



COUNCIL SUBCOMMITTEE FOR WATER ISSUES MEETING SUBCOMMITTEE MEETING AGENDA

TUESDAY, JULY 7, 2020, 9:30 AM

Council Chambers, 201 South Cortez Street
Prescott AZ 86303
(928) 777-1272

Steve Blair, Councilman

Steve Sischka, Councilman

Billie Orr, Mayor Pro Tem

The following Agenda will be considered by the Prescott **Council Subcommittee for Water Issues** at its **Subcommittee Meeting** pursuant to the Prescott City Charter, Article II, Section 13. Notice of the meeting is given pursuant to Arizona Revised Statutes, Section 38-431.02. One or more members of the Council Subcommittee may be attending the meeting through the use of a technological device.

This meeting may be viewed on Channel 64, and Facebook Live as well as on the City's website: <https://prescott.12milesout.com/live-video>

Comments from the public may be submitted through the City website: <http://www.prescott-az.gov/city-management/leadership/speaker-request-form/>

1. Call to Order
2. Roll Call

SUBCOMMITTEE MEMBERS:

Chairman Steve Blair

Member Billie Orr

Member Steve Sischka

Note: At the 3/3/20 meeting there were many questions on City of Prescott Recycling. This is outside of the Subcommittee duties, but input has been shared with Solid Waste who is in the process of ongoing public research.

3. **Public Comment**

Public Comment will be accepted following each agenda item and limited to three (3) minutes. Please complete a comment card and return it to City staff; speakers will be called in the order received.

4. Approval of Minutes of March 3, 2020
5. Approval of Water Service Agreement Application No. WSA20-003 by Chamberlain Development Representing CP Technologies, for Commercial Water Supplies on a portion of APN 102-08-057E.
6. Infrastructure Topic: Pumping vs. Recharge Update
7. Conservation and Education Discussion, Fiscal Year 2020 Rebate Summary and Fiscal Year 2021 Goals
8. Focus Discussion, Regarding Governor's Water Augmentation, Innovation, and Conservation Council (GWAICC) Annual Report

9. Adjournment

EXECUTIVE SESSION

Upon a public majority vote of a quorum of the Council Subcommittee for Water Issues, the Council Subcommittee may hold an executive session, which will not be open to the public, regarding any item listed on the agenda but only for the following purposes:

- (1) Discussion or consideration of personnel matters (A.R.S. §38-431.03(A)(1));
- (2) Discussion or consideration of records exempt by law (A.R.S. §38-431.03(A)(2));
- (3) Discussion or consultation for legal advice with the city's attorneys (A.R.S. §38-431.03(A)(3));
- (4) Discussion or consultation with the city's attorneys regarding the city's position regarding contracts that are the subject of negotiations, in pending or contemplated litigation, or in settlement discussions conducted in order to avoid litigation (A.R.S. §38-431.03(A)(4));
- (5) Discussion or consultation with designated representatives of the city to consider its position and instruct its representatives regarding negotiations with employee organizations (A.R.S. §38-431.03(A)(5));
- (6) Discussion, consultation or consideration for negotiations by the city or its designated representatives with members of a tribal council, or its designated representatives, of an Indian reservation located within or adjacent to the city (A.R.S. §38-431.03(A)(6));
- (7) Discussion or consultation with designated representatives of the city to consider its position and instruct its representatives regarding negotiations for the purchase, sale or lease of real property (A.R.S. §38-431.03(A)(7)).

THE CITY OF PRESCOTT ENDEAVORS TO MAKE ALL PUBLIC MEETINGS ACCESSIBLE TO PERSONS WITH DISABILITIES. With 72 hours advanced notice, special assistance can be provided for sight and/or hearing-impaired persons at this meeting. Reasonable accommodations will be made upon request for persons with disabilities or non-English speaking residents. Please call the City Clerk (928) 777-1272 to request an accommodation to participate in this public meeting. Prescott TDD number is (928) 445-6811. Additionally, free public relay service is available from Arizona Relay Service at 1-800-367-8939 and more information at www.azrelay.org

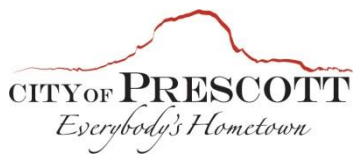
Confidentiality

Arizona statute precludes any person receiving executive session information from disclosing that information except as allowed by law. A.R.S. §38-431.03(F). Each violation of this statute is subject to a civil penalty not to exceed \$500, plus court costs and attorneys' fees. This penalty is assessed against the person who violates this statute or who knowingly aids, agrees to aid or attempts to aid another person in violating this article. The city is precluded from expending any public monies to employ or retain legal counsel to provide legal services or representation to the public body or any of its officers in any legal action commenced for violation of the statute unless Council Subcommittee for Water Issues takes a legal action at a properly noticed open meeting to approve of such expenditures prior to incurring any such obligation or indebtedness. A.R.S. §38-431.07(A)(B).

CERTIFICATION OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Prescott City Hall on _____ at _____ m. in accordance with the statement filed by the Prescott Council Subcommittee for Water Issues with the City Clerk

Sarah M. Siep, City Clerk



COMMITTEE AGENDA MEMO

MEETING DATE/TYPE: **SUBCOMMITTEE MEETING** **7-7-20**

DEPARTMENT: **Council Subcommittee for Water Issues**

AGENDA ITEM: Approval of Minutes of March 3, 2020

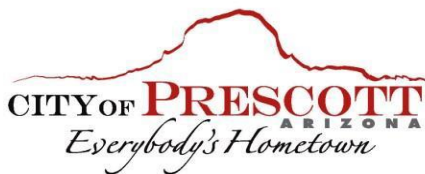
Item Summary

Approval of March 3, 2020, Council Subcommittee on Water Issues Minutes.

Attachments

1. Minutes of March 3, 2020

Recommended Action: **MOVE** to approve the March 3, 2020 minutes.



COUNCIL SUBCOMMITTEE FOR WATER ISSUES MEETING

SUBCOMMITTEE MEETING MINUTES

TUESDAY, MARCH 3, 2020, 9:30 AM

Council Chambers, 201 South Cortez

Street Prescott AZ 86303

(928) 777-1272

Steve Blair, Councilman

Steve Sischka, Councilman

Billie Orr, Mayor Pro Tem

Minutes of the Prescott **Council Subcommittee for Water Issues Meeting** held on March 3, 2020 in the Council Chambers located at 201 South Cortez Street, Prescott, Arizona.

1. Call to Order

Chairman Blair called the meeting to order at 9:32 a.m.

2. Roll Call

SUBCOMMITTEE MEMBERS PRESENT:

Chairman Steve Blair

Member Billie Orr

SUBCOMMITTEE MEMBERS EXCUSED:

Member Steve Sischka

3. Public Comment

Public comment will be accepted following each agenda item and limited to three (3) minutes. Please complete a comment card and return it to the City staff, speakers will be called in the order received.

4. Approval of February 4, 2020 Meeting Minutes

MEMBER ORR MOVED TO APPROVE THE MINUTES OF THE FEBRUARY 4, 2020 MEETING; SECONDED BY CHAIRMAN BLAIR: PASSED [2-0].

5. Water Requests (more than 2 AF/year)

No water requests meeting this requirement were submitted during this period for review.

6. Focus Topic – City Water Conservation and Education 2020

Leslie Graser presented an overview of upcoming events that Public Works will be participating in during the coming months to promote water conservation and education. One popular event is Earth Day in which Solid Waste also participates to educate the public about recycling. New events this year may include City of Prescott Library – Story Walk

Attachment: Minutes of March 3, 2020 (3014 : Item 4: Approval of March 3rd Minutes)

and Alta Vista Garden Club.

Chairman Blair commented that recycling is important and measures should be taken to educate what can be recycled.

Member Orr also stated the importance of recycling and knowing what can and cannot be recycled.

Leslie went on to discuss the current state of the rebate program with more than \$26,000 rebated to citizens in FY20, of which \$4,175 has been awarded this calendar year.

Additionally, Leslie reviewed the Facebook posts that have been prepared for the rest of this fiscal year, they are posted on the 13th of each month. Chairman Blair asked that the monthly post be added to the agenda to raise awareness during the monthly Subcommittee meeting.

Leslie discussed areas of the draft FY21 budget that describe water conservation and outreach which include implementation of an education outreach program. Also, the Mayor's Commission on Sewer and Water Connections will work to further recharge into the PrAMA for which a WaterSmart factsheet was developed in 2019.

Chairman Blair stated that the Sewer Commission goes hand in hand with goals of the Water Subcommittee by recharging what would normally be lost to septic systems. Is it possible to put a value on what we receive back into the system for recharge on a gallon basis?

Staff stated the first meeting of the Sewer and Water Commission will be held on Tuesday March 31 at 1:30 pm in the City Hall Basement Conference Room.

Citizen Leslie Hoy addressed the Subcommittee, with several comments. The Citizens Water Advocacy Group (CWAG) has tried to help promote water conservation and education by handing out City information at our public outreach events. CWAG members supported Drop by Drop and would like to see it return maybe at a different time of day. Ms. Hoy also posed a couple of questions to the Committee; When will the staff replacement happen? Will new handout materials be created? Can you be more specific about what misinformation the City thinks CWAG is sharing and why it is wrong so that we can come to an agreement on the information we are sharing? Additionally, Ms. Hoy stated there are a lot of unknowns with the hydrogeology of the aquifer, we need to act with caution if we are going to leave water for future residents.

Citizen Ralph Hess addressed the Committee, asking about recycling. What is the proper way to recycle shredded paper? Craig Dotseth stated recycling questions will be addressed at a future meeting.

Citizen Russ Pilcher addressed the Subcommittee, agreeing with Councilman Blair that recycling education is important to eliminate confusion of what is recyclable. Mr. Pilcher also stated he thinks Leslie Graser is a great resource and that the Drop by Drop program is missed.

7. Future Agenda Items

The committee had no additional future agenda items to add that have not already been discussed in this meeting.

Citizen Ralph Hess addressed the Subcommittee, stating he would like to see a call to the public agenda item on all public meetings similar to the Board of Supervisors.

8. Adjournment

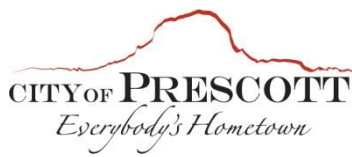
There being no further business to discuss, Chairman Blair adjourned the meeting at 10:16 a.m.

Respectfully Submitted by:

Carey Oberheim, Business Manager

Councilman Steve Blair, Chairman

Date: _____



COMMITTEE AGENDA MEMO

MEETING DATE/TYPE: **SUBCOMMITTEE MEETING** **7-7-20**

DEPARTMENT: **Council Subcommittee for Water Issues**

AGENDA ITEM: Approval of Water Service Agreement Application No. WSA20-003 by Chamberlain Development Representing CP Technologies, for Commercial Water Supplies on a portion of APN 102-08-057E.

Item Summary

Water Service Agreement Application No. WSA20-003 was filed on June 23, 2020. The applicant is seeking water supplies for a 50,000 square foot office, assembly, and warehouse facility.

Background

City of Prescott Water Management Policy (WMP) adopted on November 19, 2019, includes a Water Connection Policy. A water demand analysis was performed by a civil engineer at the applicant's expense (Attachment 1) resulting in an Average Daily Usage of 3,675 gallons (4.1 acre-feet/year).

Further, the WMP sets forth a Water Application Procedure for Projects within City Limits requiring more than 2 AF/year. The applicant has completed the following:

Contact Community Development for instructions on how to proceed	√
Attend Pre-Application Conference (PAC)	3/26/2020
Submit all required applications	√
Complete the platting process, if required	√
Present the project to the Water Issues Subcommittee	7/7/2020
City Council will consider the proposed project and water use	7/28/2020

Attachments

Recommended Action: **MOVE** to approve Water Service Agreement Application No. WSA20-003.

1. Water Demand Analysis
2. Location Map

April 24, 2020

Sun State Builders
1050 West Washington Street, Suite 214
Tempe, Arizona 85218-7213

Subject: Wastewater Design Confirmation
CP Tech
2620 Deep Well Ranch Road, Prescott, AZ – APN 102-08-057E

Ladies and Gentlemen,

This memorandum is intended to establish that the proposed development, located at the northeast corner of Deep Well Ranch Road and Ruger Road, conforms with the wastewater design criteria presented in the Revised Off-Site Master Wastewater Analysis for Deep Well Ranch, submitted by Lyon Engineering & Surveying, Inc., dated June 3, 2019. That report presented wastewater system design criteria and analysis of the functionality of the existing and proposed sewer mains for the development of four contiguous commercial lots, totaling 27.5 acres, at this location. The proposed CP Tech development occupies a portion of Pad 1 of the development described in the report. That report is included as attachment 1.

The proposed CP Tech development site totals 3.675 acres within APN 102-08-057E.

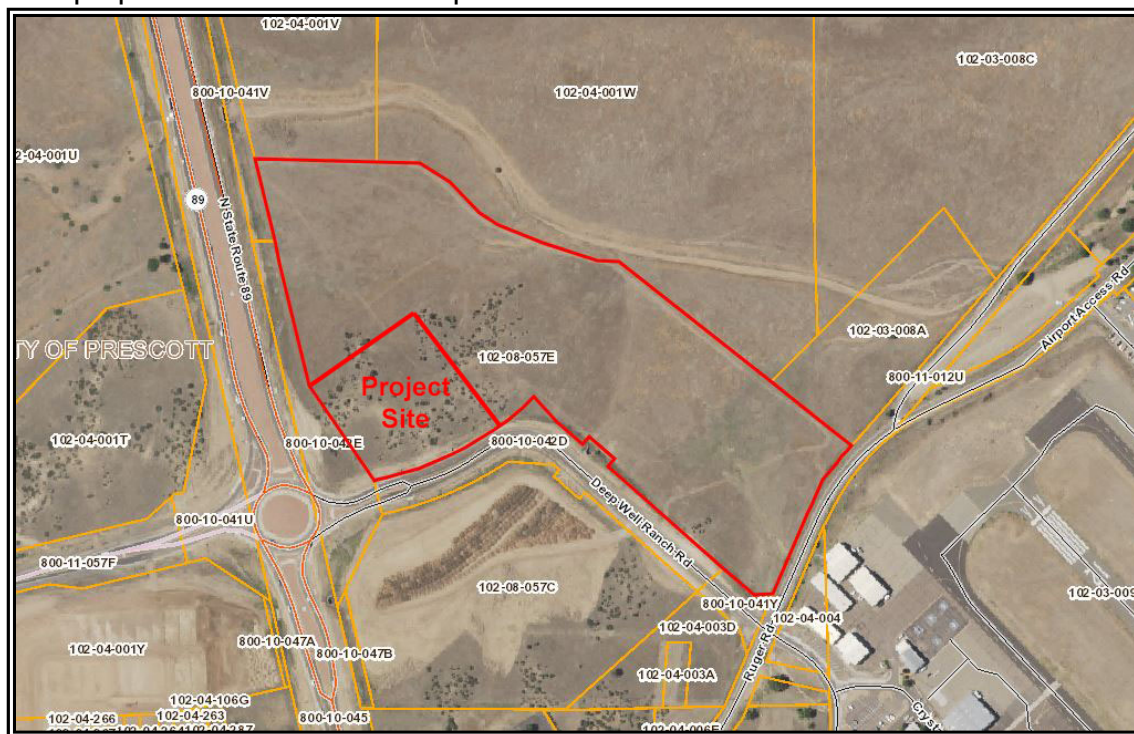


Figure 1 - Site Location

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

The proposed commercial development will consist of a single 50,000 sf, two-story building with paved parking and access. A Utility plan for the development is included as attachment 2.

Demand Calculations

For analysis of required pressure and flow values at demand locations, a new EPANet water model was constructed for the proposed development. Demand factors established in the Lyons Engineering report were used to determine ADD, MDD, PHD, and Fire Flow for the model.

Domestic water demand was determined using a demand of 1,000 gpad. Table 1, below, shows the required ADD, MDD, and PHD based on that demand and City of Prescott multipliers.

Table 1 - Domestic Water Demand

Lot Area (Acres)	ADD (gpd)	ADD (gpm)	MDD ¹ (gpd)	MDD ¹ (gpm)	PHD ² (gpd)	PHD ² (gpm)
3.675	3,675	2.55	6,615	4.59	11,944	8.29

¹ MDD=1.8 x ADD

² PHD=3.25 x ADD

For Fire Flow, the Lyons Engineering report estimated 2,000 to 3,000 gpm but recommended “...models be updated based on specific fire flows and demands once the use of the commercial pads have been determined.” Table B105.1 of the current City of Prescott Fire Protection Guidelines shows that, for type V-B construction, a building of 50,000 sf shall have a minimum required fire flow of 6,000 gpm for a duration of 4 hours. Section 5.04-2 of that document allows a 75% reduction in fire flow for buildings equipped with an approved automatic sprinkler system. The required fire flow for this development is, therefore, 1,500 gpm. Because the Lyons Engineering report recommended 2,000 gpm as the estimated fire flow, we also performed an analysis using that demand.

Hydraulic Modeling

The hydraulic model uses the following components:

- 8-inch pvc private fire line
- 2-inch pvc domestic water line
- 1-inch pvc irrigation line
- 3 separate taps into the 8-inch main south of the site
- 3 new hydrants
- Fire riser for sprinkler system
- 6-inch DIP connections to all hydrants
- Reduced Pressure Principle Backflow Prevention Assemblies (RPPBFPA) appropriately sized for each line.
- The system is not looped as it is at the end of a non-looped main.

The pump curve used for modeling was developed from a hydrant flow test performed for this project on March 31, 2020. A copy of that hydrant test report is provided as attachment 3.

**KDS**451 N. Dean Ave
Chandler, Arizona
85226-2745

ENGINEERING | DESIGN | BIM SERVICES

Modeling of head loss at RPPBFPA's was based on spec sheets from the manufacturers for typical assemblies. Spec sheets for the modeled devices are included as attachment 4.

The analyses will demonstrate pressures in excess of the required pressures at the demand locations (>20 psi during fire flow plus MDD) and pipe velocities meeting the minimum City of Prescott criteria;

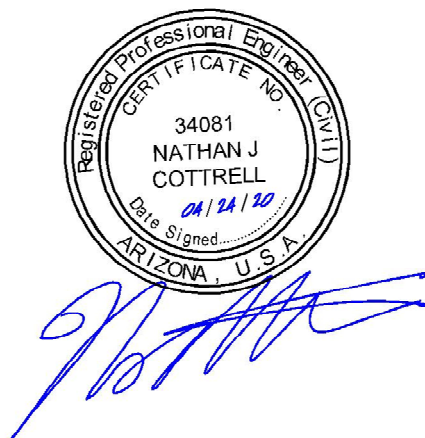
- 5 fps maximum during MDD
- 7 fps maximum during PHD
- 10 fps maximum during fire flow plus MDD¹

¹ At a demand of 1,000 gpm (typical for design models) at the 6-inch DIP connection to the hydrant, the velocity will be necessarily be 11.65 gpm as that is the velocity required to move 1,000 gpm through a 6-inch pipe.

A hydraulic model map and tabulated results of all runs are included as attachment 5.

Modeling Results

The results of the modeling reveal ample pressure at all demand locations with velocities meeting the City of Prescott criteria.



Attachment 1 – Lyons Engineering Report

CITY OF PRESCOTT

DEEP WELL RANCH ROAD

WATER MODEL REPORT

PREPARED FOR:

Chamberlain Development Prescott, LLC
1050 W Washington St #214
Tempe, AZ 85281
(480) 894-1286
PROJECT CONTACT:
Vic Chapman

PREPARED BY:

Lyon Engineering & Surveying Inc.,
1650 Willow Creek Road
Prescott AZ 86301
(928) 776-1750



DESIGN: Scott A. Lyon, P.E., R.L.S.
DATE: April 24, 2019

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1.2 System Overview	
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2.1 Hydraulic Data	
2.2 Water Modeling	
3. Conclusion & References	5
3.1 Conclusion	
3.2 References	

Appendix:

- Appendix A:
 - Vicinity Map – Exhibit 1
 - DWR-Rd - Demand Calculation Table
 - Fire Flow Test Results
- Appendix B:
 - DWR-Rd Water Model - Average Day Junction Data
 - DWR-Rd Water Model - Average Day Pipe Data
- Appendix C:
 - DWR-Rd Water Model - Max Day Junction Data
 - DWR-Rd Water Model - Max Day Pipe Data
- Appendix D:
 - DWR-Rd Water Model – Peak Hour Junction Data
 - DWR-Rd Water Model – Peak Hour Pipe Data
- Appendix E:
 - DWR-Rd Water Model – Max Day + Fire Flow Report
 - DWR-Rd Water Model – Max Day Demand Figure 1-1

1. Introduction

1.1 Purpose: The purpose of this report is to verify the functionality of the existing and proposed water main sizes within pressure Zone 12 and determine the available fire flow for the proposed future commercial development along Deep Well Ranch Road (DWRR). The developer has proposed mass grading of four commercial pads and a new 12-inch water main within the area of Highway 89 and Deep Well Ranch Road. While there are no specific building plans or subdivisions at this time for the proposed four mass graded commercial pads, the installation of an off-site water main to service Deep Well Ranch is proposed along with the sewer collection main. This proposed water distribution main will be stubbed to each commercial pad to provide water service and fire flow for future development. The proposed water distribution system is located at the intersection of Ruger Road and Deep Well Ranch Road. The four commercial pads have a total area of area of 27.5 acres with elevations ranging from 5016 to 4996. The Deep Well Ranch Master Water Report dated October 2nd, 2017 was used as the basis of design for this water alignment and overall size of the water main. Deep Well Ranch (DWR) encompasses approximately 1,800 acres, and is located on the east and west side of Willow Creek Road, and extends from Pioneer Parkway on the south up to, and past, the roundabout located on Highway 89 and Willow Creek Road. See Exhibit 1 for the vicinity map.

1.2 System Overview: There is currently a 12-inch water main stub located at the southeast corner of the Ruger Road, Deep Well Ranch Road, and Janine Drive intersection. This 12-inch water main stub is connected to the Airport Zone South Loop and a 12-inch water main that was installed west of Highway 89 within Willow Creek Road. The proposed and existing water mains are within the Airport Water Zone 12. The 12-inch main was installed with the Crystal Lane and Janine Drive Improvement. A fire flow test was conducted on the existing Willow Creek Road 12-inch water main at the fire hydrant located at the southwest corner of Antelope Crossings. The feed hydrant is located approximately 500-feet south on Willow Creek Road. This test result was used as the basis of the water model. The model used an equivalent length 12-inch pipe from the reservoir to match the pressure drop within the water line as shown on the fire flow test. The fire flow test, and FlowMaster calculation, are shown in Appendix A

Proposed improvements for DWRR include the extension of the existing 12-inch water main within Ruger Road north along the west edge of Deep Well Ranch Road. The water main terminates on the east side of Deep Well Ranch Road approximately 860-LF north of Ruger Road. All of the proposed development is located within the Zone 12 and will be serviced from the existing Zone 12 Reservoir.

2. Water System Design

2.1 Hydraulic Data: The new airport zone pressure will be based on the Zone 12 Reservoir within the Granite Dells Estates (GDE) development. The base elevation of the Zone 12 Reservoir has been set by the City of Prescott at 5170 feet. Based on a 24 foot high tank, the upper pressure zone elevation of the Airport Zone will be 5077 feet (at the base of the reservoir).

The water model was simplified as a reservoir with a 12-inch feed line based on the fire flow test results. A hydraulic elevation of 5180 ft was used based on the static pressure of the existing fire hydrant where the Roadway elevation of Willow Creek Road is 5,082 feet $[(43\text{psi} \times 2.31) + 5082 = 5181.33]$. This reservoir was connected with 4,000 LF of 12-inch water line to simulate the five psi drop in pressure during the fire flow. Demands were assumed for the four proposed pads on the west side of Highway 89 (COP# ENG19004-013). Lyon Engineering does not have regional demand information for the Airport Zone, so this model does not include the commercial uses or the water demand within the City of Prescott Airport (east of Hwy 89). This water model assumes the existing Pressure Reducing Valves do not open on the existing eighteen-inch water main to back feed Zone 12.

Based on the preliminary grading concept, the highest mass graded building pad is approximately 5,016 and the lowest mass graded building is approximately 4,996. There are no specific building plans for the four proposed commercial pad, but it is assumed a fire flow of 2,000 to 3,000 gpm will be required.

2.2 Water Modeling: Four water scenarios were produced for this report: Average Day, Max Day, Peak Hour, and Max Day + Fire Flow demands. The demands are based on an Average Day Demand times a multiplier. The multipliers have been dictated by the City of Prescott and are as follows:

Max Day Demand = Average Day x 1.8
Peak Hour Demand = Average Day x 3.25

The average day demand was calculated on an assumed use of 1,000 gallons per day per acre. The GES Table 4-1 pertains to specific uses which are unknown currently.

For the 27.5 proposed acres the total calculated demands are as follows:

Average day = 27,500 gallons per day
Max Day = 49,500 gallons per day
Peak Hour = 89,375 gallons per day

Pipe velocity criteria was set by the City of Prescott and is as follows:

At Max Day demand: 5 fps maximum
At Peak Hour demand: 7 fps maximum
At Max Day plus Fire Flow: 10 fps maximum

Pipe sizes in the models are based on existing as-builts or by proposed sizes dictated by the City of Prescott. Velocities are shown for every pipe to verify that they fall within the criteria established by the City. See Appendices A-D.

Fire Flow criteria requirements were assumed to be between 2,000 gpm to 3,000 gpm for commercial development. Fire flow results for each development phase(s), at their proposed termination of development are shown within Appendix E.

3. Conclusion & References

3.1 Conclusion: We have prepared the simplified water model of the Zone 12 Pressure Zone to size the water distribution system of DWR-Rd. The water model confirms that this area can achieve 2,000 gpm for fire flow. Without specific building plans it is not known what the required fire flow will be at this time. The estimate of 2,000 to 3,000 gpm was used based on past submittal to the City of Prescott Fire Department. It is our recommendation that this water model be updated based on specific fire flows and demands once the use of the commercial pads have been determined.

3.2 References:

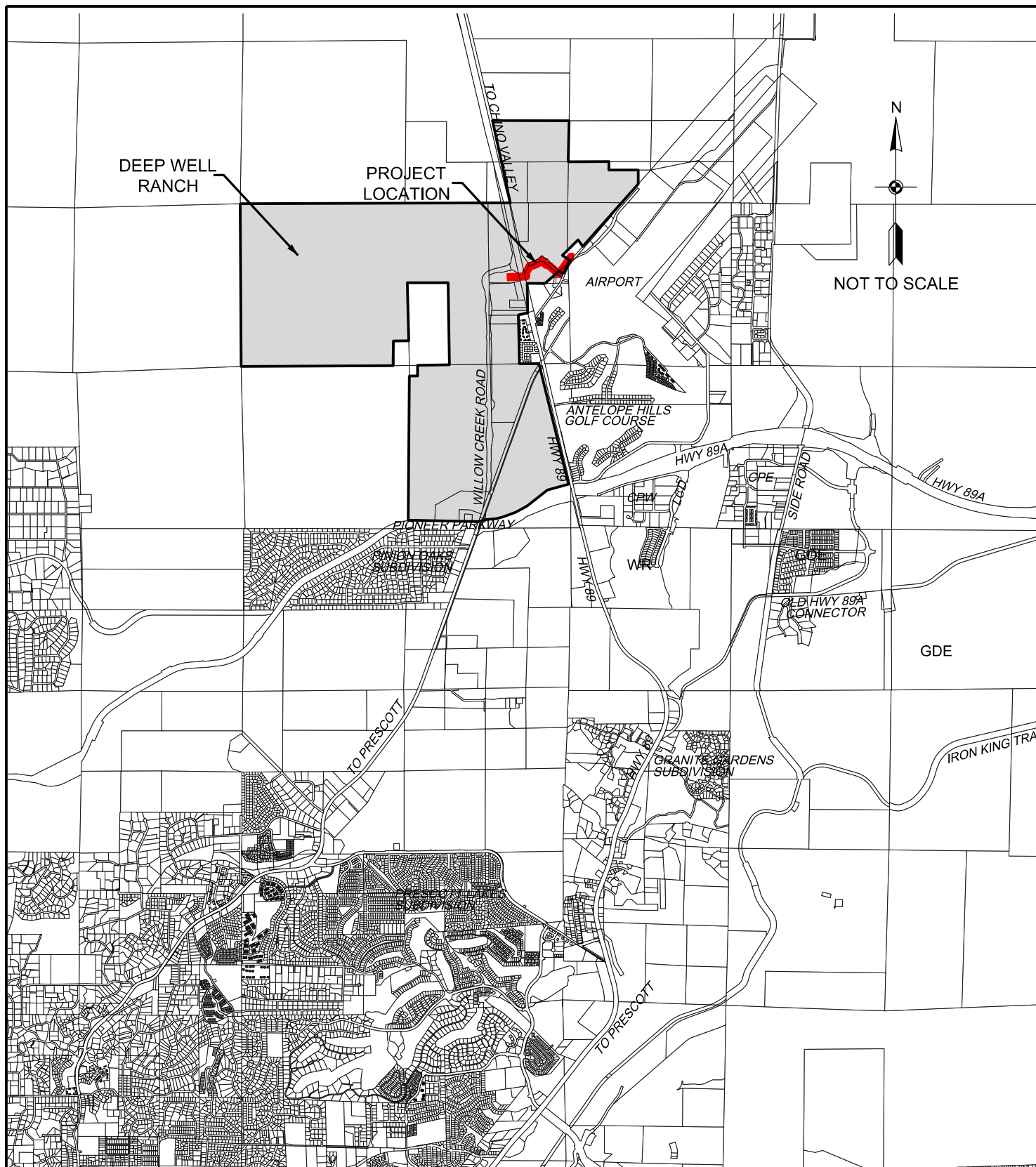
- Carollo Engineering "Zone 101 Pump Station and Zone 12 Reservoir Basis of Design Report", July 2010

APPENDIX A

VICINTTY MAP – EXHIBIT 1

ANTELOPE CROSSING PHASE 4 –
DEMAND CALCULATION TABLE

FIRE FLOW TEST RESULTS



Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

VICINITY MAP OF DEEP WELL RANCH

ENGINEERS

DRAWN: SAL

DESIGN: SAL

JOB#: 903-25

LE LYON ENGINEERING
Civil Engineers • Land Surveyors

1650 WILLOW CREEK ROAD
PRESCOTT, AZ 86301
(928) 776-1750
FAX: (928) 776-0605

SHEET: 1 OF 1

FOR
EXHIBIT
USE ONLY

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name:	Willow Creek Road
Project Address:	6300 Willow Creek Road, Prescott, Arizona 86301
Client Project No:	Not Provided
Arizona Flow Testing Project No.:	19060
Flow Test Permit Number:	ENG1902-010
Date and Time flow test conducted:	February 27, 2019 at 10:00 AM
Data is current and reliable until:	August 27, 2019
Conducted by:	Floyd Vaughan – Arizona Flow Testing, LLC (480-250-8154)
Witnessed by:	Richard Wise – City of Prescott Water Dept. (928-237-0632)

Raw Test Data

Static Pressure: **43.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **37.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **38.0 PSI**
(Measured in pounds per square inch)

Diffuser Orifice Diameter: One 2 ½ inch
(Measured in inches)

Coefficient of Diffuser: 0.9

Flowing GPM: **1,035 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **2,138 GPM**

Data with 10 % Safety Factor

Static Pressure: **38.7 PSI**
(Measured in pounds per square inch)

Residual Pressure: **32.7 PSI**
(Measured in pounds per square inch)

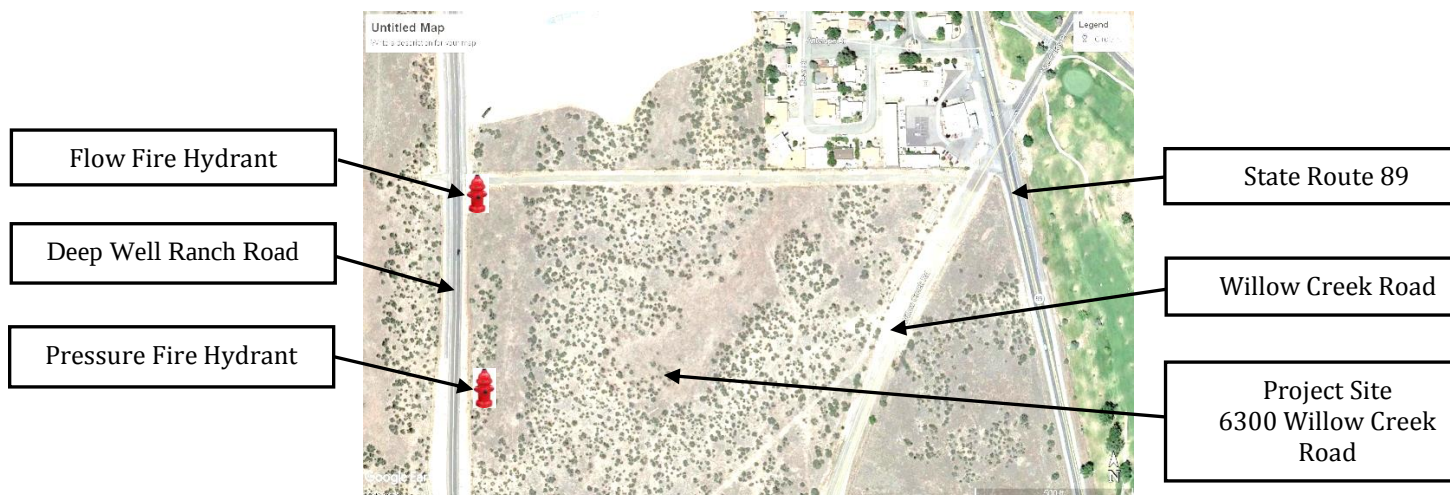
Distance between hydrants: Approx. 480 Feet

Main size: Not Provided

Flowing GPM: **1,035 GPM**

GPM @ 20 PSI: **1,912 GPM**

Flow Test Location



APPENDIX B

AVERAGE DAY DEMAND

FlexTable: Junction Table
Active Scenario: Average Day

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Zone
J-1	5,070.00	0.00	5,179.73	47	Zone 12
J-2	5,049.00	7.82	5,179.71	57	Zone 12
J-3	5,030.00	6.33	5,179.70	65	Zone 12
J-4	5,056.00	0.00	5,179.71	54	Zone 12
J-5	5,052.00	3.04	5,179.70	55	Zone 12
J-7	5,040.00	3.04	5,179.70	60	Zone 12
J-8	5,036.00	0.00	5,179.70	62	Zone 12
J-10	5,060.00	4.06	5,179.71	52	Zone 12
J-11	5,032.00	0.00	5,179.70	64	Zone 12
J-12	5,040.00	6.33	5,179.70	60	Zone 12
J-13	5,034.00	6.33	5,179.70	63	Zone 12
J-14	5,034.00	3.04	5,179.70	63	Zone 12
J-15	5,040.00	3.04	5,179.70	60	Zone 12
J-15	5,082.00	0.00	5,179.77	42	Zone 12
J-16	5,042.00	3.04	5,179.70	60	Zone 12
J-17	5,048.00	3.04	5,179.70	57	Zone 12
J-26	5,055.00	5.92	5,179.71	54	Zone 12
J-27	5,052.00	5.92	5,179.70	55	Zone 12
J-28	5,045.00	5.92	5,179.70	58	Zone 12
J-29	5,064.00	4.06	5,179.71	50	Zone 12
J-30	5,030.00	5.15	5,179.70	65	Zone 12
J-31	5,034.00	5.15	5,179.70	63	Zone 12
J-32	5,028.00	0.00	5,179.70	66	Zone 12
J-33	5,044.80	0.00	5,179.70	58	Zone 12
J-34	5,032.00	7.73	5,179.70	64	Zone 12
J-35	5,046.00	0.00	5,179.70	58	Zone 12
J-36	5,023.00	7.73	5,179.70	68	Zone 12
J-37	5,030.00	0.00	5,179.70	65	Zone 12
J-38	5,022.00	5.15	5,179.70	68	Zone 12
J-100	5,000.00	0.00	5,179.70	78	Zone 12
J-101	5,000.00	0.00	5,179.70	78	Zone 12
J-102	5,010.00	2.15	5,179.70	73	Zone 12
J-103	5,010.00	3.61	5,179.70	73	Zone 12
J-104	5,016.00	9.44	5,179.70	71	Zone 12
J-105	5,000.00	3.89	5,179.70	78	Zone 12

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

FlexTable: Pipe Table

Active Scenario: Average Day

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Length (User Defined) (ft)
P-2	2,034	J-1	J-2	12.0	120.0	41.77	0.12	2,066
P-3	1,257	J-2	J-3	8.0	110.0	12.31	0.08	0
P-10	489	J-1	J-10	12.0	120.0	79.17	0.22	0
P-11	192	J-10	J-4	12.0	120.0	59.94	0.17	0
P-12	233	J-8	J-11	8.0	110.0	4.13	0.03	0
P-13	152	J-11	J-13	6.0	90.0	4.13	0.05	0
P-14	153	J-13	J-3	6.0	90.0	-3.19	0.04	0
P-15	796	J-12	J-13	6.0	90.0	-0.99	0.01	0
P-16	554	J-3	J-12	8.0	110.0	5.34	0.03	0
P-17	140	J-8	J-14	8.0	110.0	3.79	0.02	0
P-18	403	J-14	J-7	8.0	110.0	-5.40	0.03	0
P-19	269	J-8	J-15	8.0	110.0	-7.92	0.05	0
P-21	252	J-15	J-16	8.0	110.0	1.07	0.01	0
P-22	297	J-5	J-17	12.0	120.0	38.21	0.11	0
P-23	12	R-1	J-15	12.0	120.0	120.94	0.34	4,000
P-24	383	J-16	J-17	8.0	110.0	-6.83	0.04	0
P-24	425	J-15	J-1	12.0	120.0	120.94	0.34	670
P-25	248	J-16	J-7	8.0	110.0	4.86	0.03	0
P-39	208	J-4	J-26	12.0	120.0	59.94	0.17	0
P-40	208	J-26	J-5	12.0	120.0	47.21	0.13	0
P-41	631	J-26	J-27	8.0	110.0	6.81	0.04	0
P-42	252	J-15	J-28	8.0	110.0	-12.03	0.08	0
P-43	653	J-28	J-5	8.0	110.0	-5.95	0.04	0
P-44	267	J-27	J-28	8.0	110.0	12.00	0.08	0
P-45	621	J-10	J-29	8.0	110.0	15.17	0.10	0
P-46	219	J-29	J-27	8.0	110.0	11.11	0.07	0
P-47	562	J-14	J-30	8.0	110.0	6.15	0.04	0
P-48	252	J-30	J-31	8.0	110.0	1.00	0.01	0
P-49	276	J-31	J-32	8.0	110.0	2.71	0.02	0
P-50	723	J-7	J-31	8.0	110.0	6.87	0.04	0
P-51	252	J-17	J-33	12.0	120.0	28.35	0.08	0
P-52	380	J-33	J-7	12.0	120.0	10.44	0.03	0
P-53	1,027	J-33	J-34	12.0	120.0	17.90	0.05	0
P-54	318	J-34	J-35	12.0	120.0	0.00	0.00	0
P-55	255	J-32	J-34	8.0	110.0	-5.22	0.03	0
P-56	671	J-34	J-36	8.0	110.0	4.95	0.03	0
P-57	309	J-36	J-37	8.0	110.0	-2.78	0.02	0
P-58	118	J-37	J-32	8.0	110.0	-7.93	0.05	0
P-59	180	J-38	J-37	8.0	110.0	-5.15	0.03	0
P-100	3,265	J-2	J-100	12.0	120.0	21.64	0.06	0
P-101	175	J-100	J-101	12.0	120.0	21.64	0.06	0
P-103	1,892	J-3	J-101	8.0	110.0	-2.55	0.02	0
P-104	342	J-101	J-102	12.0	120.0	19.09	0.05	0

FlexTable: Pipe Table
Active Scenario: Average Day

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Length (User Defined) (ft)
P-105	627	J-102	J-103	12.0	120.0	13.05	0.04	0
P-106	111	J-103	J-104	12.0	120.0	9.44	0.03	0
P-107	83	J-102	J-105	12.0	120.0	3.89	0.01	0

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

APPENDIX C

MAXIMUM DAY DEMAND

FlexTable: Junction Table

Active Scenario: Max Day

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Zone
J-1	5,070.00	0.00	5,179.19	47	Zone 12
J-2	5,049.00	14.08	5,179.13	56	Zone 12
J-3	5,030.00	11.39	5,179.11	65	Zone 12
J-4	5,056.00	0.00	5,179.14	53	Zone 12
J-5	5,052.00	5.47	5,179.12	55	Zone 12
J-7	5,040.00	5.47	5,179.11	60	Zone 12
J-8	5,036.00	0.00	5,179.11	62	Zone 12
J-10	5,060.00	7.31	5,179.15	52	Zone 12
J-11	5,032.00	0.00	5,179.11	64	Zone 12
J-12	5,040.00	11.39	5,179.10	60	Zone 12
J-13	5,034.00	11.39	5,179.11	63	Zone 12
J-14	5,034.00	5.47	5,179.11	63	Zone 12
J-15	5,040.00	5.47	5,179.11	60	Zone 12
J-15	5,082.00	0.00	5,179.30	42	Zone 12
J-16	5,042.00	5.47	5,179.11	59	Zone 12
J-17	5,048.00	5.47	5,179.11	57	Zone 12
J-26	5,055.00	10.66	5,179.13	54	Zone 12
J-27	5,052.00	10.66	5,179.12	55	Zone 12
J-28	5,045.00	10.66	5,179.12	58	Zone 12
J-29	5,064.00	7.31	5,179.13	50	Zone 12
J-30	5,030.00	9.27	5,179.11	65	Zone 12
J-31	5,034.00	9.27	5,179.11	63	Zone 12
J-32	5,028.00	0.00	5,179.10	65	Zone 12
J-33	5,044.80	0.00	5,179.11	58	Zone 12
J-34	5,032.00	13.91	5,179.11	64	Zone 12
J-35	5,046.00	0.00	5,179.11	58	Zone 12
J-36	5,023.00	13.91	5,179.10	68	Zone 12
J-37	5,030.00	0.00	5,179.10	65	Zone 12
J-38	5,022.00	9.27	5,179.10	68	Zone 12
J-100	5,000.00	0.00	5,179.11	77	Zone 12
J-101	5,000.00	0.00	5,179.11	77	Zone 12
J-102	5,010.00	3.87	5,179.11	73	Zone 12
J-103	5,010.00	6.50	5,179.11	73	Zone 12
J-104	5,016.00	16.99	5,179.11	71	Zone 12
J-105	5,000.00	7.00	5,179.11	77	Zone 12

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

FlexTable: Pipe Table

Active Scenario: Max Day

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Length (User Defined) (ft)
P-2	2,034	J-1	J-2	12.0	120.0	75.18	0.21	2,066
P-3	1,257	J-2	J-3	8.0	110.0	22.16	0.14	0
P-10	489	J-1	J-10	12.0	120.0	142.50	0.40	0
P-11	192	J-10	J-4	12.0	120.0	107.89	0.31	0
P-12	233	J-8	J-11	8.0	110.0	7.44	0.05	0
P-13	152	J-11	J-13	6.0	90.0	7.44	0.08	0
P-14	153	J-13	J-3	6.0	90.0	-5.74	0.07	0
P-15	796	J-12	J-13	6.0	90.0	-1.79	0.02	0
P-16	554	J-3	J-12	8.0	110.0	9.61	0.06	0
P-17	140	J-8	J-14	8.0	110.0	6.82	0.04	0
P-18	403	J-14	J-7	8.0	110.0	-9.72	0.06	0
P-19	269	J-8	J-15	8.0	110.0	-14.26	0.09	0
P-21	252	J-15	J-16	8.0	110.0	1.93	0.01	0
P-22	297	J-5	J-17	12.0	120.0	68.78	0.20	0
P-23	12	R-1	J-15	12.0	120.0	217.68	0.62	4,000
P-24	383	J-16	J-17	8.0	110.0	-12.29	0.08	0
P-24	425	J-15	J-1	12.0	120.0	217.68	0.62	670
P-25	248	J-16	J-7	8.0	110.0	8.75	0.06	0
P-39	208	J-4	J-26	12.0	120.0	107.89	0.31	0
P-40	208	J-26	J-5	12.0	120.0	84.97	0.24	0
P-41	631	J-26	J-27	8.0	110.0	12.26	0.08	0
P-42	252	J-15	J-28	8.0	110.0	-21.66	0.14	0
P-43	653	J-28	J-5	8.0	110.0	-10.71	0.07	0
P-44	267	J-27	J-28	8.0	110.0	21.61	0.14	0
P-45	621	J-10	J-29	8.0	110.0	27.31	0.17	0
P-46	219	J-29	J-27	8.0	110.0	20.00	0.13	0
P-47	562	J-14	J-30	8.0	110.0	11.06	0.07	0
P-48	252	J-30	J-31	8.0	110.0	1.79	0.01	0
P-49	276	J-31	J-32	8.0	110.0	4.88	0.03	0
P-50	723	J-7	J-31	8.0	110.0	12.36	0.08	0
P-51	252	J-17	J-33	12.0	120.0	51.02	0.14	0
P-52	380	J-33	J-7	12.0	120.0	18.80	0.05	0
P-53	1,027	J-33	J-34	12.0	120.0	32.22	0.09	0
P-54	318	J-34	J-35	12.0	120.0	0.00	0.00	0
P-55	255	J-32	J-34	8.0	110.0	-9.40	0.06	0
P-56	671	J-34	J-36	8.0	110.0	8.90	0.06	0
P-57	309	J-36	J-37	8.0	110.0	-5.01	0.03	0
P-58	118	J-37	J-32	8.0	110.0	-14.28	0.09	0
P-59	180	J-38	J-37	8.0	110.0	-9.27	0.06	0
P-100	3,265	J-2	J-100	12.0	120.0	38.95	0.11	0
P-101	175	J-100	J-101	12.0	120.0	38.95	0.11	0
P-103	1,892	J-3	J-101	8.0	110.0	-4.58	0.03	0
P-104	342	J-101	J-102	12.0	120.0	34.36	0.10	0

FlexTable: Pipe Table
Active Scenario: Max Day

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Length (User Defined) (ft)
P-105	627	J-102	J-103	12.0	120.0	23.49	0.07	0
P-106	111	J-103	J-104	12.0	120.0	16.99	0.05	0
P-107	83	J-102	J-105	12.0	120.0	7.00	0.02	0

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

APPENDIX D

PEAK HOUR DEMAND

FlexTable: Junction Table

Active Scenario: Peak Hour

Current Time: 0.000 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)	Zone
J-1	5,070.00	0.00	5,177.57	47	Zone 12
J-2	5,049.00	25.41	5,177.42	56	Zone 12
J-3	5,030.00	20.57	5,177.33	64	Zone 12
J-4	5,056.00	0.00	5,177.42	53	Zone 12
J-5	5,052.00	9.88	5,177.37	54	Zone 12
J-7	5,040.00	9.88	5,177.34	59	Zone 12
J-8	5,036.00	0.00	5,177.34	61	Zone 12
J-10	5,060.00	13.19	5,177.45	51	Zone 12
J-11	5,032.00	0.00	5,177.34	63	Zone 12
J-12	5,040.00	20.57	5,177.33	59	Zone 12
J-13	5,034.00	20.57	5,177.33	62	Zone 12
J-14	5,034.00	9.88	5,177.34	62	Zone 12
J-15	5,040.00	9.88	5,177.35	59	Zone 12
J-15	5,082.00	0.00	5,177.91	41	Zone 12
J-16	5,042.00	9.88	5,177.35	59	Zone 12
J-17	5,048.00	9.88	5,177.35	56	Zone 12
J-26	5,055.00	19.24	5,177.39	53	Zone 12
J-27	5,052.00	19.24	5,177.38	54	Zone 12
J-28	5,045.00	19.24	5,177.36	57	Zone 12
J-29	5,064.00	13.19	5,177.39	49	Zone 12
J-30	5,030.00	16.74	5,177.33	64	Zone 12
J-31	5,034.00	16.74	5,177.33	62	Zone 12
J-32	5,028.00	0.00	5,177.33	65	Zone 12
J-33	5,044.80	0.00	5,177.35	57	Zone 12
J-34	5,032.00	25.12	5,177.33	63	Zone 12
J-35	5,046.00	0.00	5,177.33	57	Zone 12
J-36	5,023.00	25.12	5,177.32	67	Zone 12
J-37	5,030.00	0.00	5,177.32	64	Zone 12
J-38	5,022.00	16.74	5,177.32	67	Zone 12
J-100	5,000.00	0.00	5,177.34	77	Zone 12
J-101	5,000.00	0.00	5,177.34	77	Zone 12
J-102	5,010.00	6.99	5,177.33	72	Zone 12
J-103	5,010.00	11.73	5,177.33	72	Zone 12
J-104	5,016.00	30.68	5,177.33	70	Zone 12
J-105	5,000.00	12.64	5,177.33	77	Zone 12

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

FlexTable: Pipe Table

Active Scenario: Peak Hour

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Length (User Defined) (ft)
P-2	2,034	J-1	J-2	12.0	120.0	135.74	0.39	2,066
P-3	1,257	J-2	J-3	8.0	110.0	40.00	0.26	0
P-10	489	J-1	J-10	12.0	120.0	257.29	0.73	0
P-11	192	J-10	J-4	12.0	120.0	194.79	0.55	0
P-12	233	J-8	J-11	8.0	110.0	13.44	0.09	0
P-13	152	J-11	J-13	6.0	90.0	13.44	0.15	0
P-14	153	J-13	J-3	6.0	90.0	-10.36	0.12	0
P-15	796	J-12	J-13	6.0	90.0	-3.22	0.04	0
P-16	554	J-3	J-12	8.0	110.0	17.35	0.11	0
P-17	140	J-8	J-14	8.0	110.0	12.30	0.08	0
P-18	403	J-14	J-7	8.0	110.0	-17.55	0.11	0
P-19	269	J-8	J-15	8.0	110.0	-25.74	0.16	0
P-21	252	J-15	J-16	8.0	110.0	3.49	0.02	0
P-22	297	J-5	J-17	12.0	120.0	124.19	0.35	0
P-23	12	R-1	J-15	12.0	120.0	393.02	1.11	4,000
P-24	383	J-16	J-17	8.0	110.0	-22.19	0.14	0
P-24	425	J-15	J-1	12.0	120.0	393.02	1.11	670
P-25	248	J-16	J-7	8.0	110.0	15.79	0.10	0
P-39	208	J-4	J-26	12.0	120.0	194.79	0.55	0
P-40	208	J-26	J-5	12.0	120.0	153.41	0.44	0
P-41	631	J-26	J-27	8.0	110.0	22.14	0.14	0
P-42	252	J-15	J-28	8.0	110.0	-39.11	0.25	0
P-43	653	J-28	J-5	8.0	110.0	-19.34	0.12	0
P-44	267	J-27	J-28	8.0	110.0	39.01	0.25	0
P-45	621	J-10	J-29	8.0	110.0	49.30	0.31	0
P-46	219	J-29	J-27	8.0	110.0	36.11	0.23	0
P-47	562	J-14	J-30	8.0	110.0	19.97	0.13	0
P-48	252	J-30	J-31	8.0	110.0	3.23	0.02	0
P-49	276	J-31	J-32	8.0	110.0	8.81	0.06	0
P-50	723	J-7	J-31	8.0	110.0	22.31	0.14	0
P-51	252	J-17	J-33	12.0	120.0	92.12	0.26	0
P-52	380	J-33	J-7	12.0	120.0	33.94	0.10	0
P-53	1,027	J-33	J-34	12.0	120.0	58.18	0.17	0
P-54	318	J-34	J-35	12.0	120.0	0.00	0.00	0
P-55	255	J-32	J-34	8.0	110.0	-16.98	0.11	0
P-56	671	J-34	J-36	8.0	110.0	16.08	0.10	0
P-57	309	J-36	J-37	8.0	110.0	-9.04	0.06	0
P-58	118	J-37	J-32	8.0	110.0	-25.78	0.16	0
P-59	180	J-38	J-37	8.0	110.0	-16.74	0.11	0
P-100	3,265	J-2	J-100	12.0	120.0	70.32	0.20	0
P-101	175	J-100	J-101	12.0	120.0	70.32	0.20	0
P-103	1,892	J-3	J-101	8.0	110.0	-8.27	0.05	0
P-104	342	J-101	J-102	12.0	120.0	62.04	0.18	0

FlexTable: Pipe Table
Active Scenario: Peak Hour

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Length (User Defined) (ft)
P-105	627	J-102	J-103	12.0	120.0	42.41	0.12	0
P-106	111	J-103	J-104	12.0	120.0	30.68	0.09	0
P-107	83	J-102	J-105	12.0	120.0	12.64	0.04	0

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

APPENDIX E

MAXIMUM DAY + FIRE FLOW REPORT

MAX DAY DEMAND
FIGURE 1-1

Fire Flow Node FlexTable: Fire Flow Report

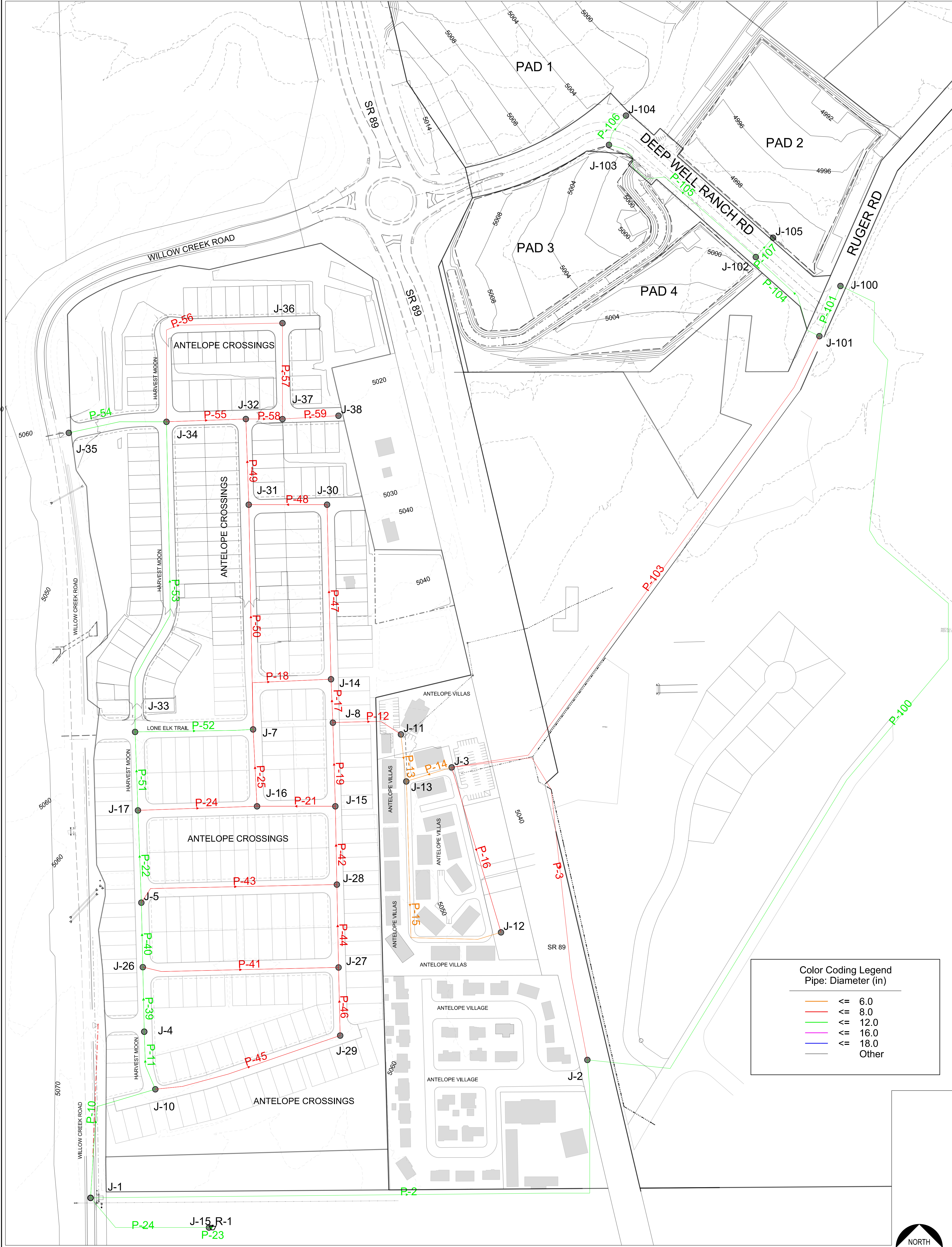
Active Scenario: Max Day

Current Time: 0.000 hours

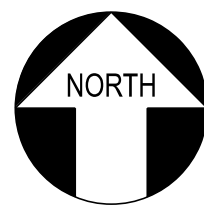
Label	Satisfies Fire Flow Constraints ?	Flow (Total Needed) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)	Junction w/ Minimum Pressure (System)	Is Fire Flow Run Balance d?	Velocity of Maximum Pipe (ft/s)	Pipe w/ Maximum Velocity
J-1	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-2	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-3	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-4	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-5	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-7	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-8	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-10	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-11	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-12	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-13	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-14	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-15	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-15	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-16	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-17	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-26	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-27	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-28	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-29	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-30	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-31	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-32	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-33	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-34	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-35	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-36	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-37	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-38	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-100	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-101	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)
J-102	True	2,003.87	2,012.50	31	20	J-15	True	6.32	P-24
J-103	True	2,006.50	2,015.19	28	20	J-15	True	6.32	P-24
J-104	True	2,016.99	2,025.72	25	20	J-15	True	6.32	P-24
J-105	True	2,007.00	2,015.56	35	20	J-15	True	6.32	P-24

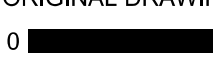
Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

FILENAME: G:\Projects\903_JCI_Investments\903-25 DWRE-Office Sewer Documents\Reports\Water\WaterCAD\DWRE-Water Analysis.dgn



Color Coding Legend	
Pipe: Diameter (in)	
—	<= 6.0
—	<= 8.0
—	<= 12.0
—	<= 16.0
—	<= 18.0
—	Other



SHEET --	CIVIL	DATE APRIL 2019 LYON PROJECT # 903-25 DRAWING NUMBER --	DEEP WELL RANCH ROAD COMMERCIAL PADS WATER MODEL	DWR ROAD MAXIMUM DAY DEMAND FIGURE 1-1	 1650 Willow Creek Road Prescott, AZ 86301 (928) 776-1750 www.lyonengineering.com © COPYRIGHT 2018	NO.	DATE	REVISION	BY	APVD	DESIGN SAL	VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. 0'  IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.
											DRAWN SAL	
											CHECKED SAL	
											APPROVED ---	

Attachment 2 – Utility Plan

DEVELOPER

SUN STATE BUILDERS
1050 W. WASHINGTON ST.
#214, TEMPE, AZ 85291
STEVE BROWN
480-894-1286

OWNER

CHAMBERLAIN
DEVELOPMENT
1050 W. WASHINGTON ST.
#214, TEMPE, AZ 85291

DRAWN BY: MGO

CHECKED BY: N/C

DATE: 06/10/20

SCALE: 1"=20'

PROJECT #: 20-017

PURPOSE:

UTILITY PLAN
FOR
CP-TECH
2620 DEEP WELL RANCH ROAD
PRESCOTT, ARIZONA

12409 W. INDIAN SCHOOL RD., AVONDALE, AZ 85392

PHONE: 623.536.1993

FAX: 623.748.9008

ENGINEERING DESIGN & CONSTRUCTION

KDS

SEAL

NATHAN J. COTTRELL

06/10/20

REGISTERED PROFESSIONAL ENGINEER

STATE OF ARIZONA

12409

06/10/20

06/10/20

ARIZONA

REGISTERED PROFESSIONAL ENGINEER

STATE OF ARIZONA

12409

06/10/20

06/10/20

SHEET 7

OF 11

C1.07

WATERLINE KEYNOTES

1. CITY FORCES TO INSTALL 1.5" WATER METER ON 2" WATER SERVICE (PER Q.C.S.D. 316P). (DOMESTIC).
2. INSTALL 2.5" PVC SCH-40 WATER LINE. 144 L.F., 36" MIN. TYPICAL DEPTH.
3. INSTALL 1.5" x 2.5" REDUCER.
4. SEE PLUMBING PLANS FOR CONTINUATION @ 5'-FT FROM BUILDING.
5. CITY FORCES TO INSTALL 1" WATER METER ON 1" WATER SERVICE (PER Q.C.S.D. 316P). (LANDSCAPING)
6. INSTALL 1.5" REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY PER OC STD DTL. 324Q-1 (1 EA. DOMESTIC AND LANDSCAPING)
7. SEE LANDSCAPE PLANS FOR CONTINUATION.
8. SEE SHEET C1.06 FOR CROSSING DATA.
9. WATERLINE AND STUB BY OTHERS. SEE "CP TECHNOLOGIES OFFSITE UTILITIES IMPROVEMENT PLANS", DATED JUNE 2020 FOR DETAILS.
10. REMOVE PLUG AND INSTALL 12" CL 350 D.I. WATERLINE PER Q.C.S.D. STD. DTL. 200Q-1. LENGTH AS SHOWN.
11. INSTALL BLOW OFF PER COP STD. DTL. 318P. NON-TRAFFIC.
12. INSTALL 12" X 8" TEE PER M.A.G. STD. DTL. 360 WITH MEGALUG RESTRAINT
13. INSTALL 8" CL 350 D.I. WATERLINE PER Q.C.S.D. STD. DTL. 200Q-1. LENGTH AS SHOWN.
14. SEE FIRELINE PLAN C1.06 FOR ADDITIONAL WATER DATA.

SEWER KEYNOTES

1. 6" SEWER STUB INSTALLED WITH ADJACENT PROJECT. INVERT = 4989.67±. CONTRACTOR TO FIELD VERIFY AND NOTIFY ENGINEER OF ANY DISCREPANCIES. REMOVE CAP AND CONNECT TO NEW LINE.
2. INSTALL 6" PVC SDR-35 SERVICE PIPE. LENGTH AND SLOPE AS SHOWN.
3. INSTALL NEW TWO-WAY CLEAN-OUT FOR BUILDING CONNECTION PER COP STD. DTL. 440P-1.
4. SEE PLUMBING PLANS FOR CONNECTION.
5. INSTALL SANITARY CLEANOUT PER Q.C.S.D. STD. DTL. 441Q. RIM AND INVERT AS SHOWN.
6. INSTALL BACKWATER VALVE PER Q.C.S.D. STD. DTL. 440P-3.
7. SANITARY SEWER LINE AND STUB BY OTHERS. SEE "CP TECHNOLOGIES OFFSITE UTILITIES IMPROVEMENT PLANS", DATED JUNE 2020 FOR DETAILS.

QUANTITIES (ONSITE)	
6" SDR-35 SEWER PIPE	99 LF
6" SEWER CLEANOUTS	2 EA
WATER METER	2 EA
BACKFLOW PREVENTORS	2 EA
2.5" PVC SCH. 40 PIPE	144 LF

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

Packet Pg. 37

Attachment 3 – Hydrant Flow Test Report

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name:	Not Provided (APN 102-08-057E)
Project Address:	Crystal Lane & Ruger Road, Prescott, Arizona 86301
Client Project No.:	Not Provided
Arizona Flow Testing Project No.:	20117
Date and Time flow test conducted:	March 31, 2020 at 1:00 PM
Data is current and reliable until:	September 31, 2020
Conducted by:	Floyd Vaughan – Arizona Flow Testing, LLC (480-250-8154)
Witnessed by:	Andrew McFadden – Prescott Water Dept. (928-777-1118)

Raw Test Data

Static Pressure: **80.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **66.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **18.0 PSI**
(Measured in pounds per square inch)

Diffuser Orifice Diameter: One 4-inch Hose Monster
(Measured in inches)

Coefficient of Diffuser: 0.7875

Flowing GPM: **1,595 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **3,500 GPM**

Data with 10 % Safety Factor

Static Pressure: **72.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **58.0 PSI**
(Measured in pounds per square inch)

Distance between hydrants: Approx. 1,240 Feet

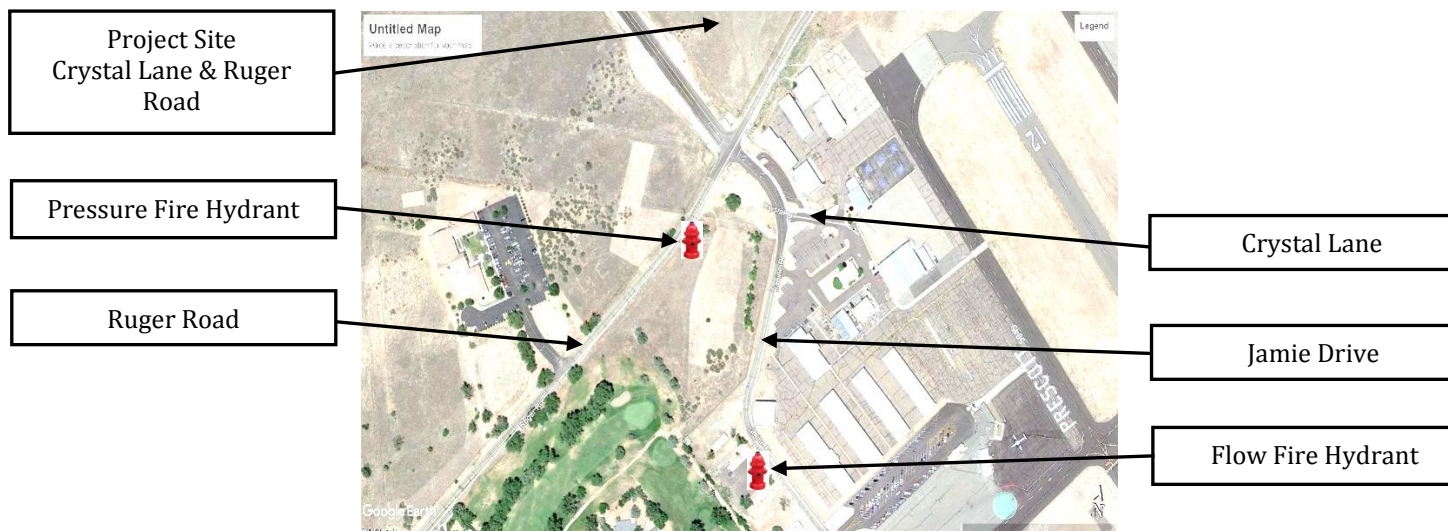
Main size: Not Provided

Flowing GPM: **1,595 GPM**

GPM @ 20 PSI: **3,240 GPM**

Flow Test Location

North ↑



Attachment 4 – Modeled RPPBFPA Spec Sheets



Model 375A

Reduced Pressure Principle Assembly

5.a

Application

Designed for installation on potable water lines to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. The Model 375A provides protection where a potential health hazard exists. Ideal for use where Lead-Free* valves are required.

Standards Compliance

- ASSE® Listed 1013
 - AWWA Compliant C511 (with gates only), and C550
 - IAPMO® Listed
 - CSA® Certified
 - UL® Classified
 - C-UL® Classified
 - FM® Approved
 - Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California.
 - NYC MEA 484-04-M
 - Meets the requirements of NSF/ANSI 61*
- *(0.25% MAX. WEIGHTED AVERAGE LEAD CONTENT)

Materials

Main valve body	Ductile Iron ASTM A 536
Access covers	Ductile Iron ASTM A 536
Coatings	NSF Approved electrostatic epoxy
finish Internals	Stainless Steel, 300 Series NORYL™
Fasteners & Springs	Stainless Steel, 300 Series
Seal rings	EPDM (FDA approved)
O-rings	Buna Nitrile (FDA approved)
Sensing line	Stainless Steel, braided hose

Features

Sizes:	2 1/2", 3", 4", 6", 8", 10"
Maximum working water pressure	175 PSI
Maximum working water temperature	140°F
Hydrostatic test pressure	350 PSI
End connections (Grooved for steel pipe)	AWWA C606
(Flanged)	ANSI B16.1
	Class 125

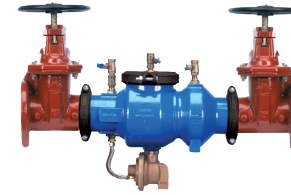
*2 1/2 & 3" sizes use 4" body & reducer couplings

Dimensions & Weights (do not include pkg.)

MODEL 375A SIZE	WEIGHT															
	WITHOUT GATES		WITH NRS GATES (GXF)		WITH OS&Y GATES (GXF)		WITH NRS GATES (GXG)		WITH OS&Y GATES (GXG)		WITH BUTTERFLY VALVES (GXG)		WITH BUTTERFLY VALVES (GXF)			
in.	mm	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	
2 1/2	65	97	44	191	87	199	90	183	83	191	87	139	63	149	68	
3	80	96	43.5	211	96	217	98	201	91	207	94	141	64	154	70	
4	100	83	38	227	103	237	108	201	91	211	96	131	59	153	69	
6	150	136	62	356	162	372	169	326	148	342	155	210	95	240	109	
8	200	305	139	757	344	781	355	757	344	757	344	449	204	495	225	
10	250	358	162	985	447	1043	473	863	391	921	418	574	260	632	287	

MODEL 375A SIZE		DIMENSION (approximate)																							
		A		A WITH BUTTERFLY VALVES		B LESS GATE VALVES		C		D		E OS&Y OPEN		E OS&Y CLOSED		E NRS GATE		E WITH BUTTERFLY VALVES		F		G		H	
in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
2 1/2	65	35 1/8	892	32 1/8	816	20 1/8	511	4 1/2	114	7 1/4	184	16 3/8	416	13 7/8	352	11 3/8	289	8 1/4	210	11	279	45 1/4	1150	9 5/8	247
3	80	36 1/8	918	33	838	20 1/8	511	4 1/2	114	7 1/4	184	18 7/8	479	15 5/8	397	12 3/8	314	8 1/2	216	11	279	46 7/8	1191	9 5/8	247
4	100	38 1/4	972	33 1/4	845	19 7/8	505	4 1/2	114	8	203	22 3/4	578	18 1/4	464	14 3/4	375	9	229	11	279	53 3/8	1356	9 5/8	247
6	150	47 1/4	1200	40 1/4	1022	25 7/8	657	5 1/2	140	10	254	30 1/8	765	23 3/4	603	19	483	10 1/4	260	12 3/8	314	65 3/8	1661	13	330
8	200	62	1575	55	1397	38 1/2	978	10	254	11	279	37 3/4	959	29 1/4	743	22 1/2	572	12	305	15 3/8	391	86 3/8	2194	17 5/16	440
10	250	64 5/8	1641	59	1499	38 1/2	978	10	254	12	305	45 3/4	1162	35 3/8	899	26 1/2	673	13	330	15 3/8	391	94 3/8	2398	17 1/8	435

Zurn Industries, LLC | Wilkins
1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766
In Canada | Zurn Industries Limited
7900 Goreway Drive, Unit 10, Brampton, Ontario L6T 5W6, 877-892-5216
www.zurn.com



(with NRS gates)



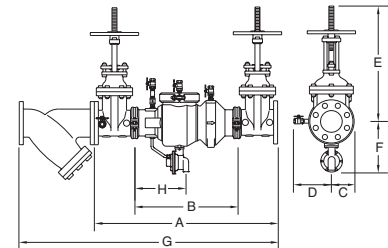
Options (Suffixes can be combined)

- ☐ - with flanged end NRS gate valves (standard)
- ☐ FSC - with epoxy coated wye type strainer (flanged only)
- ☐ G - with grooved end NRS gate valves
- ☐ GF - with grooved inlet gate connection and flanged outlet gate connection
- ☐ FG - with flanged inlet gate connection and grooved outlet gate connection
- ☐ L - less shut-off valves (grooved body connections)
- ☐ MS - with Integral Relief Valve Monitor Switch
- ☐ OSY - with flanged end OS&Y gate valves
- ☐ OSYG - with grooved end OS&Y gate valves
- ☐ PI - with Post Indicator gate valve
- ☐ BG - with grooved end butterfly valves with integral supervisory switches
- ☐ BF - with flanged end butterfly valves with integral supervisory switches
- ☐ -509 - with AWWA C509 gate valves

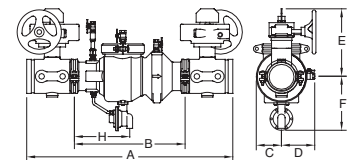
Accessories

- ☐ Repair kit (rubber only)
- ☐ Thermal expansion tank (Model XT)
- ☐ OS & Y Gate valve tamper switch (OSY-40)
- ☐ Air gap (Model AG)
- ☐ Electronic Solenoid Timer (Model EST)
- ☐ QT-SET Quick Test Fitting Set

MODEL
375A with OSY
& FSC option



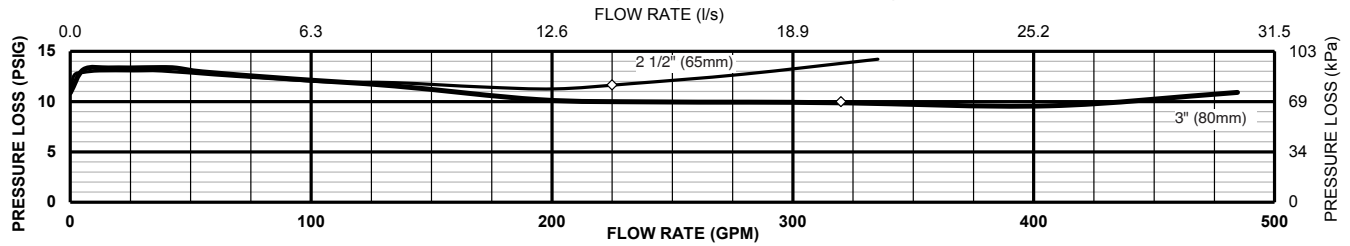
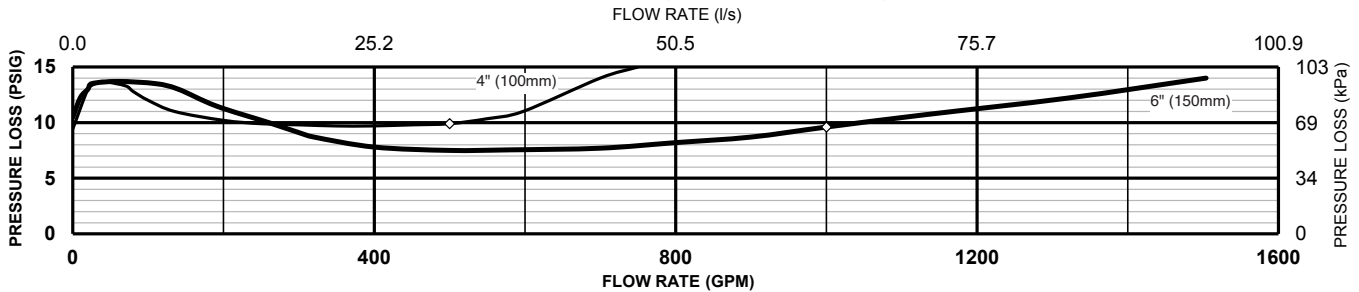
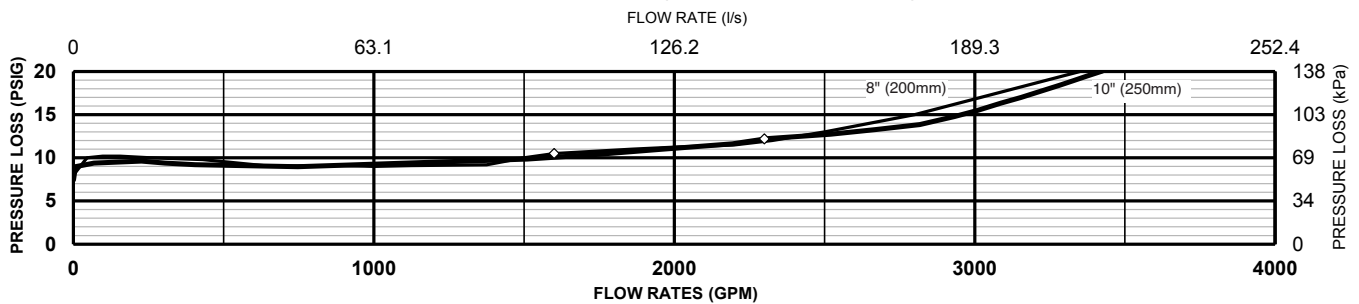
MODEL
375A with
BG option



Relief Valve
discharge port:
2 1/2" - 6" - 2.75 sq. in.
8" - 10" - 3.69 sq. in.

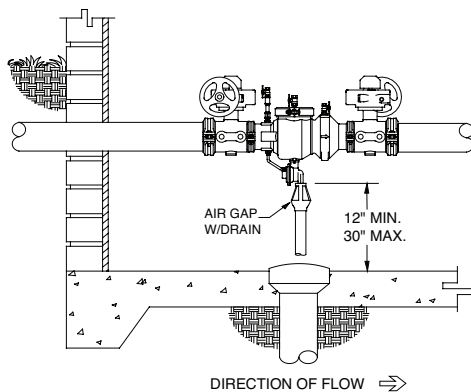
Attention: Model 375A (grooved
body) and Model 375 (flange body)
have different lay lengths.

Rev. J
Date: 12/19
Document No. BF-375A
Product No. Model 375A

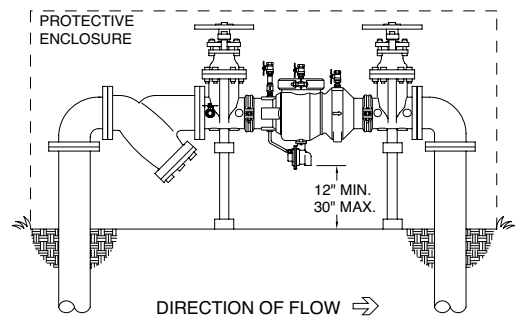
MODEL 375A 2-1/2", 3" (STANDARD & METRIC)**MODEL 375A 4" & 6" (STANDARD & METRIC)****MODEL 375A 8" & 10" (STANDARD AND METRIC)****Typical Installation**

Local codes shall govern installation requirements. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Capacity thru Schedule 40 Pipe (GPM)				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
2 1/2"	75	112	149	224
3"	115	173	230	346
4"	198	298	397	595
6"	450	675	900	1351
8"	780	1169	1559	2339
10"	1229	1843	2458	3687
12"	1763	2644	3525	5288



INDOOR INSTALLATION (375A with BG option)



OUTDOOR INSTALLATION (375A with FSC option)

Specifications

The Reduced Pressure Principle Backflow Prevention Assembly shall be certified to NSF/ANSI 61, ASSE® Listed 1013, and supplied with full port gate valves. The main body and access cover shall be epoxy coated ductile iron (ASTM A 536), the seat ring and check valve shall be NORYL™, the stem shall be stainless steel (ASTM A 276) and the seat disc elastomers shall be EPDM. The checks and the relief valve shall be accessible for maintenance without removing the device from the line. The Reduced Pressure Principle Backflow Prevention Assembly shall be a ZURN WILKINS Model 375A.

Zurn Industries, LLC | Wilkins

1747 Commerce Way, Paso Robles, CA U.S.A. 93446 Ph. 855-663-9876, Fax 805-238-5766

In Canada | Zurn Industries Limited

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www.zurn.com



Model 975XL

Reduced Pressure Principle Assembly

5.a

Application

Designed for installation on water lines to protect against both backsiphonage and backpressure of contaminated water into the potable water supply. Assembly shall provide protection where a potential health hazard exists.

Standards Compliance

- ASSE® Listed 1013
- IAPMO® Listed
- UL® Classified (less shut-off valves or with OS&Y valves)
- C-UL® Classified
- CSA® Certified B64.4
- AWWA compliant C511
- Approved by the Foundation for Cross Connection Control and Hydraulic Research at the University of Southern California
- NYC MEA 425-89-M VOL 3

Materials

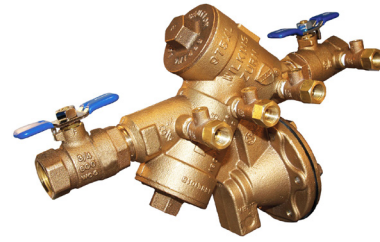
Main valve body	Cast Bronze ASTM B 584
Access covers	Cast Bronze ASTM B 584
Fasteners	Stainless Steel, 300 Series
Elastomers	Silicone (FDA Approved) Buna Nitrile (FDA Approved)
Polymers	Noryl™, NSF Listed
Springs	Stainless Steel, 300 series

Features

Sizes:	3/4", 1", 1-1/4", 1-1/2", 2"
Maximum working water pressure	175 PSI
Maximum working water temperature	180°F
Hydrostatic test pressure	350 PSI
End connections Threaded	ANSI B1.20.1

Relief Valve discharge port:

3/4" - 1"	-	0.63 sq. in.
1 1/4" - 2"	-	1.19 sq. in.



Options

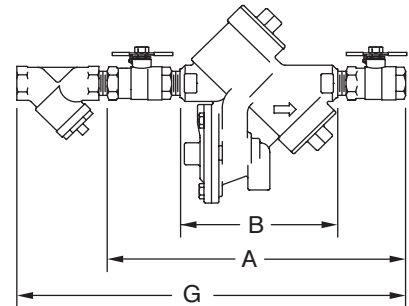
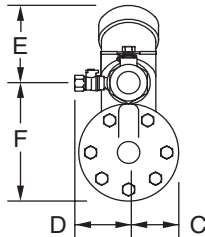
(Suffixes can be combined)

- ☐ - with full port QT ball valves (standard)
- ☐ L - less ball valves, male pipe thread
- ☐ U - with union ball valves
- ☐ MS - with integral relief valve monitor switch
- ☐ S - with bronze "Y" type strainer
- ☐ BMS - with battery operated monitor switch
- ☐ FDC - with fire hydrant connection; 2" only
- ☐ FT - with integral male 45° flare SAE test fitting
- ☐ TCU - with test cocks up
- ☐ V - with union swivel elbows (3/4" & 1")
- ☐ SE - with street elbows (3/4" & 1")
- ☐ PF - with Z-Bite™ push fit connections* (1/2"-1" only)
- ☐ PR - with Z-Press™ press fit connections*

*Fittings ship in box with valve and must be threaded into valve by hand on site.

Accessories

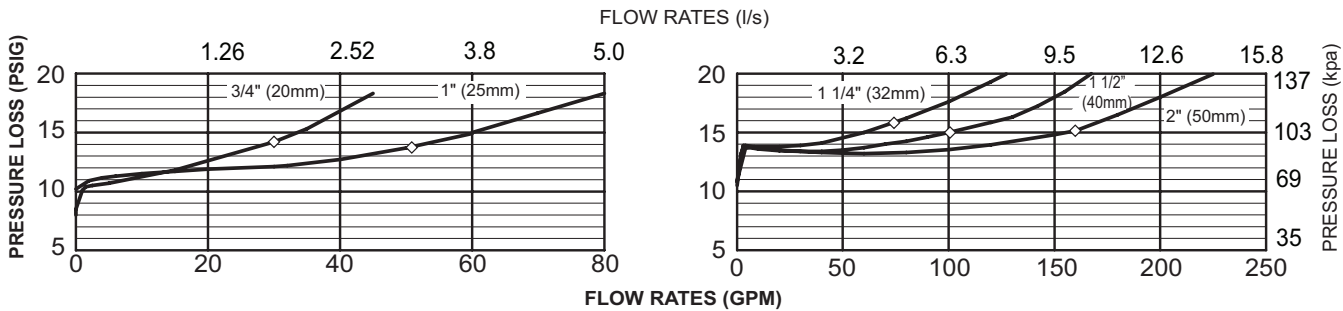
- ☐ Air gap (Model AG)
- ☐ Repair kits
- ☐ Thermal expansion tank (Mdl. XT)
- ☐ Soft seated check valve (Model 40XL)
- ☐ Shock arrester (Model 1250XL)
- ☐ QT-SET Quick Test Fitting Set
- ☐ Ball valve handle locks



Dimensions & Weights (do not include pkg.)

MODEL 975XL SIZE		DIMENSIONS (approximate)														WITH BALL VALVES	
		A		B		C		D		E		F		G			
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm		
3/4	20	12	305	7 3/4	197	2 1/8	54	3	76	3 1/2	89	5	127	16 1/8	410	12	5.5
1	25	13	330	7 3/4	197	2 1/8	54	3	76	3 1/2	89	5	127	17 3/8	441	14	6.4
1 1/4	32	17	432	10 15/16	278	2 3/4	70	3 1/2	89	5	127	6 3/4	171	22 9/16	573	28	12.7
1 1/2	40	17 3/8	441	10 15/16	278	2 3/4	70	3 1/2	89	5	127	6 3/4	171	24 1/16	611	28	12.7
2	50	18 1/2	470	10 15/16	278	2 3/4	70	3 1/2	89	5	127	6 3/4	171	26 1/2	673	34	15.4

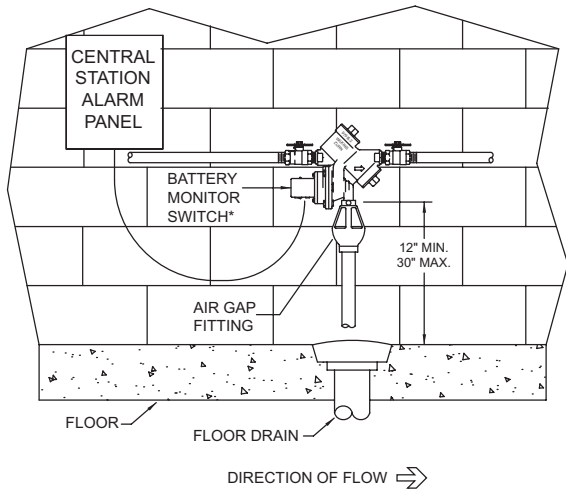
MODEL 975XL 3/4", 1", 1 1/4", 1 1/2" & 2" (STANDARD & METRIC)



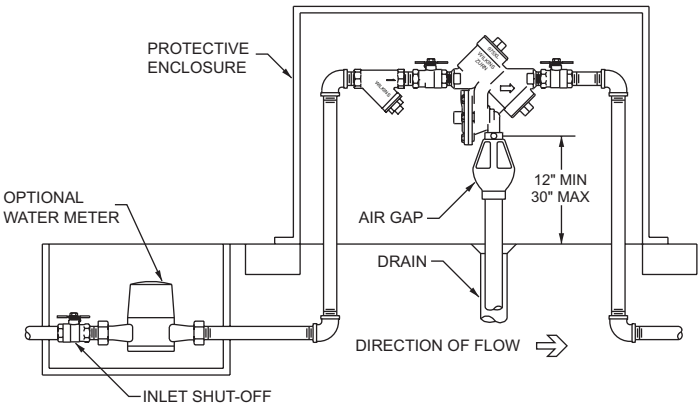
Typical Installation

Local codes shall govern installation requirements. To be installed in accordance with the manufacturers' instructions and the latest edition of the Uniform Plumbing Code. Unless otherwise specified, the assembly shall be mounted at a minimum of 12" (305mm) and a maximum of 30" (762mm) above adequate drains with sufficient side clearance for testing and maintenance. The installation shall be made so that no part of the unit can be submerged.

Capacity thru Schedule 40 Pipe				
Pipe size	5 ft/sec	7.5 ft/sec	10 ft/sec	15 ft/sec
1/8"	1	1	2	3
1/4"	2	2	3	5
3/8"	3	4	6	9
1/2"	5	7	9	14
3/4"	8	12	17	25
1"	13	20	27	40
1 1/4"	23	35	47	70
1 1/2"	32	48	63	95
2"	52	78	105	167



INDOOR INSTALLATION
(Shown w/optional BMS)



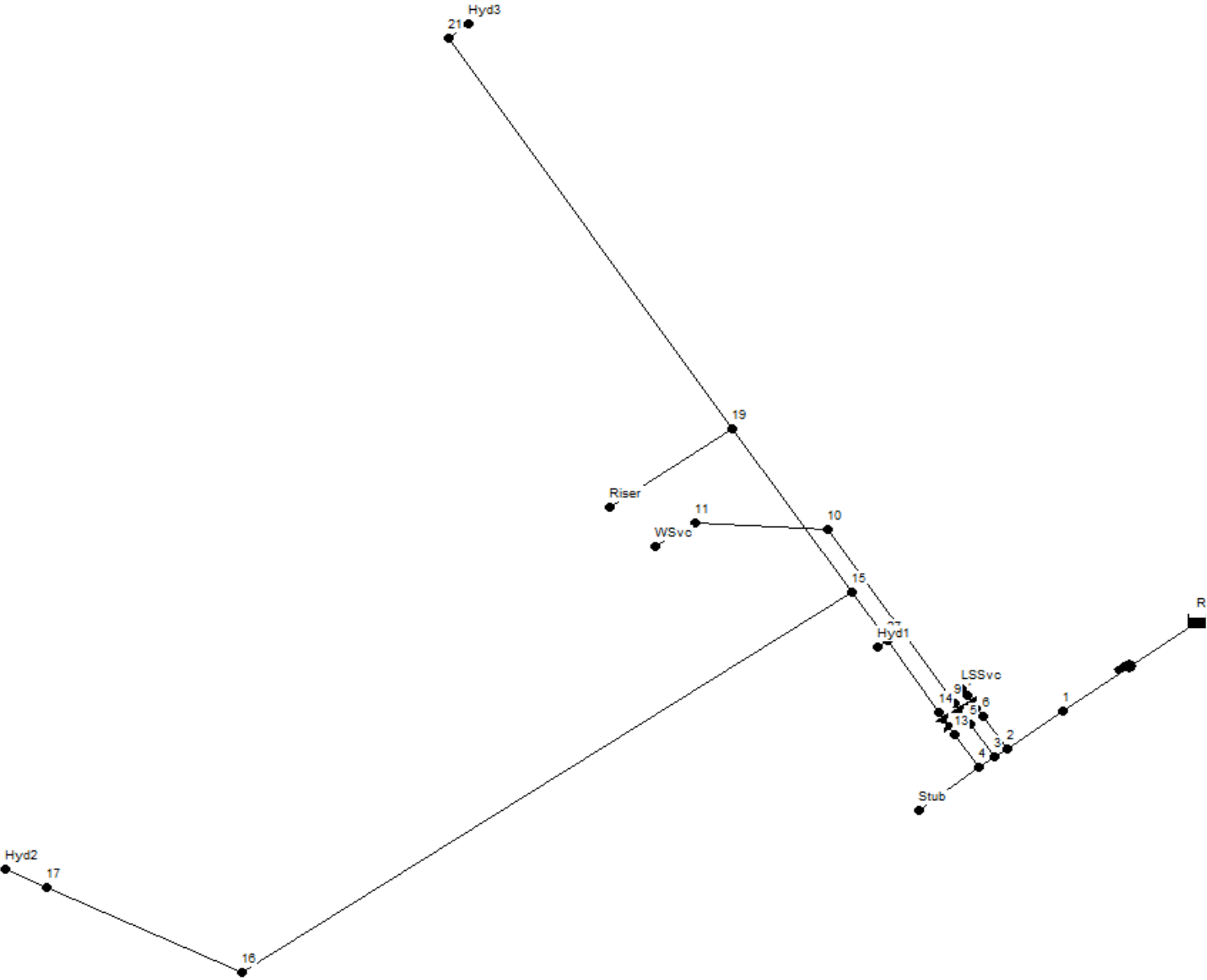
OUTDOOR INSTALLATION

Specifications

The Reduced Pressure Principle Backflow Preventer shall be ASSE® Listed 1013, rated to 180°F, and supplied with full port ball valves. The main body and access covers shall be bronze (ASTM B 584), the seat ring and all internal polymers shall be NSF® Listed Noryl™ and the seat disc elastomers shall be silicone. The first and second checks shall be accessible for maintenance without removing the relief valve or the entire device from the line. If installed indoors, the installation shall be supplied with an air gap adapter and integral monitor switch. The Reduced Pressure Principle Backflow Preventer shall be a ZURN WILKINS Model 975XL.

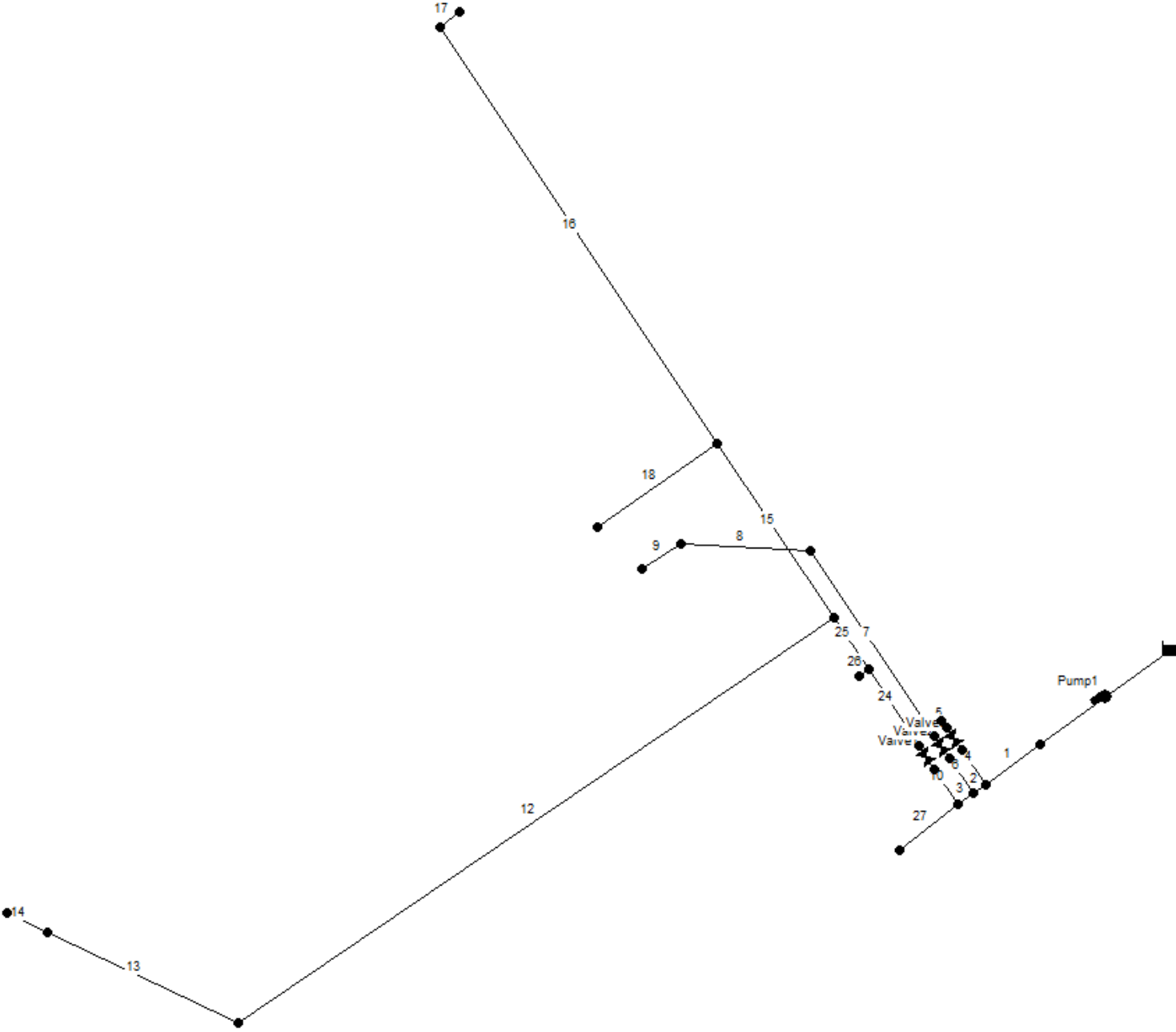
Attachment 5 – Hydraulic Modeling Results

CP Tech Hydraulic Model
Node IDs



Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech Hydraulic Model
Pipe IDs



Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - ADD

Network Table - Nodes

Node ID	Elevation ft	Demand GPM	Head ft	Pressure psi
Junc 1	5002	0.00	5168.30	72.06
Junc 2	5002	0.00	5168.30	72.06
Junc 3	5002	0.00	5168.30	72.06
Junc 4	5002	0.00	5168.30	72.06
Junc 5	5005	0.00	5168.30	70.76
Junc 6	5005	0.00	5168.30	70.76
Junc 7	5005	0.00	5145.00	60.66
Junc LSSvc	5005	0.00	5145.00	60.66
Junc 9	5005	0.00	5146.57	61.34
Junc 10	5003	0.00	5146.55	62.20
Junc 11	5005	0.00	5146.54	61.33
Junc WSvc	5009	2.55	5146.54	59.60
Junc 13	5005	0.00	5168.30	70.76
Junc 14	5005	0.00	5184.50	77.78
Junc 15	5002	0.00	5184.50	79.08
Junc 16	5005	0.00	5184.50	77.78
Junc 17	5005	0.00	5184.50	77.78
Junc Hyd2	5008	0.00	5184.50	76.48
Junc 19	5002	0.00	5184.50	79.08
Junc Riser	5009	0.00	5184.50	76.04
Junc 21	5005	0.00	5184.50	77.78
Junc Hyd3	5008	0.00	5184.50	76.48
Junc Stub	5002	0.00	5168.30	72.06
Junc 27	5002	0.00	5184.50	79.08
Junc Hyd1	5005	0.00	5184.50	77.78
Resvr Res1	5002	-2.57	5002.00	0.00

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - ADD

Network Table - Links

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 1	26	8	140	2.57	0.02	0.00	Open
Pipe 2	4	8	130	2.57	0.02	0.00	Open
Pipe 3	5	8	130	0.02	0.00	0.00	Open
Pipe 4	15	1	140	0.00	0.00	0.00	Open
Pipe 5	10	1	140	0.00	0.00	0.00	Open
Pipe 6	15	2	140	2.55	0.26	0.23	Open
Pipe 7	90	2	140	2.55	0.26	0.22	Open
Pipe 8	46	2	140	2.55	0.26	0.21	Open
Pipe 9	13	2	140	2.55	0.26	0.23	Open
Pipe 10	15	8	130	0.02	0.00	0.00	Open
Pipe 12	274	8	140	0.00	0.00	0.00	Open
Pipe 13	66	8	140	0.00	0.00	0.00	Open
Pipe 14	20	6	130	0.00	0.00	0.00	Open
Pipe 15	76	8	140	0.01	0.00	0.00	Open
Pipe 16	181	8	140	0.00	0.00	0.00	Open
Pipe 17	10	6	130	0.00	0.00	0.00	Open
Pipe 18	53	8	130	0.00	0.00	0.00	Open
Pipe 24	40	8	140	0.02	0.00	0.00	Open
Pipe 25	24	8	140	0.02	0.00	0.00	Open

CP Tech - ADD

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 26	10	6	130	0.00	0.00	0.00	Open
Pipe 27	30	8	130	0.00	0.00	0.00	Open
Pump Pump1	#N/A	#N/A	#N/A	2.57	0.00	-166.30	Open
Valve Valve1	#N/A	8	#N/A	0.02	0.00	16.20	Open
Valve Valve2	#N/A	1	#N/A	2.55	1.04	21.72	Open
Valve Valve3	#N/A	1	#N/A	0.00	0.00	23.30	Open

CP Tech - MDD

Network Table - Nodes

Node ID	Elevation ft	Demand GPM	Head ft	Pressure psi
Junc 1	5002	0.00	5168.30	72.06
Junc 2	5002	0.00	5168.30	72.06
Junc 3	5002	0.00	5168.30	72.06
Junc 4	5002	0.00	5168.30	72.06
Junc 5	5005	0.00	5168.29	70.75
Junc 6	5005	0.00	5168.30	70.76
Junc 7	5005	0.00	5145.00	60.66
Junc LSSvc	5005	0.00	5145.00	60.66
Junc 9	5005	0.00	5144.86	60.60
Junc 10	5003	0.00	5144.81	61.45
Junc 11	5005	0.00	5144.78	60.57
Junc WSvc	5009	4.59	5144.77	58.83
Junc 13	5005	0.00	5168.30	70.76
Junc 14	5005	0.00	5152.10	63.74
Junc 15	5002	0.00	5152.10	65.04
Junc 16	5005	0.00	5152.10	63.74
Junc 17	5005	0.00	5152.10	63.74
Junc Hyd2	5008	0.00	5152.10	62.44
Junc 19	5002	0.00	5152.10	65.04
Junc Riser	5009	0.00	5152.10	62.00
Junc 21	5005	0.00	5152.10	63.74
Junc Hyd3	5008	0.00	5152.10	62.44
Junc Stub	5002	0.00	5168.30	72.06
Junc 27	5002	0.00	5152.10	65.04
Junc Hyd1	5005	0.00	5152.10	63.74
Resvr Res1	5002	-4.62	5002.00	0.00

CP Tech - MDD

Network Table - Links

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 1	26	8	140	4.62	0.03	0.00	Open
Pipe 2	4	8	130	4.61	0.03	0.00	Open
Pipe 3	5	8	130	0.02	0.00	0.00	Open
Pipe 4	15	1	140	0.00	0.00	0.00	Open
Pipe 5	10	1	140	0.00	0.00	0.00	Open
Pipe 6	15	2	140	4.59	0.47	0.65	Open
Pipe 7	90	2	140	4.59	0.47	0.63	Open
Pipe 8	46	2	140	4.59	0.47	0.64	Open
Pipe 9	13	2	140	4.59	0.47	0.64	Open
Pipe 10	15	8	130	0.02	0.00	0.00	Open
Pipe 12	274	8	140	0.00	0.00	0.00	Open
Pipe 13	66	8	140	0.00	0.00	0.00	Open
Pipe 14	20	6	130	0.00	0.00	0.00	Open
Pipe 15	76	8	140	0.01	0.00	0.00	Open
Pipe 16	181	8	140	0.00	0.00	0.00	Open
Pipe 17	10	6	130	0.00	0.00	0.00	Open
Pipe 18	53	8	130	0.00	0.00	0.00	Open
Pipe 24	40	8	140	0.02	0.00	0.00	Open
Pipe 25	24	8	140	0.02	0.00	0.00	Open

CP Tech - MDD

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 26	10	6	130	0.00	0.00	0.00	Open
Pipe 27	30	8	130	0.00	0.00	0.00	Open
Pump Pump1	#N/A	#N/A	#N/A	4.62	0.00	-166.30	Open
Valve Valve1	#N/A	8	#N/A	0.02	0.00	16.20	Open
Valve Valve2	#N/A	1	#N/A	4.59	1.88	23.42	Open
Valve Valve3	#N/A	1	#N/A	0.00	0.00	23.30	Open

CP Tech - PHD

Network Table - Nodes

Node ID	Elevation ft	Demand GPM	Head ft	Pressure psi
Junc 1	5002	0.00	5168.30	72.06
Junc 2	5002	0.00	5168.30	72.06
Junc 3	5002	0.00	5168.30	72.06
Junc 4	5002	0.00	5168.30	72.06
Junc 5	5005	0.00	5168.27	70.74
Junc 6	5005	0.00	5168.30	70.76
Junc 7	5005	0.00	5191.60	80.85
Junc LSSvc	5005	0.00	5191.60	80.85
Junc 9	5005	0.00	5141.76	59.26
Junc 10	5003	0.00	5141.59	60.05
Junc 11	5005	0.00	5141.50	59.15
Junc WSvc	5009	8.29	5141.48	57.40
Junc 13	5005	0.00	5168.30	70.76
Junc 14	5005	0.00	5184.50	77.78
Junc 15	5002	0.00	5184.50	79.08
Junc 16	5005	0.00	5184.50	77.78
Junc 17	5005	0.00	5184.50	77.78
Junc Hyd2	5008	0.00	5184.50	76.48
Junc 19	5002	0.00	5184.50	79.08
Junc Riser	5009	0.00	5184.50	76.04
Junc 21	5005	0.00	5184.50	77.78
Junc Hyd3	5008	0.00	5184.50	76.48
Junc Stub	5002	0.00	5168.30	72.06
Junc 27	5002	0.00	5184.50	79.08
Junc Hyd1	5005	0.00	5184.50	77.78
Resvr Res1	5002	-8.31	5002.00	0.00

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - PHD

Network Table - Links

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 1	26	8	140	8.31	0.05	0.02	Open
Pipe 2	4	8	130	8.31	0.05	0.00	Open
Pipe 3	5	8	130	0.02	0.00	0.00	Open
Pipe 4	15	1	140	0.00	0.00	0.00	Open
Pipe 5	10	1	140	0.00	0.00	0.00	Open
Pipe 6	15	2	140	8.29	0.85	1.89	Open
Pipe 7	90	2	140	8.29	0.85	1.90	Open
Pipe 8	46	2	140	8.29	0.85	1.91	Open
Pipe 9	13	2	140	8.29	0.85	1.88	Open
Pipe 10	15	8	130	0.02	0.00	0.00	Open
Pipe 12	274	8	140	0.00	0.00	0.00	Open
Pipe 13	66	8	140	0.00	0.00	0.00	Open
Pipe 14	20	6	130	0.00	0.00	0.00	Open
Pipe 15	76	8	140	0.01	0.00	0.00	Open
Pipe 16	181	8	140	0.00	0.00	0.00	Open
Pipe 17	10	6	130	0.00	0.00	0.00	Open
Pipe 18	53	8	130	0.00	0.00	0.00	Open
Pipe 24	40	8	140	0.02	0.00	0.00	Open
Pipe 25	24	8	140	0.02	0.00	0.00	Open

CP Tech - PHD

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 26	10	6	130	0.00	0.00	0.00	Open
Pipe 27	30	8	130	0.00	0.00	0.00	Open
Pump Pump1	#N/A	#N/A	#N/A	8.31	0.00	-166.30	Open
Valve Valve1	#N/A	8	#N/A	0.02	0.00	16.20	Open
Valve Valve2	#N/A	1	#N/A	8.29	3.39	26.51	Open
Valve Valve3	#N/A	1	#N/A	0.00	0.00	23.30	Open

CP Tech - MDD +FF

Network Table - Nodes

Node ID	Elevation ft	Demand GPM	Head ft	Pressure psi
Junc 1	5002	0.00	5139.31	59.50
Junc 2	5002	0.00	5138.43	59.11
Junc 3	5002	0.00	5138.27	59.05
Junc 4	5002	0.00	5138.08	58.96
Junc 5	5005	0.00	5138.26	57.74
Junc 6	5005	0.00	5138.43	57.81
Junc 7	5005	0.00	5115.12	47.72
Junc LSSvc	5005	0.00	5115.12	47.72
Junc 9	5005	0.00	5114.84	47.59
Junc 10	5003	0.00	5114.78	48.43
Junc 11	5005	0.00	5114.75	47.55
Junc WSvc	5009	4.59	5114.74	45.82
Junc 13	5005	0.00	5137.50	57.41
Junc 14	5005	0.00	5114.78	47.57
Junc 15	5002	0.00	5112.62	47.93
Junc 16	5005	0.00	5108.26	44.74
Junc 17	5005	0.00	5107.21	44.29
Junc Hyd2	5008	1000.00	5105.72	42.34
Junc 19	5002	0.00	5112.29	47.79
Junc Riser	5009	500.00	5112.02	44.64
Junc 21	5005	0.00	5112.29	46.49
Junc Hyd3	5008	0.00	5112.29	45.19
Junc Stub	5002	0.00	5138.08	58.96
Junc 27	5002	0.00	5113.43	48.28
Junc Hyd1	5005	0.00	5113.43	46.98
Resvr Res1	5002	-1504.61	5002.00	0.00

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - MDD +FF

Network Table - Links

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 1	26	8	140	1504.61	9.60	33.94	Open
Pipe 2	4	8	130	1504.60	9.60	38.82	Open
Pipe 3	5	8	130	1500.01	9.57	38.77	Open
Pipe 4	15	1	140	0.00	0.00	0.00	Open
Pipe 5	10	1	140	0.00	0.00	0.00	Open
Pipe 6	15	2	140	4.59	0.47	0.65	Open
Pipe 7	90	2	140	4.59	0.47	0.64	Open
Pipe 8	46	2	140	4.59	0.47	0.64	Open
Pipe 9	13	2	140	4.59	0.47	0.64	Open
Pipe 10	15	8	130	1500.01	9.57	38.70	Open
Pipe 12	274	8	140	1000.00	6.38	15.92	Open
Pipe 13	66	8	140	1000.00	6.38	15.92	Open
Pipe 14	20	6	130	1000.00	11.35	74.17	Open
Pipe 15	76	8	140	500.01	3.19	4.41	Open
Pipe 16	181	8	140	0.00	0.00	0.00	Open
Pipe 17	10	6	130	0.00	0.00	0.00	Open
Pipe 18	53	8	130	500.00	3.19	5.06	Open
Pipe 24	40	8	140	1500.01	9.57	33.74	Open
Pipe 25	24	8	140	1500.01	9.57	33.73	Open

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - MDD +FF

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 26	10	6	130	0.00	0.00	0.00	Open
Pipe 27	30	8	130	0.00	0.00	0.00	Open
Pump Pump1	#N/A	#N/A	#N/A	1504.61	0.00	-137.31	Open
Valve Valve1	#N/A	8	#N/A	1500.01	9.57	22.72	Open
Valve Valve2	#N/A	1	#N/A	4.59	1.88	23.42	Open
Valve Valve3	#N/A	1	#N/A	0.00	0.00	23.30	Open

CP Tech - MDD + Fire Flow (2,000 gpm Demand)

Network Table - Nodes

Node ID	Elevation ft	Demand GPM	Head ft	Pressure psi
Junc 1	5002	0.00	5118.97	50.68
Junc 2	5002	0.00	5117.46	50.03
Junc 3	5002	0.00	5117.20	49.92
Junc 4	5002	0.00	5116.87	49.77
Junc 5	5005	0.00	5117.19	48.61
Junc 6	5005	0.00	5117.46	48.73
Junc 7	5005	0.00	5094.16	38.63
Junc LSSvc	5005	0.00	5094.16	38.63
Junc 9	5005	0.00	5093.77	38.46
Junc 10	5003	0.00	5093.71	39.30
Junc 11	5005	0.00	5093.68	38.42
Junc WSvc	5009	4.59	5093.67	36.69
Junc 13	5005	0.00	5115.88	48.04
Junc 14	5005	0.00	5090.48	37.04
Junc 15	5002	0.00	5086.80	36.74
Junc 16	5005	0.00	5082.44	33.55
Junc 17	5005	0.00	5081.39	33.10
Junc Hyd2	5008	1000.00	5079.90	31.16
Junc 19	5002	0.00	5085.59	36.22
Junc Riser	5009	500.00	5085.32	33.07
Junc 21	5005	0.00	5084.79	34.57
Junc Hyd3	5008	500.00	5084.59	33.19
Junc Stub	5002	0.00	5116.87	49.77
Junc 27	5002	0.00	5088.18	37.34
Junc Hyd1	5005	0.00	5088.18	36.04
Resvr Res1	5002	-2004.61	5002.00	0.00

Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - MDD + Fire Flow (2,000 gpm Demand)

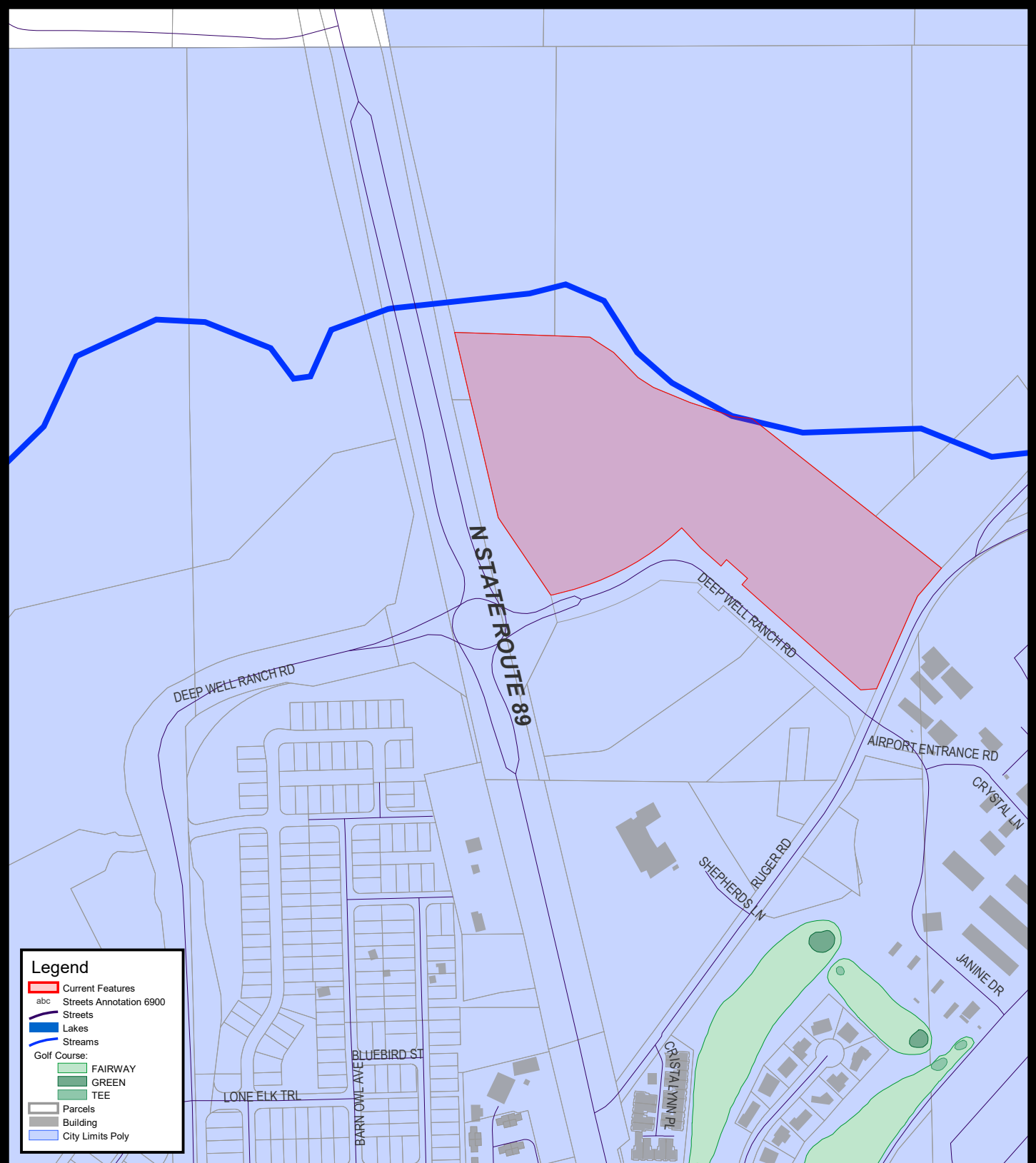
Network Table - Links

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 1	26	8	140	2004.61	12.79	57.73	Open
Pipe 2	4	8	130	2004.60	12.79	66.16	Open
Pipe 3	5	8	130	2000.01	12.77	66.02	Open
Pipe 4	15	1	140	0.00	0.00	0.00	Open
Pipe 5	10	1	140	0.00	0.00	0.00	Open
Pipe 6	15	2	140	4.59	0.47	0.65	Open
Pipe 7	90	2	140	4.59	0.47	0.64	Open
Pipe 8	46	2	140	4.59	0.47	0.64	Open
Pipe 9	13	2	140	4.59	0.47	0.64	Open
Pipe 10	15	8	130	2000.00	12.77	65.92	Open
Pipe 12	274	8	140	1000.00	6.38	15.92	Open
Pipe 13	66	8	140	1000.00	6.38	15.92	Open
Pipe 14	20	6	130	1000.00	11.35	74.17	Open
Pipe 15	76	8	140	1000.00	6.38	15.93	Open
Pipe 16	181	8	140	500.00	3.19	4.41	Open
Pipe 17	10	6	130	500.00	5.67	20.56	Open
Pipe 18	53	8	130	500.00	3.19	5.06	Open
Pipe 24	40	8	140	2000.00	12.77	57.48	Open
Pipe 25	24	8	140	2000.00	12.77	57.47	Open

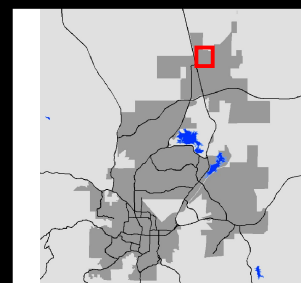
Attachment: Water Demand Analysis (3015 : ITEM 5: WSA 20-003)

CP Tech - MDD + Fire Flow (2,000 gpm Demand)

Link ID	Length ft	Diameter in	Roughness	Flow GPM	Velocity fps	Unit Headloss ft/Kft	Status
Pipe 26	10	6	130	0.00	0.00	0.00	Open
Pipe 27	30	8	130	0.00	0.00	0.00	Open
Pump Pump1	#N/A	#N/A	#N/A	2004.61	0.00	-116.97	Open
Valve Valve1	#N/A	8	#N/A	2000.00	12.77	25.40	Open
Valve Valve2	#N/A	1	#N/A	4.59	1.88	23.42	Open
Valve Valve3	#N/A	1	#N/A	0.00	0.00	23.30	Open



Attachment: Location Map (3015 : ITEM 5: WSA 20-003)

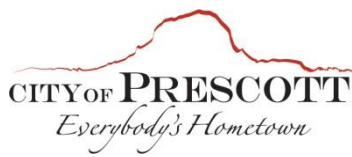


CP Technologies
located a portion of
APN 102-08-057E

This map is a product of
The City of Prescott



0' 1" = 489'



COMMITTEE AGENDA MEMO

MEETING DATE/TYPE: SUBCOMMITTEE MEETING 7-7-20

DEPARTMENT: Council Subcommittee for Water Issues

AGENDA ITEM: Infrastructure Topic: Pumping vs. Recharge Update

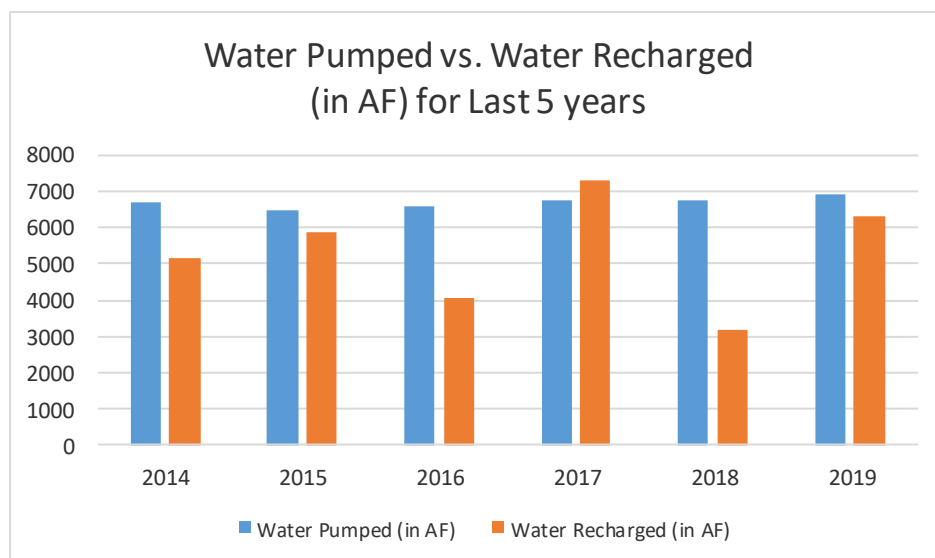
Item Summary

At the request of Chairman Blair, this is a new standing item for the Subcommittee agenda. Updates on the City's pumping of water supplies and the recharge thereof will be provided each month as provisional. In July, we will review pumping vs recharge for the last 5-years. At future meetings, year-to-date, and monthly updates will be provided.

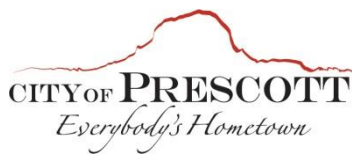
Background

Every year the City collects daily information on its water and wastewater systems. Those are then compiled to meet Annual Water Withdrawal and Use reporting to the Arizona Department of Water Resources.

Last 5 Years



AGENDA ITEM: Infrastructure Topic: Pumping vs. Recharge Update



COMMITTEE AGENDA MEMO

MEETING DATE/TYPE: **SUBCOMMITTEE MEETING** **7-7-20**

DEPARTMENT: **Council Subcommittee for Water Issues**

AGENDA ITEM: Conservation and Education Discussion, Fiscal Year 2020 Rebate Summary and Fiscal Year 2021 Goals

Item Summary

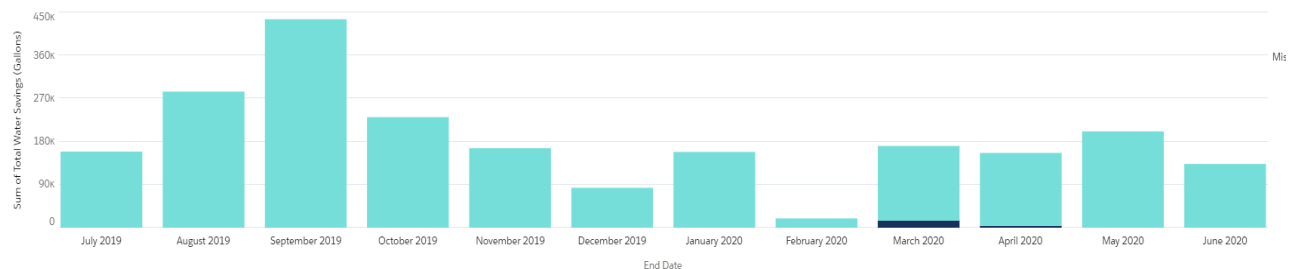
Review the results of the FY20 Conservation Rebate Program. Outline the FY21 program goals as stated in the City's Budget document.

Program Summary

FY20 Rebate Program results

The City's rebate program awarded a total of \$39,173.50. See chart below for more details on monthly activity.

Total Records	Total Processed?	Total Total Rebate	Total Total Water Savings (Gallons)	Project Count
132	126	\$39,173.50	2,199,930.000	132.00



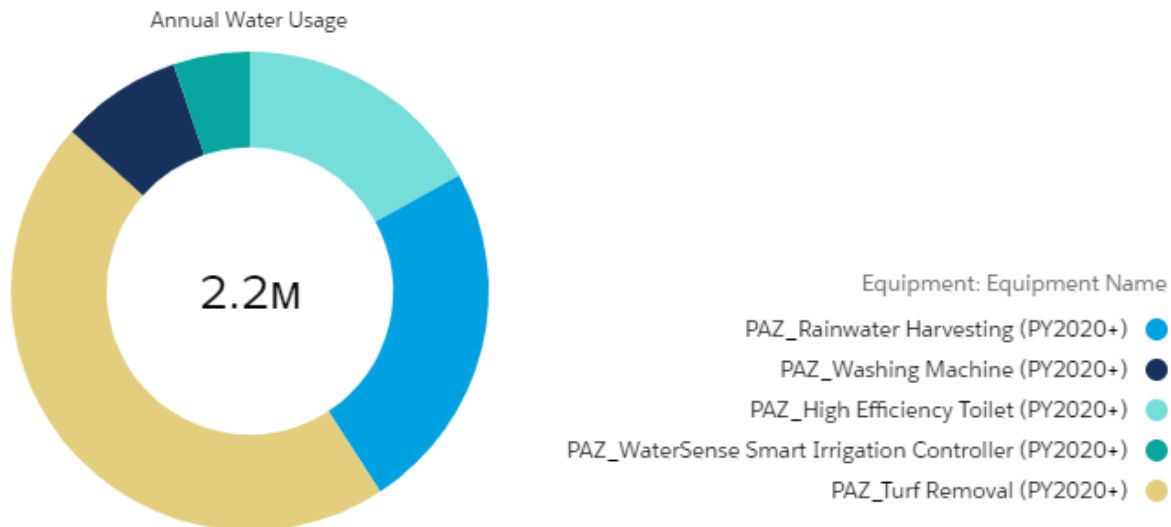
The mixture of rebates that were awarded are shown below.

Project Type	Number Awarded
Washers	48
Toilets	30
Rainwater Harvesting	20
Turf removal	19
Irrigation Controller	15
Total	132

The water savings achieved this year is shown in the chart below.

AGENDA ITEM: Conservation and Education Discussion, Fiscal Year 2020 Rebate Summary and Fiscal Year 2021 Goals

Total Records	Total Equipment Count	Total Rebate Amount	Annual Water Usage
132	152	\$39,173.50	2,199,930.00



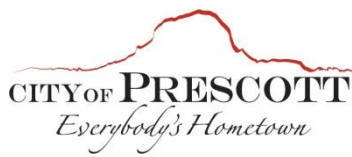
FY2021 Program Goals

As outlined in the City's Budget document, Water Resource Management (WRM) staff will implement an education outreach program and administer the Water Conservation Incentive (Rebate) Program as shown in City Code 3-10-8. The rebate program's application target is 175. Additionally, The Mayor has formed a new commission related to water and sewer connections to further increase recharge into the PrAMA, thus reducing overdraft. This commission, along with the Water Issues Committee will be a primary focus during FY21.

Public events in late FY2020 were significantly altered with the COVID-19 pandemic; however, WRM staff engaged new tools to reach city water customers or altered coordination with local partners to maintain public outreach. A list of examples for possible public outreach are:

- Monthly Facebook and City website Conservations Tips
- Funding to support K-12 water education
- Possibly resume support and attendance at public events
- WaterSmart Water Conservation quarterly newspaper articles
- WaterSmart booklet (for in person or remote delivery)

Recommended Action: This item is for presentation only. No formal action will be taken.



COMMITTEE AGENDA MEMO

MEETING DATE/TYPE: **SUBCOMMITTEE MEETING** **7-7-20**

DEPARTMENT: **Council Subcommittee for Water Issues**

AGENDA ITEM: Focus Discussion, Regarding Governor's Water Augmentation, Innovation, and Conservation Council (GWAICC) Annual Report

Item Summary

City staff has been attending and participating in the Governor's Water Augmentation, Innovations, and Conservation Council (GWAICC) and its subcommittees when schedules allow. The first annual report is available online at [https://new.azwater.gov/sites/default/files/media/New 2020 GWAICC AnnualReport Option1.pdf](https://new.azwater.gov/sites/default/files/media/New%2020%20GWAICC%20AnnualReport%20Option1.pdf)

Background

GOVERNOR'S WATER AUGMENTATION, INNOVATION AND CONSERVATION COUNCIL (GWAICC)

January 31, 2020 – GWAICC was established by Executive Order of the Governor

Council established along with legislation to adopt a Drought Contingency Plan for the State of AZ

- **Mission**
 - *Identify opportunities* for water augmentation, innovation and conservation.
 - *Assess impacts* of conservation projects funded by the State.
 - *Consider a communication plan* for the State to convey the status of water supply resiliency and how to maintain the supply status moving forward.
 - *Preparing an annual report* of the Council's activities and recommendations.
 - *Provide guidance* to the Director of ADWR upon request.
- **Issues to Address:**
 - Increasing pressures on limited groundwater supplies outside regulated areas
 - Completion of 4th management plans (Prescott AMA is developing 5th Management Plan)
 - General stream adjudication
 - Water supply physical availability in Pinal County
- **Committee Members** (see back of sheet) ADWR Director serves as chairman

Four Subcommittees (meet quarterly)

- **Long-Term Water Augmentation Committee** established to identify and explore methods of augmenting water supplies in AZ.

AGENDA ITEM: Focus Discussion, Regarding Governor's Water Augmentation, Innovation, and Conservation Council (GWAICC) Annual Report

- Released a report, “Long-Term Water Augmentation Options for AZ” in August 2019, which evaluated the States 22 planning areas to identify potential augmentation strategies.
<https://new.azwater.gov/sites/default/files/Long-Term%20Water%20Augmentation%20Options%20final.pdf>
 - Developed fact sheets for each augmentation option.
 - Augmentation options are suggestions not requirements.
 - SB1399 formed a subcommittee tasked with establishing site selection criteria to identify the 6 most potentially acceptable water storage sites on State Trust Land, and is due by Dec 2020.
- **Desalination Committee** established to evaluate the feasibility of developing desalination projects to augment water supplies.
 - Considering information on Yuma Desalting Plant (YDP) and benefits to Colorado River supply.
 - Exploring collaborative ocean desalination projects to increase delivery or exchange of Colorado River water through the Binational Desalination Work Group.
- **Post 2020 Active Management Areas Committee** established to reduce reliance on groundwater over 5 management periods from 1980 to 2025 through progressive conservation requirements.
 - Identifying challenges in the AMA's which are further described in the following “Issue Brief's”.
 - Unreplenished Groundwater Pumping
<https://new.azwater.gov/sites/default/files/ISSUE%20BRIEF%20-%20Unreplenished%20-%20Final.pdf>
 - Exempt Wells
<https://new.azwater.gov/sites/default/files/ISSUE%20BRIEF%20-%20Exempt%20Wells%20-%20Final.pdf>
 - Hydrologic Disconnect
<https://new.azwater.gov/sites/default/files/ISSUE%20BRIEF%20%E2%80%93%20Hydrologic%20Disconnect%20-%20Final.pdf>
 - Council to review issue briefs in December 2020, solution strategies will begin in 2021.
- **Non-Active Management Area Groundwater Committee** established to address issues outside of AMA's.
 - Topics and issues for discussion include:
 - Groundwater Management Strategies
 - Rural Management Areas - Develop an alternative to the AMA or Irrigation Non-Expansion Area Structures to meet the needs of certain parts of the State.
 - Water Adequacy Requirements
 - Well Spacing/Well Impact Requirements
 - Groundwater Transportation Basins
 - Data Needs, understanding impacts, enabling planning and identifying areas of concern

AGENDA ITEM: Focus Discussion, Regarding Governor's Water Augmentation, Innovation, and Conservation Council (GWAICC) Annual Report

- Best Management Practices (BMP's) and Education
- Well monitoring or measurement and reporting

Groundwater Conservation Grant

- \$2M appropriated from State General Fund to the augmentation and conservation assistance fund.
 - Conservation Grants used to support groundwater conservation in the AMA's
 - Prescott AMA awarded \$150,000
 - In addition to grants funded by groundwater withdrawal fees.

GWAICC Council Members

Legislators		Individuals Appointed		
Representative Russell Bowers		Aja, Basilio	Garfield, William	Podolak, Chuck
Senator Karen Fann		Atkins, Lisa	Graham, Patrick	Porter, Sarah
Representative Charlene Fernandez		Brown, David	Hamer, Glenn	Richards, Philip
Senator David Bradley		Buschatzke, Thomas	Kamps, Spencer	Roberts, Dave
Representative Gail Griffin		Cabrera, Misael	Kelley, Jamie	Rogers, Kevin
Senator Sine Kerr		Camacho, Chris	Kniec, John	Smallhouse, Stefanie
Senator Victoria Steele		Cooke, Ted	Lewis, Stephen Roe	Smith, Mark
Senator Lisa Otondo		Dadgar, Maria	Lombard, Cheryl	Sullivan, Craig
		Doba, Ronald	Maxwell, Edward P.	Tenney, Warren
		Dunham, Doug	Miller, Steve	Thomure, Tim
		Fabritz, Sandra	Noble, Wade	Townsend, Phillip
		Ferris, Kathy	O'Connell, Virginia	Udall, Christopher
		Gammage, Grady	Patch, Dennis	Whetten, Jay

Recommended Action: This item is for presentation only.