,212**	**$ 2,773,143**	**$ 2,855,458**	**$ 2,925,437**	**$ 2,978,634**	**$ 3,073,405**
Expenses																								
Operating Expenses																								
51-4010 - SALARIES - COUNCILMAN		$ -	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4011 - SALARIES & WAGES-TRAN TO ADMIN	$ 72,248	$ 73,089	$ 72,906	$ 79,456	$ 79,096	$ 81,469	$ 83,913	$ 86,430	$ 89,023	$ 91,694	$ 94,445	$ 97,278	$ 100,196	$ 103,202	$ 106,298	$ 109,487	$ 112,772	$ 116,155	$ 119,639	$ 123,229	$ 126,926	$ 130,733	$ 134,655	$ 138,695
51-4013 - EMP BENEFITS-TRANSFER TO ADMIN	$ 36,771	$ 42,539	$ 41,987	$ 45,452	$ 46,858	$ 48,263	$ 49,711	$ 51,203	$ 52,739	$ 54,321	$ 55,950	$ 57,629	$ 59,358	$ 61,139	$ 62,973	$ 64,862	$ 66,808	$ 68,812	$ 70,876	$ 73,003	$ 75,193	$ 77,448	$ 79,772	$ 82,165
51-4020 - BAD DEBT - WRITE OFF		$ -	$ 135,145		$ 22,975	$ 23,664	$ 24,374	$ 25,105	$ 25,858	$ 26,634	$ 27,433	$ 28,256	$ 29,104	$ 29,977	$ 30,876	$ 31,802	$ 32,756	$ 33,739	$ 34,751	$ 35,794	$ 36,868	$ 37,974	$ 39,113	$ 40,286
51-4021 - BOOKS, SUBSCRIPTIONS & MEMBERS	$ 1,362	$ 1,520	$ 1,984	$ 1,557	$ 1,621	$ 1,670	$ 1,720	$ 1,772	$ 1,825	$ 1,880	$ 1,936	$ 1,994	$ 2,054	$ 2,115	$ 2,179	$ 2,244	$ 2,312	$ 2,381	$ 2,452	$ 2,526	$ 2,602	$ 2,680	$ 2,760	$ 2,843
51-4023 - TRAVEL	$ 2,205	$ 1,252	$ 1,824	$ 2,364	$ 2,103	$ 2,167	$ 2,232	$ 2,298	$ 2,367	$ 2,438	$ 2,512	$ 2,587	$ 2,665	$ 2,744	$ 2,827	$ 2,912	$ 2,999	$ 3,089	$ 3,182	$ 3,277	$ 3,375	$ 3,477	$ 3,581	$ 3,688
51-4024 - OFFICE SUPPLIES AND EXPENSE	$ 6,232	$ 7,954	$ 5,667	$ 7,984	$ 7,447	$ 7,670	$ 7,900	$ 8,137	$ 8,381	$ 8,633	$ 8,892	$ 9,159	$ 9,433	$ 9,716	$ 10,008	$ 10,308	$ 10,617	$ 10,936	$ 11,264	$ 11,602	$ 11,950	$ 12,309	$ 12,678	$ 13,058
51-4025 - VEHICLE, EQUIP, SUPPLY/MAINT.	$ 2,058	$ 7,982	$ 3,629	$ 4,484	$ 4,611	$ 4,749	$ 4,891	$ 5,038	$ 5,189	$ 5,345	$ 5,505	$ 5,670	$ 5,841	$ 6,016	$ 6,196	$ 6,382	$ 6,574	$ 6,771	$ 6,974	$ 7,183	$ 7,399	$ 7,621	$ 7,849	$ 8,085
51-4027 - UTILITIES	$ 121,491	$ 127,698	$ 113,238	$ 131,428	$ 128,641	$ 132,500	$ 136,475	$ 140,569	$ 144,786	$ 149,130	$ 153,604	$ 158,212	$ 162,958	$ 167,847	$ 172,883	$ 178,069	$ 183,411	$ 188,913	$ 194,581	$ 200,418	$ 206,431	$ 212,624	$ 219,002	$ 225,573
51-4028 - TELEPHONE	$ 4,432	$ 2,738	$ 3,284	$ 4,787	$ 4,219	$ 4,345	$ 4,475	$ 4,610	$ 4,748	$ 4,890	$ 5,037	$ 5,188	$ 5,344	$ 5,504	$ 5,669	$ 5,839	$ 6,015	$ 6,195	$ 6,381	$ 6,572	$ 6,770	$ 6,973	$ 7,182	$ 7,397
51-4029 - TREATMENT/EQUIPMENT - CHLORINE	$ 4,824	$ 5,749	$ 12,134	$ 12,986	$ 10,483	$ 10,798	$ 11,121	$ 11,455	$ 11,799	$ 12,153	$ 12,517	$ 12,893	$ 13,280	$ 13,678	$ 14,088	$ 14,511	$ 14,946	$ 15,395	$ 15,857	$ 16,332	$ 16,822	$ 17,327	$ 17,847	$ 18,382
51-4031 - PROFESSIONAL & TECHNICAL SERVI	$ 16,917	$ 35,419	$ 33,216	$ 35,978	$ 32,893	$ 33,879	$ 34,896	$ 35,943	$ 37,021	$ 38,132	$ 39,276	$ 40,454	$ 41,667	$ 42,917	$ 44,205	$ 45,531	$ 46,897	$ 48,304	$ 49,753	$ 51,246	$ 52,783	$ 54,366	$ 55,997	$ 57,677
51-4033 - EDUCATION AND TRAINING	$ 2,343	$ 540	$ 810	$ 1,962	$ 1,628	$ 1,677	$ 1,728	$ 1,779	$ 1,833	$ 1,888	$ 1,944	$ 2,003	$ 2,063	$ 2,125	$ 2,188	$ 2,254	$ 2,322	$ 2,391	$ 2,463	$ 2,537	$ 2,613	$ 2,692	$ 2,772	$ 2,855
51-4034 - ENGINEERING	$ 7,593	$ 15,789	$ 11,346	$ 19,165	$ 15,678	$ 16,148	$ 16,633	$ 17,132	$ 17,646	$ 18,175	$ 18,720	$ 19,282	$ 19,860	$ 20,456	$ 21,070	$ 21,702	$ 22,353	$ 23,024	$ 23,714	$ 24,426	$ 25,158	$ 25,913	$ 26,691	$ 27,491
51-4035 - ATTORNEY	$ 23,133	$ 24,608	$ 70,266	$ 30,000	$ 10,000	$ 10,300	$ 10,609	$ 10,927	$ 11,255	$ 11,593	$ 11,941	$ 12,299	$ 12,668	$ 13,048	$ 13,439	$ 13,842	$ 14,258	$ 14,685	$ 15,126	$ 15,580	$ 16,047	$ 16,528	$ 17,024	$ 17,535
51-4040 - LINE - REPAIR & REPLACE	$ 22,091	$ 11,491	$ 18,274	$ 22,493	$ 20,287	$ 20,896	$ 21,522	$ 22,168	$ 22,833	$ 23,518	$ 24,224	$ 24,950	$ 25,699	$ 26,470	$ 27,264	$ 28,082	$ 28,924	$ 29,792	$ 30,686	$ 31,606	$ 32,555	$ 33,531	$ 34,537	$ 35,573
51-4048 - MISC. SUPPLIES	$ 4,672	$ 4,614	$ 2,097	$ 4,619	$ 4,277	$ 4,406	$ 4,538	$ 4,674	$ 4,814	$ 4,958	$ 5,107	$ 5,260	$ 5,418	$ 5,581	$ 5,748	$ 5,921	$ 6,098	$ 6,281	$ 6,470	$ 6,664	$ 6,864	$ 7,070	$ 7,282	$ 7,500
51-4049 - WATER METER INVENTORY & REPLAC	$ 97,719	$ 98,155	$ 73,500	$ 92,865	$ 93,155	$ 95,949	$ 98,828	$ 101,793	$ 104,846	$ 107,992	$ 111,232	$ 114,569	$ 118,006	$ 121,546	$ 125,192	$ 128,948	$ 132,816	$ 136,801	$ 140,905	$ 145,132	$ 149,486	$ 153,971	$ 158,590	$ 163,347
51-4052 - WATER SHARE PURCHASE		$ -	$ (5,075)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4053 - WATER SHARE FEES	$ 19,816	$ 37,442	$ 35,254	$ 37,790	$ 38,994	$ 40,164	$ 41,369	$ 42,610	$ 43,888	$ 45,205	$ 46,561	$ 47,958	$ 49,396	$ 50,878	$ 52,405	$ 53,977	$ 55,596	$ 57,264	$ 58,982	$ 60,751	$ 62,574	$ 64,451	$ 66,385	$ 68,376
51-4061 - MISC. SERVICES		$ 5,836	$ -	$ 5,167	$ 3,627	$ 3,736	$ 3,848	$ 3,964	$ 4,083	$ 4,205	$ 4,331	$ 4,461	$ 4,595	$ 4,733	$ 4,875	$ 5,021	$ 5,172	$ 5,327	$ 5,487	$ 5,651	$ 5,821	$ 5,995	$ 6,175	$ 6,360
51-4062 - REFUNDS	$ 2,026	$ 236	$ 788	$ 1,483	$ 1,275	$ 1,313	$ 1,352	$ 1,393	$ 1,435	$ 1,478	$ 1,522	$ 1,568	$ 1,615	$ 1,663	$ 1,713	$ 1,765	$ 1,818	$ 1,872	$ 1,928	$ 1,986	$ 2,046	$ 2,107	$ 2,170	$ 2,235
51-4065 - DEPRECIATION EXPENSE	$ 195,390	$ 192,801	$ 203,870	$ 198,166	$ 442,236	$ 455,503	$ 469,168	$ 483,243	$ 497,741	$ 512,673	$ 528,053	$ 543,894	$ 560,211	$ 577,018	$ 594,328	$ 612,158	$ 630,523	$ 649,438	$ 668,922	$ 688,989	$ 709,659	$ 730,949	$ 752,877	$ 775,464
51-4069 - REDD'S BOOSTER	$ 1,489	$ 1,925	$ 3,473	$ 2,161	$ 2,273	$ 2,341	$ 2,411	$ 2,484	$ 2,558	$ 2,635	$ 2,714	$ 2,795	$ 2,879	$ 2,966	$ 3,055	$ 3,146	$ 3,241	$ 3,338	$ 3,438	$ 3,541	$ 3,647	$ 3,757	$ 3,869	$ 3,986
51-4070 - REDD'S RESERVOIR	$ 4,000	$ -	$ 9,967	$ 8,074	$ 3,492	$ 3,597	$ 3,705	$ 3,816	$ 3,930	$ 4,048	$ 4,170	$ 4,295	$ 4,424	$ 4,556	$ 4,693	$ 4,834	$ 4,979	$ 5,128	$ 5,282	$ 5,441	$ 5,604	$ 5,772	$ 5,945	$ 6,123
51-4072 - ALDER WELL - GROUNDS & MAINTEN		$ 748	$ 2,850	$ 1,657	$ 7,512	$ 7,738	$ 7,970	$ 8,209	$ 8,455	$ 8,709	$ 8,970	$ 9,239	$ 9,517	$ 9,802	$ 10,096	$ 10,399	$ 10,711	$ 11,032	$ 11,363	$ 11,704	$ 12,055	$ 12,417	$ 12,789	$ 13,173
51-4073 - DALES WELL	$ 195	$ 316	$ 4,899	$ 6,973	$ 9,476	$ 9,760	$ 10,053	$ 10,355	$ 10,665	$ 10,985	$ 11,315	$ 11,654	$ 12,004	$ 12,364	$ 12,735	$ 13,117	$ 13,510	$ 13,916	$ 14,333	$ 14,763	$ 15,206	$ 15,662	$ 16,132	$ 16,616
51-4074 - BLACKSMITH FORK BOOSTER		$ -	$ 819	$ 515	$ 402	$ 414	$ 426	$ 439	$ 452	$ 466	$ 480	$ 494	$ 509	$ 524	$ 540	$ 556	$ 573	$ 590	$ 608	$ 626	$ 645	$ 664	$ 684	$ 705
51-4076 - ECK RESERVOIR	$ 533	$ 508	$ 930	$ 5,459	$ 3,119	$ 3,213	$ 3,309	$ 3,408	$ 3,511	$ 3,616	$ 3,724	$ 3,836	$ 3,951	$ 4,070	$ 4,192	$ 4,318	$ 4,447	$ 4,581	$ 4,718	$ 4,860	$ 5,005	$ 5,155	$ 5,310	$ 5,469
51-4077 - ECK BOOSTER	$ 228	$ 231	$ -	$ 591	$ 379	$ 391	$ 403	$ 415	$ 427	$ 440	$ 453	$ 467	$ 481	$ 495	$ 510	$ 525	$ 541	$ 557	$ 574	$ 591	$ 609	$ 627	$ 646	$ 665
51-4079 - CAPITAL OUTLAY - OTHER		$ -	$ -	**$ 1,510,000**	$ 5,100	$ 5,253	$ 5,411	$ 5,573	$ 5,740	$ 5,912	$ 6,090	$ 6,272	$ 6,461	$ 6,654	$ 6,854	$ 7,060	$ 7,271	$ 7,490	$ 7,714	$ 7,946	$ 8,184	$ 8,430	$ 8,682	$ 8,943
51-4082 - DEBT SERVICE - INTEREST	$ 14,747	$ 11,861	$ 8,889		$ -					$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4084 - INTEREST EXPENSE		$ -	$ -	$ 5,703						$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4085 - INTERFUND LOAN PAYMENT		$ -	$ -	$ 16,415						$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4086 - ZION'S 53 - LOAN PRINCIPAL		$ -	$ -		$ 53,000	$ 54,000	$ 55,000	$ 55,000	$ 56,000	$ 57,680	$ 59,410	$ 61,193	$ 63,028	$ 64,919	$ 66,867	$ 68,873	$ 70,939	$ 73,067	$ 75,259	$ 77,517	$ 79,843	$ 82,238	$ 84,705	$ 87,246
51-4092 - DOWNTOWN WATER PROJECT		$ (1)		$ -	$ -	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
51-4093 - NEW COMB FLAT RESERVOIR	$ 2,791	$ 719	$ 319	$ -	$ 4,151	$ 4,275	$ 4,404	$ 4,536	$ 4,672	$ 4,812	$ 4,956	$ 5,105	$ 5,258	$ 5,416	$ 5,579	$ 5,746	$ 5,918	$ 6,096	$ 6,279	$ 6,467	$ 6,661	$ 6,861	$ 7,067	$ 7,279
51-4094 - 400 S MAIN WELL (JAY'S)	$ 51,513	$ 859	$ 10,840	$ 5,000	$ 5,000	$ 5,150	$ 5,305	$ 5,464	$ 5,628	$ 5,796	$ 5,970	$ 6,149	$ 6,334	$ 6,524	$ 6,720	$ 6,921	$ 7,129	$ 7,343	$ 7,563	$ 7,790	$ 8,024	$ 8,264	$ 8,512	$ 8,768
Period 1 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ 661,347	$ 687,800	$ 715,312	$ 743,925	$ 773,682	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 1 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ 325,738	$ 338,767	$ 352,318	$ 366,411	$ 381,067	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 2 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 112,280	$ 116,771	$ 121,442	$ 126,300	$ 131,352	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 2 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 71,786	$ 74,657	$ 77,643	$ 80,749	$ 83,979	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 3 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 285,765	$ 297,196	$ 309,083	$ 321,447	$ 334,305	$ 347,677	$ 361,584	$ 376,047	$ 391,089	$ 406,733
Period 3 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 309,579	$ 321,962	$ 334,840	$ 348,234	$ 362,163	$ 376,650	$ 391,716	$ 407,385	$ 423,680	$ 440,627
Subtotal Operating Expenses	**$ 718,817**	**$ 714,618**	**$ 879,130**	**$ 2,302,735**	**$ 2,053,092**	**$ 2,123,965**	**$ 2,197,330**	**$ 2,272,276**	**$ 2,350,898**	**$ 1,416,099**	**$ 1,460,423**	**$ 1,506,150**	**$ 1,553,325**	**$ 1,601,995**	**$ 2,023,608**	**$ 2,090,269**	**$ 2,159,169**	**$ 2,230,383**	**$ 2,303,992**	**$ 2,380,076**	**$ 2,458,722**	**$ 2,540,016**	**$ 2,624,051**	**$ 2,710,920**
Debt Service																								
Debt Payment	$ -	$ -	$ -	$ -	$ 53,000	$ 54,000	$ 55,000	$ 55,000	$ 56,000	$ 57,000	$ 58,000	$ 59,000	$ 60,000	$ 61,000	$ 62,000	$ 62,000	$ 63,000	$ 64,000	$ 65,000	$ 66,000	$ 67,000	$ 68,000	$ 69,000	$ 70,000
Reserve Amount (0% Payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ 53,000**	**$ 54,000**	**$ 55,000**	**$ 55,000**	**$ 56,000**	**$ 57,000**	**$ 58,000**	**$ 59,000**	**$ 60,000**	**$ 61,000**	**$ 62,000**	**$ 62,000**	**$ 63,000**	**$ 64,000**	**$ 65,000**	**$ 66,000**	**$ 67,000**	**$ 68,000**	**$ 69,000**	**$ 70,000**
Out of Pocket Project Expenses	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Expense	**$ 718,817**	**$ 714,618**	**$ 879,130**	**$ 2,302,735**	**$ 2,106,092**	**$ 2,177,965**	**$ 2,252,330**	**$ 2,327,276**	**$ 2,406,898**	**$ 1,473,099**	**$ 1,518,423**	**$ 1,565,150**	**$ 1,613,325**	**$ 1,662,995**	**$ 2,085,608**	**$ 2,152,269**	**$ 2,222,169**	**$ 2,294,383**	**$ 2,368,992**	**$ 2,446,076**	**$ 2,525,722**	**$ 2,608,016**	**$ 2,693,051**	**$ 2,780,920**
Debt Coverage Ratio					**-2.766931396**	**-3.241654146**	**-3.600847605**	**-3.713655188**	**-4.653767859**	**12.92382065**	**13.30948704**	**12.70228424**	**12.82636272**	**12.78007624**	**7.126643715**	**6.496363668**	**6.566352584**	**6.424669336**	**6.049540836**	**5.955552739**	**5.921441779**	**5.66794387**	**5.138875516**	**5.178351905**
PROFIT/LOSS ( )	**$ 780,561**	**$ 831,536**	**$ 649,306**	**$ (854,410)**	**$ (199,647)**	**$ (229,049)**	**$ (253,047)**	**$ (259,251)**	**$ (316,611)**	**$ 679,658**	**$ 713,950**	**$ 690,435**	**$ 709,582**	**$ 718,585**	**$ 379,852**	**$ 340,775**	**$ 350,680**	**$ 347,179**	**$ 328,220**	**$ 327,066**	**$ 329,737**	**$ 317,420**	**$ 285,582**	**$ 292,485**
Impact Fee Account		**$ 91,696**	**$ 283,424**	**$ 327,172**	**$ 375,694**	**$ 417,308**	**$ 451,491**	**$ 500,067**	**$ 518,744**	**$ 867,065**	**$ 1,239,999**	**$ 1,594,704**	**$ 1,966,667**	**$ 2,348,642**	**$ 2,532,501**	**$ 2,689,735**	**$ 2,861,575**	**$ 3,033,263**	**$ 3,197,142**	**$ 3,366,898**	**$ 3,541,951**	**$ 3,714,578**	**$ 3,869,909**	**$ 4,035,777**
Total Water Fund	**$ 4,873,106**	**$ 5,704,642**	**$ 6,353,948**	**$ 5,499,538**	**$ 5,299,891**	**$ 5,070,842**	**$ 4,817,795**	**$ 4,558,544**	**$ 4,241,933**	**$ 4,921,591**	**$ 5,635,541**	**$ 6,325,976**	**$ 7,035,557**	**$ 7,754,142**	**$ 8,133,994**	**$ 8,474,769**	**$ 8,825,449**	**$ 9,172,628**	**$ 9,500,848**	**$ 9,827,914**	**$ 10,157,651**	**$ 10,475,071**	**$ 10,760,653**	**$ 11,053,138**
Total Cash on Hand	**$ 4,873,106**	**$ 5,612,946**	**$ 6,070,524**	**$ 5,172,366**	**$ 4,924,197**	**$ 4,653,534**	**$ 4,366,303**	**$ 4,058,477**	**$ 3,723,189**	**$ 4,054,526**	**$ 4,395,542**	**$ 4,731,271**	**$ 5,068,890**	**$ 5,405,500**	**$ 5,601,493**	**$ 5,785,033**	**$ 5,963,874**	**$ 6,139,365**	**$ 6,303,705**	**$ 6,461,016**	**$ 6,615,699**	**$ 6,760,493**	**$ 6,890,745**	**$ 7,017,361**

PROVIDENCE WATER CASH FLOW - Alternative #2
Projected Cash Flow Model - Tank Constructed in Time Period 3

Current Water User Rates				
Water Service Size	Monthly Rate	Year Rate	Connection Fee	Impact Fee
1" Connection	$ 21.00	$ 252.00	$ 500.90	$ 2,500.00
1 1/2" Connection	$ 47.31	$ 567.72	$ 1,457.50	$ 2,500.00
2" Connection	$ 81.00	$ 972.00	$ 1,531.34	$ 2,500.00
4" Connection	$ 312.00	$ 3,744.00	$ 2,628.39	$ 2,500.00
Average Yearly Overage per Connection		$ 200.00		

Interest Rate on Cash on Hand	0.32%
Inflation	3.0%
Capital Improvement Inflation	4.0%

Existing Water Improvements Debt - Dew Water Tank	
Loan Amount	$ 1,900,000
Interest Rate	1.50%
Term	30
Year Start	2022
Reserve Acc. %	0.00%

	CIP for Period 1	CIP for Period 2	CIP for Period 3
Total Cost	$ 11,915,600	$ 1,865,000	$ 9,902,000
Impact Fee %	33%	39%	52%
Start Year	2021	2026	2031
End Year	2026	2031	2041
Duration (Yrs)	5	5	10
Cost per Year	$ 786,430	$ 145,470	$ 514,904
New Impact Fee	$ 7,121.00	$ 2,961.00	$ 4,938.00

	0	0	0	0	1	2	3	4	5	6	7	8
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**
Yearly Growth Rate Residential	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Yearly Growth Rate Commercial	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Indexed Inflation Multiplier				1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267
General Information												
Connections												
RESIDENTIAL - 1"			2173	2257	2313	2371	2429	2490	2551	2615	2680	2746
RESIDENTIAL - 1 1/2"			3	3	3	3	3	3	3	3	4	4
RESIDENTIAL - 2"			3	3	3	3	3	3	3	3	4	4
RESIDENTIAL - 4"			0	0	0	0	0	0	0	0	0	0
COMMERCIAL - 1"			47	52	53	55	56	57	59	60	62	63
COMMERCIAL - 1 1/2"			10	9	9	9	10	10	10	10	11	11
COMMERCIAL - 2"			13	13	13	14	14	14	15	15	15	16
COMMERCIAL - 4"			0	0	0	0	0	0	0	0	0	0
MULTI-FAMILY - 1"			7	8	8	8	9	9	9	9	9	10
MULTI-FAMILY - 1 1/2"			7	7	7	7	8	8	8	8	8	9
MULTI-FAMILY - 2"			6	6	6	6	6	7	7	7	7	7
MULTI-FAMILY - 4"			6	6	6	6	6	7	7	7	7	7
CITY - 1"			21	19	19	20	20	21	21	22	23	23
CITY - 2"			6	6	6	6	6	7	7	7	7	7
CITY - 2"			3	3	3	3	3	3	3	3	4	4
RELIGIOUS - 2"			9	9	9	9	10	10	10	10	11	11
EDUCATIONAL - 1"			4	4	4	4	4	4	5	5	5	5
EDUCATIONAL - 2"			1	1	1	1	1	1	1	1	1	1
EDUCATIONAL - 4"			1	1	1	1	1	1	1	1	1	1
CEMETARY - 4"			1	1	1	1	1	1	1	1	1	1
Total Number of Connections			**2321**	**2408**	**2468**	**2529**	**2591**	**2656**	**2721**	**2789**	**2859**	**2929**
Connection Sizes and Quantities												
1" Connection			2252	2340	2398	2458	2518	2582	2645	2711	2779	2847
1 1/2" Connection			20	19	19	20	20	21	21	22	23	23
2" Connection			29	29	31	31	32	33	34	34	35	36
4" Connection			11	11	11	11	12	12	12	12	13	13
Total Number of ERUs				**2399**	**2459**	**2520**	**2582**	**2648**	**2712**	**2779**	**2850**	**2919**
New Connections												
New 1" Connections				88	58	60	60	64	63	66	68	68
New 1 1/2" Connections				0	0	1	0	1	0	1	1	0
New 2" Connections				0	2	0	1	1	1	0	1	1
New 4" Connections				0	0	0	1	0	0	0	1	0
Total Number of New ERUs					**60**	**61**	**62**	**66**	**64**	**67**	**71**	**69**
Revenue												
Operating Income												
51-3710 - WATER SALES	**1.135.747**	**1.107.443**	**1.158.404**	**1.157.678**	**1.178.199**	**1.206.086**	**1.238.322**	**1.269.190**	**1.298.838**	**1.329.438**	**1.366.058**	**1.397.966**
1" Connection Water Sales					1.083.896	1.111.016	1.138.136	1.167.064	1.195.540	1.225.372	1.256.108	1.286.844
1 1/2" Connection Water Sales					14,587	15,354	15,354	16,122	16,122	16,890	17,658	17,658
2" Connection Water Sales					36,332	36,332	37,504	38,676	39,848	39,848	41,020	42,192
4" Connection Water Sales					43,384	43,384	47,328	47,328	47,328	47,328	51,272	51,272
51-3711 - EXCESS WATER		-	-	-	-	-	-	-	-			
51-3715 - CONTRIBUTION FROM OTHERS		**184,539**	-	-	-	-	-	-	-			
51-3720 - CONNECTION FEES	**19,767**	**14,733**	**27,944**	**8,043**	**32,115**	**31,512**	**34,214**	**35,046**	**33,088**	**34,517**	**39,678**	**35,593**
1" Connection Fees					29,052	30,054	30,054	32,058	31,557	33,059	34,061	34,061
1 1/2" Connection Fees					-	1,458	-	1,458	-	1,458	1,458	-
2" Connection Fees					3,063	-	1,531	1,531	1,531	-	1,531	1,531
4" Connection Fees					-	-	2,628	-	-	-	2,628	-
51-3730 - FIRE PROTECTIN CONNECTION		-				-						
51-3740 - WATER SHARE FEE (IN LEIU OF)	**171,120**	**273,300**		**107,481**	**158,517**	**163,273**	**168,171**	**173,216**	**178,412**	**183,765**	**189,278**	**194,956**
51-3745 - WATER SHARE - SEASON PURCHASE	**3,025**	**3,883**		**1,657**	**2,039**	**2,100**	**2,163**	**2,228**	**2,295**	**2,364**	**2,435**	**2,508**
51-3792 - PRIOR YEAR REVENUE												
Subtotal Operating Income	**$ 1,329,659**	**$ 1,399,359**	**$ 1,186,348**	**$ 1,274,859**	**$ 1,370,870**	**$ 1,402,971**	**$ 1,442,870**	**$ 1,479,681**	**$ 1,512,634**	**$ 1,550,083**	**$ 1,597,449**	**$ 1,631,022**
Non-Operating Income												
51-3810 - INTEREST EARNINGS	$ 32,669	$ 53,000	$ 49,109	$ 41,118	$ 44,313	$ 45,642	$ 47,011	$ 48,422	$ 49,874	$ 51,371	$ 52,912	$ 54,499
51-3811 - INTEREST EARNINGS - BONDS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3890 - MISCELLANEOUS	$ 3,674	$ 2,099	$ 39,140	$ 88,601	$ 53,340	$ 54,940	$ 56,588	$ 58,286	$ 60,034	$ 61,835	$ 63,690	$ 65,601
51-3891 - Gain or loss on asset disposition		$ -	$ 62,111		$ 10,662	$ 10,982	$ 11,312	$ 11,651	$ 12,001	$ 12,361	$ 12,731	$ 13,113
51-3892 - WATER IMPACT FEE	**$ 133,376**	**$ 91,696**	**$ 191,728**	**$ 43,748**	**$ 427,260**	**$ 434,381**	**$ 441,502**	**$ 469,986**	**$ 455,744**	**$ 477,107**	**$ 505,591**	**$ 491,349**
1" Connection Impact Fees					$ 413,018.00	$ 427,260.00	$ 427,260.00	$ 455,744.00	$ 448,623.00	$ 469,986.00	$ 484,228.00	$ 484,228.00
1 1/2" Connection Impact Fees					$ -	$ 7,121.00	$ -	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ -
2" Connection Impact Fees					$ 14,242.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00
4" Connection Impact Fees					$ -	$ -	$ 7,121.00	$ -	$ -	$ -	$ 7,121.00	$ -
51-3895 - SERIES 2 - - - BONDS		$ -	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3896 - PRIOR YEAR FUNDS - IMPACT FEES		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3897 - PRIOR YEAR FUNDS - BONDS		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Non-Operating Income	**$ 169,719**	**$ 146,795**	**$ 342,088**	**$ 173,466**	**$ 535,575**	**$ 545,945**	**$ 556,413**	**$ 588,344**	**$ 577,653**	**$ 602,673**	**$ 634,924**	**$ 624,562**
Total Revenue	**$ 1,499,379**	**$ 1,546,154**	**$ 1,528,436**	**$ 1,448,325**	**$ 1,906,444**	**$ 1,948,916**	**$ 1,999,283**	**$ 2,068,025**	**$ 2,090,287**	**$ 2,152,757**	**$ 2,232,373**	**$ 2,255,584**
Expenses												
Operating Expenses												
51-4010 - SALARIES - COUNCILMAN		$ -	$ -			$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4011 - SALARIES & WAGES-TRAN TO ADMIN	$ 72,248	$ 73,089	$ 72,906	$ 79,456	$ 79,096	$ 81,469	$ 83,913	$ 86,430	$ 89,023	$ 91,694	$ 94,445	$ 97,278
51-4013 - EMP BENEFITS-TRANSFER TO ADMIN	$ 36,771	$ 42,539	$ 41,987	$ 45,452	$ 46,858	$ 48,263	$ 49,711	$ 51,203	$ 52,739	$ 54,321	$ 55,950	$ 57,629
51-4020 - BAD DEBT - WRITE OFF		$ -	$ 135,145		$ 22,975	$ 23,664	$ 24,374	$ 25,105	$ 25,858	$ 26,634	$ 27,433	$ 28,256
51-4021 - BOOKS, SUBSCRIPTIONS & MEMBERS	$ 1,362	$ 1,520	$ 1,984	$ 1,557	$ 1,621	$ 1,670	$ 1,720	$ 1,772	$ 1,825	$ 1,880	$ 1,936	$ 1,994
51-4023 - TRAVEL	$ 2,205	$ 1,252	$ 1,824	$ 2,364	$ 2,103	$ 2,167	$ 2,232	$ 2,298	$ 2,367	$ 2,438	$ 2,512	$ 2,587
51-4024 - OFFICE SUPPLIES AND EXPENSE	$ 6,232	$ 7,954	$ 5,667	$ 7,984	$ 7,447	$ 7,670	$ 7,900	$ 8,137	$ 8,381	$ 8,633	$ 8,892	$ 9,159
51-4025 - VEHICLE, EQUIP, SUPPLY/MAINT.	$ 2,058	$ 7,982	$ 3,629	$ 4,484	$ 4,611	$ 4,749	$ 4,891	$ 5,038	$ 5,189	$ 5,345	$ 5,505	$ 5,670
51-4027 - UTILITIES	$ 121,491	$ 127,698	$ 113,238	$ 131,428	$ 128,641	$ 132,500	$ 136,475	$ 140,569	$ 144,786	$ 149,130	$ 153,604	$ 158,212
51-4028 - TELEPHONE	$ 4,432	$ 2,738	$ 3,284	$ 4,787	$ 4,219	$ 4,345	$ 4,475	$ 4,610	$ 4,748	$ 4,890	$ 5,037	$ 5,188
51-4029 - TREATMENT/EQUIPMENT - CHLORINE	$ 4,824	$ 5,749	$ 12,134	$ 12,986	$ 10,483	$ 10,798	$ 11,121	$ 11,455	$ 11,799	$ 12,153	$ 12,517	$ 12,893
51-4031 - PROFESSIONAL & TECHNICAL SERVI	$ 16,917	$ 35,419	$ 33,216	$ 35,978	$ 32,893	$ 33,879	$ 34,896	$ 35,943	$ 37,021	$ 38,132	$ 39,276	$ 40,454
51-4033 - EDUCATION AND TRAINING	$ 2,343	$ 540	$ 810	$ 1,962	$ 1,628	$ 1,677	$ 1,728	$ 1,779	$ 1,833	$ 1,888	$ 1,944	$ 2,003
51-4034 - ENGINEERING	$ 7,593	$ 15,789	$ 11,346	$ 19,165	$ 15,678	$ 16,148	$ 16,633	$ 17,132	$ 17,646	$ 18,175	$ 18,720	$ 19,282
51-4035 - ATTORNEY	$ 23,133	$ 24,608	$ 70,266	$ 30,000	$ 10,000	$ 10,300	$ 10,609	$ 10,927	$ 11,255	$ 11,593	$ 11,941	$ 12,299
51-4040 - LINE - REPAIR & REPLACE	$ 22,091	$ 11,491	$ 18,274	$ 22,493	$ 20,287	$ 20,896	$ 21,522	$ 22,168	$ 22,833	$ 23,518	$ 24,224	$ 24,950
51-4048 - MISC. SUPPLIES	$ 4,672	$ 4,614	$ 2,097	$ 4,619	$ 4,277	$ 4,406	$ 4,538	$ 4,674	$ 4,814	$ 4,958	$ 5,107	$ 5,260
51-4049 - WATER METER INVENTORY & REPLAC	$ 97,719	$ 98,155	$ 73,500	$ 92,865	$ 93,155	$ 95,949	$ 98,828	$ 101,793	$ 104,846	$ 107,992	$ 111,232	$ 114,569
51-4052 - WATER SHARE PURCHASE		$ -	$ (5,075)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4053 - WATER SHARE FEES	$ 19,816	$ 37,442	$ 35,254	$ 37,790	$ 38,994	$ 40,164	$ 41,369	$ 42,610	$ 43,888	$ 45,205	$ 46,561	$ 47,958
51-4061 - MISC. SERVICES		$ 5,836	$ -	$ 5,167	$ 3,627	$ 3,736	$ 3,848	$ 3,964	$ 4,083	$ 4,205	$ 4,331	$ 4,461
51-4062 - REFUNDS	$ 2,026	$ 236	$ 788	$ 1,483	$ 1,275	$ 1,313	$ 1,352	$ 1,393	$ 1,435	$ 1,478	$ 1,522	$ 1,568
51-4065 - DEPRECIATION EXPENSE	$ 195,390	$ 192,801	$ 203,870	$ 198,166	$ 442,236	$ 455,503	$ 469,168	$ 483,243	$ 497,741	$ 512,673	$ 528,053	$ 543,894
51-4069 - REDD'S BOOSTER	$ 1,489	$ 1,925	$ 3,473	$ 2,161	$ 2,273	$ 2,341	$ 2,411	$ 2,484	$ 2,558	$ 2,635	$ 2,714	$ 2,795
51-4070 - REDD'S RESERVOIR	$ 4,000	$ -	$ 9,967	$ 8,074	$ 3,492	$ 3,597	$ 3,705	$ 3,816	$ 3,930	$ 4,048	$ 4,170	$ 4,295
51-4072 - ALDER WELL - GROUNDS & MAINTEN		$ 748	$ 2,850	$ 1,657	$ 7,512	$ 7,738	$ 7,970	$ 8,209	$ 8,455	$ 8,709	$ 8,970	$ 9,239
51-4073 - DALES WELL	$ 195	$ 316	$ 4,899	$ 6,973	$ 9,476	$ 9,760	$ 10,053	$ 10,355	$ 10,665	$ 10,985	$ 11,315	$ 11,654
51-4074 - BLACKSMITH FORK BOOSTER		$ -	$ 819	$ 515	$ 402	$ 414	$ 426	$ 439	$ 452	$ 466	$ 480	$ 494
51-4076 - ECK RESERVOIR	$ 533	$ 508	$ 930	$ 5,459	$ 3,119	$ 3,213	$ 3,309	$ 3,408	$ 3,511	$ 3,616	$ 3,724	$ 3,836
51-4077 - ECK BOOSTER	$ 228	$ 231	$ -	$ 591	$ 379	$ 391	$ 403	$ 415	$ 427	$ 440	$ 453	$ 467
51-4079 - CAPITAL OUTLAY - OTHER		$ -	$ -	**$ 1,510,000**	$ 5,100	$ 5,253	$ 5,411	$ 5,573	$ 5,740	$ 5,912	$ 6,090	$ 6,272
51-4082 - DEBT SERVICE - INTEREST	$ 14,747	$ 11,861	$ 8,889	$ -	$ -					$ -	$ -	$ -
51-4084 - INTEREST EXPENSE		$ -	$ -	$ 5,703	$ -					$ -	$ -	$ -
51-4085 - INTERFUND LOAN PAYMENT		$ -	$ -	$ 16,415	$ -					$ -	$ -	$ -
51-4086 - ZION'S 53 - LOAN PRINCIPAL		$ -	$ -		$ 53,000	$ 54,000	$ 55,000	$ 55,000	$ 56,000	$ 57,680	$ 59,410	$ 61,193
51-4092 - DOWNTOWN WATER PROJECT		$ (1)	$ -	$ -	$ -	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
51-4093 - NEW COMB FLAT RESERVOIR	$ 2,791	$ 719	$ 319	$ -	$ 4,151	$ 4,275	$ 4,404	$ 4,536	$ 4,672	$ 4,812	$ 4,956	$ 5,105
51-4094 - 400 S MAIN WELL (JAY'S)	$ 51,513	$ 859	$ 10,840	$ 5,000	$ 5,000	$ 5,150	$ 5,305	$ 5,464	$ 5,628	$ 5,796	$ 5,970	$ 6,149
Period 1 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ 547,984	$ 569,904	$ 592,700	$ 616,408	$ 641,064	$ -	$ -	$ -
Period 1 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ 269,903	$ 280,699	$ 291,927	$ 303,604	$ 315,748	$ -	$ -	$ -
Period 2 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 112,280	$ 116,771	$ 121,442
Period 2 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 71,786	$ 74,657	$ 77,643
Period 3 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 3 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Operating Expenses	**$ 718,817**	**$ 714,618**	**$ 879,130**	**$ 2,302,735**	**$ 1,883,894**	**$ 1,948,000**	**$ 2,014,326**	**$ 2,081,952**	**$ 2,152,960**	**$ 1,416,099**	**$ 1,460,423**	**$ 1,506,150**
Debt Service												
Debt Payment	$ -	$ -	$ -	$ -	$ 53,000	$ 54,000	$ 55,000	$ 55,000	$ 56,000	$ 57,000	$ 58,000	$ 59,000
Reserve Amount (0% Payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Debt Service	**$ -**	**$ -**	**$ -**	**$ -**	**$ 53,000**	**$ 54,000**	**$ 55,000**	**$ 55,000**	**$ 56,000**	**$ 57,000**	**$ 58,000**	**$ 59,000**
Out of Pocket Project Expenses	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Expense	**$ 718,817**	**$ 714,618**	**$ 879,130**	**$ 2,302,735**	**$ 1,936,894**	**$ 2,002,000**	**$ 2,069,326**	**$ 2,136,952**	**$ 2,208,960**	**$ 1,473,099**	**$ 1,518,423**	**$ 1,565,150**
Debt Coverage Ratio					**0.425476151**	**0.016966298**	**-0.273499893**	**-0.253213568**	**-1.119173918**	**12.92382065**	**13.30948704**	**12.70228424**
PROFIT/LOSS ( )	**$ 780,561**	**$ 831,536**	**$ 649,306**	**$ (854,410)**	**$ (30,450)**	**$ (53,084)**	**$ (70,042)**	**$ (68,927)**	**$ (118,674)**	**$ 679,658**	**$ 713,950**	**$ 690,435**
Impact Fee Account		**$ 91,696**	**$ 283,424**	**$ 327,172**	**$ 431,529**	**$ 531,211**	**$ 625,787**	**$ 737,169**	**$ 821,165**	**$ 1,169,486**	**$ 1,542,420**	**$ 1,897,126**
Total Water Fund	**$ 4,873,106**	**$ 5,704,642**	**$ 6,353,948**	**$ 5,499,538**	**$ 5,469,088**	**$ 5,416,005**	**$ 5,345,962**	**$ 5,277,035**	**$ 5,158,362**	**$ 5,838,019**	**$ 6,551,970**	**$ 7,242,404**
Total Cash on Hand	**$ 4,873,106**	**$ 5,612,946**	**$ 6,070,524**	**$ 5,172,366**	**$ 5,037,559**	**$ 4,884,793**	**$ 4,720,175**	**$ 4,539,866**	**$ 4,337,197**	**$ 4,668,533**	**$ 5,009,550**	**$ 5,345,279**

	9	10	11	12	13	14	15	16	17	18	19	20
	2030	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**
Yearly Growth Rate Residential	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Yearly Growth Rate Commercial	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%	2.48%
Indexed Inflation Multiplier	1.305	1.344	1.384	1.426	1.469	1.513	1.558	1.605	1.653	1.702	1.754	1.806
General Information												
Connections												
RESIDENTIAL - 1"	2814	2884	2956	3029	3104	3181	3260	3341	3424	3509	3596	3685
RESIDENTIAL - 1 1/2"	4	4	4	4	4	4	4	4	5	5	5	5
RESIDENTIAL - 2"	4	4	4	4	4	4	4	4	5	5	5	5
RESIDENTIAL - 4"	0	0	0	0	0	0	0	0	0	0	0	0
COMMERCIAL - 1"	65	66	68	70	72	73	75	77	79	81	83	85
COMMERCIAL - 1 1/2"	11	11	12	12	12	13	13	13	14	14	14	15
COMMERCIAL - 2"	16	17	17	17	18	18	19	19	20	20	21	21
COMMERCIAL - 4"	0	0	0	0	0	0	0	0	0	0	0	0
MULTI-FAMILY - 1"	10	10	10	11	11	11	12	12	12	12	13	13
MULTI-FAMILY - 1 1/2"	9	9	9	9	10	10	10	10	11	11	11	11
MULTI-FAMILY - 2"	7	8	8	8	8	8	9	9	9	9	10	10
MULTI-FAMILY - 4"	7	8	8	8	8	8	9	9	9	9	10	10
CITY - 1"	24	24	25	25	26	27	27	28	29	30	30	31
CITY - 2"	7	8	8	8	8	8	9	9	9	9	10	10
CITY - 2"	4	4	4	4	4	4	4	4	5	5	5	5
RELIGIOUS - 2"	11	11	12	12	12	13	13	13	14	14	14	15
EDUCATIONAL - 1"	5	5	5	5	6	6	6	6	6	6	6	7
EDUCATIONAL - 2"	1	1	1	1	1	1	1	1	1	1	1	1
EDUCATIONAL - 4"	1	1	1	1	1	1	1	1	1	1	1	1
CEMETARY - 4"	1	1	1	1	1	1	1	1	1	1	1	1
Total Number of Connections	**3002**	**3076**	**3153**	**3231**	**3311**	**3393**	**3477**	**3563**	**3651**	**3742**	**3835**	**3930**
Connection Sizes and Quantities												
1" Connection	2917	2990	3065	3140	3218	3298	3380	3464	3550	3638	3728	3820
1 1/2" Connection	24	24	25	25	26	27	27	28	29	30	30	31
2" Connection	37	38	39	40	41	41	42	43	44	46	47	48
4" Connection	13	13	14	14	14	15	15	15	16	16	16	17
Total Number of ERUs	**2991**	**3065**	**3143**	**3219**	**3299**	**3381**	**3464**	**3550**	**3639**	**3730**	**3821**	**3916**
New Connections												
New 1" Connections	70	73	75	75	78	80	82	84	86	88	90	92
New 1 1/2" Connections	1	0	1	0	1	1	0	1	1	1	0	1
New 2" Connections	1	1	1	1	1	0	1	1	1	2	1	1
New 4" Connections	0	0	1	0	0	1	0	0	1	0	0	1
Total Number of New ERUs	**72**	**74**	**78**	**76**	**80**	**82**	**83**	**86**	**89**	**91**	**91**	**95**
Revenue												
Operating Income												
51-3710 - WATER SALES	**1.431.545**	**1.465.713**	**1.505.497**	**1.540.569**	**1.577.765**	**1.618.636**	**1.656.872**	**1.696.780**	**1.741.536**	**1.784.424**	**1.826.276**	**1.873.743**
1" Connection Water Sales	1.318.484	1.351.480	1.385.380	1.419.280	1.454.536	1.490.696	1.527.760	1.565.728	1.604.600	1.644.376	1.685.056	1.726.640
1 1/2" Connection Water Sales	18,425	18,425	19,193	19,193	19,961	20,728	20,728	21,496	22,264	23,032	23,032	23,799
2" Connection Water Sales	43,364	44,536	45,708	46,880	48,052	48,052	49,224	50,396	51,568	53,912	55,084	56,256
4" Connection Water Sales	51,272	51,272	55,216	55,216	55,216	59,160	59,160	59,160	63,104	63,104	63,104	67,048
51-3711 - EXCESS WATER												
51-3715 - CONTRIBUTION FROM OTHERS												
51-3720 - CONNECTION FEES	**38,052**	**38,097**	**43,185**	**39,099**	**42,059**	**44,158**	**42,605**	**45,064**	**48,695**	**48,599**	**46,612**	**51,700**
1" Connection Fees	35,063	36,566	37,568	37,568	39,070	40,072	41,074	42,076	43,077	44,079	45,081	46,083
1 1/2" Connection Fees	1,458	-	1,458	-	1,458	1,458	-	1,458	1,458	1,458	-	1,458
2" Connection Fees	1,531	1,531	1,531	1,531	1,531	-	1,531	1,531	1,531	3,063	1,531	1,531
4" Connection Fees	-	-	2,628	-	-	2,628	-	-	2,628	-	-	2,628
51-3730 - FIRE PROTECTIN CONNECTION												
51-3740 - WATER SHARE FEE (IN LEIU OF)	**200,805**	**206,829**	**213,034**	**219,425**	**226,007**	**232,788**	**239,771**	**246,964**	**254,373**	**262,004**	**269,865**	**277,961**
51-3745 - WATER SHARE - SEASON PURCHASE	**2,583**	**2,661**	**2,741**	**2,823**	**2,907**	**2,995**	**3,085**	**3,177**	**3,272**	**3,371**	**3,472**	**3,576**
51-3792 - PRIOR YEAR REVENUE												
Subtotal Operating Income	**$ 1,672,985**	**$ 1,713,300**	**$ 1,764,456**	**$ 1,801,915**	**$ 1,848,739**	**$ 1,898,577**	**$ 1,942,333**	**$ 1,991,986**	**$ 2,047,876**	**$ 2,098,398**	**$ 2,146,224**	**$ 2,206,980**
Non-Operating Income												
51-3810 - INTEREST EARNINGS	$ 56,134	$ 57,818	$ 59,553	$ 61,339	$ 63,179	$ 65,075	$ 67,027	$ 69,038	$ 71,109	$ 73,242	$ 75,439	$ 77,703
51-3811 - INTEREST EARNINGS - BONDS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3890 - MISCELLANEOUS	$ 67,569	$ 69,596	$ 71,684	$ 73,834	$ 76,049	$ 78,331	$ 80,681	$ 83,101	$ 85,594	$ 88,162	$ 90,807	$ 93,531
51-3891 - Gain or loss on asset disposition	$ 13,507	$ 13,912	$ 14,329	$ 14,759	$ 15,202	$ 15,658	$ 16,128	$ 16,612	$ 17,110	$ 17,623	$ 18,152	$ 18,697
51-3892 - WATER IMPACT FEE	**$ 512,712**	**$ 526,954**	**$ 555,438**	**$ 541,196**	**$ 569,680**	**$ 583,922**	**$ 591,043**	**$ 612,406**	**$ 633,769**	**$ 648,011**	**$ 648,011**	**$ 676,495**
1" Connection Impact Fees	$ 498,470.00	$ 519,833.00	$ 534,075.00	$ 534,075.00	$ 555,438.00	$ 569,680.00	$ 583,922.00	$ 598,164.00	$ 612,406.00	$ 626,648.00	$ 640,890.00	$ 655,132.00
1 1/2" Connection Impact Fees	$ 7,121.00	$ -	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00
2" Connection Impact Fees	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ -	$ 7,121.00	$ 7,121.00	$ 7,121.00	$ 14,242.00	$ 7,121.00	$ 7,121.00
4" Connection Impact Fees	$ -	$ -	$ 7,121.00	$ -	$ -	$ 7,121.00	$ -	$ -	$ 7,121.00	$ -	$ -	$ 7,121.00
51-3895 - SERIES 2 - - - BONDS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3896 - PRIOR YEAR FUNDS - IMPACT FEES	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-3897 - PRIOR YEAR FUNDS - BONDS	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Non-Operating Income	**$ 649,922**	**$ 668,280**	**$ 701,004**	**$ 691,129**	**$ 724,111**	**$ 742,986**	**$ 754,879**	**$ 781,157**	**$ 807,582**	**$ 827,039**	**$ 832,409**	**$ 866,425**
Total Revenue	**$ 2,322,907**	**$ 2,381,580**	**$ 2,465,460**	**$ 2,493,044**	**$ 2,572,849**	**$ 2,641,562**	**$ 2,697,212**	**$ 2,773,143**	**$ 2,855,458**	**$ 2,925,437**	**$ 2,978,634**	**$ 3,073,405**
Expenses												
Operating Expenses												
51-4010 - SALARIES - COUNCILMAN	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4011 - SALARIES & WAGES-TRAN TO ADMIN	$ 100,196	$ 103,202	$ 106,298	$ 109,487	$ 112,772	$ 116,155	$ 119,639	$ 123,229	$ 126,926	$ 130,733	$ 134,655	$ 138,695
51-4013 - EMP BENEFITS-TRANSFER TO ADMIN	$ 59,358	$ 61,139	$ 62,973	$ 64,862	$ 66,808	$ 68,812	$ 70,876	$ 73,003	$ 75,193	$ 77,448	$ 79,772	$ 82,165
51-4020 - BAD DEBT - WRITE OFF	$ 29,104	$ 29,977	$ 30,876	$ 31,802	$ 32,756	$ 33,739	$ 34,751	$ 35,794	$ 36,868	$ 37,974	$ 39,113	$ 40,286
51-4021 - BOOKS, SUBSCRIPTIONS & MEMBERS	$ 2,054	$ 2,115	$ 2,179	$ 2,244	$ 2,312	$ 2,381	$ 2,452	$ 2,526	$ 2,602	$ 2,680	$ 2,760	$ 2,843
51-4023 - TRAVEL	$ 2,665	$ 2,744	$ 2,827	$ 2,912	$ 2,999	$ 3,089	$ 3,182	$ 3,277	$ 3,375	$ 3,477	$ 3,581	$ 3,688
51-4024 - OFFICE SUPPLIES AND EXPENSE	$ 9,433	$ 9,716	$ 10,008	$ 10,308	$ 10,617	$ 10,936	$ 11,264	$ 11,602	$ 11,950	$ 12,309	$ 12,678	$ 13,058
51-4025 - VEHICLE, EQUIP, SUPPLY/MAINT.	$ 5,841	$ 6,016	$ 6,196	$ 6,382	$ 6,574	$ 6,771	$ 6,974	$ 7,183	$ 7,399	$ 7,621	$ 7,849	$ 8,085
51-4027 - UTILITIES	$ 162,958	$ 167,847	$ 172,883	$ 178,069	$ 183,411	$ 188,913	$ 194,581	$ 200,418	$ 206,431	$ 212,624	$ 219,002	$ 225,573
51-4028 - TELEPHONE	$ 5,344	$ 5,504	$ 5,669	$ 5,839	$ 6,015	$ 6,195	$ 6,381	$ 6,572	$ 6,770	$ 6,973	$ 7,182	$ 7,397
51-4029 - TREATMENT/EQUIPMENT - CHLORINE	$ 13,280	$ 13,678	$ 14,088	$ 14,511	$ 14,946	$ 15,395	$ 15,857	$ 16,332	$ 16,822	$ 17,327	$ 17,847	$ 18,382
51-4031 - PROFESSIONAL & TECHNICAL SERVI	$ 41,667	$ 42,917	$ 44,205	$ 45,531	$ 46,897	$ 48,304	$ 49,753	$ 51,246	$ 52,783	$ 54,366	$ 55,997	$ 57,677
51-4033 - EDUCATION AND TRAINING	$ 2,063	$ 2,125	$ 2,188	$ 2,254	$ 2,322	$ 2,391	$ 2,463	$ 2,537	$ 2,613	$ 2,692	$ 2,772	$ 2,855
51-4034 - ENGINEERING	$ 19,860	$ 20,456	$ 21,070	$ 21,702	$ 22,353	$ 23,024	$ 23,714	$ 24,426	$ 25,158	$ 25,913	$ 26,691	$ 27,491
51-4035 - ATTORNEY	$ 12,668	$ 13,048	$ 13,439	$ 13,842	$ 14,258	$ 14,685	$ 15,126	$ 15,580	$ 16,047	$ 16,528	$ 17,024	$ 17,535
51-4040 - LINE - REPAIR & REPLACE	$ 25,699	$ 26,470	$ 27,264	$ 28,082	$ 28,924	$ 29,792	$ 30,686	$ 31,606	$ 32,555	$ 33,531	$ 34,537	$ 35,573
51-4048 - MISC. SUPPLIES	$ 5,418	$ 5,581	$ 5,748	$ 5,921	$ 6,098	$ 6,281	$ 6,470	$ 6,664	$ 6,864	$ 7,070	$ 7,282	$ 7,500
51-4049 - WATER METER INVENTORY & REPLAC	$ 118,006	$ 121,546	$ 125,192	$ 128,948	$ 132,816	$ 136,801	$ 140,905	$ 145,132	$ 149,486	$ 153,971	$ 158,590	$ 163,347
51-4052 - WATER SHARE PURCHASE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4053 - WATER SHARE FEES	$ 49,396	$ 50,878	$ 52,405	$ 53,977	$ 55,596	$ 57,264	$ 58,982	$ 60,751	$ 62,574	$ 64,451	$ 66,385	$ 68,376
51-4061 - MISC. SERVICES	$ 4,595	$ 4,733	$ 4,875	$ 5,021	$ 5,172	$ 5,327	$ 5,487	$ 5,651	$ 5,821	$ 5,995	$ 6,175	$ 6,360
51-4062 - REFUNDS	$ 1,615	$ 1,663	$ 1,713	$ 1,765	$ 1,818	$ 1,872	$ 1,928	$ 1,986	$ 2,046	$ 2,107	$ 2,170	$ 2,235
51-4065 - DEPRECIATION EXPENSE	$ 560,211	$ 577,018	$ 594,328	$ 612,158	$ 630,523	$ 649,438	$ 668,922	$ 688,989	$ 709,659	$ 730,949	$ 752,877	$ 775,464
51-4069 - REDD'S BOOSTER	$ 2,879	$ 2,966	$ 3,055	$ 3,146	$ 3,241	$ 3,338	$ 3,438	$ 3,541	$ 3,647	$ 3,757	$ 3,869	$ 3,986
51-4070 - REDD'S RESERVOIR	$ 4,424	$ 4,556	$ 4,693	$ 4,834	$ 4,979	$ 5,128	$ 5,282	$ 5,441	$ 5,604	$ 5,772	$ 5,945	$ 6,123
51-4072 - ALDER WELL - GROUNDS & MAINTEN	$ 9,517	$ 9,802	$ 10,096	$ 10,399	$ 10,711	$ 11,032	$ 11,363	$ 11,704	$ 12,055	$ 12,417	$ 12,789	$ 13,173
51-4073 - DALES WELL	$ 12,004	$ 12,364	$ 12,735	$ 13,117	$ 13,510	$ 13,916	$ 14,333	$ 14,763	$ 15,206	$ 15,662	$ 16,132	$ 16,616
51-4074 - BLACKSMITH FORK BOOSTER	$ 509	$ 524	$ 540	$ 556	$ 573	$ 590	$ 608	$ 626	$ 645	$ 664	$ 684	$ 705
51-4076 - ECK RESERVOIR	$ 3,951	$ 4,070	$ 4,192	$ 4,318	$ 4,447	$ 4,581	$ 4,718	$ 4,860	$ 5,005	$ 5,155	$ 5,310	$ 5,469
51-4077 - ECK BOOSTER	$ 481	$ 495	$ 510	$ 525	$ 541	$ 557	$ 574	$ 591	$ 609	$ 627	$ 646	$ 665
51-4079 - CAPITAL OUTLAY - OTHER	$ 6,461	$ 6,654	$ 6,854	$ 7,060	$ 7,271	$ 7,490	$ 7,714	$ 7,946	$ 8,184	$ 8,430	$ 8,682	$ 8,943
51-4082 - DEBT SERVICE - INTEREST	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4084 - INTEREST EXPENSE	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4085 - INTERFUND LOAN PAYMENT	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
51-4086 - ZION'S 53 - LOAN PRINCIPAL	$ 63,028	$ 64,919	$ 66,867	$ 68,873	$ 70,939	$ 73,067	$ 75,259	$ 77,517	$ 79,843	$ 82,238	$ 84,705	$ 87,246
51-4092 - DOWNTOWN WATER PROJECT	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
51-4093 - NEW COMB FLAT RESERVOIR	$ 5,258	$ 5,416	$ 5,579	$ 5,746	$ 5,918	$ 6,096	$ 6,279	$ 6,467	$ 6,661	$ 6,861	$ 7,067	$ 7,279
51-4094 - 400 S MAIN WELL (JAY'S)	$ 6,334	$ 6,524	$ 6,720	$ 6,921	$ 7,129	$ 7,343	$ 7,563	$ 7,790	$ 8,024	$ 8,264	$ 8,512	$ 8,768
Period 1 Capital Improvement Projects - City Portion	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 1 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 2 Capital Improvement Projects - City Portion	$ 126,300	$ 131,352	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 2 Capital Improvement Projects - Impact Fee P	$ 80,749	$ 83,979	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Period 3 Capital Improvement Projects - City Portion	$ -	$ -	$ 380,482	$ 395,701	$ 411,529	$ 427,991	$ 445,110	$ 462,915	$ 481,431	$ 500,688	$ 520,716	$ 541,545
Period 3 Capital Improvement Projects - Impact Fee P	$ -	$ -	$ 412,189	$ 428,677	$ 445,824	$ 463,657	$ 482,203	$ 501,491	$ 521,551	$ 542,413	$ 564,109	$ 586,673
Subtotal Operating Expenses	**$ 1,553,325**	**$ 1,601,995**	**$ 2,220,935**	**$ 2,295,490**	**$ 2,372,598**	**$ 2,452,350**	**$ 2,534,837**	**$ 2,620,155**	**$ 2,708,404**	**$ 2,799,686**	**$ 2,894,107**	**$ 2,991,779**
Debt Service												
Debt Payment	$ 60,000	$ 61,000	$ 62,000	$ 62,000	$ 63,000	$ 64,000	$ 65,000	$ 66,000	$ 67,000	$ 68,000	$ 69,000	$ 70,000
Reserve Amount (0% Payment)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal Debt Service	**$ 60,000**	**$ 61,000**	**$ 62,000**	**$ 62,000**	**$ 63,000**	**$ 64,000**	**$ 65,000**	**$ 66,000**	**$ 67,000**	**$ 68,000**	**$ 69,000**	**$ 70,000**
Out of Pocket Project Expenses	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Expense	**$ 1,613,325**	**$ 1,662,995**	**$ 2,282,935**	**$ 2,357,490**	**$ 2,435,598**	**$ 2,516,350**	**$ 2,599,837**	**$ 2,686,155**	**$ 2,775,404**	**$ 2,867,686**	**$ 2,963,107**	**$ 3,061,779**
Debt Coverage Ratio	**12.82636272**	**12.78007624**	**3.943946603**	**3.186358672**	**3.17858874**	**2.956446101**	**2.498080243**	**2.317996132**	**2.194846473**	**1.849279739**	**1.225021496**	**1.166092412**
PROFIT/LOSS ( )	**$ 709,582**	**$ 718,585**	**$ 182,525**	**$ 135,554**	**$ 137,251**	**$ 125,213**	**$ 97,375**	**$ 86,988**	**$ 80,055**	**$ 57,751**	**$ 15,526**	**$ 11,626**
Impact Fee Account	**$ 2,269,089**	**$ 2,651,063**	**$ 2,732,312**	**$ 2,782,832**	**$ 2,843,688**	**$ 2,899,954**	**$ 2,943,794**	**$ 2,988,709**	**$ 3,033,928**	**$ 3,071,526**	**$ 3,086,428**	**$ 3,106,250**
Total Water Fund	**$ 7,951,986**	**$ 8,670,571**	**$ 8,853,096**	**$ 8,988,650**	**$ 9,125,901**	**$ 9,251,113**	**$ 9,348,489**	**$ 9,435,476**	**$ 9,515,531**	**$ 9,573,282**	**$ 9,588,809**	**$ 9,600,435**
Total Cash on Hand	**$ 5,682,898**	**$ 6,019,508**	**$ 6,120,783**	**$ 6,205,818**	**$ 6,282,213**	**$ 6,351,160**	**$ 6,404,695**	**$ 6,446,767**	**$ 6,481,603**	**$ 6,501,756**	**$ 6,502,381**	**$ 6,494,185**

Appendix H – State Code 11-36a – Impact Fee Act

Chapter 36a
Impact Fees Act

Part 1
General Provisions

11-36a-101 Title.

This chapter is known as the "Impact Fees Act."

Enacted by Chapter 47, 2011 General Session

11-36a-102 Definitions.

As used in this chapter:

(1)

(a) "Affected entity" means each county, municipality, local district under Title 17B, Limited Purpose Local Government Entities - Local Districts, special service district under Title 17D, Chapter 1, Special Service District Act, school district, interlocal cooperation entity established under Chapter 13, Interlocal Cooperation Act, and specified public utility:

(i) whose services or facilities are likely to require expansion or significant modification because of the facilities proposed in the proposed impact fee facilities plan; or

(ii) that has filed with the local political subdivision or private entity a copy of the general or long-range plan of the county, municipality, local district, special service district, school district, interlocal cooperation entity, or specified public utility.

(b) "Affected entity" does not include the local political subdivision or private entity that is required under Section 11-36a-501 to provide notice.

(2) "Charter school" includes:

(a) an operating charter school;

(b) an applicant for a charter school whose application has been approved by a charter school authorizer as provided in Title 53A, Chapter 1a, Part 5, The Utah Charter Schools Act; and

(c) an entity that is working on behalf of a charter school or approved charter applicant to develop or construct a charter school building.

(3) "Development activity" means any construction or expansion of a building, structure, or use, any change in use of a building or structure, or any changes in the use of land that creates additional demand and need for public facilities.

(4) "Development approval" means:

(a) except as provided in Subsection (4)(b), any written authorization from a local political subdivision that authorizes the commencement of development activity;

(b) development activity, for a public entity that may develop without written authorization from a local political subdivision;

(c) a written authorization from a public water supplier, as defined in Section 73-1-4, or a private water company:

(i) to reserve or provide:

(A) a water right;

(B) a system capacity; or

(C) a distribution facility; or

(ii) to deliver for a development activity:

(A) culinary water; or

(B) irrigation water; or
(d) a written authorization from a sanitary sewer authority, as defined in Section 10-9a-103:
(i) to reserve or provide:
(A) sewer collection capacity; or
(B) treatment capacity; or
(ii) to provide sewer service for a development activity.
(5) "Enactment" means:
(a) a municipal ordinance, for a municipality;
(b) a county ordinance, for a county; and
(c) a governing board resolution, for a local district, special service district, or private entity.
(6) "Encumber" means:
(a) a pledge to retire a debt; or
(b) an allocation to a current purchase order or contract.
(7) "Hookup fee" means a fee for the installation and inspection of any pipe, line, meter, or appurtenance to connect to a gas, water, sewer, storm water, power, or other utility system of a municipality, county, local district, special service district, or private entity.
(8)
(a) "Impact fee" means a payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure.
(b) "Impact fee" does not mean a tax, a special assessment, a building permit fee, a hookup fee, a fee for project improvements, or other reasonable permit or application fee.
(9) "Impact fee analysis" means the written analysis of each impact fee required by Section 11-36a-303.
(10) "Impact fee facilities plan" means the plan required by Section 11-36a-301.
(11) "Level of service" means the defined performance standard or unit of demand for each capital component of a public facility within a service area.
(12)
(a) "Local political subdivision" means a county, a municipality, a local district under Title 17B, Limited Purpose Local Government Entities - Local Districts, or a special service district under Title 17D, Chapter 1, Special Service District Act.
(b) "Local political subdivision" does not mean a school district, whose impact fee activity is governed by Section 53A-20-100.5.
(13) "Private entity" means an entity in private ownership with at least 100 individual shareholders, customers, or connections, that is located in a first, second, third, or fourth class county and provides water to an applicant for development approval who is required to obtain water from the private entity either as a:
(a) specific condition of development approval by a local political subdivision acting pursuant to a prior agreement, whether written or unwritten, with the private entity; or
(b) functional condition of development approval because the private entity:
(i) has no reasonably equivalent competition in the immediate market; and
(ii) is the only realistic source of water for the applicant's development.
(14)
(a) "Project improvements" means site improvements and facilities that are:
(i) planned and designed to provide service for development resulting from a development activity;
(ii) necessary for the use and convenience of the occupants or users of development resulting from a development activity; and

(iii) not identified or reimbursed as a system improvement.
(b) "Project improvements" does not mean system improvements.
(15) "Proportionate share" means the cost of public facility improvements that are roughly proportionate and reasonably related to the service demands and needs of any development activity.
(16) "Public facilities" means only the following impact fee facilities that have a life expectancy of 10 or more years and are owned or operated by or on behalf of a local political subdivision or private entity:
(a) water rights and water supply, treatment, storage, and distribution facilities;
(b) wastewater collection and treatment facilities;
(c) storm water, drainage, and flood control facilities;
(d) municipal power facilities;
(e) roadway facilities;
(f) parks, recreation facilities, open space, and trails;
(g) public safety facilities; or
(h) environmental mitigation as provided in Section 11-36a-205.
(17)
(a) "Public safety facility" means:
(i) a building constructed or leased to house police, fire, or other public safety entities; or
(ii) a fire suppression vehicle costing in excess of $500,000.
(b) "Public safety facility" does not mean a jail, prison, or other place of involuntary incarceration.
(18)
(a) "Roadway facilities" means a street or road that has been designated on an officially adopted subdivision plat, roadway plan, or general plan of a political subdivision, together with all necessary appurtenances.
(b) "Roadway facilities" includes associated improvements to a federal or state roadway only when the associated improvements:
(i) are necessitated by the new development; and
(ii) are not funded by the state or federal government.
(c) "Roadway facilities" does not mean federal or state roadways.
(19)
(a) "Service area" means a geographic area designated by an entity that imposes an impact fee on the basis of sound planning or engineering principles in which a public facility, or a defined set of public facilities, provides service within the area.
(b) "Service area" may include the entire local political subdivision or an entire area served by a private entity.
(20) "Specified public agency" means:
(a) the state;
(b) a school district; or
(c) a charter school.
(21)
(a) "System improvements" means:
(i) existing public facilities that are:
(A) identified in the impact fee analysis under Section 11-36a-304; and
(B) designed to provide services to service areas within the community at large; and
(ii) future public facilities identified in the impact fee analysis under Section 11-36a-304 that are intended to provide services to service areas within the community at large.
(b) "System improvements" does not mean project improvements.

Amended by Chapter 363, 2014 General Session

Part 2
Impact Fees

11-36a-201 Impact fees.

(1) A local political subdivision or private entity shall ensure that any imposed impact fees comply with the requirements of this chapter.
(2) A local political subdivision and private entity may establish impact fees only for those public facilities defined in Section 11-36a-102.
(3) Nothing in this chapter may be construed to repeal or otherwise eliminate an impact fee in effect on the effective date of this chapter that is pledged as a source of revenues to pay bonded indebtedness that was incurred before the effective date of this chapter.

Enacted by Chapter 47, 2011 General Session

11-36a-202 Prohibitions on impact fees.

(1) A local political subdivision or private entity may not:
  (a) impose an impact fee to:
    (i) cure deficiencies in a public facility serving existing development;
    (ii) raise the established level of service of a public facility serving existing development;
    (iii) recoup more than the local political subdivision's or private entity's costs actually incurred for excess capacity in an existing system improvement; or
    (iv) include an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with:
      (A) generally accepted cost accounting practices; and
      (B) the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
  (b) delay the construction of a school or charter school because of a dispute with the school or charter school over impact fees; or
  (c) impose or charge any other fees as a condition of development approval unless those fees are a reasonable charge for the service provided.
(2)
  (a) Notwithstanding any other provision of this chapter, a political subdivision or private entity may not impose an impact fee:
    (i) on residential components of development to pay for a public safety facility that is a fire suppression vehicle;
    (ii) on a school district or charter school for a park, recreation facility, open space, or trail;
    (iii) on a school district or charter school unless:
      (A) the development resulting from the school district's or charter school's development activity directly results in a need for additional system improvements for which the impact fee is imposed; and
      (B) the impact fee is calculated to cover only the school district's or charter school's proportionate share of the cost of those additional system improvements;

(iv) to the extent that the impact fee includes a component for a law enforcement facility, on development activity for:

(A) the Utah National Guard;

(B) the Utah Highway Patrol; or

(C) a state institution of higher education that has its own police force; or

(v) on development activity on the state fair park, as defined in Section 63H-6-102.

(b)

(i) Notwithstanding any other provision of this chapter, a political subdivision or private entity may not impose an impact fee on development activity that consists of the construction of a school, whether by a school district or a charter school, if:

(A) the school is intended to replace another school, whether on the same or a different parcel;

(B) the new school creates no greater demand or need for public facilities than the school or school facilities, including any portable or modular classrooms that are on the site of the replaced school at the time that the new school is proposed; and

(C) the new school and the school being replaced are both within the boundary of the local political subdivision or the jurisdiction of the private entity.

(ii) If the imposition of an impact fee on a new school is not prohibited under Subsection (2)(b)(i) because the new school creates a greater demand or need for public facilities than the school being replaced, the impact fee shall be based only on the demand or need that the new school creates for public facilities that exceeds the demand or need that the school being replaced creates for those public facilities.

(c) Notwithstanding any other provision of this chapter, a political subdivision or private entity may impose an impact fee for a road facility on the state only if and to the extent that:

(i) the state's development causes an impact on the road facility; and

(ii) the portion of the road facility related to an impact fee is not funded by the state or by the federal government.

(3) Notwithstanding any other provision of this chapter, a local political subdivision may impose and collect impact fees on behalf of a school district if authorized by Section 53A-20-100.5.

Amended by Chapter 2, 2016 Special Session 3

11-36a-203 Private entity assessment of impact fees -- Charges for water rights, physical infrastructure -- Notice -- Audit.

(1) A private entity:

(a) shall comply with the requirements of this chapter before imposing an impact fee; and

(b) except as otherwise specified in this chapter, is subject to the same requirements of this chapter as a local political subdivision.

(2) A private entity may only impose a charge for water rights or physical infrastructure necessary to provide water or sewer facilities by imposing an impact fee.

(3) Where notice and hearing requirements are specified, a private entity shall comply with the notice and hearing requirements for local districts.

(4) A private entity that assesses an impact fee under this chapter is subject to the audit requirements of Title 51, Chapter 2a, Accounting Reports from Political Subdivisions, Interlocal Organizations, and Other Local Entities Act.

Enacted by Chapter 47, 2011 General Session

11-36a-204 Other names for impact fees.

(1) A fee that meets the definition of impact fee under Section 11-36a-102 is an impact fee subject to this chapter, regardless of what term the local political subdivision or private entity uses to refer to the fee.

(2) A local political subdivision or private entity may not avoid application of this chapter to a fee that meets the definition of an impact fee under Section 11-36a-102 by referring to the fee by another name.

Enacted by Chapter 47, 2011 General Session

11-36a-205 Environmental mitigation impact fees.

Notwithstanding the requirements and prohibitions of this chapter, a local political subdivision may impose and assess an impact fee for environmental mitigation when:

(1) the local political subdivision has formally agreed to fund a Habitat Conservation Plan to resolve conflicts with the Endangered Species Act of 1973, 16 U.S.C. Sec. 1531, et seq. or other state or federal environmental law or regulation;

(2) the impact fee bears a reasonable relationship to the environmental mitigation required by the Habitat Conservation Plan; and

(3) the legislative body of the local political subdivision adopts an ordinance or resolution:

  (a) declaring that an impact fee is required to finance the Habitat Conservation Plan;

  (b) establishing periodic sunset dates for the impact fee; and

  (c) requiring the legislative body to:

    (i) review the impact fee on those sunset dates;

    (ii) determine whether or not the impact fee is still required to finance the Habitat Conservation Plan; and

    (iii) affirmatively reauthorize the impact fee if the legislative body finds that the impact fee must remain in effect.

Enacted by Chapter 47, 2011 General Session

Part 3
Establishing an Impact Fee

11-36a-301 Impact fee facilities plan.

(1) Before imposing an impact fee, each local political subdivision or private entity shall, except as provided in Subsection (3), prepare an impact fee facilities plan to determine the public facilities required to serve development resulting from new development activity.

(2) A municipality or county need not prepare a separate impact fee facilities plan if the general plan required by Section 10-9a-401 or 17-27a-401, respectively, contains the elements required by Section 11-36a-302.

(3) A local political subdivision or a private entity with a population, or serving a population, of less than 5,000 as of the last federal census that charges impact fees of less than $250,000 annually need not comply with the impact fee facilities plan requirements of this part, but shall ensure that:

  (a) the impact fees that the local political subdivision or private entity imposes are based upon a reasonable plan that otherwise complies with the common law and this chapter; and

(b) each applicable notice required by this chapter is given.

Amended by Chapter 200, 2013 General Session

11-36a-302 Impact fee facilities plan requirements -- Limitations -- School district or charter school.

(1)

(a) An impact fee facilities plan shall:

(i) identify the existing level of service;

(ii) subject to Subsection (1)(c), establish a proposed level of service;

(iii) identify any excess capacity to accommodate future growth at the proposed level of service;

(iv) identify demands placed upon existing public facilities by new development activity at the proposed level of service; and

(v) identify the means by which the political subdivision or private entity will meet those growth demands.

(b) A proposed level of service may diminish or equal the existing level of service.

(c) A proposed level of service may:

(i) exceed the existing level of service if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service; or

(ii) establish a new public facility if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

(2) In preparing an impact fee facilities plan, each local political subdivision shall generally consider all revenue sources to finance the impacts on system improvements, including:

(a) grants;

(b) bonds;

(c) interfund loans;

(d) impact fees; and

(e) anticipated or accepted dedications of system improvements.

(3) A local political subdivision or private entity may only impose impact fees on development activities when the local political subdivision's or private entity's plan for financing system improvements establishes that impact fees are necessary to maintain a proposed level of service that complies with Subsection (1)(b) or (c).

(4)

(a) Subject to Subsection (4)(c), the impact fee facilities plan shall include a public facility for which an impact fee may be charged or required for a school district or charter school if the local political subdivision is aware of the planned location of the school district facility or charter school:

(i) through the planning process; or

(ii) after receiving a written request from a school district or charter school that the public facility be included in the impact fee facilities plan.

(b) If necessary, a local political subdivision or private entity shall amend the impact fee facilities plan to reflect a public facility described in Subsection (4)(a).

(c)

(i) In accordance with Subsections 10-9a-305(3) and 17-27a-305(3), a local political subdivision may not require a school district or charter school to participate in the cost of any roadway or sidewalk.

(ii) Notwithstanding Subsection (4)(c)(i), if a school district or charter school agrees to build a roadway or sidewalk, the roadway or sidewalk shall be included in the impact fee facilities plan if the local jurisdiction has an impact fee facilities plan for roads and sidewalks.

Amended by Chapter 200, 2013 General Session

11-36a-303 Impact fee analysis.

(1) Subject to the notice requirements of Section 11-36a-504, each local political subdivision or private entity intending to impose an impact fee shall prepare a written analysis of each impact fee.

(2) Each local political subdivision or private entity that prepares an impact fee analysis under Subsection (1) shall also prepare a summary of the impact fee analysis designed to be understood by a lay person.

Enacted by Chapter 47, 2011 General Session

11-36a-304 Impact fee analysis requirements.

(1) An impact fee analysis shall:

(a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;

(b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;

(c) subject to Subsection (2), demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;

(d) estimate the proportionate share of:

(i) the costs for existing capacity that will be recouped; and

(ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and

(e) based on the requirements of this chapter, identify how the impact fee was calculated.

(2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:

(a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;

(b) the cost of system improvements for each public facility;

(c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;

(d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;

(e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;

(f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;

(g) extraordinary costs, if any, in servicing the newly developed properties; and
(h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Enacted by Chapter 47, 2011 General Session

11-36a-305 Calculating impact fees.

(1) In calculating an impact fee, a local political subdivision or private entity may include:
(a) the construction contract price;
(b) the cost of acquiring land, improvements, materials, and fixtures;
(c) the cost for planning, surveying, and engineering fees for services provided for and directly related to the construction of the system improvements; and
(d) for a political subdivision, debt service charges, if the political subdivision might use impact fees as a revenue stream to pay the principal and interest on bonds, notes, or other obligations issued to finance the costs of the system improvements.
(2) In calculating an impact fee, each local political subdivision or private entity shall base amounts calculated under Subsection (1) on realistic estimates, and the assumptions underlying those estimates shall be disclosed in the impact fee analysis.

Enacted by Chapter 47, 2011 General Session

11-36a-306 Certification of impact fee analysis.

(1) An impact fee facilities plan shall include a written certification from the person or entity that prepares the impact fee facilities plan that states the following:"I certify that the attached impact fee facilities plan:
1. includes only the costs of public facilities that are:
a. allowed under the Impact Fees Act; and
b. actually incurred; or
c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
a. costs of operation and maintenance of public facilities;
b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act."
(2) An impact fee analysis shall include a written certification from the person or entity that prepares the impact fee analysis which states as follows:"I certify that the attached impact fee analysis:
1. includes only the costs of public facilities that are:
a. allowed under the Impact Fees Act; and
b. actually incurred; or
c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
a. costs of operation and maintenance of public facilities;

b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or

c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;

3. offsets costs with grants or other alternate sources of payment; and
4. complies in each and every relevant respect with the Impact Fees Act."

Amended by Chapter 278, 2013 General Session

Part 4
Enactment of Impact Fees

11-36a-401 Impact fee enactment.

(1)

(a) A local political subdivision or private entity wishing to impose impact fees shall pass an impact fee enactment in accordance with Section 11-36a-402.

(b) An impact fee imposed by an impact fee enactment may not exceed the highest fee justified by the impact fee analysis.

(2) An impact fee enactment may not take effect until 90 days after the day on which the impact fee enactment is approved.

Enacted by Chapter 47, 2011 General Session

11-36a-402 Required provisions of impact fee enactment.

(1) A local political subdivision or private entity shall ensure, in addition to the requirements described in Subsections (2) and (3), that an impact fee enactment contains:

(a) a provision establishing one or more service areas within which the local political subdivision or private entity calculates and imposes impact fees for various land use categories;

(b)

(i) a schedule of impact fees for each type of development activity that specifies the amount of the impact fee to be imposed for each type of system improvement; or

(ii) the formula that the local political subdivision or private entity, as the case may be, will use to calculate each impact fee;

(c) a provision authorizing the local political subdivision or private entity, as the case may be, to adjust the standard impact fee at the time the fee is charged to:

(i) respond to:

(A) unusual circumstances in specific cases; or

(B) a request for a prompt and individualized impact fee review for the development activity of the state, a school district, or a charter school and an offset or credit for a public facility for which an impact fee has been or will be collected; and

(ii) ensure that the impact fees are imposed fairly; and

(d) a provision governing calculation of the amount of the impact fee to be imposed on a particular development that permits adjustment of the amount of the impact fee based upon studies and data submitted by the developer.

(2) A local political subdivision or private entity shall ensure that an impact fee enactment allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer:
(a) dedicates land for a system improvement;
(b) builds and dedicates some or all of a system improvement; or
(c) dedicates a public facility that the local political subdivision or private entity and the developer agree will reduce the need for a system improvement.
(3) A local political subdivision or private entity shall include a provision in an impact fee enactment that requires a credit against impact fees for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities:
(a) are system improvements; or
(b)
(i) are dedicated to the public; and
(ii) offset the need for an identified system improvement.

Enacted by Chapter 47, 2011 General Session

11-36a-403 Other provisions of impact fee enactment.
(1) A local political subdivision or private entity may include a provision in an impact fee enactment that:
(a) provides an impact fee exemption for:
(i) development activity attributable to:
(A) low income housing;
(B) the state;
(C) subject to Subsection (2), a school district; or
(D) subject to Subsection (2), a charter school; or
(ii) other development activity with a broad public purpose; and
(b) except for an exemption under Subsection (1)(a)(i)(A), establishes one or more sources of funds other than impact fees to pay for that development activity.
(2) An impact fee enactment that provides an impact fee exemption for development activity attributable to a school district or charter school shall allow either a school district or a charter school to qualify for the exemption on the same basis.
(3) An impact fee enactment that repeals or suspends the collection of impact fees is exempt from the notice requirements of Section 11-36a-504.

Enacted by Chapter 47, 2011 General Session

Part 5
Notice

11-36a-501 Notice of intent to prepare an impact fee facilities plan.
(1) Before preparing or amending an impact fee facilities plan, a local political subdivision or private entity shall provide written notice of its intent to prepare or amend an impact fee facilities plan.
(2) A notice required under Subsection (1) shall:
(a) indicate that the local political subdivision or private entity intends to prepare or amend an impact fee facilities plan;

(b) describe or provide a map of the geographic area where the proposed impact fee facilities will be located; and
(c) subject to Subsection (3), be posted on the Utah Public Notice Website created under Section 63F-1-701.
(3) For a private entity required to post notice on the Utah Public Notice Website under Subsection (2)(c):
(a) the private entity shall give notice to the general purpose local government in which the private entity's private business office is located; and
(b) the general purpose local government described in Subsection (3)(a) shall post the notice on the Utah Public Notice Website.

Enacted by Chapter 47, 2011 General Session

11-36a-502 Notice to adopt or amend an impact fee facilities plan.
(1) If a local political subdivision chooses to prepare an independent impact fee facilities plan rather than include an impact fee facilities element in the general plan in accordance with Section 11-36a-301, the local political subdivision shall, before adopting or amending the impact fee facilities plan:
(a) give public notice, in accordance with Subsection (2), of the plan or amendment at least 10 days before the day on which the public hearing described in Subsection (1)(d) is scheduled;
(b) make a copy of the plan or amendment, together with a summary designed to be understood by a lay person, available to the public;
(c) place a copy of the plan or amendment and summary in each public library within the local political subdivision; and
(d) hold a public hearing to hear public comment on the plan or amendment.
(2) With respect to the public notice required under Subsection (1)(a):
(a) each municipality shall comply with the notice and hearing requirements of, and, except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Sections 10-9a-205 and 10-9a-801 and Subsection 10-9a-502(2);
(b) each county shall comply with the notice and hearing requirements of, and, except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Sections 17-27a-205 and 17-27a-801 and Subsection 17-27a-502(2); and
(c) each local district, special service district, and private entity shall comply with the notice and hearing requirements of, and receive the protections of, Section 17B-1-111.
(3) Nothing contained in this section or Section 11-36a-503 may be construed to require involvement by a planning commission in the impact fee facilities planning process.

Enacted by Chapter 47, 2011 General Session

11-36a-503 Notice of preparation of an impact fee analysis.
(1) Before preparing or contracting to prepare an impact fee analysis, each local political subdivision or, subject to Subsection (2), private entity shall post a public notice on the Utah Public Notice Website created under Section 63F-1-701.
(2) For a private entity required to post notice on the Utah Public Notice Website under Subsection (1):
(a) the private entity shall give notice to the general purpose local government in which the private entity's primary business is located; and

(b) the general purpose local government described in Subsection (2)(a) shall post the notice on the Utah Public Notice Website.

Enacted by Chapter 47, 2011 General Session

11-36a-504 Notice of intent to adopt impact fee enactment -- Hearing -- Protections.

(1) Before adopting an impact fee enactment:

(a) a municipality legislative body shall:

(i) comply with the notice requirements of Section 10-9a-205 as if the impact fee enactment were a land use ordinance;

(ii) hold a hearing in accordance with Section 10-9a-502 as if the impact fee enactment were a land use ordinance; and

(iii) except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Section 10-9a-801 as if the impact fee were a land use ordinance;

(b) a county legislative body shall:

(i) comply with the notice requirements of Section 17-27a-205 as if the impact fee enactment were a land use ordinance;

(ii) hold a hearing in accordance with Section 17-27a-502 as if the impact fee enactment were a land use ordinance; and

(iii) except as provided in Subsection 11-36a-701(3)(b)(ii), receive the protections of Section 17-27a-801 as if the impact fee were a land use ordinance;

(c) a local district or special service district shall:

(i) comply with the notice and hearing requirements of Section 17B-1-111; and

(ii) receive the protections of Section 17B-1-111;

(d) a local political subdivision shall at least 10 days before the day on which a public hearing is scheduled in accordance with this section:

(i) make a copy of the impact fee enactment available to the public; and

(ii) post notice of the local political subdivision's intent to enact or modify the impact fee, specifying the type of impact fee being enacted or modified, on the Utah Public Notice Website created under Section 63F-1-701; and

(e) a local political subdivision shall submit a copy of the impact fee analysis and a copy of the summary of the impact fee analysis prepared in accordance with Section 11-36a-303 on its website or to each public library within the local political subdivision.

(2) Subsection (1)(a) or (b) may not be construed to require involvement by a planning commission in the impact fee enactment process.

Enacted by Chapter 47, 2011 General Session

Part 6
Impact Fee Proceeds

11-36a-601 Accounting of impact fees.

A local political subdivision that collects an impact fee shall:

(1) establish a separate interest bearing ledger account for each type of public facility for which an impact fee is collected;

(2) deposit a receipt for an impact fee in the appropriate ledger account established under Subsection (1);
(3) retain the interest earned on each fund or ledger account in the fund or ledger account;
(4) at the end of each fiscal year, prepare a report on each fund or ledger account showing:
  (a) the source and amount of all money collected, earned, and received by the fund or ledger account; and
  (b) each expenditure from the fund or ledger account; and
(5) produce a report that:
  (a) identifies impact fee funds by the year in which they were received, the project from which the funds were collected, the impact fee projects for which the funds were budgeted, and the projected schedule for expenditure;
  (b) is in a format developed by the state auditor;
  (c) is certified by the local political subdivision's chief financial officer; and
  (d) is transmitted annually to the state auditor.

Enacted by Chapter 47, 2011 General Session

11-36a-602 Expenditure of impact fees.
(1) A local political subdivision may expend impact fees only for a system improvement:
  (a) identified in the impact fee facilities plan; and
  (b) for the specific public facility type for which the fee was collected.
(2)
  (a) Except as provided in Subsection (2)(b), a local political subdivision shall expend or encumber the impact fees for a permissible use within six years of their receipt.
  (b) A local political subdivision may hold the fees for longer than six years if it identifies, in writing:
    (i) an extraordinary and compelling reason why the fees should be held longer than six years; and
    (ii) an absolute date by which the fees will be expended.

Enacted by Chapter 47, 2011 General Session

11-36a-603 Refunds.
A local political subdivision shall refund any impact fee paid by a developer, plus interest earned, when:
(1) the developer does not proceed with the development activity and has filed a written request for a refund;
(2) the fee has not been spent or encumbered; and
(3) no impact has resulted.

Enacted by Chapter 47, 2011 General Session

Part 7
Challenges

11-36a-701 Impact fee challenge.

(1) A person or an entity residing in or owning property within a service area, or an organization, association, or a corporation representing the interests of persons or entities owning property within a service area, has standing to file a declaratory judgment action challenging the validity of an impact fee.

(2)

(a) A person or an entity required to pay an impact fee who believes the impact fee does not meet the requirements of law may file a written request for information with the local political subdivision who established the impact fee.

(b) Within two weeks after the receipt of the request for information under Subsection (2)(a), the local political subdivision shall provide the person or entity with the impact fee analysis, the impact fee facilities plan, and any other relevant information relating to the impact fee.

(3)

(a) Subject to the time limitations described in Section 11-36a-702 and procedures set forth in Section 11-36a-703, a person or an entity that has paid an impact fee that was imposed by a local political subdivision may challenge:

(i) if the impact fee enactment was adopted on or after July 1, 2000:

(A) subject to Subsection (3)(b)(i) and except as provided in Subsection (3)(b)(ii), whether the local political subdivision complied with the notice requirements of this chapter with respect to the imposition of the impact fee; and

(B) whether the local political subdivision complied with other procedural requirements of this chapter for imposing the impact fee; and

(ii) except as limited by Subsection (3)(c), the impact fee.

(b)

(i) The sole remedy for a challenge under Subsection (3)(a)(i)(A) is the equitable remedy of requiring the local political subdivision to correct the defective notice and repeat the process.

(ii) The protections given to a municipality under Section 10-9a-801 and to a county under Section 17-27a-801 do not apply in a challenge under Subsection (3)(a)(i)(A).

(c) The sole remedy for a challenge under Subsection (3)(a)(ii) is a refund of the difference between what the person or entity paid as an impact fee and the amount the impact fee should have been if it had been correctly calculated.

(4)

(a) Subject to Subsection (4)(d), if an impact fee that is the subject of an advisory opinion under Section 13-43-205 is listed as a cause of action in litigation, and that cause of action is litigated on the same facts and circumstances and is resolved consistent with the advisory opinion:

(i) the substantially prevailing party on that cause of action:

(A) may collect reasonable attorney fees and court costs pertaining to the development of that cause of action from the date of the delivery of the advisory opinion to the date of the court's resolution; and

(B) shall be refunded an impact fee held to be in violation of this chapter, based on the difference between the impact fee paid and what the impact fee should have been if the government entity had correctly calculated the impact fee; and

(ii) in accordance with Section 13-43-206, a government entity shall refund an impact fee held to be in violation of this chapter to the person who was in record title of the property on the day on which the impact fee for the property was paid if:

(A) the impact fee was paid on or after the day on which the advisory opinion on the impact fee was issued but before the day on which the final court ruling on the impact fee is issued; and

(B) the person described in Subsection (3)(a)(ii) requests the impact fee refund from the government entity within 30 days after the day on which the court issued the final ruling on the impact fee.

(b) A government entity subject to Subsection (3)(a)(ii) shall refund the impact fee based on the difference between the impact fee paid and what the impact fee should have been if the government entity had correctly calculated the impact fee.

(c) Subsection (4) may not be construed to create a new cause of action under land use law.

(d) Subsection (3)(a) does not apply unless the resolution described in Subsection (3)(a) is final.

Enacted by Chapter 47, 2011 General Session

11-36a-702 Time limitations.

(1) A person or an entity that initiates a challenge under Subsection 11-36a-701(3)(a) may not initiate that challenge unless it is initiated within:

(a) for a challenge under Subsection 11-36a-701(3)(a)(i)(A), 30 days after the day on which the person or entity pays the impact fee;

(b) for a challenge under Subsection 11-36a-701(3)(a)(i)(B), 180 days after the day on which the person or entity pays the impact fee; or

(c) for a challenge under Subsection 11-36a-701(3)(a)(ii), one year after the day on which the person or entity pays the impact fee.

(2) The deadline to file an action in district court is tolled from the date that a challenge is filed using an administrative appeals procedure described in Section 11-36a-703 until 30 days after the day on which a final decision is rendered in the administrative appeals procedure.

Enacted by Chapter 47, 2011 General Session

11-36a-703 Procedures for challenging an impact fee.

(1)

(a) A local political subdivision may establish, by ordinance or resolution, or a private entity may establish by prior written policy, an administrative appeals procedure to consider and decide a challenge to an impact fee.

(b) If the local political subdivision or private entity establishes an administrative appeals procedure, the local political subdivision shall ensure that the procedure includes a requirement that the local political subdivision make its decision no later than 30 days after the day on which the challenge to the impact fee is filed.

(2) A challenge under Subsection 11-36a-701(3)(a) is initiated by filing:

(a) if the local political subdivision or private entity has established an administrative appeals procedure under Subsection (1), the necessary document, under the administrative appeals procedure, for initiating the administrative appeal;

(b) a request for arbitration as provided in Section 11-36a-705; or

(c) an action in district court.

(3) The sole remedy for a successful challenge under Subsection 11-36a-701(1), which determines that an impact fee process was invalid, or an impact fee is in excess of the fee allowed under this act, is a declaration that, until the local political subdivision or private entity enacts a new

impact fee study, from the date of the decision forward, the entity may charge an impact fee only as the court has determined would have been appropriate if it had been properly enacted.
(4) Subsections (2), (3), 11-36a-701(3), and 11-36a-702(1) may not be construed as requiring a person or an entity to exhaust administrative remedies with the local political subdivision before filing an action in district court under Subsections (2), (3), 11-36a-701(3), and 11-36a-702(1).
(5) The judge may award reasonable attorney fees and costs to the prevailing party in an action brought under this section.
(6) This chapter may not be construed as restricting or limiting any rights to challenge impact fees that were paid before the effective date of this chapter.

Amended by Chapter 200, 2013 General Session

11-36a-704 Mediation.
(1) In addition to the methods of challenging an impact fee under Section 11-36a-701, a specified public agency may require a local political subdivision or private entity to participate in mediation of any applicable impact fee.
(2) To require mediation, the specified public agency shall submit a written request for mediation to the local political subdivision or private entity.
(3) The specified public agency may submit a request for mediation under this section at any time, but no later than 30 days after the day on which an impact fee is paid.
(4) Upon the submission of a request for mediation under this section, the local political subdivision or private entity shall:
(a) cooperate with the specified public agency to select a mediator; and
(b) participate in the mediation process.

Enacted by Chapter 47, 2011 General Session

11-36a-705 Arbitration.
(1) A person or entity intending to challenge an impact fee under Section 11-36a-703 shall file a written request for arbitration with the local political subdivision within the time limitation described in Section 11-36a-702 for the applicable type of challenge.
(2) If a person or an entity files a written request for arbitration under Subsection (1), an arbitrator or arbitration panel shall be selected as follows:
(a) the local political subdivision and the person or entity filing the request may agree on a single arbitrator within 10 days after the day on which the request for arbitration is filed; or
(b) if a single arbitrator is not agreed to in accordance with Subsection (2)(a), an arbitration panel shall be created with the following members:
(i) each party shall select an arbitrator within 20 days after the date the request is filed; and
(ii) the arbitrators selected under Subsection (2)(b)(i) shall select a third arbitrator.
(3) The arbitration panel shall hold a hearing on the challenge no later than 30 days after the day on which:
(a) the single arbitrator is agreed on under Subsection (2)(a); or
(b) the two arbitrators are selected under Subsection (2)(b)(i).
(4) The arbitrator or arbitration panel shall issue a decision in writing no later than 10 days after the day on which the hearing described in Subsection (3) is completed.
(5) Except as provided in this section, each arbitration shall be governed by Title 78B, Chapter 11, Utah Uniform Arbitration Act.
(6) The parties may agree to:

(a) binding arbitration;
(b) formal, nonbinding arbitration; or
(c) informal, nonbinding arbitration.

(7) If the parties agree in writing to binding arbitration:
(a) the arbitration shall be binding;
(b) the decision of the arbitration panel shall be final;
(c) neither party may appeal the decision of the arbitration panel; and
(d) notwithstanding Subsection (10), the person or entity challenging the impact fee may not also challenge the impact fee under Subsection 11-36a-701(1) or Subsection 11-36a-703(2)(a) or (2)(c).

(8)
(a) Except as provided in Subsection (8)(b), if the parties agree to formal, nonbinding arbitration, the arbitration shall be governed by the provisions of Title 63G, Chapter 4, Administrative Procedures Act.
(b) For purposes of applying Title 63G, Chapter 4, Administrative Procedures Act, to a formal, nonbinding arbitration under this section, notwithstanding Section 63G-4-502, "agency" means a local political subdivision.

(9)
(a) An appeal from a decision in an informal, nonbinding arbitration may be filed with the district court in which the local political subdivision is located.
(b) An appeal under Subsection (9)(a) shall be filed within 30 days after the day on which the arbitration panel issues a decision under Subsection (4).
(c) The district court shall consider de novo each appeal filed under this Subsection (9).
(d) Notwithstanding Subsection (10), a person or entity that files an appeal under this Subsection (9) may not also challenge the impact fee under Subsection 11-36a-701(1) or Subsection 11-36a-703(2)(a) or (2)(c).

(10)
(a) Except as provided in Subsections (7)(d) and (9)(d), this section may not be construed to prohibit a person or entity from challenging an impact fee as provided in Subsection 11-36a-701(1) or Subsection 11-36a-703(2)(a) or (2)(c).
(b) The filing of a written request for arbitration within the required time in accordance with Subsection (1) tolls all time limitations under Section 11-36a-702 until the day on which the arbitration panel issues a decision.

(11) The person or entity filing a request for arbitration and the local political subdivision shall equally share all costs of an arbitration proceeding under this section.

Enacted by Chapter 47, 2011 General Session

In accordance with Utah Code Annotated, 11-36a-306, Impact Fee Certification, Steven D. Wood, P.E., on behalf of Sunrise Engineering, Inc., makes the following certification:

I certify that the attached impact fee facilities plan and impact fee analysis:

1. Includes only the cost for qualifying public facilities that are:
    a. Allowed under the Impact Fees Act; and
    b. Actually incurred; or
    c. Projected to be incurred or encumbered withing six years after each impact fee is paid;
2. Does not include:
    a. Costs of operation and maintenance of public facilities; or
    b. Costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; and

3. Offsets costs with grants or other alternate sources of payment; and

4. Complies in each and every relevant respect with the Impact Fees Act."

Steven D. Wood, P.E. makes this certification with the following qualifications:

1. All the recommendations of the Impact Fee Facilities Plan ("IFFP") made in the IFFP document or in the Impact Fee Analysis document are followed in their entirety by Providence City, Utah staff and elected officials.
2. If all or a portion of the IFFP's or Impact Fee Analyses are modified or amended, this certification is no longer valid.
3. All information provided to Sunrise Engineering, Inc. its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by Providence City, Utah and outside sources.

4. The undersigned is trained and licenses as a professional engineer and has not been trained or licensed as a lawyer. Nothing in the foregoing certification shall be deemed an opinion of law or an opinion of compliance with law which under applicable professional licensing laws or regulations or other laws or regulations must be rendered by a lawyer licensed in the State of Utah.
5. The foregoing certification is an expression of professional opinion based on the undersigned's best knowledge, information, and belief and shall not be construed as a warranty or guarantee of any fact or circumstance.
6. The forgoing certification is made only to Providence City, Utah and may not be used or relied upon by any other person or entity without the expressed written consent authorization of the undersigned.

Sunrise Engineering, Inc.

By: ____________________

Dated: 5-31-2022