MASTER WATER REPORT UPDATE
FOR EASTMARK

Revised April 4, 2014
Revised November 26, 2013
Revised August 9, 2013
Revised February 4, 2013
Revised September 18, 2012
Revised August 10, 2012
Revised December 20, 2011
April 22, 2011

REVIEWED BY
CITY STAFF
BY
5/1/14 DATE

WOOD/PATEL
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April 22, 2011
WP# 144173

DMB® Master Developer Approval EASTMARK.
_____ Date _____

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ARIZONA, U.S.A.
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EXECUTIVE SUMMARY

This Report supersedes the *Master Water Report Update for Eastmark*, dated April 4, 2014, and has been prepared to specifically address revisions to the proposed water system layout within the portion of Development Unit 5 East (DU 5E). More detailed land use planning within DU 5E has been prepared and provided to Wood, Patel & Associates, Inc. (Wood/Patel) by DMB Mesa Proving Grounds, LLC. DU 5E is planned for the next phase of development within Eastmark, and is bound by Elliot Road to the north, DU 6N to the East, and DU 5 to the south and west. Changes to the *Master Water Report Update for Eastmark* include:

- Revised land uses within DU 5E were incorporated to reflect more detailed planning. Minor adjustments were made to land uses within the Development Units that have not undergone detailed planning.

- An additional 16-inch waterline is required in the Elliott Road alignment to meet City of Mesa criteria. This waterline shall connect to the existing 24-inch waterline in the Signal Butte Road alignment and extend to the northeast corner of DU 5E.

- Revised water demand for the portion of DU 5 affected by eliminating the golf course and subsequent land use updates within these Development Units.

- Wood/Patel received final lot counts for DU 7 parcels which showed a reduction of lots from 2,129 dwelling units in previous mater plans to 1,958 dwelling units within this update. The excess 171 units have been allocated to DU 5. Water demands within DU 7 and DU 5 have been revised accordingly.

Refer to the attached location plan in Plate 1 – *Vicinity Map*.

1.0 INTRODUCTION

1.1 General Background and Project Location

The proposed Eastmark (formerly known as Mesa Proving Grounds) is anticipated to be an approximate 3,151-acre master planned community in the City of Mesa (City). It is a Planned Community District (PCD) which is a mixed-use development that will include single-family residential, multi-family residential, urban mixed-use, commercial mixed-use, industrial uses, office, hotel, resort, golf, various community uses, and open spaces.

This Master Water Report Update has been prepared in accordance with Wood, Patel & Associates, Inc.'s (Wood/Patel's) understanding of the City of Mesa's technical requirements for water distribution systems, as applicable for the development known as Eastmark.

The Site is located within Sections 14, 15, 22, 23, 26, and 27, Township 1 South, Range 7 East of the Gila and Salt River Meridian. The Site is bounded by Elliot Road to the north, the Pacific Proving Grounds on the south, Ellsworth Road to the west, and Signal Butte Road to the east (refer to Plate 1 – *Vicinity Map*).

1.2 Scope of Master Water Report Update

The *Master Water Report Update for Eastmark* presents water design flows, pipe sizes, and backbone waterline locations as required to provide water service to the Site at full build-out conditions. The purpose of this update is to reflect proposed revisions to the water system layout for Development Unit 5 East.

A more detailed analysis of the water system for each development unit will be provided with each Development Unit Master Water Report. Each Development Unit Master Water Report will address changes in the development units and adjacent development units which may occur as development progresses and densities change. Updates to the Master Water Report may be required if significant changes are made to the Land Uses and assumptions utilized to prepare this Report. Additionally, design criteria may change based on actual water consumption data to calculate demand on the system in the future.

1.3 City of Mesa Water Master Plan

The City, in conjunction with Black & Veatch consultants, completed the *City of Mesa 2010 Water Master Plan Report (Update).* According to this report, the Site is located in the City's Desert Wells pressure zone.

1.4 Full Build-Out Condition

The design criteria utilized to calculate water demands and to determine required pipe sizes for the Site are based on projected full build-out conditions for residential dwelling unit densities, commercial uses, industrial uses, and community uses within the Site. For a detailed breakdown of Eastmark modeled land use areas, refer to Table 13 – *Overall Eatmark Modeled Land Use,* and Plate 2 – *Master Water Exhibit - Full Build-Out.*

1.5 Development Unit Master Plan Approvals

As each development unit is planned, this *Master Water Report for Eastmark* shall be updated as a living document to reflect changes to the land use plan that would affect the full build-out potable water distribution system. Since the development of Eastmark spans over many years, the criteria used to size the system has and will change from time to time to account for better information and changes in technology. Each development unit shall be master planned utilizing current approved criteria, which accurately reflects water demand calculation on a master planned level for the entire community. The approvals of development unit water master plans and corresponding criteria are as follows:

- DU 6 North – Approved report dated April 22, 2011 with 2007 City of Mesa water criteria.
- DU 7 – Approved report dated December 20, 2011 with 2009 City of Mesa water criteria.
- DU 8 & 9 – Approved report dated February 4, 2013 with 2009 City of Mesa water criteria.
- DU 3 South - Approved report dated November 26, 2013 with 2009 City of Mesa water criteria.
- DU 3/4 – Has been submitted to the City of Mesa for review, report dated April 4, 2013.

- DU 5 East – DU masterplan is currently being prepared and shall be submitted subsequently.

1.6 Construction Phasing

This Master Water Report Update presents the full build-out condition of the Site. It is anticipated that waterline construction will be phased corresponding to the Development Unit Plans. A proposed plan will be presented in each Development Unit Master Report to show the improvements that must be constructed with each development unit to meet the City's requirements for demands.

1.7 Basis of Design Reports for Specific Individual Developments

As development progresses within the Site, Basis of Design (BOD) reports are required for specific individual developments to ensure compliance with this Master Report Update and the Development Unit Master Report, and to identify significant variations in land use, water demands, and the water infrastructure needed to serve the parcel. BOD reports may require recent fire hydrant flow test data, as well as results from a calibrated hydraulic water model demonstrating sufficient fire flows and system pressures to non-residential areas. If applicable, the BOD reports should identify locations with pressures greater than 80 psi that require individual pressure regulators.

2.0 EXISTING CONDITIONS

2.1 Topographic Conditions

The Site consists of multiple automotive test tracks, a grouping of commercial/industrial buildings, and undisturbed desert. The Site has been utilized by General Motors as a desert automotive testing facility since the 1950's. General Motors has vacated the Site. The majority of the Site is surrounded by undeveloped desert along the northern, western, and southern boundaries. The Site is bordered on the east by two residential developments that have recently been constructed or are currently under construction, including Nova Vista and Bella Via (formerly known as Mountain Horizons). The land generally slopes in a southwesterly direction, at approximately 0.5 to 1 percent. The peak elevation within the Site is approximately 1,460 feet above mean sea level (MSL), located near the intersection of Signal Butte Road and Elliot Road. The lowest elevation within the Site is approximately 1,390 feet MSL, located near the Ray Road alignment and Ellsworth Road.

2.2 Existing Pressure Zones and Hydraulic Grade Lines

The Site is located within the Desert Wells water pressure zone, defined by the City of Mesa as follows:

<u>Desert Wells Pressure Zone:</u>

- Ground elevation range = 1,370 to 1,520 feet
- Static hydraulic grade line (HGL) = 1,634 feet.

2.3 Existing Offsite Water Infrastructure

Relevant existing water infrastructure adjacent to the Site includes the following within the Desert Wells Pressure Zone:

- 16-inch waterline extending south along Ellsworth Road from Elliot Road to Pecos Road.
- 30-inch waterline extending south along Signal Butte Road from Elliot Road to Ruben Avenue.
- 16-inch waterline extending south along Signal Butte Road from Elliot Road to Ray Road.

- 16-inch waterline extending east along Elliot Road from Ellsworth Road to Signal Butte Road.
- 12-inch waterline extending east along Warner Road from the Loop 202 Freeway to Ellsworth Road.

2.4 Existing Onsite Water Infrastructure

It is Wood/Patel's understanding there are existing onsite water service lines for the General Motors Proving Grounds offices and facilities. These waterlines will be removed by the developer in conjunction with construction of Eastmark. Additionally, it is Wood/Patel's understanding the following waterlines have been constructed:

- 12-inch waterlines looping around the First Solar facility at the southwest corner of Elliot Road and Signal Butte Road.
- 16-inch waterline extending east along Ray Road, from Ellsworth Road to Signal Butte Road.
- 12-inch waterline extending north along Inspirian Parkway, from Ray Road to Point Twenty-Two Boulevard.
- 20-inch waterline extending north along Eastmark Parkway, from Ray Road to Point Twenty-Two Boulevard
- 12-inch waterline extending north along Everton Terrace, from Ray Road to Point Twenty-Two Boulevard
- 12-inch waterline extending east along Starion Avenue, Cylinder Way, Aperture Avenue, and Lumiere Avenue, from Eastmark Parkway to Signal Butte Road.
- 24-inch waterline extending west along Point Twenty-Two Boulevard, from Signal Butte Road to Inspirian Parkway.
- It is our understanding that an additional 16-inch waterline from Elliot Road to the retrofitted First Solar building is under construction.

3.0 DESIGN CRITERIA AND PROJECTED WATER DEMANDS

3.1 Design Criteria

For the purpose of this Master Water Report Update, water demand design flows and pipe-sizing criteria utilized in this plan are based on Wood/Patel's understanding of the following:

- Applicable water system design criteria listed in the *2012 City of Mesa Engineering and Design Standards,* along with City-accepted population-based criteria, per Table 12 – *DU 5 East Water Design Criteria.*
- Regionally-accepted design standards.
- Title 18, Chapter 9 of the *Arizona Administrative Code.*

Tables 2, 4, 6, 8, 10, and 12 present the Unit Daily Water Demands for each land use category, based on density and population specific to each master planned development unit as they have been approved. The design criterion is used in Tables 1, 3, 5, 7, 9, 11 and 13 to determine the Daily Water Demand for each development unit based on the detailed land use in master planned development units and conceptual land use throughout the rest of Eastmark. The Development Unit Daily Water Demand criteria are used to estimate the water design flows and determine pipe sizes.

Fire flow requirements were modeled during the fire flow analysis of the Site. Residential development was modeled with a fire flow of 3,000 gpm, and the commercial development was modeled with a minimum fire flow of 4,000 gpm.

3.2 Water Demand Design Flows

Water demand flows under full build-out conditions are calculated using the design criteria listed in Section 3.1. For detailed calculations, refer to Table 13 – *Overall Eastmark Modeled Land Use.* Design flows are summarized below and include adjustments for Development Unit 5 East.

	Average-Day Demand MGD (gpm)	Max- Day Demand MGD (gpm)	Peak-Hour Demand MGD (gpm)
DU 5 East	1.00 (700)	2.01 (1,400)	3.02 (2,100)
Remaining Eastmark	12.99 (9,014)	24.26 (16,845)	34.44 (23,919)
Total	**13.99 (9,714)**	**26.27 (18,245)**	**37.47 (26,019)**

Water demands for the First Solar retrofitted building were calculated by CH2M Hill and are included within the water modeling. Peaking for the Max Day Demand was also provided with a peaking factor of 1.39. It is our understanding the manufacturing process proposed for the Site operates continually at consistent rates; therefore, the Peak Hour Demand is equal to the Max Day Demand.

3.3 Sustainability Techniques

Eastmark is planned to develop as a sustainable community. One proposed method is to utilize non-potable water for irrigation of open spaces which will have less impact on the potable water system. If, for some reason, all or part of the non-potable system defined in the *Master Non-Potable Water Report for Eastmark* is not built, and water is to be supplied for facilities not currently included in the demands provided in this Master Potable Water Report, this Report shall be modified and resubmitted to the City to reflect the additional demands agreed to by the City. In the future, new techniques and technologies will advance in sustainable water management that may be incorporated into the Site as approved in accordance with Section 9.0 of the Community Plan.

4.0 HYDRAULIC MODEL

Bentley *WaterCAD Version 8i*, a potable water transmission and distribution system numerical modeling program, was utilized to analyze the proposed potable water system. A hydraulic grade line (HGL) of 1,634 feet was used to simulate the water supply pressure for the Desert Wells pressure zone. Water demands and peaking factors utilized are based on the *2012 City of Mesa Engineering Design Standards* and regionally accepted design criteria. Pipes are sized to accommodate modeled conditions of flow.

4.1 Modeled Scenarios

The following primary modeling scenarios were selected to demonstrate compliance with City of Mesa requirements and analyze the proposed water system:

- Average Daily Demand
- Max Daily Demand
- Peak Hour Demand
- Max Daily Demand Plus Fire Flow
- Fire Flow Analyses

To analyze the planned water distribution system during drought or C.A.P. dry-up conditions, the above scenarios were also modeled using the current Desert Wells Groundwater Facility (DWGWF), Signal Butte Groundwater Facility (SBGWF), and the City's distribution system north of Ray Road through the existing 24-inch waterline in Signal Butte Road. Additional scenarios to evaluate flow velocities during selected fire flow events were evaluated as part of the fire flow analysis and are presented in Section 4.3 - *Hydraulic Modeling Results*. The hydraulic model utilizes the Hazen-Williams equation to calculate head losses throughout the system during the modeled scenarios. Refer to Tables 2, 4, 6, 8, 10 and 12 for additional information regarding hydraulic modeling parameters.

4.2 Hydraulic Modeling Assumptions

Several assumptions were made regarding offsite water infrastructure for the purpose of modeling full build-out design conditions. Refer to Plate 2 and Plate 3 for detailed information regarding future offsite water infrastructure. The City of Mesa has provided groundwater well data for the Signal Butte Groundwater and Desert Wells Groundwater Facilities. The flow rates used in the hydraulic model are shown in Table 16- *City of Mesa Groundwater Inventory*.

4.3 Hydraulic Modeling Results

The hydraulic modeling results indicate the onsite system is capable of delivering average daily and peak hour demands within the following onsite pressure ranges:

	Full Build-Out Pressure (psi)			
	Non-Drought		Drought	
Hydraulic Model Scenario	Low	High	Low	High
Avg. Day Demand	64	105	64	107
Peak Hour Demand	59	92	59	98

Fire flow results for the model indicate available fire flows of 4,000 gpm for commercial development, and 3,000 gpm for residential development during Max Day Demand, while maintaining residual pressures greater than 20 psi throughout the Site at full build-out conditions. Detailed hydraulic modeling results, calculations, and exhibits are provided in the attached appendices and plates. Modeled outflow from each water source is shown below.

The drought condition model was revised to utilize the 2025 capacity of the DWGWF and SBGWF determined from the City of Mesa Facility Inventory (see Table 16).

Flow from South CAP Desert Wells Pump Station:

	Non-Drought	Drought
Avg. Day Demand:	8,581 gpm	6,396 gpm
Max Day Demand:	16,117 gpm	11,915 gpm
Peak Hour Demand:	22,984 gpm	13,208 gpm

Flow from COM Water System, North of Elliot Road:

	Non-Drought	Drought
Avg. Day Demand:	1,133 gpm	844 gpm
Max Day Demand:	2,128 gpm	1,573 gpm
Peak Hour Demand:	3,035 gpm	4,274 gpm

Flow from Desert Wells Groundwater Facility:

	Non-Drought	Drought
Avg. Day Demand:	0 gpm	2,475 gpm
Max Day Demand:	0 gpm	4,757 gpm
Peak Hour Demand:	0 gpm	8,537 gpm

5.0 GENERAL PLAN FOR ONSITE WATER DISTRIBUTION

5.1 Piping Layout

The planned water distribution system for the Site consists of looped public waterlines ranging in diameter from 8 inches through 30 inches, using pipe materials per City of Mesa standards. Main waterlines have been located within designated public rights-of-way. In accordance with City of Mesa standards, 12-inch and 16-inch waterlines are generally located near ½-mile and 1-mile street alignments or are upsized as needed to meet design constraints (refer to Plate 2 – *Master Water Exhibit - Full Build-Out*).

5.2 Water Sources

According to the *2010 City of Mesa Water Master Plan (Update),* two primary sources of water will supply Eastmark. These sources are surface water supplied from the C.A.P. canal and groundwater from proposed well sites.

5.2.1 Surface Water

The Signal Butte Groundwater Facility, consisting of a reservoir and groundwater wells, has recently been constructed to provide storage and assist in meeting peak demands in the Desert Wells Zone. A portion of the facility will serve Eastmark in the interim until such time as the City deems it necessary to construct the C.A.P. raw water conveyance system from the C.A.P. canal and the water treatment portion of the plant.

According to the *2010 City of Mesa Water Master Plan (Update),* the C.A.P. water supply system typically provides a constant supply of surface water, although outages are possible as a result of failures and for periodic maintenance. C.A.P. has indicated that short dry-ups (ranging from one week to one month in duration) may be required every two to three years on average for maintenance purposes. According to the *2010 City of Mesa Water Master Plan (Update),* the South C.A.P. water facilities will be supplied by groundwater production wells during C.A.P. dry-ups to provide adequate storage and pumping to the Desert Wells Pressure Zone and other pressure zones.

5.2.2 Groundwater Wells

Conceptual locations of the future DWGWF and remote groundwater wells are shown in Plate 2. Well locations are conceptual in nature and subject to change. Well collection lines are also shown extending from each well site to supply the South C.A.P. water facilities. It is Wood/Patel's understanding the well sites and well collector mains will be logically phased with development and will be owned, operated, and maintained by the City of Mesa.

5.3 Water Pressure to Multi-Story Buildings

Based on full build-out hydraulic modeling results, peak-hour residual pressures within the Site are at or above 59 pounds per square inch (psi). Private individual booster pumps may be required to serve multi-story buildings, and should be evaluated on an individual basis.

6.0 CONCLUSIONS

The *Master Water Report Update for Eastmark* meets accepted standards and requirements, and will serve as a guide for construction documents associated with the planned potable water systems. No critical issues were identified that would preclude the anticipated development as presented in this Master Water Report Update. The following are critical conclusions:

1. The Site is located within the existing Desert Wells water pressure zone currently served by the City of Mesa.

2. For the purpose of this Master Water Report Update, the full build-out conditions have been evaluated for the design of the water distribution system. It is anticipated waterline construction will be phased to correspond with development unit plans.

3. A more detailed analysis of the water system for each development unit will be provided with each Development Unit Master Water Report. Each Development Unit Master Water Report will address changes in the development units and adjacent development units which may occur as development progresses and densities change, and each report will present the portions of the improvements that must be built to serve the development unit. The individual Development Unit Master Plans will establish the phasing of the water infrastructure as approved by the City.

4. The approximate average daily water demand for the Site is 13.99 million gallons per day (MGD) at full build-out conditions, per Section 3.2 of this Report.

5. A hydraulic model was utilized to analyze the proposed potable water system and size pipes for the water distribution system. Modeling results indicate minimum residual pressures are met throughout the Site. Additionally head loss and velocities within the planned waterlines meet the design criteria presented herein with the exception of the waterlines located near Signal Butte Road and Elliott Road. The proposed additional 16-inch waterline will reduce the velocities and head loss in this area to previous master plan conditions.

6. The existing and planned onsite water distribution system for Eastmark consists of looped public waterlines ranging in diameter from 8 inches through 30 inches.

7. The proposed water distribution system and resulting hydraulic modeling output assume City of Mesa water production facilities and booster pump station facilities will be brought into service as necessary.

8. It is Wood/Patel's understanding the City of Mesa will evaluate the planned capital improvements for adequacy in serving Eastmark, as well as the full build-out service areas.

9. This *Master Water Report Update for Eastmark* demonstrates the sufficiency of the proposed water distribution system to serve the Site in accordance with City of Mesa Water Standards.

TABLE 1

DU 6 North Modeled Land Use

TABLE 1 - DU 6 NORTH MODELED LAND USE

Project: DU 6 at Eastmark
Location: Mesa, Arizona

Proj. Number: 103456.04
Proj. Engineer: Michael Young, P.E.

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Commercial/ Industrial/ Retail S.F.	Land Use	Unit Daily Water Demand (GPD/DU, AC, or S.F.)	Avg Day
DU-6A	--	--	--	89.1	1,340,000	INDUSTRIAL	5,339	2,793,600
DU-6B	--	--	--	53.7	1,340,000	INDUSTRIAL	6,462	347,035
DU-6C	--	--	--	129.7	2,680,000	INDUSTRIAL	5,351	694,070
DU 6N Totals	**0**	**0.0**		**272.5**	**5,360,000**			**3,834,705**

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION

Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	GPD/AC	Avg Day (GPD)	Avg Day (GPM)
J-DU6-010	--	--	--	--	INDUSTRIAL	--	--	--
J-DU6-020	81% DU-6A	--	72.2	--	INDUSTRIAL	31,512	2,275,200	1580.0
J-DU6-030	1/3 DU-6B	--	17.9	--	INDUSTRIAL	6,462	115,678	80.3
J-DU6-040	1/3 DU-6B, 1/6 DU-6C	--	39.5	--	INDUSTRIAL	5,857	231,357	160.7
J-DU6-050	1/3 DU-6B, 1/6 DU-6C	--	39.5	--	INDUSTRIAL	8,786	347,035	241.0
J-DU6-060	19% DU-6A, 1/6 DU-6C	--	38.5	--	INDUSTRIAL	13,465	518,400	360.0
J-DU6-070	1/6 DU-6C	--	21.6	--	INDUSTRIAL	5,355	115,678	80.3
J-DU6-080	1/6 DU-6C	--	21.6	--	INDUSTRIAL	5,355	115,678	80.3
J-DU6-090	1/6 DU-6C	--	21.6	--	INDUSTRIAL	5,355	115,678	80.3
		0	**272.4**				**3,834,704**	**2,662.9**

Note: Water demands have been adjusted to account for the retrofit of the original First Solar Building within DU-6A. The average day and peak flows for the retrofit were determined from the CH2M Hill Plan that was provided by the City of Mesa. The total demand was determined to be 1940 GPM, with 360 GPM coming from the waterline in the Signal Butte Road alignment and 1580 GPM coming from the waterline in the Elliot Road alignment.

TABLE 2

DU 6 North Water Design Criteria

WOOD/PATEL

TABLE 2 - DU 6 NORTH WATER DESIGN CRITERIA

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Mesa Proving Grounds
Location: Mesa, Arizona
Date: April 22, 2011
References: 2007 City of Mesa Engineering Design Standards

Proj. Number: 103456.04
Proj. Engineer: Michael Young, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY RANGE / VALUE	DWELLING UNIT DENSITY UNITS	UNIT DAILY WATER VALUE	UNIT DAILY WATER UNITS	NOTES
LDR-1	Low Density Residential (LDR 0-1)	0-1	DU/AC	126	GPD/AC	Source: Dwelling unit density divisions are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2007 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	204	GPD/AC	
LDR-3	Low Density Residential (LDR-1-2)	1-2	DU/AC	281	GPD/AC	
MDR-1	Medium Density Residential (MDR 2-4)	2-4	DU/AC	834	GPD/AC	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	1,218	GPD/AC	
MDR-3	Medium Density Residential (MDR 4-6)	4-6	DU/AC	1,602	GPD/AC	
MDR-4	Medium Density Residential (MDR 6-10)	6-10	DU/AC	1,523	GPD/AC	
HDR-1	High Density Residential (HDR 10-15)	10-15	DU/AC	1,936	GPD/AC	
HDR-2	High Density Residential (HDR 15+)	15+	DU/AC	2,355	GPD/AC	
MUR-1	Mixed Use/Residential (MUR) – Residential	30% Max. 15+	DU/AC	2,307	GPD/AC	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
Hotel	300	GPD/UNIT	Based on actual water use data for resorts and discussions with City of Mesa Staff.
Commercial / Retail / Office	1,700	GPD/AC	Source: City of Mesa 2007 Engineering and Design Standards.
Education / Civic / Church	1,500	GPD/AC	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Peak Day	1.80	x Ave Day Demand	2
Peak Hour	1.70	x Peak Day Demand	3
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	
Minimum Residual Pressure, Peak Day + Fire Flow	20	psi	2
Maximum Pipe Headloss, Peak Day Demand	10 ft/1000 ft	-	3
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	3
Maximum Velocity, Peak Day + Fire Flow	10	ft/s	3
Minimum Pipe Diameter, Looped System	8	in	2
Hazen-Williams C-value	120	-	3

Notes:
1. City of Scottsdale Design Standards and Policy Manual
2. Per 2007 City of Mesa Engineering Design Standards.
3. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.

TABLE 3

DU 7 Modeled Land Use

Proj. Number: 113697.02
Proj. Engineer: Darrell Smith, P.E.

Project: DU 7 at Eastmark
Location: Mesa, Arizona

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Commercial/ Industrial/ Retail S.F.	Land Use	Unit Daily Water Demand (GPD/DU, AC, or S.F.)	Avg Day
7-1	84	15.9	5.28	--	--	MDR-3	1602	25,472
7-2	79	19.3	4.09	--	--	MDR-1	834	16,096
7-3	110	30.7	3.58	--	--	MDR-1	834	25,604
7-4	84	32.3	2.60	--	--	MDR-1	834	26,938
7-5	66	25.1	2.63	--	--	MDR-1	834	20,933
7-6	38	18.5	2.05	--	--	MDR-1	834	15,429
7-7	98	26.8	3.66	--	--	MDR-1	834	22,351
7-8	120	23.5	5.11	--	--	MDR-3	1602	37,647
7-9	81	23.1	3.51	--	--	MDR-1	834	19,265
7-10	--	--	--	7.5	37,000	CHURCH	1500	11,250
7-11	135	24.4	5.53	--	--	MDR-3	1602	39,089
7-12	97	23.0	4.22	--	--	MDR-1	834	19,182
7-13	78	19.2	4.06	--	--	MDR-1	834	16,013
7-14	53	17.3	3.06	--	--	MDR-1	834	14,428
7-15	58	18.4	3.15	--	--	MDR-1	834	15,346
7-16	106	26.4	4.02	--	--	MDR-1	834	22,018
7-17	99	20.1	4.93	--	--	MDR-3	1602	32,200
7-18	85	29.1	2.92	--	--	MDR-1	834	24,269
7-19	103	23.8	4.33	--	--	MDR-1	834	19,849
7-20	80	19.9	4.02	--	--	MDR-1	834	16,597
7-21	84	19.0	4.42	--	--	MDR-1	834	15,846
7-22	--	--	--	20.0	185,000	EDUCATION	1500	30,000
7-23	220	20.0	11.00	--	--	HDR-1	1936	38,720
7-24	--	--	--	6.0	20,000	CHURCH	1500	9,000
7-25	--	--	--	2.5	8,000	CIVIC	1500	3,750
7-26	--	--	--	5.5	15,000	COMMERCIAL/ RESTAURANT	1700	9,350
7-27	--	--	--	29.3	--	PARK/LAKE	4,400	128,920
ROW				28.9	--	INFRASTRUCTURE ROAD R.O.W.	--	--
DU 7 Totals	**1958**	**475.8**		**99.7**	**265,000**			**675,562**

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION

Junction	Parcel(s)	No. of DUs	Acres	Residential Density (DU/AC)	Land Use	GPD/AC	Avg Day (GPD)	Avg Day (GPM)
J-DU7-010	7-26	--	5.5	--	COMMERCIAL/ RESTAURANT	1,700	9,350	6.5
J-DU7-020	7-27	--	29.3	--	PARK/LAKE	4,400	128,920	89.5
J-DU7-030	--	--	--	--	--	--	--	--
J-DU7-040	--	--	--	--	--	--	--	--
J-DU7-050	7-23	220	20.0	11.0	HDR-1	1,936	38,720	26.9
J-DU7-060	7-13	78	19.2	4.1	MDR-1	834	16,013	11.1
J-DU7-070	--	--	--	--	--	--	--	--
J-DU7-080	7-10, 7-11	135	31.9	5.5	MDR-3, CHURCH	1,578	50,339	35.0
J-DU7-090	--	--	--	--	--	--	--	--
J-DU7-100	7-1, 7-2	163	35.2	4.6	MDR-1, MDR-3	1,181	41,568	28.9
J-DU7-110	7-3, 7-21	194	49.7	3.9	MDR-1	834	41,450	28.8
J-DU7-120	--	--	--	--	--	--	--	--
J-DU7-130	7-25	--	2.5	--	CIVIC	1,500	3,750	2.6
J-DU7-140	7-16, 7-19, 7-22	209	70.2	4.2	MDR-1, EDUCATION	1,024	71,867	49.9
J-DU7-150	7-14, 7-24	53	23.3	3.1	MDR-1, CHURCH	1,005	23,428	16.3
J-DU7-160	7-12, 7-15	155	41.4	3.7	MDR-1	834	34,528	24.0
J-DU7-170	7-6	38	18.5	2.1	MDR-1	834	15,429	10.7
J-DU7-180	7-4	84	32.3	2.6	MDR-1	834	26,938	18.7
J-DU7-190	7-5, 7-7	164	51.9	3.2	MDR-1	834	43,284	30.1
J-DU7-200	7-17, 7-18, 7-20	264	69.1	3.8	MDR-1, MDR-3	1,057	73,066	50.7
J-250EX	7-8, 7-9	201	46.6	4.3	MDR-1, MDR-3	1,221	56,912	39.5
DU 7 Totals		**1,958**	**546.6**				**675,562**	**469**

TABLE 4

DU 7 Water Design Criteria

WOOD/PATEL

TABLE 4 - DU 7 WATER DESIGN CRITERIA

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Mesa Proving Grounds - DU 7
Location: Mesa, Arizona
References: 2009 City of Mesa Engineering Design Standards

Proj. Number: 113697.02
Proj. Engineer: Darrell Smith, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY RANGE / VALUE	DWELLING UNIT DENSITY UNITS	UNIT DAILY WATER VALUE	UNIT DAILY WATER UNITS	NOTES
LDR-1	Low Density Residential (LDR 0-1)	0-1	DU/AC	126	GPD/AC	Source: Dwelling unit density divisions are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2009 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	204	GPD/AC	
LDR-3	Low Density Residential (LDR-1-2)	1-2	DU/AC	281	GPD/AC	
MDR-1	Medium Density Residential (MDR 2-4)	2-4	DU/AC	834	GPD/AC	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	1,218	GPD/AC	
MDR-3	Medium Density Residential (MDR 4-6)	4-6	DU/AC	1,602	GPD/AC	
MDR-4	Medium Density Residential (MDR 6-10)	6-10	DU/AC	1,523	GPD/AC	
HDR-1	High Density Residential (HDR 10-15)	10-15	DU/AC	1,936	GPD/AC	
HDR-2	High Density Residential (HDR 15+)	15+	DU/AC	2,355	GPD/AC	
MUR-1	Mixed Use/Residential (MUR) -- Residential	30% Max. 15+	DU/AC	2,307	GPD/AC	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
Hotel	300	GPD/UNIT	Based on actual water use data for resorts and discussions
Commercial / Retail / Office	1,700	GPD/AC	
Education/Civic/Church	1,600	GPD/AC	ource: City of Mesa 2009 Engineering and Design Standar
Potable Irrigated Turf	4,400	GPD/AC	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Peak Day	1.80	x Ave Day Demand	2
Peak Hour	1.70	x Peak Day Demand	3
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	
Minimum Residual Pressure, Peak Day + Fire Flow	20	psi	2
Maximum Pipe Headloss, Peak Day Demand	10 ft/1000 ft	-	3
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	3
Maximum Velocity, Peak Day + Fire Flow	10	ft/s	3
Minimum Pipe Diameter, Looped System	8	in	2
Hazen-Williams C-value	120	-	3

Notes:
1. City of Scottsdale Design Standards and Policy Manual
2. Per 2009 City of Mesa Engineering Design Standards.
3. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.

TABLE 5

DU 8 & 9 Modeled Land Use

Project: DU 8 & 9 at Eastmark
Location: Mesa, Arizona

Proj. Number: 123854.04
Proj. Engineer: Darrell Smith, P.E.

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Commercial/ Industrial/ Retail S.F.	Land Use	Unit Daily Water Demand (GPD/DU, AC, or S.F.)	Avg Day
8-1	74	22.9	3.23	--	--	MDR-1	300	22,200
8-2	87	30.0	2.90	--	--	MDR-1	300	26,100
8-3	64	24.7	2.59	--	--	MDR-1	300	19,200
8-4	42	20.9	2.01	--	--	MDR-1	300	12,600
8-5	--	--	--	6.8	--	PARK	4400	29,920
8-6	91	23.6	3.86	--	--	MDR-1	300	27,300
8-7	74	28.2	2.62	--	--	MDR-1	300	22,200
8-8	39	20.0	1.95	--	--	LDR-3	490	19,110
8-9	64	21.7	2.95	--	--	MDR-1	300	19,200
9-1	189	54.0	3.50	--	--	MDR-1	300	56,700
9-2	99	31.8	3.11	--	--	MDR-1	300	29,700
9-3	--	--	--	12.4	200,000	Civic	1500	18,600
9-4	159	49.4	3.22	--	--	MDR-1	300	47,700
9-5	145	39.8	3.64	--	--	MDR-1	300	43,500
9-6	90	22.4	4.02	--	--	MDR-2	250	22,500
9-7	226	60.7	3.72	--	--	MDR-1	300	67,800
Other	--	--	--	57.3	Drainage Channel/Road ROW	---	--	0
DU 8 & 9 Totals	**1443**	**450.1**		**76.5**	**200,000**			**484,330**

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION

Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	GPD/AC	Avg Day (GPD)	Avg Day (GPM)
J-DU8-010	--	--	--	--	--	--	--	--
J-DU8-020	--	--	--	--	--	--	--	--
J-DU8-030	--	--	--	--	--	--	--	--
J-DU8-040	1/2 8-9	32	10.9	2.9	MDR-1	881	9,600	6.7
J-DU8-050	--	--	--	--	--	--	--	--
J-DU8-060	1/2 8-2	43.5	15.0	2.9	MDR-1	870	13,050	9.1
J-DU8-070	8-1	74	22.9	3.2	MDR-1	969	22,200	15.4
J-DU8-080	1/2 8-4	21	10.5	2.0	MDR-1	600	6,300	4.4
J-DU8-090	1/2 8-4, 1/2 8-8	40.5	20.5	2.0	MDR-1 & LDR-3	773	15,855	11.0
J-DU8-100	1/2 8-2	43.5	15.0	2.9	MDR-1	870	13,050	9.1
J-DU8-110	8-3 & 8-5, 1/2 8-6	110	43.3	2.5	MDR-1 & Park	1,450	62,770	43.6
J-DU8-120	1/2 8-6, 1/2 8-7	82.5	25.9	3.2	MDR-1	956	24,750	17.2
J-DU8-130	1/2 8-7, 1/2 8-8, 1/2 8-9	88.5	35.0	2.5	MDR-1 & LDR-3	864	30,255	21.0
J-DU9-010	1/2 9-1	94.5	27.0	3.5	MDR-1	1,050	28,350	19.7
J-DU9-020	1/2 9-1, 1/2 9-2 & 9-3	144	49.1	2.9	MDR-1 & Civic	1,069	52,500	36.5
J-DU9-030	1/2 9-2 & 9-3, 1/2 9-4	129	46.8	2.8	MDR-1 & Civic	1,026	48,000	33.3
J-DU9-040	1/2 9-6	45	11.2	4.0	MDR-2	1,004	11,250	7.8
J-DU9-050	--	--	--	--	--	--	--	--
J-DU9-060	1/2 9-6, 1/2 9-7	158	41.6	3.8	MDR-2 & MDR-1	1,085	45,150	31.4
J-DU9-070	1/2 9-4, 1/2 9-5	152	44.6	3.4	MDR-1	1,022	45,600	31.7
J-DU9-080	1/2 9-5, 1/2 9-7	185.5	50.3	3.7	MDR-1	1,106	55,650	38.6
DU 8 & 9 Totals		**1,444**	**469.6**				**484,330**	**336.5**

TABLE 6

DU 8 & 9 Water Design Criteria

WOOD/PATEL

TABLE 6 - DU 8 & 9 WATER DESIGN CRITERIA

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: DU 8 & 9 at Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 123835.04
Proj. Engineer: Darrell Smith, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY RANGE / VALUE	DWELLING UNIT DENSITY UNITS	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
LDR-1	Low Density Residential (LDR 0-1)	0.5	DU/AC	490	GPD/DU	126	GPD/AC	Source: Dwelling unit density divisons are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2012 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1.0	DU/AC	490	GPD/DU	204	GPD/AC	
LDR-3	Low Density Residential (LDR-1-2)	1.2	DU/AC	490	GPD/DU	281	GPD/AC	
MDR-1	Medium Density Residential (MDR 2-4)	3.0	DU/AC	300	GPD/DU	834	GPD/AC	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4.0	DU/AC	250	GPD/DU	1,218	GPD/AC	
MDR-3	Medium Density Residential (MDR 4-6)	5.0	DU/AC	250	GPD/DU	1,602	GPD/AC	
MDR-4	Medium Density Residential (MDR 6-10)	6.5	DU/AC	250	GPD/DU	1,523	GPD/AC	
HDR-1	High Density Residential (HDR 10-15)	11.0	DU/AC	230	GPD/DU	1,936	GPD/AC	
HDR-2	High Density Residential (HDR 15+)	17.0	DU/AC	230	GPD/DU	2,355	GPD/AC	
MUR-1	Mixed Use/Residential (MUR) – Residential	15.0	DU/AC	185	GPD/DU	2,307	GPD/AC	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
Resort Hotel	350	GPD/UNIT	Source: City of Mesa 2012 Engineering and Design Standards.
Commercial / Retail	0.8	GPD/SF	
Office	0.6	GPD/SF	
Education/Civic/Church	1,500	GPD/AC	
Potable Irrigated Turf	4,400	GPD/AC	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Max Day	2.0	x Ave Day Demand	2
Peak Hour	3.0	x Ave Day Demand	2
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	
Minimum Residual Pressure, Max Day + Fire Flow	20	psi	2
Maximum Pipe Headloss, Max Day Demand	10 ft/1000 ft	-	3
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	3
Maximum Velocity, Max Day + Fire Flow	10	ft/s	3
Minimum Pipe Diameter, Looped System	8	in	2
Hazen-Williams C-value	120	-	3

Notes:
1. City of Scottsdale Design Standards and Policy Manual
2. Per 2012 City of Mesa Engineering Design Standards.
3. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.

TABLE 7

DU 3 South Modeled Land Use

TABLE 7 - DU 3 SOUTH MODELED LAND USE

Proj. Number: 113697.08
Proj. Engineer: Darrell Smith, P.E.

Project: DU 3S at Eastmark
Location: Mesa, Arizona

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Commercial/ Industrial/ Retail S.F.	Land Use	Unit Daily Water Demand (GPD/Acre)	Avg Day
3S-1	137	30.9	4.43	--	--	MDR-2	1218	37,636
3S-2	115	31.4	3.66	--	--	MDR-2	1218	38,245
3S-3	139	30.0	4.63	--	--	MDR-2	1218	36,540
DU 3S Totals	**391**	**92.3**		**0.0**	**0**			**112,421**

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION

Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	GPD/AC	Avg Day (GPD)	Avg Day (GPM)
J-DU3S-010	3S-3	55	12.0	4.6	MDR-2	1,218	14,616	10.2
J-DU3S-020	3S-2, 3S-3	52	13.0	4.0	MDR-2	1,218	15,834	11.0
J-DU3S-030	3S-1, 3S-2	73	17.7	4.1	MDR-2	1,218	21,559	15.0
J-DU3S-040	3S-1	57	13.0	4.4	MDR-2	1,218	15,834	11.0
J-DU3S-050	3S-1, 3S-2	58	14.3	4.1	MDR-2	1,218	17,417	12.1
J-DU3S-060	3S-2, 3S-3	58	14.0	4.1	MDR-2	1,218	17,052	11.8
J-DU3S-070	3S-3	38	8.3	4.6	MDR-2	1,218	10,109	7.0
		391	**92.3**				**112,421**	**78.1**

TABLE 8

DU 3 South Water Design Criteria

WOOD/PATEL

TABLE 8 - DU 3 SOUTH WATER DESIGN CRITERIA

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 113697.08
Proj. Engineer: Darrell Smith, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY RANGE / VALUE	DWELLING UNIT DENSITY UNITS	UNIT DAILY WATER VALUE	UNIT DAILY WATER UNITS	NOTES
LDR-1	Low Density Residential (LDR 0-1)	0-1	DU/AC	126	GPD/AC	Source: Dwelling unit density divisions are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2009 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	204	GPD/AC	
LDR-3	Low Density Residential (LDR-1-2)	1-2	DU/AC	281	GPD/AC	
MDR-1	Medium Density Residential (MDR 2-4)	2-4	DU/AC	834	GPD/AC	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	1,218	GPD/AC	
MDR-3	Medium Density Residential (MDR 4-6)	4-6	DU/AC	1,602	GPD/AC	
MDR-4	Medium Density Residential (MDR 6-10)	6-10	DU/AC	1,523	GPD/AC	
HDR-1	High Density Residential (HDR 10-15)	10-15	DU/AC	1,936	GPD/AC	
HDR-2	High Density Residential (HDR 15+)	15+	DU/AC	2,355	GPD/AC	
MUR-1	Mixed Use/Residential (MUR) – Residential	30% Max. 15+	DU/AC	2,307	GPD/AC	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
Hotel	300	GPD/UNIT	Based on actual water use data for resorts and discussion
Commercial / Retail / Office	1,700	GPD/AC	urce: City of Mesa 2009 Engineering and Design Standar
Education/Civic/Church	1,500	GPD/AC	
Potable Irrigated Turf	4,400	GPD/AC	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Peak Day	2.00	x Ave Day Demand	2
Peak Hour	3.00	x Ave Day Demand	2
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	
Minimum Residual Pressure, Peak Day + Fire Flow	20	psi	2
Maximum Pipe Headloss, Peak Day Demand	10 ft/1000 ft	-	3
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	3
Maximum Velocity, Peak Day + Fire Flow	10	ft/s	3
Minimum Pipe Diameter, Looped System	8	in	2
Hazen-Williams C-value	120	-	3

Notes:
1. City of Scottsdale Design Standards and Policy Manual
2. Per 2012 City of Mesa Engineering Design Standards.
3. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.

TABLE 9

DU 3/4 Modeled Land Use

Project: DU 3/4 at Eastmark
Location: Mesa, Arizona

Proj. Number: 113697.09
Proj. Engineer: Dan Matthews, P.E.

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Land Use	Floor Area (SQ. FT.)	Population Density or Acreage		Total Population or Acreage	Unit Daily Water Demand (GPD/DU, AC, or S.F.)		Avg Day Flow (GPD)	Total Avg Day Flow (GPD)
3/4-1	--	--	--	10.0	Middle School	87,120	100	Students and Staff/Acre	1,000	40	GPD / Person	40,000	54,800
							0.30	Acres of Turf/Acre	3	4,400	GPD/Acre	13,200	
							0.20	Acres of Low Water Use Landscaping/Acre	2	800	GPD/Acre	1,600	
3/4-2	460	23.0	20.00	--	HDR-2	--	--	--	--	230	GPD/DU	105,800	105,800
3/4-3	--	--	--	58.9	Park	--	--	--	--	--	--	--	--
3/4-4	--	--	--	5.0	Elementary School	43,560	200	Students and Staff / Acre	1,000	40	GPD / Person	40,000	47,400
							0.3	Acres of Turf/Acre	1.5	4,400	GPD/Acre	6,600	
							0.2	Acres of Low Water Use Landscaping/Acre	1.0	800	GPD/Acre	800	
3/4-5	--	--	--	15.0	Library	50,000	0.4	Empolyees/ 1, 000 S.F.	20	54	GPD / Person	1,080	10,680
							2.0	Patrons/1,000 S.F.	100	20	GPD / Person	2,000	
							1.0	Acres of Turf	1.0	4,400	GPD/Acre	4,400	
							4.0	Acres of Low Water Use Landscaping	4.0	800	GPD/Acre	3,200	
3/4-6	--	--	--	16.0	Aquatic Center	50,000	200	Patrons and Staff / Acre	3,200	15	GPD / Person	48,000	48,000
3/4-7	--	--	--	49.0	University	--	4,780	Boarded Students	4,780	80	GPD / Person	382,400	406,400
							4.0	Acres of Turf	4.0	4,400	GPD/Acre	17,600	
							8.0	Acres of Low Water Use Landscaping	8.0	800	GPD/Acre	6,400	
3/4-8	640	32.0	20.00	--	HDR-2	--	--	--	--	230	GPD/DU	147,200	147,200
3/4-9	--	--	--	112.0	University	--	7,970	Boarded Students	7,970	80	GPD / Person	637,600	871,600
							4,950	Commuter Students and Staff	4,950	40	GPD / Person	198,000	
							6.0	Acres of Turf	6.0	4,400	GPD/Acre	26,400	
							12	Acres of Low Water Use Landscaping	12.0	800	GPD/Acre	9,600	
3/4-10	3459	173.0	19.99	--	HDR-2	--	--	--	--	230	GPD/DU	795,570	795,570
3/4-11	--	--	--	29.5	Office	1,124,000	5	Employees/ 1,000 S.F.	5,620	80	GPD / Person	449,600	449,600
3/4-12	--	--	--	12.5	Office	476,000	5	Employees/ 1,000 S.F.	2,380	80	GPD / Person	190,400	190,400
3/4-13	--	--	--	45.0	Commercial/Retail/Restaurant	278,000	2.5	Employees and Patrons/ 1,000 S.F.	695	80	GPD / Person	55,600	310,600
	--	--	--		Office	525,000	5.0	Employees/ 1,000 S.F.	2,625	80	GPD / Person	210,000	
	--	--	--		Theater	12 Screens 50,000	250	Seats/Screen	3,000	7.5	GPD / Seat	22,500	
	--	--	--		Hotel	45,000	150	Rooms	--	150	GPD / Room	22,500	
Other	--	--	--	27.4	Road ROW	--	--	--	--	--	--	--	--
DU 3 & 4 Totals	4,559	228.0		380.3									3,438,050

TABLE 9 CONTINUED - DU 3/4 MODELED LAND USE

Project: DU 3/4 at Eastmark
Location: Mesa, Arizona

Proj. Number: 113697.09
Proj. Engineer: Dan Matthews, P.E.

Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	Floor Area (SQ. FT.)	Avg Day Flow (GPD)	Total Avg Day Flow (GPD)	Avg Day (GPM)	Total Avg Day Flow (GPM)
J-DU3-4-010	1/4 3/4-10	864	43.3	20	HDR-2	--	198,893	198,893	138.1	138.1
J-DU3-4-020	1/4 3/4-10	865	43.3	20	HDR-2	--	198,893	198,893	138.1	138.1
J-DU3-4-030	1/4 3/4-13	--	11.3	--	Commercial/Retail/Restaurant/Office/Theater/Hotel	224,500	77,650	186,600	53.9	129.6
	1/8 3/4-9	--	14.0	--	University	--	108,950		75.7	
J-DU3-4-040	1/4 3/4-9	--	28.0	--	University	--	217,900	217,900	151.3	151.3
J-DU3-4-050	1/4 3/4-8	160	8.0	5	HDR-2	--	36,800	36,800	25.6	25.6
J-DU3-4-060	3/4-6	--	16.0	--	Aquatic Center	50,000	48,000	48,000	33.3	58.9
	1/4 3/4-8	160	8.0	5	HDR-2	--	36,800	36,800	25.6	
J-DU3-4-070	1/8 3/4-7	--	6.1	--	University	--	50,800	268,700	35.3	186.6
	1/4 3/4-9	--	28.0	--	University	--	217,900		151.3	
J-DU3-4-080	1/8 3/4-7	--	6.1	--	University	--	50,800	268,700	35.3	186.6
	1/4 3/4-9	--	28.0	--	University	--	217,900		151.3	
J-DU3-4-090	1/8 3/4-9	--	14.0	--	University	--	108,950	108,950	75.7	75.7
J-DU3-4-100	3/4-12	--	12.5	--	Office	476,000	190,400	268,050	132.2	186.1
	1/4 3/4-13	--	11.3	--	Commercial/Retail/Restaurant/Office/Theater/Hotel	224,500	77,650		53.9	
J-DU3-4-110	1/2 3/4-7	--	24.5	--	University	--	203,200	203,200	141.1	141.1
J-DU3-4-120	1/2-3/4-11	--	14.8	--	Office	562,000	224,800	224,800	156.1	156.1
J-DU3-4-130	1/4-3/4-2	115	5.8	20.0	HDR-2	--	26,450	251,250	18.4	174.5
	1/2-3/4-11	--	14.8	--	Office	562,000	224,800		156.1	
J-DU3-4-140	3/4-1	--	10.0	--	Middle School	87,120	54,800	134,150	38.1	93.2
	3/4-3/4-2	345	17.3	20	HDR-2	--	79,350		55.1	
J-DU3-4-150	1/4 3/4-7	--	12.3	--	University	--	101,600	101,600	70.6	70.6
J-DU3-4-180	3/4-5	--	15.0	--	Library	50,000	10,680	10,680	7.4	7.4
J-DU3-4-190	3/4-4	--	5.0	--	Elementary School	43,560	47,400	47,400	32.9	32.9
J-DU3-4-200	1/4 3/4-10	865	43.3	20	HDR-2	--	198,893	198,893	138.1	138.1
J-300EX	1/4 3/4-13	--	11.3	--	Commercial/Retail/Restaurant/Office/Theater/Hotel	224,500	77,650	77,650	53.9	53.9
J-DU3S-080	1/4 3/4-13	--	11.3	--	Commercial/Retail/Restaurant/Office/Theater/Hotel	224,500	77,650	77,650	53.9	53.9
J-DU7-020	1/4 3/4-10	865	43.3	20	HDR-2	--	198,893	198,893	138.1	138.1
J-DU7-040	1/4 3/4-8	160	8.0	5	HDR-2	--	36,800	36,800	25.6	25.6
J-DU7-050	1/4 3/4-8	160	8.0	5	HDR-2	--	36,800	36,800	25.6	25.6
DU 3 & 4 Totals		**4,559**				**2,728,680**	**3,438,052**	**3,438,052**	**2,388**	**2,388**

TABLE 10

DU 3/4 Water Design Criteria

WOOD/PATEL

TABLE 10 - DU 3/4 WATER DESIGN CRITERIA

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards and City of Mesa approved population based design criteria

Proj. Number: 113697.09
Proj. Engineer: Dan Matthews, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY VALUE	DWELLING UNIT DENSITY UNITS	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
LDR-1	Low Density Residential (LDR 0-1)	0.5	DU/AC	490	GPD/DU	Source: Dwelling unit density divisions are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2012 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	490	GPD/DU	
LDR-3	Low Density Residential (LDR-1-2)	1.2	DU/AC	490	GPD/DU	
MDR-1	Medium Density Residential (MDR 2-4)	3.0	DU/AC	250	GPD/DU	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	250	GPD/DU	
MDR-3	Medium Density Residential (MDR 4-6)	5.0	DU/AC	250	GPD/DU	
MDR-4	Medium Density Residential (MDR 6-10)	6.5	DU/AC	250	GPD/DU	
HDR-1	High Density Residential (HDR 10-15)	11.0	DU/AC	230	GPD/DU	
HDR-2	High Density Residential (HDR 15+)	20.0	DU/AC	230	GPD/DU	
MUR-1	Mixed Use/Residential (MUR) – Residential	15.0	DU/AC	185	GPD/DU	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	Population Density		WATER DESIGN DEMANDS (PER CAPITA)		NOTES
University - Boarded Student	---	---	80	GPD / Person	Source: City of Mesa approved population based criteria
University - Commuter Student and Staff	---	---	40	GPD / Person	
Elementary School - Student and Staff	200	Students and Staff / Acre	40	GPD / Person	
Middle School - Student and Staff	100	Students and Staff / Acre	40	GPD / Person	
Civic / Church / Library Staff	0.4	Employees / 1,000 S.F.	54	GPD / Person	
Civic / Church / Library Patrons	2	Patrons / 1,000 S.F.	20	GPD / Person	
Aquatic Center	200	Patrons and Staff / Acre	15	GPD / Person	
Commercial / Retail / Restaurant	2.5	Employees and Patrons / 1,000 S.F.	80	GPD / Person	
Office	5.0	Employees / 1,000 S.F.	80	GPD / Person	
Theater	250	Seats / Screen	7.5	GPD / Seat	
Hotel	---	---	150	GPD / Room	
Resort	---	---	300	GPD / Room	
Turf	---	---	4400	GPD/Acre	
Low Water Use Landscaping	---	---	800	GPD/Acre	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Max Day	2.0	x Ave Day Demand	1
Peak Hour	3.0	x Ave Day Demand	1
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	1
Minimum Residual Pressure, Max Day + Fire Flow	20	psi	1
Maximum Pipe Head Loss, Max Day Demand	10 ft/1000 ft	-	2
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	1
Maximum Velocity, Max Day + Fire Flow	10	ft/s	1
Minimum Pipe Diameter, Looped System	8	in	1
Hazen-Williams C-value	120	-	2

Notes:
1. Per 2012 City of Mesa Engineering Design Standards.
2. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems

TABLE 11

DU 5 East Modeled Land Use

TABLE 11 - DU 5 EAST MODELED LAND USE

Project: DU 5 East at Eastmark
Location: Mesa, Arizona

Proj. Number: 144173
Proj. Engineer: Dan Matthews, P.E.

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Land Use	Floor Area (SQ. FT.)	Population Density or Acreage	Total Population or Acreage	Unit Daily Water Demand (GPD/DU, AC, or S.F.)		Avg Day Flow (GPD)	Total Avg Day Flow (GPD)
DU-5E	--	--	--	82.0	Industrial	1,000,000	--	82	12,293	GPD/ACRE	1,008,000	1,008,000
DU5 East Totals	--	--		**82.0**								**1,008,000**

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION

Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	Floor Area (SQ. FT.)	Total Avg Day Flow (GPD)	Total Avg Day Flow (GPM)
J-DU5E-010	1/4 5E	--	20.5	--	Industrial	250,000	252,000	175.0
J-DU5E-020	1/4 5E	--	20.5	--	Industrial	250,000	252,000	175.0
J-2340EX	1/4 5E	--	20.5	--	Industrial	250,000	252,000	175.0
J-1130EX	1/4 5E	--	20.5	--	Industrial	250,000	252,000	175.0
						Totals	**1,008,000**	**700**

Note: Water demands have been adjusted to account for the industrial development of DU5 East. The average day demand for the industrial development was provided by the City of Mesa. The total average day demand needed by 2023 was determined to be 700 GPM or 1,008,000 MGD.

TABLE 12

DU 5 East Water Design Criteria

WOOD/PATEL

TABLE 12 - DU 5 EAST WATER DESIGN CRITERIA

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards and City of Mesa approved population based design criteria

Proj. Number: 144173
Proj. Engineer: Dan Matthews, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS

LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY VALUE	DWELLING UNIT DENSITY UNITS	UNIT DAILY WATER DEMAND VALUE	UNIT DAILY WATER DEMAND UNITS	NOTES
LDR-1	Low Density Residential (LDR 0-1)	0.5	DU/AC	490	GPD/DU	Source: Dwelling unit density divisions are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2012 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	490	GPD/DU	
LDR-3	Low Density Residential (LDR-1-2)	1.2	DU/AC	490	GPD/DU	
MDR-1	Medium Density Residential (MDR 2-4)	3.0	DU/AC	250	GPD/DU	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	250	GPD/DU	
MDR-3	Medium Density Residential (MDR 4-6)	5.0	DU/AC	250	GPD/DU	
MDR-4	Medium Density Residential (MDR 6-10)	6.5	DU/AC	250	GPD/DU	
HDR-1	High Density Residential (HDR 10-15)	11.0	DU/AC	230	GPD/DU	
HDR-2	High Density Residential (HDR 15+)	20.0	DU/AC	230	GPD/DU	
MUR-1	Mixed Use/Residential (MUR) -- Residential	15.0	DU/AC	185	GPD/DU	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS

LAND USE	Population Density		WATER DESIGN DEMANDS (PER CAPITA)		NOTES
University - Boarded Student	---	---	80	GPD / Person	Source: City of Mesa approved population based criteria
University - Commuter Student and Staff	---	---	40	GPD / Person	
Elementary School - Student and Staff	200	Students and Staff / Acre	40	GPD / Person	
Middle School - Student and Staff	100	Students and Staff / Acre	40	GPD / Person	
Civic / Church / Library Staff	0.4	Employees / 1,000 S.F.	54	GPD / Person	
Civic / Church / Library Patrons	2	Patrons / 1,000 S.F.	20	GPD / Person	
Aquatic Center	200	Patrons and Staff / Acre	15	GPD / Person	
Commercial / Retail / Restaurant	2.5	Employees and Patrons / 1,000 S.F.	80	GPD / Person	
Office	6.0	Employees / 1,000 S.F.	80	GPD / Person	
Theater	250	Seats / Screen	7.5	GPD / Seat	
Hotel	---	---	150	GPD / Room	
Resort	---	---	300	GPD / Room	
Turf	---	---	4400	GPD/Acre	
Low Water Use Landscaping	---	---	800	GPD/Acre	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
PEAKING FACTORS			
Max Day	2.0	x Ave Day Demand	1
Peak Hour	3.0	x Ave Day Demand	1
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	1
Minimum Residual Pressure, Max Day + Fire Flow	20	psi	1
Maximum Pipe Head Loss, Max Day Demand	10 ft/1000 ft	-	2
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	1
Maximum Velocity, Max Day + Fire Flow	10	ft/s	1
Minimum Pipe Diameter, Looped System	8	in	1
Hazen-Williams C-value	120	-	2

Notes:
1. Per 2012 City of Mesa Engineering Design Standards.
2. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.

TABLE 13

Overall Eastmark Modeled Land Use

Project: Eastmark
Location: Mesa, Arizona

Proj. Number: 144173
Proj. Engineer: Dan Matthews, P.E.

EASTMARK - PRELIMINARY RESIDENTIAL LAND USE AND DWELLING UNIT BREAKDOWN

Land Use	LDR-2	LDR-3	MDR-1	MDR-2	MDR-3	MDR-4	HDR-1	HDR-2	Residential Total	Mixed Use Residential	Total Residential Units
Acreage	78.0	20.0	900.6	114.7	83.9	61.5	35.0	350.2	1,643.9	52.4	--
Dwelling Units	78	39	2,977	481	438	400	385	7,002	11,800	3,200	15,000

EASTMARK - WATER DEMAND CALCULATIONS

Development Unit	Total Area (AC)	Residential (AC)	Total Dwelling Units	Keys[1]	Gross Non-Residential[2] (AC)	Total Floor Area (sq. ft.)	Education (AC)	Church (AC)	Civic (AC)	Other (AC)	Avg. Day Water Demand (GPD)	Development Unit Flow Area (AC)	Unit Daily Water Demand (GPD/AC)
1	129.7	0.0	2,000	500	105.8	2,250,000	0.0	0.0	0.0	15.9	1,485,000	129.7	11,449.5
2	205.0	81.5	2,000	0	69.1	1,848,000	5.5	0.0	0.0	54.4	1,018,975	205	4,970.6
3S	92.3	92.3	391	0	0.0	--	0.0	0.0	0.0	0.0	112,421	92.3	1,218.0
3/4	608.3	228.0	4,559	150	118.0	2,728,680	176.0	0.0	31.0	27.4	3,438,050	608.3	5,651.9
5E	82.0	0.0	0	0	82.0	1,000,000	0.0	0.0	0.0	0.0	1,008,000	82	12,292.7
5	384.6	163.2	1,071	5500	45.1	6,098,320	0.0	0.0	0.0	43.3	1,478,148	384.6	3,843.3
6N	272.5	0.0	--	0	272.5	5,360,000	0.0	0.0	0.0	0.0	3,834,705	272.5	14,072.3
6S	277.5	153.0	1,578	0	60.6	250,000	5.0	12.5	0.0	63.9	453,168	277.5	1,633.0
7	575.5	475.8	1,958	0	5.5	265,000	20.0	13.5	2.5	58.2	675,562	575.5	1,173.9
8	198.8	192.0	535	0	0.0	--	0.0	0.0	0.0	35.0	197,830	198.8	995.1
9	327.8	258.1	908	0	0.0	200,000	0.0	0.0	12.4	22.3	286,500	327.8	874.0
Subtotal:	**3,154.0**	**1643.9**	**15,000**	**6,150**	**758.6**	**20,000,000**	**206.5**	**26.0**	**45.9**	**320.4**	**13,988,359**	**3,154.0**	--

[1] Anticipated number of "Keys" represents hotel and resort uses. This includes approximately 8 acres within DU-1, 2.5 acres within DU 3/4, and 133 acres within DU-5.
[2] Non-residential water demands are calculated based on net non-residential acreage.

Abbreviations:
AC = Acres
GPD = Gallons Per Day
GPD/AC = Gallons Per Day Per Acre

TABLE 14

Water Demand Design Flows (Full Build-Out) by Development Unit

TABLE 14 - WATER DEMAND DESIGN FLOWS (FULL BUILD OUT) BY DEVELOPMENT UNIT

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 144173
Proj. Engineer: Dan Matthews, P.E.

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	AVE. DAY DEMAND (GPD)	AVE. DAY DEMAND (GPM)	MAX DAY DEMAND (GPD)	MAX DAY DEMAND (GPM)	PEAK HOUR DEMAND (GPM)
DU-1	DU-1A	50.7			11,449.5	J-1240	580,490	403.1	1,160,980	806.2	1,209.3
	DU-1B	57.1			11,449.5	J-1220	653,766	454.0	1,307,532	908.0	1,362.0
	DU-1C	21.9			11,449.5	J-370	250,744	174.1	501,488	348.2	522.3
Total		129.7	0.0				1,485,000	1,031.2	2,970,000	2,062.4	3,093.6
DU-2	DU-2A	31.6			4,970.61	J-390	157,071	109.1	314,142	218.2	327.3
	DU-2B	15.4			4,970.61	J-970EX	76,547	53.2	153,094	106.4	159.6
	DU-2C	89.8			4,970.61	J-2220	446,361	310.0	892,722	620.0	930.0
	DU-2D	68.2			4,970.61	J-DU3-4-120	338,996	235.4	677,992	470.8	706.2
Total		205.0	0.0				1,018,975	707.7	2,037,950	1,415.4	2,123.1
DU-3S	3S-1	30.9	137	MDR-2	1,218	J-DU3S-030, J-DU3S-040, J-DU3S-050	37,636	26.1	75,272	52.3	78.3
	3S-2	31.4	115	MDR-2	1,218	J-DU3S-020, J-DU3S-030, J-DU3S-050, J-DU3S-060	38,245	26.6	76,490	53.1	79.6
	3S-3	30.0	139	MDR-2	1,218	J-DU3S-010, J-DU3S-020, J-DU3S-060, J-DU3S-070	36,540	25.4	73,080	50.8	76.2
Total		92.3	391				112,421	78.1	224,842	156.2	234.3
DU-3/4	DU-3/4-1	10.0	–	Middle School	5,480	J-DU3-4-140	54,800	38.1	109,600	76.1	114.3
	DU-3/4-2	23.0	460	HDR-2	4,600	J-DU3-4-130, J-DU3-4-140	105,800	73.5	211,600	146.9	220.5
	DU-3/4-3	58.9	–	Park	0	–	0.0	0.0	0	–	0.0
	DU-3/4-4	5.0	–	Elementary School	9,480	J-DU3-4-190	47,400	32.9	94,800	65.8	98.7
	DU-3/4-5	15.0	–	Library	712	J-DU3-4-180	10,680	7.4	21,360	14.8	22.2
	DU-3/4-6	16.0	–	Aquatic Center	3,000	J-DU3-4-060	48,000	33.3	96,000	66.7	99.9
	DU-3/4-7	49.0	–	University	8,294	J-DU3-4-070, J-DU3-4-180 J-DU3-4-110, J-DU3-4-150	406,400	282.2	812,800	564.4	846.6
	DU-3/4-8	32.0	640	HDR-2	4,600	J-DU3-4-050, J-DU3-4-060, J-DU7-040, J-DU7-050	147,200	102.2	294,400	204.4	306.6
	DU-3/4-9	112.0	–	University	7,782	J-DU3-4-030, J-DU3-4-040, J-DU3-4-070, J-DU3-4-080, J-DU3-4-090	871,600	605.3	1,743,200	1,210.6	1,815.9
	DU-3/4-10	173.0	3,459	HDR-2	4,599	J-DU3-4-010, J-DU3-4-020, J-DU3-4-200, J-DU7-020	795,570	552.5	1,591,140	1,105.0	1,657.5
	DU-3/4-11	29.5	–	Office	15,241	J-DU3-4-120, J-DU3-4-130	449,600	312.2	899,200	624.4	936.6
	DU-3/4-12	12.5	–	Office	15,232	J-DU3-4-100	190,400	132.2	380,800	264.4	396.6
	DU-3/4-13	45.0	–	Commercial/Retail/ Restaurant/Hotel/ Office/Theater	6,902	J-DU3-4-030, J-DU3-4-100, J-300EX, J-DU3S-080	310,600	215.7	621,200	431.4	647.1
		27.4		Other	0		0	0.0	0	0.0	0.0
Total		608.3	4,559.0				3,438,050	2,387.5	6,876,100	4,774.9	7,162.5
DU 5E	DU-5E	82.0	–	Industrial	12,293	J-DU5E-020, J-DU5E-010, J-1130EX J-2340EX	1,008,000	700.0	2,016,000	1,400.0	2,100.0
		82.0					1,008,000	700.0	2,016,000	1,400.0	2,100.0
DU-5	DU-5A	29.9			3,843.34	J-1290	114,916	79.8	229,832	159.6	239.4
	1/2 DU-5B	64.5			3,843.34	J-380	247,895	172.1	495,790	344.3	516.3
	1/2 DU-5B	64.5			3,843.34	J-750	247,895	172.1	495,790	344.3	516.3
	1/2 DU-5C	36.5			3,843.34	J-DU3-4-180	140,282	97.4	280,564	194.8	292.2
	1/2 DU-5C	36.5			3,843.34	J-DU3-4-170	140,282	97.4	280,564	194.8	292.2
	1/4 DU-5D	27.2			3,843.34	J-2340EX	104,539	72.6	209,078	145.2	217.8
	1/4 DU-5D	27.2			3,843.34	J-DU5E-020	104,539	72.6	209,078	145.2	217.8
	1/2 DU-5D	54.3			3,843.34	J-DU5E-010	208,693	144.9	417,386	289.9	434.7
	DU-5G	14.8			3,843.34	J-480	56,881	39.5	113,762	79.0	118.5
	DU-5F	29.2			3,843.34	J-1140	112,226	77.9	224,452	155.9	233.7
Total		384.6	0.0				1,478,148	1,026.3	2,956,296	2,053.0	3,079.9

TABLE 14 - WATER DEMAND DESIGN FLOWS (FULL BUILD OUT) BY DEVELOPMENT UNIT

CIVIL ENGINEERS • HYDROLOGISTS • LAND SURVEYORS • CONSTRUCTION MANAGERS

Project: Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 144173
Proj. Engineer: Dan Matthews, P.E.

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	AVE. DAY DEMAND (GPD)	AVE. DAY DEMAND (GPM)	MAX DAY DEMAND (GPD)	MAX DAY DEMAND (GPM)	PEAK HOUR DEMAND (GPM)
DU-6N	DU-6A [1]	89.1	–	INDUSTRIAL	5,339	J-DU6-020, J-DU6-060	2,793,600	1,940.0	3,883,104	2,696.6	2,696.6
	DU-6B	53.7	–	INDUSTRIAL	6,462	J-DU6-030, J-DU6-040, J-DU6-050	347,035	241.0	694,070	482.0	723.0
	DU-6C	129.7	–	INDUSTRIAL	5,351	J-DU6-040, J-DU6-050, J-DU6-070, J-DU6-080, J-DU6-090	694,070	482.0	1,388,140	964.0	1,446.0
Total		272.5	0.0				3,834,705	2,663.0	5,965,314	4,142.6	4,865.6
DU-6S	DU-6D	50.5			1,633.04	J-480	82,469	57.3	164,938	114.5	171.9
	1/2 DU 6E	31.3			1,633.04	J-460	51,114	35.5	102,228	71.0	106.5
	1/2 DU-6E	31.3			1,633.04	J-460	51,114	35.5	102,228	71.0	106.5
	DU-6F	51.5			1,633.04	J-DU7-050	84,102	58.4	168,204	116.8	175.2
	DU-6G	22.4			1,633.04	J-1320	36,580	25.4	73,160	50.8	76.2
	DU-6H	90.5			1,633.04	J-DU7-080	147,790	102.6	295,580	205.3	307.8
Total		277.5	0.0				453,169	314.7	906,338	629.4	944.1
DU-7	7-1	15.9	84	MDR-3	1,602	J-DU7-100	25,472	17.7	50,944	35.4	53.1
	7-2	19.3	79	MDR-1	834	J-DU7-100	16,096	11.2	32,192	22.4	33.6
	7-3	30.7	110	MDR-1	834	J-DU7-110	25,604	17.8	51,208	35.6	53.4
	7-4	32.3	84	MDR-1	834	J-DU7-180	26,938	18.7	53,876	37.4	56.1
	7-5	25.1	66	MDR-1	834	J-DU7-180	20,933	14.5	41,866	29.1	43.5
	7-6	18.5	38	MDR-1	834	J-DU7-170	15,429	10.7	30,858	21.4	32.1
	7-7	26.8	98	MDR-1	834	J-DU7-180	22,351	15.5	44,702	31.0	46.5
	7-8	23.5	120	MDR-3	1,602	J-250EX	37,647	26.1	75,294	52.3	78.3
	7-9	23.1	81	MDR-1	834	J-250EX	19,265	13.4	38,530	26.8	40.2
	7-10	7.5	–	CHURCH	1,500	J-DU7-080	11,250	7.8	22,500	15.6	23.4
	7-11	24.4	135	MDR-3	1,602	J-DU7-080	39,089	27.1	78,178	54.3	81.3
	7-12	23.0	97	MDR-1	834	J-DU7-160	19,182	13.3	38,364	26.6	39.9
	7-13	19.2	78	MDR-1	834	J-DU7-060	16,013	11.1	32,026	22.2	33.3
	7-14	17.3	53	MDR-1	834	J-DU7-150	14,428	10.0	28,856	20.0	30.0
	7-15	18.4	58	MDR-1	834	J-DU7-160	15,346	10.7	30,692	21.3	32.1
	7-16	26.4	106	MDR-1	834	J-DU7-140	22,018	15.3	44,036	30.6	45.9
	7-17	20.1	99	MDR-3	1,602	J-DU7-200	32,200	22.4	64,400	44.7	67.2
	7-18	29.1	85	MDR-1	834	J-DU7-200	24,269	16.9	48,538	33.7	50.7
	7-19	23.8	103	MDR-1	834	J-DU7-140	19,849	13.8	39,698	27.6	41.4
	7-20	19.9	80	MDR-1	834	J-DU7-200	16,597	11.5	33,194	23.1	34.5
	7-21	19.0	84	MDR-1	834	J-DU7-110	15,846	11.0	31,692	22.0	33.0
	7-22	20.0	–	EDUCATION	–	J-DU7-140	30,000	20.8	60,000	41.7	62.4
	7-23	20.0	220	HDR-1	1,936	J-DU7-050	38,720	26.9	77,440	53.8	80.7
	7-24	6.0	–	CHURCH	1,500	J-DU7-150	9,000	6.3	18,000	12.5	18.9
	7-25	2.5	–	CIVIC	1,500	J-DU7-130	3,750	2.6	7,500	5.2	7.8
	7-26	5.5	–	COMMERCIAL/ RESTAURANT	1,700	J-DU7-010	9,350	6.5	18,700	13.0	19.5
	7-27	29.3	–	PARK/LAKE	4,400	J-DU7-020	128,920	89.5	257,840	179	269
		28.9	–	Road R.O.W.	–	–	–	–	–	–	–
Total		575.5	1,959				675,562	469.1	1,351,124	938.3	1,407.8
DU-8	8-1	22.9	74	MDR-1	969	J-DU8-070	22,200	15.4	44,400	30.8	46.2
	8-2	30.0	87	MDR-1	870	J-DU8-060, J-DU8-100	26,100	18.1	52,200	36.3	54.3
	8-3	24.7	64	MDR-1	777	J-DU8-110	19,200	13.3	38,400	26.7	39.9
	8-4	20.9	42	MDR-1	603	J-DU8-080, J-DU8-090	12,600	8.8	25,200	17.5	26.4
	8-5	6.8	–	PARK	4,400	J-DU8-080, J-DU8-090	29,920	20.8	59,840	41.6	62.4
	8-6	23.6	91	MDR-1	1,157	J-DU8-110, J-DU8-120	27,300	19.0	54,600	37.9	57.0
	8-7	28.2	74	MDR-1	787	J-DU8-120, J-DU8-130	22,200	15.4	44,400	30.8	46.2
	8-8	20.0	39	LDR-3	956	J-DU8-090, J-DU8-130	19,110	13.3	38,220	26.5	39.9
	8-9	21.7	64	MDR-1	885	J-DU8-040, J-DU8-130	19,200	13.3	38,400	26.7	39.9
Total		198.8	535				197,830	137.4	395,660	274.8	412.2

Notes: 1) The CH2M Hill Plan that was provided by the City of Mesa shows that the Max Day Demand and Peak Hour Demand is equal to approximately 1.39 multiplied by the AVG Day Demand.

TABLE 14 - WATER DEMAND DESIGN FLOWS (FULL BUILD OUT) BY DEVELOPMENT UNIT

Project: Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 144173
Proj. Engineer: Dan Matthews, P.E.

DU-9	9-1	54.0	189	MDR-1	1,050	J-DU9-010, J-DU9-020	56,700	39.4	113,400	78.8	118.2
	9-2	31.8	99	MDR-1	934	J-DU9-020, J-DU9-030	29,700	20.6	59,400	41.3	61.8
	9-3	12.4	–	Civic	1,500	J-DU9-020, J-DU9-030	18,600	12.9	37,200	25.8	38.7
	9-4	49.4	159	MDR-1	966	J-DU9-030, J-DU9-070	47,700	33.1	95,400	66.3	99.3
	9-5	39.8	145	MDR-1	1,093	J-DU9-070, J-DU9-080	43,500	30.2	87,000	60.4	90.6
	9-6	22.4	90	MDR-2	1,004	J-DU9-040, J-DU9-060	22,500	15.6	45,000	31.3	46.8
	9-7	60.7	226	MDR-1	1,117	J-DU9-060, J-DU9-080	67,800	47.1	135,600	94.2	141.3
		57.3	0	Other	0		0.0	0.0	0.0	0.0	0.0
Total		**327.8**	**908**				**288,500**	**199.9**	**573,000**	**398.1**	**596.7**
EASTMARK TOTAL		**3,154**	**8,351**				**13,988,360**	**9,713.9**	**26,272,624**	**18,245.1**	**26,018.8**

TABLE 15

Water Demand Design Flows (Full Build-Out) by Junction Node

WOOD/PATEL **TABLE 15 - WATER DEMAND DESIGN FLOWS BY JUNCTION NODE**

CIVIL ENGINEERS • HYDROLOGISTS • LAND SURVEYORS • CONSTRUCTION MANAGERS

Project: Eastmark

Location: Mesa, Arizona **Proj. Number:** 144173

References: 2012 City of Mesa Engineering Design Standards **Proj. Engineer:** Dan Matthews, P.E.

	WATER DEMAND (GPM)		
HYDRAULIC MODEL NODE	AVE. DAY	MAX DAY	PEAK HOUR
J-DU3S-010	10.2	20.4	30.6
J-DU3S-020	11.0	22.0	33.0
J-DU3S-030	15.0	30.0	45.0
J-DU3S-040	11.0	22.0	33.0
J-DU3S-050	12.1	24.2	36.3
J-DU3S-060	11.8	23.6	35.4
J-DU3S-070	7.0	14.0	21.0
J-DU3S-080	53.9	107.8	161.7
J-DU3-4-010	138.1	276.2	414.3
J-DU3-4-020	138.1	276.2	414.3
J-DU3-4-030	129.6	259.2	388.8
J-DU3-4-040	151.3	302.6	453.9
J-DU3-4-050	25.6	51.2	76.8
J-DU3-4-060	58.9	117.8	176.7
J-DU3-4-070	186.6	373.2	559.8
J-DU3-4-080	186.6	373.2	559.8
J-DU3-4-090	75.7	151.4	227.1
J-DU3-4-100	186.1	372.2	558.3
J-DU3-4-110	141.1	282.2	423.3
J-DU3-4-120	391.5	783.0	1174.5
J-DU3-4-130	174.5	349.0	523.5
J-DU3-4-140	93.2	186.4	279.6
J-DU3-4-150	70.6	141.2	211.8
J-DU3-4-160	--	--	--
J-DU3-4-170	97.4	194.8	292.2
J-DU3-4-180	104.8	209.6	314.4
J-DU3-4-190	32.9	65.8	98.7
J-DU3-4-200	138.1	276.2	414.3
J-DU5E-010	319.9	639.8	959.7
JDU5E-020	247.6	495.2	742.8
J-DU6-010	0.0	0.0	0.0
J-DU6-020 (1)	1580.0	2196.2	2196.2
J-DU6-030	80.3	160.6	240.9
J-DU6-040	160.7	321.4	482.1
J-DU6-050	241.0	482.0	723.0
J-DU6-060 (1)	360.0	500.4	500.4
J-DU6-070	80.3	160.6	240.9
J-DU6-080	80.3	160.6	240.9
J-DU6-090	80.3	160.6	240.9
J-DU7-010	6.5	13.0	19.5
J-DU7-020	227.6	455.2	682.8
J-DU7-030	0.0	0.0	0.0
J-DU7-040	25.6	51.2	76.8
J-DU7-050	110.9	221.8	332.7
J-DU7-060	11.1	22.2	33.3
J-DU7-070	0.0	0.0	0.0
J-DU7-080	137.6	275.2	412.8
J-DU7-090	0.0	0.0	0.0
J-DU7-100	28.9	57.8	86.7
J-DU7-110	28.8	57.6	86.4
J-DU7-120	0.0	0.0	0.0
J-DU7-130	2.6	5.2	7.8
J-DU7-140	49.9	99.8	149.7
J-DU7-150	16.3	32.6	48.9
J-DU7-160	24.0	48.0	72.0

J-DU7-170	10.7	21.4	32.1
J-DU7-180	18.7	37.4	56.1
J-DU7-190	30.1	60.2	90.3
J-DU7-200	50.7	101.4	152.1
J-250EX	39.5	79.0	118.5
J-DU8-010	0.0	0.0	0.0
J-DU8-020	0.0	0.0	0.0
J-DU8-030	0.0	0.0	0.0
J-DU8-040	6.7	13.4	20.1
J-DU8-050	0.0	0.0	0.0
J-DU8-060	9.1	18.2	27.3
J-DU8-070	15.4	30.8	46.2
J-DU8-080	4.4	8.8	13.2
J-DU8-090	11.0	22.0	33.0
J-DU8-100	9.1	18.2	27.3
J-DU8-110	43.6	87.2	130.8
J-DU8-120	17.2	34.4	51.6
J-DU8-130	21.0	42.0	63.0
J-DU9-010	19.7	39.4	59.1
J-DU9-020	36.5	73.0	109.5
J-DU9-030	33.3	66.6	99.9
J-DU9-040	7.8	15.6	23.4
J-DU9-050	0.0	0.0	0.0
J-DU9-060	31.4	62.8	94.2
J-DU9-070	31.7	63.4	95.1
J-DU9-080	38.6	77.2	115.8
J-300EX	53.9	107.8	161.7
J-370	174.1	348.2	522.3
J-380	172.1	344.2	516.3
J-390	109.1	218.2	327.3
J-460	71.0	142.0	213.0
J-480	96.8	193.6	290.4
J-750	172.1	344.2	516.3
J-970EX	53.2	106.4	159.6
J-1140	77.9	155.8	233.7
J-1220	454.0	908.0	1362.0
J-1240	403.1	806.2	1209.3
J-1290	79.8	159.6	239.4
J-1320	25.4	50.8	76.2
J-2220	310.0	620.0	930.0
J-1130EX	175.0	350.0	525.0
J-2340EX	247.6	495.2	742.8
TOTAL	**9,714.2**	**18,245.0**	**26,019.2**

Notes: 1) The CH2M Hill Plan that was provided by the City of Mesa shows that the Max Day Demand and Peak Hour Demand is equal to approximately 1.39 multiplied by the AVG Day Demand.

TABLE 16

City of Mesa Groundwater Wells Inventory

WOOD/PATEL

TABLE 16 - City of Mesa Groundwater Wells

CIVIL ENGINEERS * HYDROLOGISTS * LAND SURVEYORS * CONSTRUCTION MANAGERS

Project: DU 5 East at Eastmark
Location: Mesa, Arizona
References: 2012 City of Mesa Well Inventory
Proj. Number: 113697.09
Proj. Engineer: Dan Matthews, P.E.

DESERT WELLS PRESSURE ZONE

Well ID	2013 Capacity (MGD)	2015 Capacity (MGD)	2020 Capacity (MGD)	2025 Capacity (MGD)	2040 Capacity (MGD)	Comments
DW6	1.09	1.09	1.09	1.09	1.09	
DW7	1.26	1.26	1.26	1.26	1.26	
DW9	1.99	1.99	1.99	1.99	1.99	
DW10	Idled	-	-	-	-	Idled due to High Nitrate Levels
Subtotal (MGD)=	*4.34*	*4.34*	*4.34*	*4.34*	*4.34*	
Subtotal (GPM)=	*3013.9*	*3013.9*	*3013.9*	*3013.9*	*3013.9*	
DW11	1.73	1.73	1.73	1.73	1.73	Desert Wells GWF
DW12	Piped to FF			1.10	1.10	Desert Wells GWF
DW14	2.10	2.10	2.10	2.10	2.10	Desert Wells GWF
DW15	2.18	2.18	2.18	2.18	2.18	Desert Wells GWF
New Wells at DW GWF				6.00	12.00	Desert Wells GWF
Subtotal (MGD)=	*6.01*	*6.01*	*6.01*	***13.11***	*19.11*	
Subtotal (GPM)=	*4173.6*	*4173.6*	*4173.6*	***9104.2***	*13270.8*	
DW13	1.19	1.19	1.19	1.19	1.19	Signal Butte GWF
DW16	1.38	1.38	1.38	1.38	1.38	Signal Butte GWF
DW17	2.13	2.13	2.13	2.13	2.13	Signal Butte GWF
DW18	Drilled	2.00	2.00	2.00	2.00	Signal Butte GWF
DW21	2.16	2.16	2.16	2.16	2.16	Signal Butte GWF
DW22	2.16	2.16	2.16	2.16	2.16	Signal Butte GWF
New Wells at SB GWF				8.00	8.00	Signal Butte GWF
Subtotal (MGD)=	*9.02*	*11.02*	*11.02*	***19.02***	*19.02*	
Subtotal (GPM)=	*6263.9*	*7652.8*	*7652.8*	***13,208.3***	*13,208.3*	
DWGWF & SBGWF Total (MGD)=	*15.03*	*17.03*	*17.03*	***32.13***	*38.13*	
DWGWF & SBGWF Total (GPM)=	*10,437.5*	*11,826.4*	*11,826.4*	***22,312.5***	*26,479.2*	
Overall Total Capacity (MGD)=	*19.37*	*21.37*	*21.37*	*36.47*	*42.47*	
Overall Total Capacity (GPM)=	*13,451.4*	*14,840.3*	*14,840.3*	*25,326.4*	*29,493.1*	

Notes: 1) The assumption was made that the full-buildout of Eastmark could occur by 2025. Therefore, the capacity of the Desert Wells GWF and Signal Butte GWF in 2025 were used in the water model analysis.

APPENDIX A

Hydraulic Modeling Results
Served by South CAP Water Treatment Plant
(Non-Drought Condition)

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Reservoir Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Flow Net (Out) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,132.9	Desert Wells	1,634.0
SCAP DWPS	1,634.0	8,581.3	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	(N/A)	Desert Wells	(N/A)

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	95	1,625.5
J-110EX	1,440.0	Desert Wells	0.0	80	1,625.6
J-120EX	1,462.0	Desert Wells	0.0	74	1,632.7
J-135EX	1,460.0	Desert Wells	0.0	74	1,631.4
J-150EX	1,472.0	Desert Wells	0.0	68	1,629.9
J-160EX	1,435.0	Desert Wells	0.0	84	1,629.0
J-170EX	1,430.0	Desert Wells	0.0	86	1,628.8
J-180EX	1,410.0	Desert Wells	0.0	95	1,628.6
J-190EX	1,395.0	Desert Wells	0.0	101	1,628.2
J-200EX	1,385.0	Desert Wells	0.0	105	1,627.7
J-220EX	1,480.0	Desert Wells	0.0	65	1,631.3
J-230EX	1,475.0	Desert Wells	0.0	67	1,630.4
J-250EX	1,452.0	Desert Wells	39.5	77	1,629.9
J-260EX	1,453.0	Desert Wells	0.0	77	1,629.9
J-270	1,429.0	Desert Wells	0.0	86	1,628.8
J-280EX	1,460.0	Desert Wells	0.0	73	1,629.2
J-300EX	1,392.0	Desert Wells	53.9	102	1,627.2
J-320	1,422.0	Desert Wells	0.0	89	1,628.8
J-330EX	1,455.0	Desert Wells	0.0	75	1,629.4
J-340	1,440.0	Desert Wells	0.0	82	1,629.0
J-360EX	1,400.0	Desert Wells	0.0	98	1,625.5
J-370	1,405.0	Desert Wells	174.1	95	1,625.4
J-380	1,414.0	Desert Wells	172.1	92	1,625.5
J-390	1,405.0	Desert Wells	109.1	95	1,625.4
J-460	1,423.0	Desert Wells	71.0	88	1,627.5
J-480	1,429.0	Desert Wells	96.8	86	1,627.6
J-550	1,425.0	Desert Wells	0.0	88	1,628.9
J-590EX	1,410.0	Desert Wells	0.0	93	1,625.5
J-750	1,415.0	Desert Wells	172.1	91	1,625.5
J-920	1,434.0	Desert Wells	0.0	84	1,629.2
J-950	1,414.0	Desert Wells	0.0	93	1,627.9
J-960EX	1,401.0	Desert Wells	0.0	97	1,625.5
J-970EX	1,397.0	Desert Wells	53.2	99	1,625.5
J-1000EX	1,455.0	Desert Wells	0.0	77	1,633.7
J-1010EX	1,485.0	Desert Wells	0.0	64	1,633.3
J-1020EX	1,425.0	Desert Wells	0.0	90	1,633.9
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,433.0	Desert Wells	0.0	84	1,626.6
J-1050EX	1,445.0	Desert Wells	0.0	80	1,629.6
J-1120EX	1,453.0	Desert Wells	0.0	77	1,629.9
J-1130EX	1,445.0	Desert Wells	175.0	80	1,629.0
J-1140	1,433.0	Desert Wells	77.9	84	1,627.7
J-1160EX	1,445.0	Desert Wells	0.0	82	1,633.7
J-1170EX	1,470.0	Desert Wells	0.0	71	1,633.5

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1180EX	1,440.0	Desert Wells	0.0	84	1,633.8
J-1190EX	1,420.0	Desert Wells	0.0	93	1,633.9
J-1200EX	1,445.0	Desert Wells	0.0	82	1,633.8
J-1210EX	1,455.0	Desert Wells	0.0	77	1,633.5
J-1220	1,405.0	Desert Wells	454.0	95	1,625.1
J-1220EX	1,475.0	Desert Wells	0.0	68	1,633.0
J-1230EX	1,460.0	Desert Wells	0.0	73	1,629.3
J-1235EX	1,440.0	Desert Wells	0.0	82	1,629.4
J-1240	1,411.0	Desert Wells	403.1	93	1,625.2
J-1240EX	1,455.0	Desert Wells	0.0	76	1,629.5
J-1270	1,417.0	Desert Wells	0.0	90	1,625.6
J-1280	1,410.0	Desert Wells	0.0	95	1,628.6
J-1290	1,425.0	Desert Wells	79.8	87	1,626.1
J-1290EX	1,480.0	Desert Wells	0.0	66	1,633.1
J-1300EX	1,465.0	Desert Wells	0.0	73	1,633.5
J-1310EX	1,480.0	Desert Wells	0.0	66	1,633.2
J-1320	1,426.0	Desert Wells	25.4	87	1,627.8
J-1330EX	1,465.0	Desert Wells	0.0	73	1,633.5
J-1340EX	1,450.0	Desert Wells	0.0	79	1,633.7
J-1350EX	1,465.0	Desert Wells	0.0	73	1,633.5
J-1360EX	1,445.0	Desert Wells	0.0	82	1,633.7
J-1370EX	1,430.0	Desert Wells	0.0	88	1,633.8
J-1380EX	1,450.0	Desert Wells	0.0	79	1,633.7
J-1390EX	1,430.0	Desert Wells	0.0	88	1,633.8
J-1400EX	1,430.0	Desert Wells	0.0	88	1,633.8
J-1410	1,454.0	Desert Wells	0.0	76	1,630.3
J-1410EX	1,420.0	Desert Wells	0.0	93	1,633.9
J-1420EX	1,460.0	Desert Wells	0.0	74	1,630.1
J-1430EX	1,455.0	Desert Wells	0.0	76	1,630.4
J-1440EX	1,478.0	Desert Wells	0.0	66	1,630.8
J-1680EX	1,400.0	Desert Wells	0.0	98	1,625.5
J-1990EX	1,447.0	Desert Wells	0.0	79	1,629.6
J-2000EX	1,442.0	Desert Wells	0.0	81	1,629.4
J-2010	1,419.0	Desert Wells	0.0	91	1,628.7
J-2040	1,427.0	Desert Wells	0.0	87	1,628.8
J-2100	1,436.0	Desert Wells	0.0	83	1,628.2
J-2120EX	1,453.0	Desert Wells	0.0	76	1,629.3
J-2140EX	1,446.0	Desert Wells	0.0	79	1,629.1
J-2200	1,414.0	Desert Wells	0.0	93	1,628.1
J-2220	1,410.0	Desert Wells	310.0	93	1,625.4
J-2295	1,415.0	Desert Wells	0.0	92	1,627.9
J-2340EX	1,435.0	Desert Wells	247.6	83	1,627.2
J-DU3-4-010	1,405.0	Desert Wells	138.1	96	1,627.2
J-DU3-4-020	1,401.0	Desert Wells	138.1	98	1,627.1

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU3-4-030	1,397.0	Desert Wells	129.6	100	1,627.0
J-DU3-4-040	1,403.0	Desert Wells	151.3	97	1,627.1
J-DU3-4-050	1,410.0	Desert Wells	25.6	94	1,626.7
J-DU3-4-060	1,408.0	Desert Wells	58.9	94	1,626.1
J-DU3-4-070	1,404.0	Desert Wells	186.6	96	1,626.0
J-DU3-4-080	1,400.0	Desert Wells	186.6	98	1,626.0
J-DU3-4-090	1,393.0	Desert Wells	75.7	101	1,626.1
J-DU3-4-100	1,391.0	Desert Wells	186.1	102	1,627.0
J-DU3-4-110	1,393.0	Desert Wells	141.1	101	1,625.8
J-DU3-4-120	1,393.0	Desert Wells	391.5	101	1,625.6
J-DU3-4-130	1,399.0	Desert Wells	174.5	98	1,625.6
J-DU3-4-140	1,404.0	Desert Wells	93.2	96	1,625.7
J-DU3-4-150	1,407.0	Desert Wells	70.6	95	1,625.8
J-DU3-4-160	1,407.0	Desert Wells	0.0	95	1,625.8
J-DU3-4-170	1,412.0	Desert Wells	97.4	93	1,625.9
J-DU3-4-180	1,414.0	Desert Wells	104.8	92	1,626.6
J-DU3-4-190	1,417.0	Desert Wells	32.9	91	1,627.0
J-DU3-4-200	1,412.5	Desert Wells	138.1	93	1,627.4
J-DU3S-010	1,412.0	Desert Wells	10.2	93	1,627.7
J-DU3S-020	1,407.0	Desert Wells	11.0	95	1,627.5
J-DU3S-030	1,401.0	Desert Wells	15.0	98	1,627.4
J-DU3S-040	1,399.0	Desert Wells	11.0	99	1,627.3
J-DU3S-050	1,404.0	Desert Wells	12.1	97	1,627.4
J-DU3S-060	1,410.0	Desert Wells	11.8	94	1,627.5
J-DU3S-070	1,417.0	Desert Wells	7.0	91	1,627.6
J-DU3S-080	1,396.0	Desert Wells	53.9	100	1,627.2
J-DU5E-010	1,435.0	Desert Wells	319.9	83	1,627.1
J-DU5E-020	1,440.0	Desert Wells	247.6	81	1,627.4
J-DU6-010	1,459.0	Desert Wells	0.0	74	1,629.5
J-DU6-020	1,453.0	Desert Wells	1,580.0	76	1,629.3
J-DU6-030	1,450.0	Desert Wells	80.3	77	1,629.1
J-DU6-040	1,440.0	Desert Wells	160.7	82	1,629.2
J-DU6-050	1,448.0	Desert Wells	241.0	78	1,629.3
J-DU6-060	1,458.0	Desert Wells	360.0	74	1,630.0
J-DU6-070	1,452.0	Desert Wells	80.3	77	1,629.8
J-DU6-080	1,446.0	Desert Wells	80.3	79	1,629.4
J-DU6-090	1,435.0	Desert Wells	80.3	84	1,629.2
J-DU7-010	1,415.0	Desert Wells	6.5	92	1,627.8
J-DU7-020	1,425.0	Desert Wells	227.6	88	1,627.3
J-DU7-030	1,416.0	Desert Wells	0.0	91	1,627.3
J-DU7-040	1,409.0	Desert Wells	25.6	94	1,627.3
J-DU7-050	1,416.0	Desert Wells	110.9	92	1,627.5
J-DU7-060	1,423.0	Desert Wells	11.1	89	1,627.8
J-DU7-070	1,430.0	Desert Wells	0.0	86	1,628.2

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-080	1,434.0	Desert Wells	137.6	84	1,628.5
J-DU7-090	1,437.0	Desert Wells	0.0	83	1,629.4
J-DU7-100	1,435.0	Desert Wells	28.9	84	1,629.0
J-DU7-110	1,435.0	Desert Wells	28.8	84	1,628.3
J-DU7-120	1,420.0	Desert Wells	0.0	90	1,627.9
J-DU7-130	1,420.0	Desert Wells	2.6	90	1,627.8
J-DU7-140	1,425.0	Desert Wells	49.9	88	1,627.8
J-DU7-150	1,419.0	Desert Wells	16.3	90	1,627.6
J-DU7-160	1,435.0	Desert Wells	24.0	84	1,628.2
J-DU7-170	1,432.0	Desert Wells	10.7	85	1,628.2
J-DU7-180	1,433.0	Desert Wells	18.7	85	1,628.4
J-DU7-190	1,437.0	Desert Wells	30.1	83	1,628.9
J-DU7-200	1,432.0	Desert Wells	50.7	85	1,627.9
J-DU8-010	1,420.0	Desert Wells	0.0	90	1,628.0
J-DU8-020	1,419.5	Desert Wells	0.0	90	1,628.1
J-DU8-030	1,421.0	Desert Wells	0.0	90	1,628.2
J-DU8-040	1,418.0	Desert Wells	6.7	91	1,628.4
J-DU8-050	1,422.0	Desert Wells	0.0	89	1,628.6
J-DU8-060	1,420.0	Desert Wells	9.1	90	1,628.2
J-DU8-070	1,420.0	Desert Wells	15.4	90	1,628.2
J-DU8-080	1,422.0	Desert Wells	4.4	89	1,628.3
J-DU8-090	1,424.0	Desert Wells	11.0	88	1,628.3
J-DU8-100	1,425.0	Desert Wells	9.1	88	1,628.3
J-DU8-110	1,430.0	Desert Wells	43.6	86	1,628.2
J-DU8-120	1,431.0	Desert Wells	17.2	85	1,628.3
J-DU8-130	1,427.0	Desert Wells	21.0	87	1,628.3
J-DU9-010	1,419.0	Desert Wells	19.7	90	1,628.0
J-DU9-020	1,415.0	Desert Wells	36.5	92	1,628.0
J-DU9-030	1,416.0	Desert Wells	33.3	92	1,628.1
J-DU9-040	1,416.0	Desert Wells	7.8	92	1,628.1
J-DU9-050	1,419.0	Desert Wells	0.0	90	1,628.2
J-DU9-060	1,422.0	Desert Wells	31.4	89	1,628.3
J-DU9-070	1,414.0	Desert Wells	31.7	93	1,628.1
J-DU9-080	1,419.0	Desert Wells	38.6	90	1,628.1

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	210.2	0.34	0.040
P-170EX	16.0	5,366.00	120.0	210.2	0.34	0.040
P-180EX	16.0	5,396.00	120.0	318.0	0.51	0.087
P-190EX	16.0	5,728.00	120.0	318.0	0.51	0.087
P-200EX	16.0	231.00	120.0	-696.7	1.11	0.371
P-210EX	16.0	1,388.00	120.0	-489.4	0.78	0.193
P-220EX	16.0	2,909.00	120.0	787.0	1.26	0.465
P-240EX	16.0	1,387.00	120.0	-1,922.7	3.07	2.430
P-250EX	16.0	2,611.00	120.0	499.2	0.80	0.200
P-310	30.0	4,937.00	120.0	1,740.5	0.79	0.095
P-340EX	16.0	5,775.00	120.0	210.2	0.34	0.040
P-410EX	16.0	5,368.00	120.0	318.0	0.51	0.087
P-630	12.0	710.00	120.0	-112.7	0.32	0.052
P-660	12.0	2,013.00	120.0	-192.2	0.55	0.139
P-970	24.0	1,001.00	120.0	1,200.4	0.85	0.141
P-980	24.0	1,935.00	120.0	555.2	0.39	0.034
P-1060EX	16.0	1,328.00	120.0	-90.1	0.14	0.008
P-1070EX	16.0	1,243.00	120.0	-371.4	0.59	0.116
P-1390	16.0	727.00	120.0	-93.2	0.15	0.009
P-1400	16.0	1,976.00	120.0	-485.7	0.77	0.190
P-1630EX	16.0	1,793.00	120.0	400.4	0.64	0.133
P-1640EX	16.0	1,335.00	120.0	927.3	1.48	0.630
P-1780	24.0	1,528.00	120.0	1,200.4	0.85	0.141
P-1790	24.0	1,115.00	120.0	1,200.4	0.85	0.141
P-1840	12.0	1,001.00	120.0	160.8	0.46	0.100
P-1940EX	16.0	1,976.00	120.0	243.1	0.39	0.053
P-1950EX	16.0	680.00	120.0	70.7	0.11	0.005
P-1970EX	16.0	927.00	120.0	660.8	1.05	0.336
P-1980EX	16.0	1,106.00	120.0	519.7	0.83	0.215
P-2000EX	16.0	2,710.00	120.0	-665.7	1.06	0.341
P-2040EX	16.0	10,635.00	120.0	-263.9	0.42	0.061
P-2055EX	16.0	10,453.00	120.0	118.9	0.19	0.014
P-2070EX	24.0	5,329.00	120.0	-750.1	0.53	0.059
P-2500EX	24.0	2,750.00	120.0	786.1	0.56	0.064
P-2510EX	24.0	2,726.00	120.0	753.1	0.53	0.059
P-2540EX	12.0	2,624.00	120.0	-92.7	0.26	0.036
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.000
P-2655EX	16.0	2,870.00	120.0	210.2	0.34	0.040
P-2660EX	24.0	2,797.00	120.0	1,132.9	0.80	0.127
P-2665EX	16.0	2,716.00	120.0	210.2	0.34	0.040
P-2690EX	16.0	2,914.00	120.0	-124.5	0.20	0.015
P-2700EX	16.0	3,115.00	120.0	374.7	0.60	0.118
P-2710EX	16.0	1,823.00	120.0	284.1	0.45	0.070
P-2720EX	12.0	3,042.00	120.0	-90.6	0.26	0.034

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2800	24.0	5,786.00	120.0	-107.8	0.08	0.002
P-2830	16.0	2,890.00	120.0	73.9	0.12	0.006
P-2860	12.0	1,164.00	120.0	-199.0	0.56	0.148
P-2860EX	24.0	761.00	120.0	1,132.9	0.80	0.127
P-2870	16.0	643.00	120.0	294.4	0.47	0.075
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.000
P-2890	12.0	992.00	120.0	-320.9	0.91	0.358
P-2890EX	8.0	3,148.00	120.0	-58.3	0.37	0.110
P-2900	24.0	1,423.00	120.0	1,017.1	0.72	0.104
P-2910EX	24.0	497.00	120.0	1,074.6	0.76	0.115
P-2930	12.0	1,167.00	120.0	119.2	0.34	0.057
P-2950	12.0	1,089.00	120.0	33.0	0.09	0.005
P-2960	12.0	1,277.00	120.0	340.8	0.97	0.400
P-2970EX	12.0	1,119.00	120.0	54.7	0.16	0.014
P-2990EX	8.0	2,811.00	120.0	-42.0	0.27	0.060
P-3010EX	12.0	471.00	120.0	58.3	0.17	0.015
P-3020EX	12.0	1,167.00	120.0	12.7	0.04	0.001
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.000
P-3040	12.0	1,135.00	120.0	322.0	0.91	0.360
P-3040EX	8.0	3,081.00	120.0	-40.9	0.26	0.057
P-3060	12.0	595.00	120.0	0.0	0.00	0.000
P-3070EX	8.0	2,922.00	120.0	-28.2	0.18	0.029
P-3080EX	12.0	1,397.00	120.0	-90.7	0.26	0.034
P-3090EX	12.0	1,109.00	120.0	-72.4	0.21	0.023
P-3100EX	12.0	695.00	120.0	20.3	0.06	0.002
P-3110EX	12.0	664.00	120.0	2.1	0.01	0.000
P-3120EX	8.0	1,851.00	120.0	-18.3	0.12	0.013
P-3130	12.0	1,155.00	120.0	28.2	0.08	0.004
P-3140EX	16.0	1,783.00	120.0	26.1	0.04	0.001
P-3150	12.0	779.00	120.0	296.6	0.84	0.309
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.000
P-3160EX	8.0	3,801.00	120.0	-26.1	0.17	0.025
P-3170EX	8.0	2,838.00	120.0	-57.6	0.37	0.107
P-3180EX	8.0	736.00	120.0	17.4	0.11	0.012
P-3190EX	30.0	4,441.00	120.0	4,452.6	2.02	0.538
P-3200	30.0	814.00	120.0	4,452.6	2.02	0.538
P-3240EX	16.0	1,954.00	120.0	385.5	0.62	0.124
P-3250EX	12.0	844.00	120.0	-287.8	0.82	0.293
P-3260EX	16.0	1,108.00	120.0	787.0	1.26	0.464
P-3270EX	16.0	1,509.00	120.0	579.0	0.92	0.263
P-3280EX	12.0	2,890.00	120.0	-207.9	0.59	0.160
P-3290EX	12.0	2,432.00	120.0	79.9	0.23	0.027
P-3930EX	16.0	751.00	120.0	-90.1	0.14	0.008
P-3940EX	16.0	509.00	120.0	-90.1	0.14	0.008

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-3970EX	16.0	1,445.00	120.0	90.1	0.14	0.008
P-4090	12.0	1,276.00	120.0	255.0	0.72	0.234
P-4720EX	16.0	1,216.00	120.0	467.8	0.75	0.177
P-4730EX	16.0	456.00	120.0	467.8	0.75	0.177
P-4750EX	16.0	715.00	120.0	467.8	0.75	0.177
P-4760EX	16.0	774.00	120.0	61.9	0.10	0.004
P-4780	24.0	1,020.00	120.0	555.2	0.39	0.034
P-4790EX	16.0	1,816.00	120.0	152.5	0.24	0.022
P-4860	24.0	986.00	120.0	-555.2	0.39	0.034
P-4870	24.0	620.00	120.0	-555.2	0.39	0.034
P-5280	12.0	949.00	120.0	89.7	0.25	0.034
P-5290	12.0	977.00	120.0	-220.3	0.63	0.178
P-5510	12.0	1,886.00	120.0	261.0	0.74	0.244
P-5540	12.0	2,100.00	120.0	-358.5	1.02	0.440
P-5560	12.0	927.00	120.0	-281.2	0.80	0.280
P-5570	12.0	1,841.00	120.0	-155.6	0.44	0.094
P-5620	16.0	1,146.00	120.0	234.4	0.37	0.049
P-5700EX	16.0	1,176.00	120.0	1,252.0	2.00	1.098
P-5710EX	16.0	1,171.00	120.0	1,252.0	2.00	1.098
P-5720	12.0	696.00	120.0	229.7	0.65	0.193
P-5730	12.0	955.00	120.0	132.9	0.38	0.070
P-5740	24.0	2,671.00	120.0	-555.2	0.39	0.034
P-5760	12.0	1,545.00	120.0	-307.6	0.87	0.331
P-5770	16.0	353.00	120.0	102.9	0.16	0.011
P-5780	16.0	684.00	120.0	102.9	0.16	0.011
P-5790	12.0	884.00	120.0	-307.6	0.87	0.331
P-6030	12.0	162.00	120.0	207.3	0.59	0.160
P-6064	16.0	846.00	120.0	-447.4	0.71	0.163
P-6065	16.0	3,443.00	120.0	-447.4	0.71	0.163
P-6070	16.0	247.00	120.0	-589.5	0.94	0.272
P-6166	16.0	900.00	120.0	-1,006.5	1.61	0.733
P-6167EX	16.0	1,381.00	120.0	-1,351.8	2.16	1.265
P-6171	16.0	3,164.00	120.0	1,299.9	2.07	1.177
P-7000	16.0	742.00	120.0	-446.2	0.71	0.162
P-COMWTREX	36.0	10.00	120.0	1,132.9	0.36	0.012
P-DU-3-4-070	12.0	734.00	120.0	-507.0	1.44	0.836
P-DU-3-4-080	12.0	913.00	120.0	-182.4	0.52	0.126
P-DU-3-4-090	12.0	1,401.00	120.0	4.2	0.01	0.000
P-DU-3-4-100	12.0	717.00	120.0	-190.8	0.54	0.137
P-DU-3-4-110	16.0	597.00	120.0	-114.9	0.18	0.013
P-DU-3-4-120	16.0	1,375.00	120.0	-289.4	0.46	0.073
P-DU-3-4-130	12.0	1,165.00	120.0	-195.1	0.55	0.143
P-DU-3S-130	16.0	1,385.00	120.0	-533.1	0.85	0.226
P-DU3-4-010	12.0	1,834.00	120.0	-131.9	0.37	0.069

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU3-4-020	24.0	1,370.00	120.0	-713.0	0.51	0.054
P-DU3-4-030	24.0	1,035.00	120.0	-842.6	0.60	0.073
P-DU3-4-040	24.0	496.00	120.0	-848.7	0.60	0.074
P-DU3-4-050	24.0	1,092.00	120.0	-1,000.0	0.71	0.100
P-DU3-4-060	12.0	553.00	120.0	-532.6	1.51	0.915
P-DU3-4-160	12.0	1,157.00	120.0	-265.7	0.75	0.253
P-DU3-4-170	16.0	937.00	120.0	-379.7	0.61	0.121
P-DU3-4-180	16.0	1,045.00	120.0	-379.7	0.61	0.120
P-DU3-4-190	16.0	1,019.00	120.0	-962.8	1.54	0.675
P-DU3-4-200	16.0	958.00	120.0	-709.1	1.13	0.383
P-DU3-4-210	16.0	1,373.00	120.0	-742.0	1.18	0.417
P-DU3S-010	8.0	261.00	120.0	143.3	0.91	0.580
P-DU3S-020	8.0	1,374.00	120.0	65.0	0.42	0.134
P-DU3S-030	8.0	1,542.00	120.0	54.0	0.34	0.095
P-DU3S-040	8.0	1,242.00	120.0	39.0	0.25	0.052
P-DU3S-050	8.0	801.00	120.0	-65.2	0.42	0.135
P-DU3S-060	8.0	974.00	120.0	-37.2	0.24	0.048
P-DU3S-070	8.0	1,384.00	120.0	-49.3	0.31	0.080
P-DU3S-080	8.0	1,241.00	120.0	-61.1	0.39	0.119
P-DU3S-090	8.0	621.00	120.0	-68.1	0.43	0.146
P-DU3S-100	16.0	1,114.00	130.0	136.3	0.22	0.016
P-DU3S-110	16.0	1,525.00	130.0	-125.0	0.20	0.013
P-DU3S-120	16.0	1,560.00	120.0	-395.0	0.63	0.130
P-DU5E-010	12.0	2,201.00	120.0	-97.7	0.28	0.040
P-DU5E-020	12.0	1,392.00	120.0	222.2	0.63	0.181
P-DU5E-030	12.0	2,181.00	120.0	469.8	1.33	0.725
P-DU6-010	12.0	1,163.00	120.0	242.9	0.69	0.214
P-DU6-020	16.0	124.00	120.0	818.8	1.31	0.500
P-DU6-030	12.0	1,388.00	120.0	185.3	0.53	0.129
P-DU6-040	12.0	2,188.00	120.0	102.3	0.29	0.043
P-DU6-050	12.0	2,203.00	120.0	-89.1	0.25	0.033
P-DU6-060	12.0	2,209.00	120.0	242.9	0.69	0.214
P-DU6-070	16.0	142.00	120.0	1,154.3	1.84	0.945
P-DU6-080	12.0	1,130.00	120.0	413.7	1.17	0.573
P-DU6-090	12.0	1,397.00	120.0	172.7	0.49	0.114
P-DU6-100	12.0	1,966.00	120.0	90.4	0.26	0.034
P-DU6-110	12.0	1,963.00	120.0	-89.1	0.25	0.033
P-DU6-120	12.0	1,955.00	120.0	-137.7	0.39	0.075
P-DU6-130	12.0	135.00	120.0	282.6	0.80	0.283
P-DU6-140	12.0	1,094.00	120.0	340.0	0.96	0.399
P-DU6-150	12.0	1,411.00	120.0	170.7	0.48	0.111
P-DU6-160	16.0	211.00	120.0	614.5	0.98	0.294
P-DU7-010	12.0	1,169.00	120.0	320.6	0.91	0.358
P-DU7-020	12.0	1,092.00	120.0	-93.0	0.26	0.036

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU7-030	12.0	1,044.00	120.0	-93.0	0.26	0.036
P-DU7-040	24.0	1,410.00	120.0	-1,465.2	1.04	0.204
P-DU7-050	24.0	1,075.00	120.0	-1,708.4	1.21	0.271
P-DU7-060	24.0	1,254.00	120.0	-1,719.5	1.22	0.274
P-DU7-070	24.0	992.00	120.0	-1,987.0	1.41	0.358
P-DU7-080	24.0	2,552.00	120.0	-2,432.2	1.72	0.521
P-DU7-090	16.0	941.00	120.0	-766.4	1.22	0.442
P-DU7-100	16.0	1,562.00	120.0	-737.5	1.18	0.412
P-DU7-110	16.0	1,742.00	120.0	-590.8	0.94	0.273
P-DU7-120	16.0	778.00	120.0	414.0	0.66	0.141
P-DU7-130	20.0	317.00	120.0	-499.5	0.51	0.067
P-DU7-140	20.0	1,207.00	120.0	-496.9	0.51	0.067
P-DU7-150	20.0	1,514.00	120.0	-626.0	0.64	0.102
P-DU7-160	20.0	619.00	120.0	-609.7	0.62	0.098
P-DU7-170	12.0	1,073.00	130.0	54.5	0.15	0.012
P-DU7-180	12.0	828.00	120.0	-78.5	0.22	0.026
P-DU7-190	12.0	399.00	120.0	-318.8	0.90	0.354
P-DU7-200	12.0	2,378.00	120.0	38.3	0.11	0.007
P-DU7-210	12.0	1,049.00	120.0	-405.9	1.15	0.554
P-DU7-220	12.0	1,054.00	120.0	-375.8	1.07	0.480
P-DU7-230	12.0	1,714.00	120.0	-229.6	0.65	0.193
P-DU7-240	12.0	1,014.00	120.0	-178.9	0.51	0.121
P-DU8-010	16.0	1,107.00	120.0	-322.7	0.51	0.089
P-DU8-020	16.0	714.00	120.0	-443.4	0.71	0.161
P-DU8-030	16.0	1,312.00	120.0	-391.6	0.62	0.128
P-DU8-040	16.0	1,371.00	120.0	-428.7	0.68	0.151
P-DU8-050	16.0	520.00	120.0	-505.0	0.81	0.204
P-DU8-060	16.0	1,021.00	120.0	-645.3	1.03	0.322
P-DU8-070	8.0	542.00	120.0	-82.2	0.52	0.207
P-DU8-080	8.0	253.00	120.0	-31.9	0.20	0.036
P-DU8-090	8.0	1,138.00	120.0	-47.3	0.30	0.075
P-DU8-100	12.0	599.00	120.0	156.1	0.44	0.094
P-DU8-110	12.0	709.00	120.0	74.6	0.21	0.024
P-DU8-120	8.0	678.00	120.0	-59.4	0.38	0.113
P-DU8-130	8.0	1,315.00	120.0	25.1	0.16	0.023
P-DU8-140	8.0	966.00	120.0	10.8	0.07	0.005
P-DU8-150	6.0	737.00	130.0	-12.8	0.15	0.023
P-DU8-160	8.0	1,265.00	120.0	13.0	0.08	0.007
P-DU8-170	8.0	2,613.00	120.0	-5.5	0.04	0.001
P-DU8-180	8.0	1,778.00	120.0	-22.7	0.14	0.019
P-DU8-190	8.0	1,185.00	120.0	25.9	0.17	0.024
P-DU8-200	8.0	1,054.00	120.0	69.6	0.44	0.153
P-DU9-010	16.0	904.00	120.0	-142.2	0.23	0.019
P-DU9-020	16.0	227.00	120.0	-120.6	0.19	0.015

Active Scenario: Ave Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU9-030	8.0	1,616.00	120.0	-41.2	0.26	0.058
P-DU9-040	8.0	746.00	120.0	-30.4	0.19	0.033
P-DU9-050	8.0	869.00	120.0	-47.3	0.30	0.074
P-DU9-060	8.0	1,550.00	120.0	-49.9	0.32	0.082
P-DU9-070	8.0	1,001.00	120.0	-23.7	0.15	0.021
P-DU9-080	8.0	644.00	120.0	-31.5	0.20	0.035
P-DU9-090	8.0	3,092.00	120.0	-7.0	0.04	0.002
P-DU9-100	8.0	1,619.00	120.0	-24.8	0.16	0.023
P-DU9-110	8.0	3,057.00	120.0	-13.9	0.09	0.008
P-DU9-120	8.0	901.00	120.0	19.6	0.12	0.014
P-DU9-130	8.0	879.00	120.0	-75.9	0.48	0.179
P-DU9-140	8.0	430.00	120.0	-140.3	0.90	0.557
P-DU9-150	8.0	4,471.00	120.0	-32.9	0.21	0.038
P-SCAP	36.0	1,752.00	120.0	-8,581.3	2.70	0.747

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Reservoir Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Flow Net (Out) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	2,127.8	Desert Wells	1,634.0
SCAP DWPS	1,634.0	16,117.2	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	(N/A)	Desert Wells	(N/A)

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	86	1,604.9
J-110EX	1,440.0	Desert Wells	0.0	72	1,605.5
J-120EX	1,462.0	Desert Wells	0.0	73	1,629.8
J-135EX	1,460.0	Desert Wells	0.0	72	1,625.7
J-150EX	1,472.0	Desert Wells	0.0	64	1,620.5
J-160EX	1,435.0	Desert Wells	0.0	79	1,617.1
J-170EX	1,430.0	Desert Wells	0.0	81	1,616.7
J-180EX	1,410.0	Desert Wells	0.0	89	1,616.0
J-190EX	1,395.0	Desert Wells	0.0	95	1,614.3
J-200EX	1,385.0	Desert Wells	0.0	98	1,612.5
J-220EX	1,480.0	Desert Wells	0.0	63	1,625.4
J-230EX	1,475.0	Desert Wells	0.0	64	1,622.4
J-250EX	1,452.0	Desert Wells	79.0	73	1,620.4
J-260EX	1,453.0	Desert Wells	0.0	72	1,620.5
J-270	1,429.0	Desert Wells	0.0	81	1,616.6
J-280EX	1,460.0	Desert Wells	0.0	68	1,617.9
J-300EX	1,392.0	Desert Wells	107.8	95	1,610.8
J-320	1,422.0	Desert Wells	0.0	84	1,616.4
J-330EX	1,455.0	Desert Wells	0.0	71	1,618.8
J-340	1,440.0	Desert Wells	0.0	77	1,617.4
J-360EX	1,400.0	Desert Wells	0.0	89	1,604.8
J-370	1,405.0	Desert Wells	348.2	86	1,604.4
J-380	1,414.0	Desert Wells	344.2	83	1,605.0
J-390	1,405.0	Desert Wells	218.2	86	1,604.5
J-460	1,423.0	Desert Wells	142.0	82	1,612.0
J-480	1,429.0	Desert Wells	193.6	79	1,612.3
J-550	1,425.0	Desert Wells	0.0	83	1,616.9
J-590EX	1,410.0	Desert Wells	0.0	84	1,604.9
J-750	1,415.0	Desert Wells	344.2	82	1,605.1
J-920	1,434.0	Desert Wells	0.0	80	1,617.9
J-950	1,414.0	Desert Wells	0.0	86	1,613.5
J-960EX	1,401.0	Desert Wells	0.0	88	1,604.8
J-970EX	1,397.0	Desert Wells	106.4	90	1,604.8
J-1000EX	1,455.0	Desert Wells	0.0	77	1,633.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,631.9
J-1020EX	1,425.0	Desert Wells	0.0	90	1,633.5
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,433.0	Desert Wells	0.0	76	1,609.0
J-1050EX	1,445.0	Desert Wells	0.0	75	1,619.3
J-1120EX	1,453.0	Desert Wells	0.0	73	1,620.6
J-1130EX	1,445.0	Desert Wells	350.0	75	1,618.0
J-1140	1,433.0	Desert Wells	155.8	78	1,612.7
J-1160EX	1,445.0	Desert Wells	0.0	81	1,632.9
J-1170EX	1,470.0	Desert Wells	0.0	70	1,632.4

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1180EX	1,440.0	Desert Wells	0.0	84	1,633.2
J-1190EX	1,420.0	Desert Wells	0.0	92	1,633.5
J-1200EX	1,445.0	Desert Wells	0.0	81	1,633.2
J-1210EX	1,455.0	Desert Wells	0.0	77	1,632.4
J-1220	1,405.0	Desert Wells	908.0	86	1,603.3
J-1220EX	1,475.0	Desert Wells	0.0	67	1,630.9
J-1230EX	1,460.0	Desert Wells	0.0	69	1,618.3
J-1235EX	1,440.0	Desert Wells	0.0	77	1,618.8
J-1240	1,411.0	Desert Wells	806.2	83	1,604.0
J-1240EX	1,455.0	Desert Wells	0.0	71	1,619.2
J-1270	1,417.0	Desert Wells	0.0	81	1,605.3
J-1280	1,410.0	Desert Wells	0.0	89	1,616.0
J-1290	1,425.0	Desert Wells	159.6	79	1,607.1
J-1290EX	1,480.0	Desert Wells	0.0	65	1,631.2
J-1300EX	1,465.0	Desert Wells	0.0	72	1,632.4
J-1310EX	1,480.0	Desert Wells	0.0	66	1,631.4
J-1320	1,426.0	Desert Wells	50.8	81	1,612.9
J-1330EX	1,465.0	Desert Wells	0.0	72	1,632.4
J-1340EX	1,450.0	Desert Wells	0.0	79	1,632.9
J-1350EX	1,465.0	Desert Wells	0.0	72	1,632.4
J-1360EX	1,445.0	Desert Wells	0.0	81	1,632.9
J-1370EX	1,430.0	Desert Wells	0.0	88	1,633.2
J-1380EX	1,450.0	Desert Wells	0.0	79	1,633.1
J-1390EX	1,430.0	Desert Wells	0.0	88	1,633.2
J-1400EX	1,430.0	Desert Wells	0.0	88	1,633.2
J-1410	1,454.0	Desert Wells	0.0	73	1,621.8
J-1410EX	1,420.0	Desert Wells	0.0	92	1,633.5
J-1420EX	1,460.0	Desert Wells	0.0	70	1,621.7
J-1430EX	1,455.0	Desert Wells	0.0	72	1,622.3
J-1440EX	1,478.0	Desert Wells	0.0	63	1,623.7
J-1680EX	1,400.0	Desert Wells	0.0	89	1,604.8
J-1990EX	1,447.0	Desert Wells	0.0	75	1,619.6
J-2000EX	1,442.0	Desert Wells	0.0	77	1,618.8
J-2010	1,419.0	Desert Wells	0.0	85	1,616.3
J-2040	1,427.0	Desert Wells	0.0	82	1,616.5
J-2100	1,436.0	Desert Wells	0.0	77	1,614.6
J-2120EX	1,453.0	Desert Wells	0.0	72	1,619.7
J-2140EX	1,446.0	Desert Wells	0.0	75	1,618.4
J-2200	1,414.0	Desert Wells	0.0	87	1,614.0
J-2220	1,410.0	Desert Wells	620.0	84	1,604.4
J-2295	1,415.0	Desert Wells	0.0	86	1,613.2
J-2340EX	1,435.0	Desert Wells	495.2	76	1,611.5
J-DU3-4-010	1,405.0	Desert Wells	276.2	89	1,611.0
J-DU3-4-020	1,401.0	Desert Wells	276.2	91	1,610.5

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU3-4-030	1,397.0	Desert Wells	259.2	92	1,610.3
J-DU3-4-040	1,403.0	Desert Wells	302.6	90	1,610.7
J-DU3-4-050	1,410.0	Desert Wells	51.2	86	1,609.3
J-DU3-4-060	1,408.0	Desert Wells	117.8	86	1,607.1
J-DU3-4-070	1,404.0	Desert Wells	373.2	88	1,606.7
J-DU3-4-080	1,400.0	Desert Wells	373.2	89	1,606.7
J-DU3-4-090	1,393.0	Desert Wells	151.4	93	1,607.0
J-DU3-4-100	1,391.0	Desert Wells	372.2	95	1,610.0
J-DU3-4-110	1,393.0	Desert Wells	282.2	92	1,605.9
J-DU3-4-120	1,393.0	Desert Wells	783.0	92	1,605.1
J-DU3-4-130	1,399.0	Desert Wells	349.0	89	1,605.1
J-DU3-4-140	1,404.0	Desert Wells	186.4	87	1,605.5
J-DU3-4-150	1,407.0	Desert Wells	141.2	86	1,606.1
J-DU3-4-160	1,407.0	Desert Wells	0.0	86	1,605.9
J-DU3-4-170	1,412.0	Desert Wells	194.8	84	1,606.4
J-DU3-4-180	1,414.0	Desert Wells	209.6	84	1,608.8
J-DU3-4-190	1,417.0	Desert Wells	65.8	84	1,610.1
J-DU3-4-200	1,412.5	Desert Wells	276.2	86	1,611.7
J-DU3S-010	1,412.0	Desert Wells	20.4	87	1,612.7
J-DU3S-020	1,407.0	Desert Wells	22.0	89	1,612.0
J-DU3S-030	1,401.0	Desert Wells	30.0	91	1,611.5
J-DU3S-040	1,399.0	Desert Wells	22.0	92	1,611.3
J-DU3S-050	1,404.0	Desert Wells	24.2	90	1,611.5
J-DU3S-060	1,410.0	Desert Wells	23.6	87	1,611.9
J-DU3S-070	1,417.0	Desert Wells	14.0	85	1,612.4
J-DU3S-080	1,396.0	Desert Wells	107.8	93	1,610.9
J-DU5E-010	1,435.0	Desert Wells	639.8	76	1,611.2
J-DU5E-020	1,440.0	Desert Wells	495.2	74	1,612.2
J-DU6-010	1,459.0	Desert Wells	0.0	70	1,620.2
J-DU6-020	1,453.0	Desert Wells	2,196.2	72	1,619.6
J-DU6-030	1,450.0	Desert Wells	160.6	73	1,618.6
J-DU6-040	1,440.0	Desert Wells	321.4	77	1,618.9
J-DU6-050	1,448.0	Desert Wells	482.0	74	1,619.5
J-DU6-060	1,458.0	Desert Wells	500.4	71	1,621.3
J-DU6-070	1,452.0	Desert Wells	160.6	73	1,620.5
J-DU6-080	1,446.0	Desert Wells	160.6	75	1,619.5
J-DU6-090	1,435.0	Desert Wells	160.6	80	1,619.1
J-DU7-010	1,415.0	Desert Wells	13.0	86	1,612.8
J-DU7-020	1,425.0	Desert Wells	455.2	81	1,611.3
J-DU7-030	1,416.0	Desert Wells	0.0	84	1,611.2
J-DU7-040	1,409.0	Desert Wells	51.2	87	1,611.1
J-DU7-050	1,416.0	Desert Wells	221.8	85	1,612.1
J-DU7-060	1,423.0	Desert Wells	22.2	82	1,613.1
J-DU7-070	1,430.0	Desert Wells	0.0	80	1,614.3

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-080	1,434.0	Desert Wells	275.2	79	1,615.6
J-DU7-090	1,437.0	Desert Wells	0.0	79	1,618.7
J-DU7-100	1,435.0	Desert Wells	57.8	79	1,617.2
J-DU7-110	1,435.0	Desert Wells	57.6	78	1,614.9
J-DU7-120	1,420.0	Desert Wells	0.0	84	1,613.2
J-DU7-130	1,420.0	Desert Wells	5.2	84	1,613.1
J-DU7-140	1,425.0	Desert Wells	99.8	81	1,612.8
J-DU7-150	1,419.0	Desert Wells	32.6	84	1,612.3
J-DU7-160	1,435.0	Desert Wells	48.0	78	1,614.4
J-DU7-170	1,432.0	Desert Wells	21.4	79	1,614.5
J-DU7-180	1,433.0	Desert Wells	37.4	79	1,615.0
J-DU7-190	1,437.0	Desert Wells	60.2	78	1,616.8
J-DU7-200	1,432.0	Desert Wells	101.4	78	1,613.3
J-DU8-010	1,420.0	Desert Wells	0.0	84	1,613.6
J-DU8-020	1,419.5	Desert Wells	0.0	84	1,614.0
J-DU8-030	1,421.0	Desert Wells	0.0	84	1,614.6
J-DU8-040	1,418.0	Desert Wells	13.4	85	1,615.3
J-DU8-050	1,422.0	Desert Wells	0.0	84	1,615.7
J-DU8-060	1,420.0	Desert Wells	18.2	84	1,614.4
J-DU8-070	1,420.0	Desert Wells	30.8	84	1,614.4
J-DU8-080	1,422.0	Desert Wells	8.8	83	1,614.6
J-DU8-090	1,424.0	Desert Wells	22.0	82	1,614.6
J-DU8-100	1,425.0	Desert Wells	18.2	82	1,614.7
J-DU8-110	1,430.0	Desert Wells	87.2	80	1,614.6
J-DU8-120	1,431.0	Desert Wells	34.4	79	1,614.6
J-DU8-130	1,427.0	Desert Wells	42.0	81	1,614.7
J-DU9-010	1,419.0	Desert Wells	39.4	84	1,613.5
J-DU9-020	1,415.0	Desert Wells	73.0	86	1,613.9
J-DU9-030	1,416.0	Desert Wells	66.6	86	1,614.1
J-DU9-040	1,416.0	Desert Wells	15.6	86	1,614.2
J-DU9-050	1,419.0	Desert Wells	0.0	84	1,614.3
J-DU9-060	1,422.0	Desert Wells	62.8	83	1,614.8
J-DU9-070	1,414.0	Desert Wells	63.4	87	1,614.1
J-DU9-080	1,419.0	Desert Wells	77.2	84	1,614.2

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	418.1	0.67	0.144
P-170EX	16.0	5,366.00	120.0	418.1	0.67	0.144
P-180EX	16.0	5,396.00	120.0	632.1	1.01	0.310
P-190EX	16.0	5,728.00	120.0	632.1	1.01	0.310
P-200EX	16.0	231.00	120.0	-1,632.7	2.61	1.795
P-210EX	16.0	1,388.00	120.0	-1,135.1	1.81	0.915
P-220EX	16.0	2,909.00	120.0	1,486.7	2.37	1.509
P-240EX	16.0	1,387.00	120.0	-3,475.5	5.55	7.272
P-250EX	16.0	2,611.00	120.0	1,001.0	1.60	0.725
P-310	30.0	4,937.00	120.0	3,460.0	1.57	0.338
P-340EX	16.0	5,775.00	120.0	418.1	0.67	0.144
P-410EX	16.0	5,368.00	120.0	632.1	1.01	0.310
P-630	12.0	710.00	120.0	-219.4	0.62	0.177
P-660	12.0	2,013.00	120.0	-375.5	1.07	0.479
P-970	24.0	1,001.00	120.0	2,387.3	1.69	0.503
P-980	24.0	1,935.00	120.0	1,103.5	0.78	0.121
P-1060EX	16.0	1,328.00	120.0	-202.7	0.32	0.038
P-1070EX	16.0	1,243.00	120.0	-764.6	1.22	0.440
P-1390	16.0	727.00	120.0	-157.3	0.25	0.024
P-1400	16.0	1,976.00	120.0	-946.2	1.51	0.654
P-1630EX	16.0	1,793.00	120.0	792.8	1.27	0.471
P-1640EX	16.0	1,335.00	120.0	1,833.2	2.93	2.224
P-1780	24.0	1,528.00	120.0	2,387.3	1.69	0.503
P-1790	24.0	1,115.00	120.0	2,387.3	1.69	0.503
P-1840	12.0	1,001.00	120.0	319.5	0.91	0.355
P-1940EX	16.0	1,976.00	120.0	460.6	0.73	0.172
P-1950EX	16.0	680.00	120.0	116.8	0.19	0.013
P-1970EX	16.0	927.00	120.0	1,299.6	2.07	1.176
P-1980EX	16.0	1,106.00	120.0	1,017.4	1.62	0.747
P-2000EX	16.0	2,710.00	120.0	-1,372.7	2.19	1.302
P-2040EX	16.0	10,635.00	120.0	-495.7	0.79	0.197
P-2055EX	16.0	10,453.00	120.0	223.3	0.36	0.045
P-2070EX	24.0	5,329.00	120.0	-1,408.8	1.00	0.190
P-2500EX	24.0	2,750.00	120.0	1,476.5	1.05	0.207
P-2510EX	24.0	2,726.00	120.0	1,414.6	1.00	0.191
P-2540EX	12.0	2,624.00	120.0	-174.2	0.49	0.116
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.000
P-2655EX	16.0	2,870.00	120.0	418.1	0.67	0.144
P-2660EX	24.0	2,797.00	120.0	2,127.8	1.51	0.407
P-2665EX	16.0	2,716.00	120.0	418.1	0.67	0.144
P-2690EX	16.0	2,914.00	120.0	-254.3	0.41	0.057
P-2700EX	16.0	3,115.00	120.0	746.7	1.19	0.421
P-2710EX	16.0	1,823.00	120.0	566.0	0.90	0.252
P-2720EX	12.0	3,042.00	120.0	-180.7	0.51	0.124

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2800	24.0	5,786.00	120.0	-214.0	0.15	0.006
P-2830	16.0	2,890.00	120.0	147.9	0.24	0.021
P-2860	12.0	1,164.00	120.0	-402.0	1.14	0.544
P-2860EX	24.0	761.00	120.0	2,127.8	1.51	0.407
P-2870	16.0	643.00	120.0	608.0	0.97	0.288
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.000
P-2890	12.0	992.00	120.0	-646.3	1.83	1.310
P-2890EX	8.0	3,148.00	120.0	-109.5	0.70	0.352
P-2900	24.0	1,423.00	120.0	1,910.3	1.35	0.333
P-2910EX	24.0	497.00	120.0	2,018.4	1.43	0.369
P-2930	12.0	1,167.00	120.0	237.4	0.67	0.205
P-2950	12.0	1,089.00	120.0	61.9	0.18	0.017
P-2960	12.0	1,277.00	120.0	700.0	1.99	1.519
P-2970EX	12.0	1,119.00	120.0	102.6	0.29	0.043
P-2990EX	8.0	2,811.00	120.0	-78.8	0.50	0.192
P-3010EX	12.0	471.00	120.0	109.5	0.31	0.049
P-3020EX	12.0	1,167.00	120.0	23.8	0.07	0.003
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.000
P-3040	12.0	1,135.00	120.0	639.1	1.81	1.283
P-3040EX	8.0	3,081.00	120.0	-76.8	0.49	0.183
P-3060	12.0	595.00	120.0	0.0	0.00	0.000
P-3070EX	8.0	2,922.00	120.0	-53.0	0.34	0.092
P-3080EX	12.0	1,397.00	120.0	-170.3	0.48	0.111
P-3090EX	12.0	1,109.00	120.0	-136.0	0.39	0.073
P-3100EX	12.0	695.00	120.0	38.2	0.11	0.007
P-3110EX	12.0	664.00	120.0	3.9	0.01	0.000
P-3120EX	8.0	1,851.00	120.0	-34.3	0.22	0.041
P-3130	12.0	1,155.00	120.0	53.0	0.15	0.013
P-3140EX	16.0	1,783.00	120.0	49.1	0.08	0.003
P-3150	12.0	779.00	120.0	588.3	1.67	1.101
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.000
P-3160EX	8.0	3,801.00	120.0	-49.1	0.31	0.080
P-3170EX	8.0	2,838.00	120.0	-108.1	0.69	0.344
P-3180EX	8.0	736.00	120.0	32.7	0.21	0.037
P-3190EX	30.0	4,441.00	120.0	8,532.8	3.87	1.796
P-3200	30.0	814.00	120.0	8,532.8	3.87	1.796
P-3240EX	16.0	1,954.00	120.0	864.5	1.38	0.553
P-3250EX	12.0	844.00	120.0	-485.7	1.38	0.772
P-3260EX	16.0	1,108.00	120.0	1,486.7	2.37	1.509
P-3270EX	16.0	1,509.00	120.0	1,105.5	1.76	0.872
P-3280EX	12.0	2,890.00	120.0	-381.3	1.08	0.493
P-3290EX	12.0	2,432.00	120.0	104.4	0.30	0.045
P-3930EX	16.0	751.00	120.0	-202.7	0.32	0.038
P-3940EX	16.0	509.00	120.0	-202.7	0.32	0.038

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-3970EX	16.0	1,445.00	120.0	202.7	0.32	0.038
P-4090	12.0	1,276.00	120.0	506.0	1.44	0.832
P-4720EX	16.0	1,216.00	120.0	929.9	1.48	0.633
P-4730EX	16.0	456.00	120.0	929.9	1.48	0.633
P-4750EX	16.0	715.00	120.0	929.9	1.48	0.633
P-4760EX	16.0	774.00	120.0	122.7	0.20	0.015
P-4780	24.0	1,020.00	120.0	1,103.5	0.78	0.121
P-4790EX	16.0	1,816.00	120.0	303.4	0.48	0.080
P-4860	24.0	986.00	120.0	-1,103.5	0.78	0.120
P-4870	24.0	620.00	120.0	-1,103.5	0.78	0.120
P-5280	12.0	949.00	120.0	175.3	0.50	0.117
P-5290	12.0	977.00	120.0	-444.7	1.26	0.655
P-5510	12.0	1,886.00	120.0	540.4	1.53	0.940
P-5540	12.0	2,100.00	120.0	-708.1	2.01	1.551
P-5560	12.0	927.00	120.0	-561.9	1.59	1.011
P-5570	12.0	1,841.00	120.0	-315.3	0.89	0.347
P-5620	16.0	1,146.00	120.0	502.2	0.80	0.202
P-5700EX	16.0	1,176.00	120.0	2,329.7	3.72	3.467
P-5710EX	16.0	1,171.00	120.0	2,329.7	3.72	3.467
P-5720	12.0	696.00	120.0	455.4	1.29	0.685
P-5730	12.0	955.00	120.0	261.8	0.74	0.246
P-5740	24.0	2,671.00	120.0	-1,103.5	0.78	0.121
P-5760	12.0	1,545.00	120.0	-611.2	1.73	1.181
P-5770	16.0	353.00	120.0	515.9	0.82	0.212
P-5780	16.0	684.00	120.0	515.9	0.82	0.213
P-5790	12.0	884.00	120.0	-611.2	1.73	1.181
P-6030	12.0	162.00	120.0	497.6	1.41	0.807
P-6064	16.0	846.00	120.0	-889.4	1.42	0.583
P-6065	16.0	3,443.00	120.0	-889.4	1.42	0.583
P-6070	16.0	247.00	120.0	-1,171.8	1.87	0.971
P-6166	16.0	900.00	120.0	-2,072.7	3.31	2.792
P-6167EX	16.0	1,381.00	120.0	-2,751.8	4.39	4.719
P-6171	16.0	3,164.00	120.0	2,420.2	3.86	3.721
P-7000	16.0	742.00	120.0	-886.6	1.41	0.579
P-COMWTREX	36.0	10.00	120.0	2,127.8	0.67	0.061
P-DU-3-4-070	12.0	734.00	120.0	-1,003.5	2.85	2.958
P-DU-3-4-080	12.0	913.00	120.0	-364.2	1.03	0.453
P-DU-3-4-090	12.0	1,401.00	120.0	9.0	0.03	0.000
P-DU-3-4-100	12.0	717.00	120.0	-382.2	1.08	0.495
P-DU-3-4-110	16.0	597.00	120.0	-226.2	0.36	0.046
P-DU-3-4-120	16.0	1,375.00	120.0	-575.2	0.92	0.260
P-DU-3-4-130	12.0	1,165.00	120.0	-380.3	1.08	0.490
P-DU-3S-130	16.0	1,385.00	120.0	-1,060.3	1.69	0.807
P-DU3-4-010	12.0	1,834.00	120.0	-260.6	0.74	0.244

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU3-4-020	24.0	1,370.00	120.0	-1,412.6	1.00	0.190
P-DU3-4-030	24.0	1,035.00	120.0	-1,671.8	1.19	0.260
P-DU3-4-040	24.0	496.00	120.0	-1,687.4	1.20	0.265
P-DU3-4-050	24.0	1,092.00	120.0	-1,990.0	1.41	0.359
P-DU3-4-060	12.0	553.00	120.0	-1,054.7	2.99	3.244
P-DU3-4-160	12.0	1,157.00	120.0	-521.5	1.48	0.880
P-DU3-4-170	16.0	937.00	120.0	-756.8	1.21	0.432
P-DU3-4-180	16.0	1,045.00	120.0	-756.8	1.21	0.432
P-DU3-4-190	16.0	1,019.00	120.0	-1,897.9	3.03	2.372
P-DU3-4-200	16.0	958.00	120.0	-1,399.3	2.23	1.349
P-DU3-4-210	16.0	1,373.00	120.0	-1,465.1	2.34	1.469
P-DU3S-010	8.0	261.00	120.0	285.2	1.82	2.075
P-DU3S-020	8.0	1,374.00	120.0	129.4	0.83	0.480
P-DU3S-030	8.0	1,542.00	120.0	107.4	0.69	0.340
P-DU3S-040	8.0	1,242.00	120.0	77.4	0.49	0.185
P-DU3S-050	8.0	801.00	120.0	-129.0	0.82	0.478
P-DU3S-060	8.0	974.00	120.0	-73.6	0.47	0.169
P-DU3S-070	8.0	1,384.00	120.0	-97.8	0.62	0.286
P-DU3S-080	8.0	1,241.00	120.0	-121.4	0.78	0.427
P-DU3S-090	8.0	621.00	120.0	-135.4	0.86	0.522
P-DU3S-100	16.0	1,114.00	130.0	268.5	0.43	0.055
P-DU3S-110	16.0	1,525.00	130.0	-247.3	0.39	0.047
P-DU3S-120	16.0	1,560.00	120.0	-784.1	1.25	0.461
P-DU5E-010	12.0	2,201.00	120.0	-183.9	0.52	0.128
P-DU5E-020	12.0	1,392.00	120.0	455.9	1.29	0.686
P-DU5E-030	12.0	2,181.00	120.0	951.1	2.70	2.679
P-DU6-010	12.0	1,163.00	120.0	391.9	1.11	0.519
P-DU6-020	16.0	124.00	120.0	1,337.0	2.13	1.239
P-DU6-030	12.0	1,388.00	120.0	464.5	1.32	0.711
P-DU6-040	12.0	2,188.00	120.0	193.7	0.55	0.141
P-DU6-050	12.0	2,203.00	120.0	71.6	0.20	0.022
P-DU6-060	12.0	2,209.00	120.0	391.9	1.11	0.519
P-DU6-070	16.0	142.00	120.0	1,950.9	3.11	2.496
P-DU6-080	12.0	1,130.00	120.0	717.9	2.04	1.591
P-DU6-090	12.0	1,397.00	120.0	363.3	1.03	0.451
P-DU6-100	12.0	1,966.00	120.0	151.8	0.43	0.090
P-DU6-110	12.0	1,963.00	120.0	-55.8	0.16	0.014
P-DU6-120	12.0	1,955.00	120.0	-340.7	0.97	0.400
P-DU6-130	12.0	135.00	120.0	348.7	0.99	0.418
P-DU6-140	12.0	1,094.00	120.0	528.8	1.50	0.903
P-DU6-150	12.0	1,411.00	120.0	312.4	0.89	0.341
P-DU6-160	16.0	211.00	120.0	1,003.4	1.60	0.728
P-DU7-010	12.0	1,169.00	120.0	637.4	1.81	1.276
P-DU7-020	12.0	1,092.00	120.0	-182.2	0.52	0.126

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU7-030	12.0	1,044.00	120.0	-182.2	0.52	0.125
P-DU7-040	24.0	1,410.00	120.0	-2,913.7	2.07	0.728
P-DU7-050	24.0	1,075.00	120.0	-3,393.1	2.41	0.965
P-DU7-060	24.0	1,254.00	120.0	-3,415.3	2.42	0.977
P-DU7-070	24.0	992.00	120.0	-3,947.7	2.80	1.278
P-DU7-080	24.0	2,552.00	120.0	-4,834.1	3.43	1.859
P-DU7-090	16.0	941.00	120.0	-1,524.0	2.43	1.580
P-DU7-100	16.0	1,562.00	120.0	-1,466.2	2.34	1.471
P-DU7-110	16.0	1,742.00	120.0	-1,174.0	1.87	0.974
P-DU7-120	16.0	778.00	120.0	824.1	1.31	0.506
P-DU7-130	20.0	317.00	120.0	-989.9	1.01	0.240
P-DU7-140	20.0	1,207.00	120.0	-984.7	1.01	0.237
P-DU7-150	20.0	1,514.00	120.0	-1,240.1	1.27	0.364
P-DU7-160	20.0	619.00	120.0	-1,207.5	1.23	0.346
P-DU7-170	12.0	1,073.00	130.0	106.7	0.30	0.040
P-DU7-180	12.0	828.00	120.0	-154.7	0.44	0.093
P-DU7-190	12.0	399.00	120.0	-632.7	1.79	1.259
P-DU7-200	12.0	2,378.00	120.0	76.9	0.22	0.025
P-DU7-210	12.0	1,049.00	120.0	-807.2	2.29	1.977
P-DU7-220	12.0	1,054.00	120.0	-747.0	2.12	1.713
P-DU7-230	12.0	1,714.00	120.0	-456.6	1.30	0.688
P-DU7-240	12.0	1,014.00	120.0	-355.2	1.01	0.432
P-DU8-010	16.0	1,107.00	120.0	-640.0	1.02	0.317
P-DU8-020	16.0	714.00	120.0	-880.1	1.40	0.572
P-DU8-030	16.0	1,312.00	120.0	-778.1	1.24	0.455
P-DU8-040	16.0	1,371.00	120.0	-852.3	1.36	0.538
P-DU8-050	16.0	520.00	120.0	-1,004.3	1.60	0.730
P-DU8-060	16.0	1,021.00	120.0	-1,283.8	2.05	1.150
P-DU8-070	8.0	542.00	120.0	-163.2	1.04	0.738
P-DU8-080	8.0	253.00	120.0	-63.4	0.40	0.128
P-DU8-090	8.0	1,138.00	120.0	-94.2	0.60	0.266
P-DU8-100	12.0	599.00	120.0	311.5	0.88	0.339
P-DU8-110	12.0	709.00	120.0	148.8	0.42	0.086
P-DU8-120	8.0	678.00	120.0	-118.0	0.75	0.405
P-DU8-130	8.0	1,315.00	120.0	50.3	0.32	0.083
P-DU8-140	8.0	966.00	120.0	22.0	0.14	0.018
P-DU8-150	6.0	737.00	130.0	-25.4	0.29	0.082
P-DU8-160	8.0	1,265.00	120.0	26.1	0.17	0.025
P-DU8-170	8.0	2,613.00	120.0	-10.8	0.07	0.005
P-DU8-180	8.0	1,778.00	120.0	-45.2	0.29	0.068
P-DU8-190	8.0	1,185.00	120.0	51.4	0.33	0.087
P-DU8-200	8.0	1,054.00	120.0	138.6	0.88	0.545
P-DU9-010	16.0	904.00	120.0	-282.3	0.45	0.070
P-DU9-020	16.0	227.00	120.0	-240.1	0.38	0.052

Active Scenario: Max Day Demand - Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU9-030	8.0	1,616.00	120.0	-81.6	0.52	0.204
P-DU9-040	8.0	746.00	120.0	-61.2	0.39	0.120
P-DU9-050	8.0	869.00	120.0	-93.4	0.60	0.263
P-DU9-060	8.0	1,550.00	120.0	-99.6	0.64	0.295
P-DU9-070	8.0	1,001.00	120.0	-46.9	0.30	0.073
P-DU9-080	8.0	644.00	120.0	-62.5	0.40	0.125
P-DU9-090	8.0	3,092.00	120.0	-13.6	0.09	0.007
P-DU9-100	8.0	1,619.00	120.0	-49.4	0.32	0.081
P-DU9-110	8.0	3,057.00	120.0	-27.5	0.18	0.027
P-DU9-120	8.0	901.00	120.0	39.2	0.25	0.052
P-DU9-130	8.0	879.00	120.0	-151.1	0.96	0.640
P-DU9-140	8.0	430.00	120.0	-279.5	1.78	1.999
P-DU9-150	8.0	4,471.00	120.0	-65.6	0.42	0.136
P-SCAP	36.0	1,752.00	120.0	-16,117.2	5.08	2.400

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Reservoir Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Flow Net (Out) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	3,035.1	Desert Wells	1,634.0
SCAP DWPS	1,634.0	22,984.1	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	(N/A)	Desert Wells	(N/A)

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	73	1,574.7
J-110EX	1,440.0	Desert Wells	0.0	59	1,576.0
J-120EX	1,462.0	Desert Wells	0.0	71	1,625.9
J-135EX	1,460.0	Desert Wells	0.0	68	1,618.2
J-150EX	1,472.0	Desert Wells	0.0	59	1,607.4
J-160EX	1,435.0	Desert Wells	0.0	71	1,600.2
J-170EX	1,430.0	Desert Wells	0.0	73	1,599.4
J-180EX	1,410.0	Desert Wells	0.0	81	1,597.8
J-190EX	1,395.0	Desert Wells	0.0	86	1,594.3
J-200EX	1,385.0	Desert Wells	0.0	89	1,590.5
J-220EX	1,480.0	Desert Wells	0.0	59	1,617.4
J-230EX	1,475.0	Desert Wells	0.0	59	1,611.5
J-250EX	1,452.0	Desert Wells	118.5	67	1,607.0
J-260EX	1,453.0	Desert Wells	0.0	67	1,607.6
J-270	1,429.0	Desert Wells	0.0	74	1,599.2
J-280EX	1,460.0	Desert Wells	0.0	61	1,602.0
J-300EX	1,392.0	Desert Wells	161.7	84	1,587.0
J-320	1,422.0	Desert Wells	0.0	76	1,598.8
J-330EX	1,455.0	Desert Wells	0.0	64	1,603.7
J-340	1,440.0	Desert Wells	0.0	70	1,600.7
J-360EX	1,400.0	Desert Wells	0.0	75	1,574.4
J-370	1,405.0	Desert Wells	522.3	73	1,573.7
J-380	1,414.0	Desert Wells	516.3	70	1,575.1
J-390	1,405.0	Desert Wells	327.3	73	1,573.9
J-460	1,423.0	Desert Wells	213.0	72	1,589.5
J-480	1,429.0	Desert Wells	290.4	70	1,590.0
J-550	1,425.0	Desert Wells	0.0	76	1,599.7
J-590EX	1,410.0	Desert Wells	0.0	71	1,574.8
J-750	1,415.0	Desert Wells	516.3	69	1,575.1
J-920	1,434.0	Desert Wells	0.0	73	1,601.9
J-950	1,414.0	Desert Wells	0.0	77	1,592.6
J-960EX	1,401.0	Desert Wells	0.0	75	1,574.5
J-970EX	1,397.0	Desert Wells	159.6	77	1,574.4
J-1000EX	1,455.0	Desert Wells	0.0	77	1,632.1
J-1010EX	1,485.0	Desert Wells	0.0	63	1,630.0
J-1020EX	1,425.0	Desert Wells	0.0	90	1,633.1
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,433.0	Desert Wells	0.0	65	1,583.8
J-1050EX	1,445.0	Desert Wells	0.0	69	1,604.8
J-1120EX	1,453.0	Desert Wells	0.0	67	1,607.9
J-1130EX	1,445.0	Desert Wells	525.0	69	1,603.4
J-1140	1,433.0	Desert Wells	233.7	68	1,591.0
J-1160EX	1,445.0	Desert Wells	0.0	81	1,632.0
J-1170EX	1,470.0	Desert Wells	0.0	70	1,631.0

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1180EX	1,440.0	Desert Wells	0.0	83	1,632.5
J-1190EX	1,420.0	Desert Wells	0.0	92	1,633.1
J-1200EX	1,445.0	Desert Wells	0.0	81	1,632.5
J-1210EX	1,455.0	Desert Wells	0.0	76	1,630.8
J-1220	1,405.0	Desert Wells	1,362.0	72	1,571.5
J-1220EX	1,475.0	Desert Wells	0.0	66	1,628.1
J-1230EX	1,460.0	Desert Wells	0.0	62	1,602.8
J-1235EX	1,440.0	Desert Wells	0.0	71	1,603.8
J-1240	1,411.0	Desert Wells	1,209.3	70	1,572.8
J-1240EX	1,455.0	Desert Wells	0.0	65	1,604.6
J-1270	1,417.0	Desert Wells	0.0	69	1,575.6
J-1280	1,410.0	Desert Wells	0.0	81	1,597.8
J-1290	1,425.0	Desert Wells	239.4	67	1,579.5
J-1290EX	1,480.0	Desert Wells	0.0	64	1,628.7
J-1300EX	1,465.0	Desert Wells	0.0	72	1,630.8
J-1310EX	1,480.0	Desert Wells	0.0	64	1,629.0
J-1320	1,426.0	Desert Wells	76.2	72	1,591.3
J-1330EX	1,465.0	Desert Wells	0.0	72	1,630.9
J-1340EX	1,450.0	Desert Wells	0.0	79	1,632.0
J-1350EX	1,465.0	Desert Wells	0.0	72	1,630.9
J-1360EX	1,445.0	Desert Wells	0.0	81	1,632.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,632.5
J-1380EX	1,450.0	Desert Wells	0.0	79	1,632.3
J-1390EX	1,430.0	Desert Wells	0.0	88	1,632.5
J-1400EX	1,430.0	Desert Wells	0.0	88	1,632.5
J-1410	1,454.0	Desert Wells	0.0	67	1,610.0
J-1410EX	1,420.0	Desert Wells	0.0	92	1,633.1
J-1420EX	1,460.0	Desert Wells	0.0	65	1,610.5
J-1430EX	1,455.0	Desert Wells	0.0	68	1,611.5
J-1440EX	1,478.0	Desert Wells	0.0	59	1,614.1
J-1680EX	1,400.0	Desert Wells	0.0	75	1,574.5
J-1990EX	1,447.0	Desert Wells	0.0	69	1,605.4
J-2000EX	1,442.0	Desert Wells	0.0	70	1,603.9
J-2010	1,419.0	Desert Wells	0.0	78	1,598.5
J-2040	1,427.0	Desert Wells	0.0	74	1,599.0
J-2100	1,436.0	Desert Wells	0.0	69	1,594.9
J-2120EX	1,453.0	Desert Wells	0.0	67	1,607.8
J-2140EX	1,446.0	Desert Wells	0.0	69	1,604.5
J-2200	1,414.0	Desert Wells	0.0	78	1,593.6
J-2220	1,410.0	Desert Wells	930.0	71	1,573.7
J-2295	1,415.0	Desert Wells	0.0	77	1,592.1
J-2340EX	1,435.0	Desert Wells	742.8	67	1,589.3
J-DU3-4-010	1,405.0	Desert Wells	414.3	79	1,587.3
J-DU3-4-020	1,401.0	Desert Wells	414.3	80	1,586.4

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU3-4-030	1,397.0	Desert Wells	388.8	82	1,585.8
J-DU3-4-040	1,403.0	Desert Wells	453.9	79	1,586.7
J-DU3-4-050	1,410.0	Desert Wells	76.8	75	1,583.7
J-DU3-4-060	1,408.0	Desert Wells	176.7	74	1,579.2
J-DU3-4-070	1,404.0	Desert Wells	559.8	75	1,578.3
J-DU3-4-080	1,400.0	Desert Wells	559.8	77	1,578.3
J-DU3-4-090	1,393.0	Desert Wells	227.1	81	1,579.1
J-DU3-4-100	1,391.0	Desert Wells	558.3	84	1,585.3
J-DU3-4-110	1,393.0	Desert Wells	423.3	80	1,576.8
J-DU3-4-120	1,393.0	Desert Wells	1,174.5	79	1,575.1
J-DU3-4-130	1,399.0	Desert Wells	523.5	76	1,575.2
J-DU3-4-140	1,404.0	Desert Wells	279.6	74	1,575.9
J-DU3-4-150	1,407.0	Desert Wells	211.8	74	1,577.1
J-DU3-4-160	1,407.0	Desert Wells	0.0	73	1,576.8
J-DU3-4-170	1,412.0	Desert Wells	292.2	72	1,577.7
J-DU3-4-180	1,414.0	Desert Wells	314.4	73	1,582.8
J-DU3-4-190	1,417.0	Desert Wells	98.7	73	1,585.4
J-DU3-4-200	1,412.5	Desert Wells	414.3	76	1,588.8
J-DU3S-010	1,412.0	Desert Wells	30.6	77	1,590.9
J-DU3S-020	1,407.0	Desert Wells	33.0	79	1,589.6
J-DU3S-030	1,401.0	Desert Wells	45.0	81	1,588.4
J-DU3S-040	1,399.0	Desert Wells	33.0	82	1,588.0
J-DU3S-050	1,404.0	Desert Wells	36.3	80	1,588.3
J-DU3S-060	1,410.0	Desert Wells	35.4	78	1,589.1
J-DU3S-070	1,417.0	Desert Wells	21.0	75	1,590.3
J-DU3S-080	1,396.0	Desert Wells	161.7	83	1,587.2
J-DU5E-010	1,435.0	Desert Wells	959.7	67	1,588.8
J-DU5E-020	1,440.0	Desert Wells	742.8	65	1,590.8
J-DU6-010	1,459.0	Desert Wells	0.0	65	1,608.3
J-DU6-020	1,453.0	Desert Wells	2,196.2	67	1,607.5
J-DU6-030	1,450.0	Desert Wells	240.9	67	1,604.8
J-DU6-040	1,440.0	Desert Wells	482.1	72	1,605.3
J-DU6-050	1,448.0	Desert Wells	723.0	69	1,606.6
J-DU6-060	1,458.0	Desert Wells	500.4	66	1,609.9
J-DU6-070	1,452.0	Desert Wells	240.9	67	1,607.9
J-DU6-080	1,446.0	Desert Wells	240.9	69	1,606.6
J-DU6-090	1,435.0	Desert Wells	240.9	74	1,605.7
J-DU7-010	1,415.0	Desert Wells	19.5	76	1,591.2
J-DU7-020	1,425.0	Desert Wells	682.8	71	1,588.0
J-DU7-030	1,416.0	Desert Wells	0.0	74	1,587.8
J-DU7-040	1,409.0	Desert Wells	76.8	77	1,587.5
J-DU7-050	1,416.0	Desert Wells	332.7	75	1,589.6
J-DU7-060	1,423.0	Desert Wells	33.3	73	1,591.8
J-DU7-070	1,430.0	Desert Wells	0.0	71	1,594.4

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-080	1,434.0	Desert Wells	412.8	71	1,597.1
J-DU7-090	1,437.0	Desert Wells	0.0	72	1,603.5
J-DU7-100	1,435.0	Desert Wells	86.7	72	1,600.4
J-DU7-110	1,435.0	Desert Wells	86.4	69	1,595.6
J-DU7-120	1,420.0	Desert Wells	0.0	74	1,592.0
J-DU7-130	1,420.0	Desert Wells	7.8	74	1,591.8
J-DU7-140	1,425.0	Desert Wells	149.7	72	1,591.2
J-DU7-150	1,419.0	Desert Wells	48.9	74	1,590.1
J-DU7-160	1,435.0	Desert Wells	72.0	69	1,594.5
J-DU7-170	1,432.0	Desert Wells	32.1	70	1,594.6
J-DU7-180	1,433.0	Desert Wells	56.1	70	1,595.7
J-DU7-190	1,437.0	Desert Wells	90.3	70	1,599.5
J-DU7-200	1,432.0	Desert Wells	152.1	69	1,592.2
J-DU8-010	1,420.0	Desert Wells	0.0	75	1,592.7
J-DU8-020	1,419.5	Desert Wells	0.0	75	1,593.6
J-DU8-030	1,421.0	Desert Wells	0.0	75	1,594.9
J-DU8-040	1,418.0	Desert Wells	20.1	77	1,596.4
J-DU8-050	1,422.0	Desert Wells	0.0	76	1,597.2
J-DU8-060	1,420.0	Desert Wells	27.3	75	1,594.4
J-DU8-070	1,420.0	Desert Wells	46.2	76	1,594.5
J-DU8-080	1,422.0	Desert Wells	13.2	75	1,595.0
J-DU8-090	1,424.0	Desert Wells	33.0	74	1,595.0
J-DU8-100	1,425.0	Desert Wells	27.3	74	1,595.1
J-DU8-110	1,430.0	Desert Wells	130.8	71	1,594.9
J-DU8-120	1,431.0	Desert Wells	51.6	71	1,594.9
J-DU8-130	1,427.0	Desert Wells	63.0	73	1,595.2
J-DU9-010	1,419.0	Desert Wells	59.1	75	1,592.7
J-DU9-020	1,415.0	Desert Wells	109.5	77	1,593.4
J-DU9-030	1,416.0	Desert Wells	99.9	77	1,593.9
J-DU9-040	1,416.0	Desert Wells	23.4	77	1,594.0
J-DU9-050	1,419.0	Desert Wells	0.0	76	1,594.2
J-DU9-060	1,422.0	Desert Wells	94.2	75	1,595.4
J-DU9-070	1,414.0	Desert Wells	95.1	78	1,593.9
J-DU9-080	1,419.0	Desert Wells	115.8	76	1,594.1

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	624.7	1.00	0.303
P-170EX	16.0	5,366.00	120.0	624.7	1.00	0.303
P-180EX	16.0	5,396.00	120.0	943.9	1.51	0.651
P-190EX	16.0	5,728.00	120.0	943.9	1.51	0.651
P-200EX	16.0	231.00	120.0	-2,711.3	4.33	4.592
P-210EX	16.0	1,388.00	120.0	-1,890.8	3.02	2.355
P-220EX	16.0	2,909.00	120.0	2,128.1	3.40	2.932
P-240EX	16.0	1,387.00	120.0	-4,770.7	7.61	13.075
P-250EX	16.0	2,611.00	120.0	1,519.5	2.42	1.571
P-310	30.0	4,937.00	120.0	5,166.0	2.34	0.709
P-340EX	16.0	5,775.00	120.0	624.7	1.00	0.303
P-410EX	16.0	5,368.00	120.0	943.9	1.51	0.651
P-630	12.0	710.00	120.0	-323.0	0.92	0.362
P-660	12.0	2,013.00	120.0	-553.9	1.57	0.984
P-970	24.0	1,001.00	120.0	3,566.6	2.53	1.059
P-980	24.0	1,935.00	120.0	1,647.9	1.17	0.253
P-1060EX	16.0	1,328.00	120.0	-327.4	0.52	0.092
P-1070EX	16.0	1,243.00	120.0	-1,169.8	1.87	0.968
P-1390	16.0	727.00	120.0	-205.0	0.33	0.038
P-1400	16.0	1,976.00	120.0	-1,392.8	2.22	1.337
P-1630EX	16.0	1,793.00	120.0	1,180.7	1.88	0.985
P-1640EX	16.0	1,335.00	120.0	2,727.3	4.35	4.642
P-1780	24.0	1,528.00	120.0	3,566.6	2.53	1.059
P-1790	24.0	1,115.00	120.0	3,566.6	2.53	1.059
P-1840	12.0	1,001.00	120.0	476.8	1.35	0.746
P-1940EX	16.0	1,976.00	120.0	663.8	1.06	0.339
P-1950EX	16.0	680.00	120.0	149.4	0.24	0.021
P-1970EX	16.0	927.00	120.0	1,926.3	3.07	2.438
P-1980EX	16.0	1,106.00	120.0	1,503.0	2.40	1.540
P-2000EX	16.0	2,710.00	120.0	-2,102.4	3.35	2.867
P-2040EX	16.0	10,635.00	120.0	-708.0	1.13	0.381
P-2055EX	16.0	10,453.00	120.0	318.4	0.51	0.087
P-2070EX	24.0	5,329.00	120.0	-2,008.8	1.42	0.366
P-2500EX	24.0	2,750.00	120.0	2,105.3	1.49	0.399
P-2510EX	24.0	2,726.00	120.0	2,016.9	1.43	0.368
P-2540EX	12.0	2,624.00	120.0	-248.4	0.70	0.223
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.000
P-2655EX	16.0	2,870.00	120.0	624.7	1.00	0.303
P-2660EX	24.0	2,797.00	120.0	3,035.1	2.15	0.785
P-2665EX	16.0	2,716.00	120.0	624.7	1.00	0.303
P-2690EX	16.0	2,914.00	120.0	-399.4	0.64	0.132
P-2700EX	16.0	3,115.00	120.0	1,120.0	1.79	0.893
P-2710EX	16.0	1,823.00	120.0	848.5	1.35	0.534
P-2720EX	12.0	3,042.00	120.0	-271.6	0.77	0.263

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2800	24.0	5,786.00	120.0	-319.2	0.23	0.012
P-2830	16.0	2,890.00	120.0	223.8	0.36	0.045
P-2860	12.0	1,164.00	120.0	-607.3	1.72	1.167
P-2860EX	24.0	761.00	120.0	3,035.1	2.15	0.785
P-2870	16.0	643.00	120.0	932.6	1.49	0.636
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.000
P-2890	12.0	992.00	120.0	-974.1	2.76	2.800
P-2890EX	8.0	3,148.00	120.0	-156.1	1.00	0.680
P-2900	24.0	1,423.00	120.0	2,724.9	1.93	0.643
P-2910EX	24.0	497.00	120.0	2,879.0	2.04	0.712
P-2930	12.0	1,167.00	120.0	354.8	1.01	0.431
P-2950	12.0	1,089.00	120.0	88.4	0.25	0.033
P-2960	12.0	1,277.00	120.0	1,069.5	3.03	3.329
P-2970EX	12.0	1,119.00	120.0	146.3	0.42	0.084
P-2990EX	8.0	2,811.00	120.0	-112.3	0.72	0.370
P-3010EX	12.0	471.00	120.0	156.1	0.44	0.094
P-3020EX	12.0	1,167.00	120.0	34.0	0.10	0.006
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.000
P-3040	12.0	1,135.00	120.0	953.5	2.70	2.692
P-3040EX	8.0	3,081.00	120.0	-109.5	0.70	0.352
P-3060	12.0	595.00	120.0	0.0	0.00	0.000
P-3070EX	8.0	2,922.00	120.0	-75.5	0.48	0.177
P-3080EX	12.0	1,397.00	120.0	-242.9	0.69	0.214
P-3090EX	12.0	1,109.00	120.0	-193.9	0.55	0.141
P-3100EX	12.0	695.00	120.0	54.5	0.15	0.014
P-3110EX	12.0	664.00	120.0	5.5	0.02	0.000
P-3120EX	8.0	1,851.00	120.0	-49.0	0.31	0.079
P-3130	12.0	1,155.00	120.0	75.5	0.21	0.025
P-3140EX	16.0	1,783.00	120.0	70.0	0.11	0.005
P-3150	12.0	779.00	120.0	877.3	2.49	2.307
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.000
P-3160EX	8.0	3,801.00	120.0	-70.0	0.45	0.154
P-3170EX	8.0	2,838.00	120.0	-154.1	0.98	0.664
P-3180EX	8.0	736.00	120.0	46.6	0.30	0.072
P-3190EX	30.0	4,441.00	120.0	12,399.6	5.63	3.588
P-3200	30.0	814.00	120.0	12,399.6	5.63	3.588
P-3240EX	16.0	1,954.00	120.0	1,376.0	2.20	1.307
P-3250EX	12.0	844.00	120.0	-608.6	1.73	1.172
P-3260EX	16.0	1,108.00	120.0	2,128.1	3.40	2.932
P-3270EX	16.0	1,509.00	120.0	1,594.7	2.54	1.718
P-3280EX	12.0	2,890.00	120.0	-533.3	1.51	0.918
P-3290EX	12.0	2,432.00	120.0	75.3	0.21	0.024
P-3930EX	16.0	751.00	120.0	-327.4	0.52	0.092
P-3940EX	16.0	509.00	120.0	-327.4	0.52	0.091

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-3970EX	16.0	1,445.00	120.0	327.4	0.52	0.092
P-4090	12.0	1,276.00	120.0	754.7	2.14	1.745
P-4720EX	16.0	1,216.00	120.0	1,388.2	2.22	1.329
P-4730EX	16.0	456.00	120.0	1,388.2	2.22	1.329
P-4750EX	16.0	715.00	120.0	1,388.2	2.22	1.329
P-4760EX	16.0	774.00	120.0	182.2	0.29	0.031
P-4780	24.0	1,020.00	120.0	1,647.9	1.17	0.253
P-4790EX	16.0	1,816.00	120.0	453.8	0.72	0.168
P-4860	24.0	986.00	120.0	-1,647.9	1.17	0.253
P-4870	24.0	620.00	120.0	-1,647.9	1.17	0.253
P-5280	12.0	949.00	120.0	258.5	0.73	0.240
P-5290	12.0	977.00	120.0	-671.5	1.90	1.406
P-5510	12.0	1,886.00	120.0	830.1	2.35	2.082
P-5540	12.0	2,100.00	120.0	-1,052.8	2.99	3.234
P-5560	12.0	927.00	120.0	-842.5	2.39	2.140
P-5570	12.0	1,841.00	120.0	-477.3	1.35	0.747
P-5620	16.0	1,146.00	120.0	788.5	1.26	0.466
P-5700EX	16.0	1,176.00	120.0	3,289.9	5.25	6.569
P-5710EX	16.0	1,171.00	120.0	3,289.9	5.25	6.569
P-5720	12.0	696.00	120.0	678.9	1.93	1.435
P-5730	12.0	955.00	120.0	388.5	1.10	0.510
P-5740	24.0	2,671.00	120.0	-1,647.9	1.17	0.253
P-5760	12.0	1,545.00	120.0	-912.6	2.59	2.482
P-5770	16.0	353.00	120.0	1,092.6	1.74	0.853
P-5780	16.0	684.00	120.0	1,092.6	1.74	0.853
P-5790	12.0	884.00	120.0	-912.6	2.59	2.482
P-6030	12.0	162.00	120.0	820.5	2.33	2.038
P-6064	16.0	846.00	120.0	-1,328.7	2.12	1.225
P-6065	16.0	3,443.00	120.0	-1,328.7	2.12	1.225
P-6070	16.0	247.00	120.0	-1,750.1	2.79	2.041
P-6166	16.0	900.00	120.0	-3,171.9	5.06	6.140
P-6167EX	16.0	1,381.00	120.0	-4,178.2	6.67	10.228
P-6171	16.0	3,164.00	120.0	3,430.9	5.47	7.100
P-7000	16.0	742.00	120.0	-1,323.6	2.11	1.217
P-COMWTREX	36.0	10.00	120.0	3,035.1	0.96	0.110
P-DU-3-4-070	12.0	734.00	120.0	-1,494.0	4.24	6.183
P-DU-3-4-080	12.0	913.00	120.0	-545.7	1.55	0.957
P-DU-3-4-090	12.0	1,401.00	120.0	14.1	0.04	0.001
P-DU-3-4-100	12.0	717.00	120.0	-573.9	1.63	1.051
P-DU-3-4-110	16.0	597.00	120.0	-335.4	0.54	0.096
P-DU-3-4-120	16.0	1,375.00	120.0	-858.9	1.37	0.546
P-DU-3-4-130	12.0	1,165.00	120.0	-559.8	1.59	1.004
P-DU-3S-130	16.0	1,385.00	120.0	-1,584.1	2.53	1.697
P-DU3-4-010	12.0	1,834.00	120.0	-387.4	1.10	0.508

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU3-4-020	24.0	1,370.00	120.0	-2,104.8	1.49	0.399
P-DU3-4-030	24.0	1,035.00	120.0	-2,493.6	1.77	0.546
P-DU3-4-040	24.0	496.00	120.0	-2,520.5	1.79	0.556
P-DU3-4-050	24.0	1,092.00	120.0	-2,974.4	2.11	0.756
P-DU3-4-060	12.0	553.00	120.0	-1,570.8	4.46	6.785
P-DU3-4-160	12.0	1,157.00	120.0	-771.6	2.19	1.819
P-DU3-4-170	16.0	937.00	120.0	-1,132.6	1.81	0.912
P-DU3-4-180	16.0	1,045.00	120.0	-1,132.6	1.81	0.912
P-DU3-4-190	16.0	1,019.00	120.0	-2,817.6	4.50	4.930
P-DU3-4-200	16.0	958.00	120.0	-2,079.1	3.32	2.808
P-DU3-4-210	16.0	1,373.00	120.0	-2,177.8	3.48	3.060
P-DU3S-010	8.0	261.00	120.0	426.4	2.72	4.370
P-DU3S-020	8.0	1,374.00	120.0	193.4	1.23	1.011
P-DU3S-030	8.0	1,542.00	120.0	160.4	1.02	0.715
P-DU3S-040	8.0	1,242.00	120.0	115.4	0.74	0.388
P-DU3S-050	8.0	801.00	120.0	-192.1	1.23	0.998
P-DU3S-060	8.0	974.00	120.0	-109.7	0.70	0.354
P-DU3S-070	8.0	1,384.00	120.0	-146.0	0.93	0.601
P-DU3S-080	8.0	1,241.00	120.0	-181.4	1.16	0.898
P-DU3S-090	8.0	621.00	120.0	-202.4	1.29	1.100
P-DU3S-100	16.0	1,114.00	130.0	398.5	0.64	0.114
P-DU3S-110	16.0	1,525.00	130.0	-368.1	0.59	0.098
P-DU3S-120	16.0	1,560.00	120.0	-1,169.8	1.87	0.968
P-DU5E-010	12.0	2,201.00	120.0	-263.5	0.75	0.249
P-DU5E-020	12.0	1,392.00	120.0	696.2	1.97	1.503
P-DU5E-030	12.0	2,181.00	120.0	1,439.0	4.08	5.768
P-DU6-010	12.0	1,163.00	120.0	462.0	1.31	0.703
P-DU6-020	16.0	124.00	120.0	1,645.2	2.63	1.820
P-DU6-030	12.0	1,388.00	120.0	802.3	2.28	1.955
P-DU6-040	12.0	2,188.00	120.0	259.1	0.74	0.241
P-DU6-050	12.0	2,203.00	120.0	343.5	0.97	0.406
P-DU6-060	12.0	2,209.00	120.0	462.0	1.31	0.704
P-DU6-070	16.0	142.00	120.0	2,522.5	4.03	4.017
P-DU6-080	12.0	1,130.00	120.0	991.1	2.81	2.891
P-DU6-090	12.0	1,397.00	120.0	535.4	1.52	0.924
P-DU6-100	12.0	1,966.00	120.0	205.9	0.58	0.157
P-DU6-110	12.0	1,963.00	120.0	76.1	0.22	0.025
P-DU6-120	12.0	1,955.00	120.0	-569.0	1.61	1.035
P-DU6-130	12.0	135.00	120.0	283.4	0.80	0.285
P-DU6-140	12.0	1,094.00	120.0	611.5	1.73	1.182
P-DU6-150	12.0	1,411.00	120.0	446.8	1.27	0.661
P-DU6-160	16.0	211.00	120.0	1,234.7	1.97	1.070
P-DU7-010	12.0	1,169.00	120.0	952.0	2.70	2.683
P-DU7-020	12.0	1,092.00	120.0	-269.2	0.76	0.259

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU7-030	12.0	1,044.00	120.0	-269.2	0.76	0.259
P-DU7-040	24.0	1,410.00	120.0	-4,352.9	3.09	1.531
P-DU7-050	24.0	1,075.00	120.0	-5,064.6	3.59	2.027
P-DU7-060	24.0	1,254.00	120.0	-5,097.9	3.62	2.051
P-DU7-070	24.0	992.00	120.0	-5,893.5	4.18	2.683
P-DU7-080	24.0	2,552.00	120.0	-7,218.9	5.12	3.907
P-DU7-090	16.0	941.00	120.0	-2,277.0	3.63	3.323
P-DU7-100	16.0	1,562.00	120.0	-2,190.3	3.50	3.092
P-DU7-110	16.0	1,742.00	120.0	-1,753.0	2.80	2.047
P-DU7-120	16.0	778.00	120.0	1,231.9	1.97	1.065
P-DU7-130	20.0	317.00	120.0	-1,475.4	1.51	0.502
P-DU7-140	20.0	1,207.00	120.0	-1,467.6	1.50	0.497
P-DU7-150	20.0	1,514.00	120.0	-1,847.8	1.89	0.761
P-DU7-160	20.0	619.00	120.0	-1,798.9	1.84	0.724
P-DU7-170	12.0	1,073.00	130.0	157.9	0.45	0.083
P-DU7-180	12.0	828.00	120.0	-229.9	0.65	0.193
P-DU7-190	12.0	399.00	120.0	-944.0	2.68	2.642
P-DU7-200	12.0	2,378.00	120.0	115.6	0.33	0.054
P-DU7-210	12.0	1,049.00	120.0	-1,206.0	3.42	4.159
P-DU7-220	12.0	1,054.00	120.0	-1,115.7	3.17	3.600
P-DU7-230	12.0	1,714.00	120.0	-682.0	1.93	1.447
P-DU7-240	12.0	1,014.00	120.0	-529.9	1.50	0.907
P-DU8-010	16.0	1,107.00	120.0	-954.3	1.52	0.664
P-DU8-020	16.0	714.00	120.0	-1,313.3	2.10	1.199
P-DU8-030	16.0	1,312.00	120.0	-1,161.7	1.85	0.956
P-DU8-040	16.0	1,371.00	120.0	-1,273.2	2.03	1.132
P-DU8-050	16.0	520.00	120.0	-1,500.5	2.39	1.535
P-DU8-060	16.0	1,021.00	120.0	-1,918.7	3.06	2.420
P-DU8-070	8.0	542.00	120.0	-243.6	1.55	1.550
P-DU8-080	8.0	253.00	120.0	-94.6	0.60	0.269
P-DU8-090	8.0	1,138.00	120.0	-140.8	0.90	0.561
P-DU8-100	12.0	599.00	120.0	466.5	1.32	0.716
P-DU8-110	12.0	709.00	120.0	222.8	0.63	0.182
P-DU8-120	8.0	678.00	120.0	-176.3	1.13	0.852
P-DU8-130	8.0	1,315.00	120.0	75.6	0.48	0.177
P-DU8-140	8.0	966.00	120.0	33.3	0.21	0.039
P-DU8-150	6.0	737.00	130.0	-37.7	0.43	0.171
P-DU8-160	8.0	1,265.00	120.0	39.2	0.25	0.053
P-DU8-170	8.0	2,613.00	120.0	-16.0	0.10	0.010
P-DU8-180	8.0	1,778.00	120.0	-67.6	0.43	0.144
P-DU8-190	8.0	1,185.00	120.0	76.7	0.49	0.182
P-DU8-200	8.0	1,054.00	120.0	207.2	1.32	1.148
P-DU9-010	16.0	904.00	120.0	-421.4	0.67	0.146
P-DU9-020	16.0	227.00	120.0	-359.0	0.57	0.109

Active Scenario: Peak Hour Demand, Served by SCAP
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU9-030	8.0	1,616.00	120.0	-121.5	0.78	0.427
P-DU9-040	8.0	746.00	120.0	-92.0	0.59	0.255
P-DU9-050	8.0	869.00	120.0	-139.0	0.89	0.548
P-DU9-060	8.0	1,550.00	120.0	-149.2	0.95	0.625
P-DU9-070	8.0	1,001.00	120.0	-69.8	0.45	0.153
P-DU9-080	8.0	644.00	120.0	-93.2	0.59	0.262
P-DU9-090	8.0	3,092.00	120.0	-19.9	0.13	0.015
P-DU9-100	8.0	1,619.00	120.0	-73.9	0.47	0.170
P-DU9-110	8.0	3,057.00	120.0	-41.1	0.26	0.057
P-DU9-120	8.0	901.00	120.0	58.8	0.38	0.111
P-DU9-130	8.0	879.00	120.0	-225.9	1.44	1.347
P-DU9-140	8.0	430.00	120.0	-418.2	2.67	4.215
P-DU9-150	8.0	4,471.00	120.0	-98.1	0.63	0.287
P-SCAP	36.0	1,752.00	120.0	-22,984.1	7.24	4.630

Active Scenario: Max Day + Fire Flow - Served by SCAP
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-100EX	Desert Wells	1,406.0	True	3,000.0	5,000.0	68	59	J-110EX
J-110EX	Desert Wells	1,440.0	True	3,000.0	5,000.0	57	61	J-1440EX
J-120EX	Desert Wells	1,462.0	True	3,000.0	5,000.0	72	62	J-220EX
J-135EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	66	61	J-1440EX
J-150EX	Desert Wells	1,472.0	True	3,000.0	5,000.0	57	60	J-230EX
J-160EX	Desert Wells	1,435.0	True	3,000.0	5,000.0	55	54	J-280EX
J-170EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	59	56	J-280EX
J-180EX	Desert Wells	1,410.0	True	3,000.0	5,000.0	78	60	J-150EX
J-190EX	Desert Wells	1,395.0	True	3,000.0	5,000.0	73	60	J-150EX
J-200EX	Desert Wells	1,385.0	True	3,000.0	5,000.0	77	60	J-150EX
J-220EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	55	57	J-1440EX
J-230EX	Desert Wells	1,475.0	True	3,000.0	5,000.0	56	58	J-1440EX
J-250EX	Desert Wells	1,452.0	True	4,079.0	5,000.0	69	60	J-150EX
J-260EX	Desert Wells	1,453.0	True	3,000.0	5,000.0	67	60	J-1440EX
J-270	Desert Wells	1,429.0	True	3,000.0	5,000.0	73	60	J-150EX
J-280EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	47	54	J-1230EX
J-300EX	Desert Wells	1,392.0	True	4,107.8	5,000.0	83	60	J-1440EX
J-320	Desert Wells	1,422.0	True	3,000.0	5,000.0	75	60	J-150EX
J-330EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	62	60	J-1230EX
J-340	Desert Wells	1,440.0	True	3,000.0	5,000.0	69	60	J-150EX
J-360EX	Desert Wells	1,400.0	True	3,000.0	5,000.0	73	59	J-110EX
J-370	Desert Wells	1,405.0	True	4,348.2	5,000.0	70	59	J-110EX
J-380	Desert Wells	1,414.0	True	3,344.2	5,000.0	68	59	J-110EX
J-390	Desert Wells	1,405.0	True	4,218.2	5,000.0	70	60	J-110EX
J-460	Desert Wells	1,423.0	True	3,142.0	5,000.0	65	60	J-1440EX
J-480	Desert Wells	1,429.0	True	3,193.6	5,000.0	56	58	J-1140
J-550	Desert Wells	1,425.0	True	3,000.0	5,000.0	75	60	J-150EX
J-590EX	Desert Wells	1,410.0	True	3,000.0	5,000.0	69	58	J-110EX
J-750	Desert Wells	1,415.0	True	4,344.2	5,000.0	68	59	J-110EX
J-920	Desert Wells	1,434.0	True	3,000.0	5,000.0	73	60	J-150EX
J-950	Desert Wells	1,414.0	True	3,000.0	5,000.0	77	60	J-150EX
J-960EX	Desert Wells	1,401.0	True	3,000.0	5,000.0	71	59	J-110EX
J-970EX	Desert Wells	1,397.0	True	3,106.4	5,000.0	75	60	J-110EX
J-1000EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	75	62	J-1010EX
J-1010EX	Desert Wells	1,485.0	True	3,000.0	5,000.0	62	62	J-220EX
J-1020EX	Desert Wells	1,425.0	True	3,000.0	5,000.0	70	63	J-220EX
J-1030EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	67	63	J-220EX
J-1040EX	Desert Wells	1,433.0	True	3,000.0	5,000.0	63	60	J-110EX
J-1050EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	68	60	J-150EX
J-1120EX	Desert Wells	1,453.0	True	3,000.0	5,000.0	67	60	J-1440EX
J-1130EX	Desert Wells	1,445.0	True	4,350.0	6,000.0	65	61	J-1440EX
J-1140	Desert Wells	1,433.0	True	4,155.8	5,000.0	53	59	J-480
J-1160EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	47	57	J-1360EX

Active Scenario: Max Day + Fire Flow - Served by SCAP
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-1170EX	Desert Wells	1,470.0	True	3,000.0	5,000.0	68	62	J-1010EX
J-1180EX	Desert Wells	1,440.0	True	3,000.0	5,000.0	67	62	J-1010EX
J-1190EX	Desert Wells	1,420.0	True	3,000.0	5,000.0	59	63	J-220EX
J-1200EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	25	47	J-1370EX
J-1210EX	Desert Wells	1,455.0	True	3,000.0	4,888.4	20	25	J-1300EX
J-1220	Desert Wells	1,405.0	True	3,908.0	5,000.0	59	59	J-110EX
J-1220EX	Desert Wells	1,475.0	True	3,000.0	5,000.0	66	62	J-220EX
J-1230EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	51	53	J-280EX
J-1235EX	Desert Wells	1,440.0	True	3,000.0	5,000.0	70	60	J-150EX
J-1240	Desert Wells	1,411.0	True	4,806.2	5,000.0	64	58	J-110EX
J-1240EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	62	60	J-150EX
J-1270	Desert Wells	1,417.0	True	3,000.0	5,000.0	67	58	J-110EX
J-1280	Desert Wells	1,410.0	True	3,000.0	5,000.0	80	60	J-150EX
J-1290	Desert Wells	1,425.0	True	3,159.6	5,000.0	55	60	J-110EX
J-1290EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	64	62	J-220EX
J-1300EX	Desert Wells	1,465.0	True	3,000.0	5,000.0	23	27	J-1210EX
J-1310EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	64	62	J-1010EX
J-1320	Desert Wells	1,426.0	True	3,050.8	5,000.0	64	60	J-1440EX
J-1330EX	Desert Wells	1,465.0	True	3,000.0	5,000.0	60	62	J-1010EX
J-1340EX	Desert Wells	1,450.0	True	3,000.0	5,000.0	65	62	J-1010EX
J-1350EX	Desert Wells	1,465.0	True	3,000.0	5,000.0	28	29	J-1300EX
J-1360EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	57	57	J-1160EX
J-1370EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	47	40	J-1200EX
J-1380EX	Desert Wells	1,450.0	True	3,000.0	5,000.0	64	62	J-1010EX
J-1390EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	67	62	J-1010EX
J-1400EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	61	56	J-1200EX
J-1410	Desert Wells	1,454.0	True	3,000.0	5,000.0	69	61	J-1440EX
J-1410EX	Desert Wells	1,420.0	True	3,000.0	5,000.0	65	63	J-220EX
J-1420EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	65	60	J-1440EX
J-1430EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	63	58	J-1440EX
J-1440EX	Desert Wells	1,478.0	True	3,000.0	5,000.0	56	57	J-220EX
J-1680EX	Desert Wells	1,400.0	True	3,000.0	5,000.0	72	59	J-110EX
J-1990EX	Desert Wells	1,447.0	True	3,000.0	5,000.0	67	60	J-150EX
J-2000EX	Desert Wells	1,442.0	True	3,000.0	5,000.0	69	60	J-150EX
J-2010	Desert Wells	1,419.0	True	3,000.0	5,000.0	76	60	J-150EX
J-2040	Desert Wells	1,427.0	True	3,000.0	5,000.0	73	60	J-150EX
J-2100	Desert Wells	1,436.0	True	3,000.0	5,000.0	58	60	J-1440EX
J-2120EX	Desert Wells	1,453.0	True	3,000.0	5,000.0	66	61	J-1440EX
J-2140EX	Desert Wells	1,446.0	True	3,000.0	5,000.0	67	61	J-1440EX
J-2200	Desert Wells	1,414.0	True	3,000.0	5,000.0	76	60	J-150EX
J-2220	Desert Wells	1,410.0	True	3,620.0	5,000.0	62	59	J-110EX
J-2295	Desert Wells	1,415.0	True	3,000.0	5,000.0	77	60	J-150EX
J-2340EX	Desert Wells	1,435.0	True	4,495.2	6,000.0	62	60	J-110EX

Active Scenario: Max Day + Fire Flow - Served by SCAP
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-DU3-4-010	Desert Wells	1,405.0	True	3,276.2	5,000.0	78	60	J-150EX
J-DU3-4-020	Desert Wells	1,401.0	True	3,276.2	5,000.0	81	60	J-1440EX
J-DU3-4-030	Desert Wells	1,397.0	True	4,259.2	5,000.0	82	60	J-1440EX
J-DU3-4-040	Desert Wells	1,403.0	True	4,302.6	5,000.0	80	60	J-1440EX
J-DU3-4-050	Desert Wells	1,410.0	True	3,051.2	5,000.0	71	60	J-1440EX
J-DU3-4-060	Desert Wells	1,408.0	True	4,117.8	5,000.0	69	60	J-1440EX
J-DU3-4-070	Desert Wells	1,404.0	True	4,373.2	5,000.0	64	60	J-1440EX
J-DU3-4-080	Desert Wells	1,400.0	True	4,373.2	5,000.0	68	60	J-1440EX
J-DU3-4-090	Desert Wells	1,393.0	True	4,151.4	5,000.0	80	60	J-1440EX
J-DU3-4-100	Desert Wells	1,391.0	True	4,372.2	5,000.0	85	60	J-1440EX
J-DU3-4-110	Desert Wells	1,393.0	True	4,282.2	5,000.0	78	60	J-1440EX
J-DU3-4-120	Desert Wells	1,393.0	True	4,783.0	5,000.0	78	61	J-1440EX
J-DU3-4-130	Desert Wells	1,399.0	True	4,349.0	5,000.0	75	61	J-1440EX
J-DU3-4-140	Desert Wells	1,404.0	True	4,186.4	5,000.0	74	61	J-1440EX
J-DU3-4-150	Desert Wells	1,407.0	True	4,141.2	5,000.0	66	60	J-1440EX
J-DU3-4-160	Desert Wells	1,407.0	True	3,000.0	5,000.0	72	61	J-1440EX
J-DU3-4-170	Desert Wells	1,412.0	True	4,194.8	5,000.0	72	61	J-1440EX
J-DU3-4-180	Desert Wells	1,414.0	True	4,209.6	5,000.0	72	60	J-1440EX
J-DU3-4-190	Desert Wells	1,417.0	True	4,065.8	5,000.0	72	60	J-1440EX
J-DU3-4-200	Desert Wells	1,412.5	True	3,276.2	5,000.0	74	60	J-150EX
J-DU3S-010	Desert Wells	1,412.0	True	3,020.4	5,000.0	50	50	J-DU3S-070
J-DU3S-020	Desert Wells	1,407.0	True	3,022.0	3,545.1	20	50	J-DU3S-030
J-DU3S-030	Desert Wells	1,401.0	True	3,030.0	3,584.0	20	47	J-DU3S-020
J-DU3S-040	Desert Wells	1,399.0	True	3,022.0	5,000.0	29	37	J-DU3S-050
J-DU3S-050	Desert Wells	1,404.0	True	3,024.2	3,666.7	20	41	J-DU3S-060
J-DU3S-060	Desert Wells	1,410.0	True	3,023.6	3,349.9	20	51	J-DU3S-050
J-DU3S-070	Desert Wells	1,417.0	True	3,014.0	4,064.5	20	37	J-DU3S-060
J-DU3S-080	Desert Wells	1,396.0	True	4,107.8	5,000.0	81	60	J-1440EX
J-DU5E-010	Desert Wells	1,435.0	True	4,639.8	6,000.0	32	43	J-DU5E-020
J-DU5E-020	Desert Wells	1,440.0	True	4,495.2	6,000.0	32	43	J-DU5E-010
J-DU6-010	Desert Wells	1,459.0	True	3,000.0	5,000.0	54	61	J-1440EX
J-DU6-020	Desert Wells	1,453.0	True	6,196.2	7,000.0	63	60	J-1440EX
J-DU6-030	Desert Wells	1,450.0	True	4,160.6	5,000.0	65	61	J-1440EX
J-DU6-040	Desert Wells	1,440.0	True	4,321.4	5,000.0	63	61	J-1440EX
J-DU6-050	Desert Wells	1,448.0	True	4,482.0	5,000.0	65	61	J-1440EX
J-DU6-060	Desert Wells	1,458.0	True	4,500.4	5,000.0	66	60	J-1440EX
J-DU6-070	Desert Wells	1,452.0	True	4,160.6	5,000.0	67	60	J-1440EX
J-DU6-080	Desert Wells	1,446.0	True	4,160.6	5,000.0	63	60	J-1440EX
J-DU6-090	Desert Wells	1,435.0	True	4,160.6	5,000.0	58	61	J-1440EX
J-DU7-010	Desert Wells	1,415.0	True	4,013.0	5,000.0	77	60	J-150EX
J-DU7-020	Desert Wells	1,425.0	True	3,455.2	5,000.0	60	60	J-150EX
J-DU7-030	Desert Wells	1,416.0	True	3,000.0	5,000.0	65	60	J-150EX
J-DU7-040	Desert Wells	1,409.0	True	3,051.2	5,000.0	79	60	J-1440EX

Active Scenario: Max Day + Fire Flow - Served by SCAP
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-DU7-050	Desert Wells	1,416.0	True	4,221.8	5,000.0	77	60	J-150EX
J-DU7-060	Desert Wells	1,423.0	True	3,022.2	5,000.0	74	60	J-150EX
J-DU7-070	Desert Wells	1,430.0	True	3,000.0	5,000.0	72	60	J-150EX
J-DU7-080	Desert Wells	1,434.0	True	3,275.2	5,000.0	71	60	J-150EX
J-DU7-090	Desert Wells	1,437.0	True	3,000.0	5,000.0	73	60	J-150EX
J-DU7-100	Desert Wells	1,435.0	True	3,057.8	5,000.0	70	60	J-150EX
J-DU7-110	Desert Wells	1,435.0	True	3,057.6	5,000.0	69	60	J-150EX
J-DU7-120	Desert Wells	1,420.0	True	3,000.0	5,000.0	76	60	J-150EX
J-DU7-130	Desert Wells	1,420.0	True	4,005.2	5,000.0	75	60	J-150EX
J-DU7-140	Desert Wells	1,425.0	True	4,099.8	5,000.0	73	60	J-150EX
J-DU7-150	Desert Wells	1,419.0	True	4,032.6	5,000.0	75	60	J-150EX
J-DU7-160	Desert Wells	1,435.0	True	3,048.0	5,000.0	64	60	J-150EX
J-DU7-170	Desert Wells	1,432.0	True	3,021.4	5,000.0	67	60	J-150EX
J-DU7-180	Desert Wells	1,433.0	True	3,037.4	5,000.0	67	60	J-150EX
J-DU7-190	Desert Wells	1,437.0	True	3,060.2	5,000.0	63	60	J-150EX
J-DU7-200	Desert Wells	1,432.0	True	3,101.4	5,000.0	62	60	J-150EX
J-DU8-010	Desert Wells	1,420.0	True	3,000.0	5,000.0	75	60	J-150EX
J-DU8-020	Desert Wells	1,419.5	True	3,000.0	5,000.0	75	60	J-150EX
J-DU8-030	Desert Wells	1,421.0	True	3,000.0	5,000.0	73	60	J-150EX
J-DU8-040	Desert Wells	1,418.0	True	3,013.4	5,000.0	75	60	J-150EX
J-DU8-050	Desert Wells	1,422.0	True	3,000.0	5,000.0	74	60	J-150EX
J-DU8-060	Desert Wells	1,420.0	True	3,018.2	5,000.0	55	59	J-DU8-070
J-DU8-070	Desert Wells	1,420.0	True	3,030.8	5,000.0	41	60	J-150EX
J-DU8-080	Desert Wells	1,422.0	True	3,008.8	5,000.0	63	60	J-150EX
J-DU8-090	Desert Wells	1,424.0	True	3,022.0	5,000.0	46	56	J-DU8-120
J-DU8-100	Desert Wells	1,425.0	True	3,018.2	5,000.0	67	60	J-150EX
J-DU8-110	Desert Wells	1,430.0	True	3,087.2	4,918.7	20	42	J-DU8-120
J-DU8-120	Desert Wells	1,431.0	True	3,034.4	3,057.3	20	61	J-1440EX
J-DU8-130	Desert Wells	1,427.0	True	3,042.0	5,000.0	27	38	J-DU8-120
J-DU9-010	Desert Wells	1,419.0	True	3,039.4	5,000.0	75	60	J-150EX
J-DU9-020	Desert Wells	1,415.0	True	4,073.0	5,000.0	50	60	J-150EX
J-DU9-030	Desert Wells	1,416.0	True	4,066.6	5,000.0	42	50	J-DU9-040
J-DU9-040	Desert Wells	1,416.0	True	3,015.6	4,449.2	20	47	J-DU9-050
J-DU9-050	Desert Wells	1,419.0	True	3,000.0	5,000.0	24	30	J-DU9-080
J-DU9-060	Desert Wells	1,422.0	True	3,062.8	5,000.0	36	48	J-DU9-080
J-DU9-070	Desert Wells	1,414.0	True	3,063.4	3,877.6	20	50	J-DU9-080
J-DU9-080	Desert Wells	1,419.0	True	3,077.2	3,913.4	20	50	J-DU9-050

APPENDIX B

Hydraulic Modeling Results
Served by Desert Wells Groundwater Facility
(Drought Condition)

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Reservoir Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Flow Net (Out) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	844.4	Desert Wells	1,634.0
SCAP DWPS	1,634.0	6,395.3	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	2,474.5	Desert Wells	1,634.0

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	96	1,627.7
J-110EX	1,440.0	Desert Wells	0.0	81	1,627.8
J-120EX	1,462.0	Desert Wells	0.0	74	1,633.2
J-135EX	1,460.0	Desert Wells	0.0	75	1,632.5
J-150EX	1,472.0	Desert Wells	0.0	69	1,632.0
J-160EX	1,435.0	Desert Wells	0.0	86	1,633.1
J-170EX	1,430.0	Desert Wells	0.0	88	1,633.4
J-180EX	1,410.0	Desert Wells	0.0	97	1,633.9
J-190EX	1,395.0	Desert Wells	0.0	103	1,632.6
J-200EX	1,385.0	Desert Wells	0.0	107	1,631.3
J-220EX	1,480.0	Desert Wells	0.0	66	1,632.6
J-230EX	1,475.0	Desert Wells	0.0	68	1,632.2
J-250EX	1,452.0	Desert Wells	39.5	78	1,631.9
J-260EX	1,453.0	Desert Wells	0.0	77	1,631.8
J-270	1,429.0	Desert Wells	0.0	88	1,632.1
J-280EX	1,460.0	Desert Wells	0.0	75	1,632.6
J-300EX	1,392.0	Desert Wells	53.9	103	1,630.0
J-320	1,422.0	Desert Wells	0.0	91	1,632.2
J-330EX	1,455.0	Desert Wells	0.0	77	1,632.0
J-340	1,440.0	Desert Wells	0.0	83	1,631.9
J-360EX	1,400.0	Desert Wells	0.0	99	1,627.7
J-370	1,405.0	Desert Wells	174.1	96	1,627.6
J-380	1,414.0	Desert Wells	172.1	92	1,627.8
J-390	1,405.0	Desert Wells	109.1	96	1,627.7
J-460	1,423.0	Desert Wells	71.0	90	1,629.9
J-480	1,429.0	Desert Wells	96.8	87	1,630.0
J-550	1,425.0	Desert Wells	0.0	90	1,631.9
J-590EX	1,410.0	Desert Wells	0.0	94	1,627.7
J-750	1,415.0	Desert Wells	172.1	92	1,627.8
J-920	1,434.0	Desert Wells	0.0	86	1,631.9
J-950	1,414.0	Desert Wells	0.0	94	1,630.8
J-960EX	1,401.0	Desert Wells	0.0	98	1,627.7
J-970EX	1,397.0	Desert Wells	53.2	100	1,627.7
J-1000EX	1,455.0	Desert Wells	0.0	77	1,633.8
J-1010EX	1,485.0	Desert Wells	0.0	64	1,633.6
J-1020EX	1,425.0	Desert Wells	0.0	90	1,633.9
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,433.0	Desert Wells	0.0	85	1,628.4
J-1050EX	1,445.0	Desert Wells	0.0	81	1,631.9
J-1120EX	1,453.0	Desert Wells	0.0	77	1,631.8
J-1130EX	1,445.0	Desert Wells	175.0	80	1,630.3
J-1140	1,433.0	Desert Wells	77.9	85	1,630.1
J-1160EX	1,445.0	Desert Wells	0.0	82	1,633.8
J-1170EX	1,470.0	Desert Wells	0.0	71	1,633.7

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1180EX	1,440.0	Desert Wells	0.0	84	1,633.9
J-1190EX	1,420.0	Desert Wells	0.0	93	1,633.9
J-1200EX	1,445.0	Desert Wells	0.0	82	1,633.9
J-1210EX	1,455.0	Desert Wells	0.0	77	1,633.7
J-1220	1,405.0	Desert Wells	454.0	96	1,627.3
J-1220EX	1,475.0	Desert Wells	0.0	69	1,633.4
J-1230EX	1,460.0	Desert Wells	0.0	75	1,632.3
J-1235EX	1,440.0	Desert Wells	0.0	83	1,631.9
J-1240	1,411.0	Desert Wells	403.1	94	1,627.4
J-1240EX	1,455.0	Desert Wells	0.0	77	1,632.0
J-1270	1,417.0	Desert Wells	0.0	91	1,627.8
J-1280	1,410.0	Desert Wells	0.0	96	1,632.5
J-1290	1,425.0	Desert Wells	79.8	88	1,628.1
J-1290EX	1,480.0	Desert Wells	0.0	66	1,633.5
J-1300EX	1,465.0	Desert Wells	0.0	73	1,633.7
J-1310EX	1,480.0	Desert Wells	0.0	66	1,633.5
J-1320	1,426.0	Desert Wells	25.4	88	1,630.2
J-1330EX	1,465.0	Desert Wells	0.0	73	1,633.7
J-1340EX	1,450.0	Desert Wells	0.0	80	1,633.8
J-1350EX	1,465.0	Desert Wells	0.0	73	1,633.7
J-1360EX	1,445.0	Desert Wells	0.0	82	1,633.8
J-1370EX	1,430.0	Desert Wells	0.0	88	1,633.9
J-1380EX	1,450.0	Desert Wells	0.0	80	1,633.8
J-1390EX	1,430.0	Desert Wells	0.0	88	1,633.9
J-1400EX	1,430.0	Desert Wells	0.0	88	1,633.9
J-1410	1,454.0	Desert Wells	0.0	77	1,632.1
J-1410EX	1,420.0	Desert Wells	0.0	93	1,633.9
J-1420EX	1,460.0	Desert Wells	0.0	74	1,631.8
J-1430EX	1,455.0	Desert Wells	0.0	77	1,632.0
J-1440EX	1,478.0	Desert Wells	0.0	67	1,632.3
J-1680EX	1,400.0	Desert Wells	0.0	99	1,627.7
J-1990EX	1,447.0	Desert Wells	0.0	80	1,631.9
J-2000EX	1,442.0	Desert Wells	0.0	82	1,631.9
J-2010	1,419.0	Desert Wells	0.0	92	1,632.3
J-2040	1,427.0	Desert Wells	0.0	89	1,632.1
J-2100	1,436.0	Desert Wells	0.0	84	1,630.6
J-2120EX	1,453.0	Desert Wells	0.0	77	1,630.6
J-2140EX	1,446.0	Desert Wells	0.0	80	1,630.4
J-2200	1,414.0	Desert Wells	0.0	94	1,631.1
J-2220	1,410.0	Desert Wells	310.0	94	1,627.6
J-2295	1,415.0	Desert Wells	0.0	93	1,630.7
J-2340EX	1,435.0	Desert Wells	247.6	84	1,628.9
J-DU3-4-010	1,405.0	Desert Wells	138.1	97	1,630.0
J-DU3-4-020	1,401.0	Desert Wells	138.1	99	1,629.8

Active Scenario: Ave Day Demand - Served by DWGWF

FlexTable: Junction Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU3-4-030	1,397.0	Desert Wells	129.6	101	1,629.7
J-DU3-4-040	1,403.0	Desert Wells	151.3	98	1,629.8
J-DU3-4-050	1,410.0	Desert Wells	25.6	95	1,629.3
J-DU3-4-060	1,408.0	Desert Wells	58.9	95	1,628.6
J-DU3-4-070	1,404.0	Desert Wells	186.6	97	1,628.5
J-DU3-4-080	1,400.0	Desert Wells	186.6	99	1,628.5
J-DU3-4-090	1,393.0	Desert Wells	75.7	102	1,628.6
J-DU3-4-100	1,391.0	Desert Wells	186.1	103	1,629.6
J-DU3-4-110	1,393.0	Desert Wells	141.1	102	1,628.2
J-DU3-4-120	1,393.0	Desert Wells	391.5	102	1,627.9
J-DU3-4-130	1,399.0	Desert Wells	174.5	99	1,627.9
J-DU3-4-140	1,404.0	Desert Wells	93.2	97	1,628.0
J-DU3-4-150	1,407.0	Desert Wells	70.6	96	1,628.2
J-DU3-4-160	1,407.0	Desert Wells	0.0	96	1,628.1
J-DU3-4-170	1,412.0	Desert Wells	97.4	94	1,628.2
J-DU3-4-180	1,414.0	Desert Wells	104.8	93	1,629.0
J-DU3-4-190	1,417.0	Desert Wells	32.9	92	1,629.4
J-DU3-4-200	1,412.5	Desert Wells	138.1	94	1,630.2
J-DU3S-010	1,412.0	Desert Wells	10.2	95	1,630.6
J-DU3S-020	1,407.0	Desert Wells	11.0	97	1,630.4
J-DU3S-030	1,401.0	Desert Wells	15.0	99	1,630.2
J-DU3S-040	1,399.0	Desert Wells	11.0	100	1,630.1
J-DU3S-050	1,404.0	Desert Wells	12.1	98	1,630.2
J-DU3S-060	1,410.0	Desert Wells	11.8	95	1,630.3
J-DU3S-070	1,417.0	Desert Wells	7.0	92	1,630.5
J-DU3S-080	1,396.0	Desert Wells	53.9	101	1,630.0
J-DU5E-010	1,435.0	Desert Wells	319.9	84	1,628.7
J-DU5E-020	1,440.0	Desert Wells	247.6	82	1,628.9
J-DU6-010	1,459.0	Desert Wells	0.0	74	1,630.9
J-DU6-020	1,453.0	Desert Wells	1,580.0	77	1,630.5
J-DU6-030	1,450.0	Desert Wells	80.3	78	1,630.4
J-DU6-040	1,440.0	Desert Wells	160.7	82	1,630.6
J-DU6-050	1,448.0	Desert Wells	241.0	79	1,630.8
J-DU6-060	1,458.0	Desert Wells	360.0	75	1,631.6
J-DU6-070	1,452.0	Desert Wells	80.3	78	1,631.6
J-DU6-080	1,446.0	Desert Wells	80.3	80	1,631.0
J-DU6-090	1,435.0	Desert Wells	80.3	85	1,630.7
J-DU7-010	1,415.0	Desert Wells	6.5	93	1,630.5
J-DU7-020	1,425.0	Desert Wells	227.6	89	1,630.0
J-DU7-030	1,416.0	Desert Wells	0.0	93	1,629.9
J-DU7-040	1,409.0	Desert Wells	25.6	96	1,629.9
J-DU7-050	1,416.0	Desert Wells	110.9	93	1,630.1
J-DU7-060	1,423.0	Desert Wells	11.1	90	1,630.3
J-DU7-070	1,430.0	Desert Wells	0.0	87	1,630.6

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-080	1,434.0	Desert Wells	137.6	85	1,630.9
J-DU7-090	1,437.0	Desert Wells	0.0	84	1,631.9
J-DU7-100	1,435.0	Desert Wells	28.9	85	1,631.5
J-DU7-110	1,435.0	Desert Wells	28.8	85	1,631.0
J-DU7-120	1,420.0	Desert Wells	0.0	91	1,630.6
J-DU7-130	1,420.0	Desert Wells	2.6	91	1,630.6
J-DU7-140	1,425.0	Desert Wells	49.9	89	1,630.4
J-DU7-150	1,419.0	Desert Wells	16.3	91	1,630.2
J-DU7-160	1,435.0	Desert Wells	24.0	85	1,630.7
J-DU7-170	1,432.0	Desert Wells	10.7	86	1,630.8
J-DU7-180	1,433.0	Desert Wells	18.7	86	1,631.0
J-DU7-190	1,437.0	Desert Wells	30.1	84	1,631.4
J-DU7-200	1,432.0	Desert Wells	50.7	86	1,630.5
J-DU8-010	1,420.0	Desert Wells	0.0	91	1,630.8
J-DU8-020	1,419.5	Desert Wells	0.0	91	1,630.9
J-DU8-030	1,421.0	Desert Wells	0.0	91	1,631.1
J-DU8-040	1,418.0	Desert Wells	6.7	92	1,631.3
J-DU8-050	1,422.0	Desert Wells	0.0	91	1,631.5
J-DU8-060	1,420.0	Desert Wells	9.1	91	1,630.9
J-DU8-070	1,420.0	Desert Wells	15.4	91	1,630.9
J-DU8-080	1,422.0	Desert Wells	4.4	90	1,631.0
J-DU8-090	1,424.0	Desert Wells	11.0	90	1,631.0
J-DU8-100	1,425.0	Desert Wells	9.1	89	1,631.0
J-DU8-110	1,430.0	Desert Wells	43.6	87	1,631.0
J-DU8-120	1,431.0	Desert Wells	17.2	87	1,631.0
J-DU8-130	1,427.0	Desert Wells	21.0	88	1,631.1
J-DU9-010	1,419.0	Desert Wells	19.7	92	1,630.8
J-DU9-020	1,415.0	Desert Wells	36.5	93	1,630.9
J-DU9-030	1,416.0	Desert Wells	33.3	93	1,631.0
J-DU9-040	1,416.0	Desert Wells	7.8	93	1,631.0
J-DU9-050	1,419.0	Desert Wells	0.0	92	1,631.0
J-DU9-060	1,422.0	Desert Wells	31.4	91	1,631.2
J-DU9-070	1,414.0	Desert Wells	31.7	94	1,631.0
J-DU9-080	1,419.0	Desert Wells	38.6	92	1,631.0

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	-331.4	0.53	0.094
P-170EX	16.0	5,366.00	120.0	-331.4	0.53	0.094
P-180EX	16.0	5,396.00	120.0	541.7	0.86	0.233
P-190EX	16.0	5,728.00	120.0	541.7	0.86	0.233
P-200EX	16.0	231.00	120.0	-670.4	1.07	0.345
P-210EX	16.0	1,388.00	120.0	-434.7	0.69	0.155
P-220EX	16.0	2,909.00	120.0	531.3	0.85	0.224
P-240EX	16.0	1,387.00	120.0	-1,687.4	2.69	1.908
P-250EX	16.0	2,611.00	120.0	240.4	0.38	0.052
P-310	30.0	4,937.00	120.0	384.5	0.17	0.006
P-340EX	16.0	5,775.00	120.0	-331.4	0.53	0.094
P-410EX	16.0	5,368.00	120.0	541.7	0.86	0.233
P-630	12.0	710.00	120.0	-132.4	0.38	0.069
P-660	12.0	2,013.00	120.0	-221.1	0.63	0.180
P-970	24.0	1,001.00	120.0	-151.0	0.11	0.003
P-980	24.0	1,935.00	120.0	-883.7	0.63	0.080
P-1060EX	16.0	1,328.00	120.0	-11.5	0.02	0.000
P-1070EX	16.0	1,243.00	120.0	-296.8	0.47	0.076
P-1390	16.0	727.00	120.0	-172.7	0.28	0.028
P-1400	16.0	1,976.00	120.0	-552.4	0.88	0.241
P-1630EX	16.0	1,793.00	120.0	539.6	0.86	0.231
P-1640EX	16.0	1,335.00	120.0	1,019.2	1.63	0.750
P-1780	24.0	1,528.00	120.0	-151.0	0.11	0.003
P-1790	24.0	1,115.00	120.0	-151.0	0.11	0.003
P-1840	12.0	1,001.00	120.0	164.9	0.47	0.104
P-1940EX	16.0	1,976.00	120.0	329.3	0.53	0.093
P-1950EX	16.0	680.00	120.0	153.4	0.24	0.022
P-1970EX	16.0	927.00	120.0	746.5	1.19	0.421
P-1980EX	16.0	1,106.00	120.0	605.4	0.97	0.286
P-2000EX	16.0	2,710.00	120.0	-540.0	0.86	0.231
P-2040EX	16.0	10,635.00	120.0	-196.7	0.31	0.036
P-2055EX	16.0	10,453.00	120.0	88.6	0.14	0.008
P-2070EX	24.0	5,329.00	120.0	-559.1	0.40	0.034
P-2500EX	24.0	2,750.00	120.0	585.9	0.42	0.037
P-2510EX	24.0	2,726.00	120.0	561.4	0.40	0.034
P-2540EX	12.0	2,624.00	120.0	-69.1	0.20	0.021
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.000
P-2655EX	16.0	2,870.00	120.0	-331.4	0.53	0.094
P-2660EX	24.0	2,797.00	120.0	844.4	0.60	0.073
P-2665EX	16.0	2,716.00	120.0	-331.4	0.53	0.094
P-2690EX	16.0	2,914.00	120.0	-211.7	0.34	0.041
P-2700EX	16.0	3,115.00	120.0	28.8	0.05	0.001
P-2710EX	16.0	1,823.00	120.0	-83.8	0.13	0.007
P-2720EX	12.0	3,042.00	120.0	-112.6	0.32	0.051

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2800	24.0	5,786.00	120.0	1,601.3	1.14	0.240
P-2830	16.0	2,890.00	120.0	247.6	0.40	0.055
P-2860	12.0	1,164.00	120.0	-189.6	0.54	0.135
P-2860EX	24.0	761.00	120.0	844.4	0.60	0.073
P-2870	16.0	643.00	120.0	243.2	0.39	0.053
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.000
P-2890	12.0	992.00	120.0	-307.4	0.87	0.331
P-2890EX	8.0	3,148.00	120.0	-43.4	0.28	0.064
P-2900	24.0	1,423.00	120.0	758.1	0.54	0.060
P-2910EX	24.0	497.00	120.0	801.0	0.57	0.067
P-2930	12.0	1,167.00	120.0	122.7	0.35	0.060
P-2950	12.0	1,089.00	120.0	24.6	0.07	0.003
P-2960	12.0	1,277.00	120.0	284.7	0.81	0.287
P-2970EX	12.0	1,119.00	120.0	40.7	0.12	0.008
P-2990EX	8.0	2,811.00	120.0	-31.3	0.20	0.035
P-3010EX	12.0	471.00	120.0	43.4	0.12	0.009
P-3020EX	12.0	1,167.00	120.0	9.4	0.03	0.001
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.000
P-3040	12.0	1,135.00	120.0	329.0	0.93	0.375
P-3040EX	8.0	3,081.00	120.0	-30.5	0.19	0.033
P-3060	12.0	595.00	120.0	0.0	0.00	0.000
P-3070EX	8.0	2,922.00	120.0	-21.0	0.13	0.017
P-3080EX	12.0	1,397.00	120.0	-67.6	0.19	0.020
P-3090EX	12.0	1,109.00	120.0	-54.0	0.15	0.013
P-3100EX	12.0	695.00	120.0	15.2	0.04	0.001
P-3110EX	12.0	664.00	120.0	1.6	0.00	0.000
P-3120EX	8.0	1,851.00	120.0	-13.6	0.09	0.007
P-3130	12.0	1,155.00	120.0	21.0	0.06	0.002
P-3140EX	16.0	1,783.00	120.0	19.5	0.03	0.000
P-3150	12.0	779.00	120.0	303.6	0.86	0.323
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.000
P-3160EX	8.0	3,801.00	120.0	-19.5	0.12	0.014
P-3170EX	8.0	2,838.00	120.0	-42.9	0.27	0.062
P-3180EX	8.0	736.00	120.0	13.0	0.08	0.007
P-3190EX	30.0	4,441.00	120.0	2,952.9	1.34	0.252
P-3200	30.0	814.00	120.0	2,952.9	1.34	0.252
P-3240EX	16.0	1,954.00	120.0	82.1	0.13	0.007
P-3250EX	12.0	844.00	120.0	-290.9	0.83	0.299
P-3260EX	16.0	1,108.00	120.0	531.3	0.85	0.224
P-3270EX	16.0	1,509.00	120.0	362.9	0.58	0.111
P-3280EX	12.0	2,890.00	120.0	-168.4	0.48	0.108
P-3290EX	12.0	2,432.00	120.0	122.5	0.35	0.060
P-3930EX	16.0	751.00	120.0	-11.5	0.02	0.000
P-3940EX	16.0	509.00	120.0	-11.5	0.02	0.000

Active Scenario: Ave Day Demand - Served by DWGWF

FlexTable: Pipe Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-3970EX	16.0	1,445.00	120.0	11.5	0.02	0.000
P-4090	12.0	1,276.00	120.0	264.4	0.75	0.250
P-4720EX	16.0	1,216.00	120.0	173.7	0.28	0.028
P-4730EX	16.0	456.00	120.0	173.7	0.28	0.028
P-4750EX	16.0	715.00	120.0	173.7	0.28	0.028
P-4760EX	16.0	774.00	120.0	-193.2	0.31	0.035
P-4780	24.0	1,020.00	120.0	-883.7	0.63	0.080
P-4790EX	16.0	1,816.00	120.0	-80.6	0.13	0.007
P-4860	24.0	986.00	120.0	883.7	0.63	0.080
P-4870	24.0	620.00	120.0	883.7	0.63	0.080
P-5280	12.0	949.00	120.0	102.4	0.29	0.043
P-5290	12.0	977.00	120.0	-207.6	0.59	0.160
P-5510	12.0	1,886.00	120.0	204.9	0.58	0.156
P-5540	12.0	2,100.00	120.0	-356.3	1.01	0.435
P-5560	12.0	927.00	120.0	-285.3	0.81	0.288
P-5570	12.0	1,841.00	120.0	-141.2	0.40	0.078
P-5620	16.0	1,146.00	120.0	140.7	0.22	0.019
P-5700EX	16.0	1,176.00	120.0	923.7	1.47	0.625
P-5710EX	16.0	1,171.00	120.0	923.7	1.47	0.625
P-5720	12.0	696.00	120.0	220.5	0.63	0.179
P-5730	12.0	955.00	120.0	123.7	0.35	0.061
P-5740	24.0	2,671.00	120.0	883.7	0.63	0.080
P-5760	12.0	1,545.00	120.0	-298.4	0.85	0.313
P-5770	16.0	353.00	120.0	-431.3	0.69	0.153
P-5780	16.0	684.00	120.0	-431.3	0.69	0.152
P-5790	12.0	884.00	120.0	-298.4	0.85	0.313
P-6030	12.0	162.00	120.0	235.7	0.67	0.203
P-6064	16.0	846.00	120.0	-717.7	1.15	0.392
P-6065	16.0	3,443.00	120.0	-717.7	1.15	0.392
P-6070	16.0	247.00	120.0	-699.0	1.12	0.373
P-6160	36.0	932.00	120.0	6,395.3	2.02	0.433
P-6161	36.0	820.00	120.0	6,395.3	2.02	0.433
P-6162	36.0	862.00	120.0	2,474.5	0.78	0.075
P-6163	36.0	895.00	120.0	2,474.5	0.78	0.075
P-6166	16.0	900.00	120.0	-824.6	1.32	0.506
P-6167EX	16.0	1,381.00	120.0	-1,204.0	1.92	1.021
P-6171	16.0	3,164.00	120.0	1,144.4	1.83	0.929
P-7000	16.0	742.00	120.0	-554.3	0.88	0.243
P-COMWTREX	36.0	10.00	120.0	844.4	0.27	0.012
P-DU-3-4-070	12.0	734.00	120.0	-537.7	1.53	0.932
P-DU-3-4-080	12.0	913.00	120.0	-176.1	0.50	0.118
P-DU-3-4-090	12.0	1,401.00	120.0	10.5	0.03	0.001
P-DU-3-4-100	12.0	717.00	120.0	-197.1	0.56	0.145
P-DU-3-4-110	16.0	597.00	120.0	-115.5	0.18	0.013

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU-3-4-120	16.0	1,375.00	120.0	-290.0	0.46	0.073
P-DU-3-4-130	12.0	1,165.00	120.0	-232.1	0.66	0.197
P-DU-3S-130	16.0	1,385.00	120.0	-520.4	0.83	0.216
P-DU3-4-010	12.0	1,834.00	120.0	-205.1	0.58	0.156
P-DU3-4-020	24.0	1,370.00	120.0	-665.7	0.47	0.047
P-DU3-4-030	24.0	1,035.00	120.0	-795.3	0.56	0.066
P-DU3-4-040	24.0	496.00	120.0	-728.3	0.52	0.056
P-DU3-4-050	24.0	1,092.00	120.0	-879.6	0.62	0.079
P-DU3-4-060	12.0	553.00	120.0	-563.3	1.60	1.016
P-DU3-4-160	12.0	1,157.00	120.0	-302.7	0.86	0.321
P-DU3-4-170	16.0	937.00	120.0	-372.2	0.59	0.116
P-DU3-4-180	16.0	1,045.00	120.0	-372.2	0.59	0.116
P-DU3-4-190	16.0	1,019.00	120.0	-1,022.0	1.63	0.754
P-DU3-4-200	16.0	958.00	120.0	-770.5	1.23	0.447
P-DU3-4-210	16.0	1,373.00	120.0	-803.4	1.28	0.483
P-DU3S-010	8.0	261.00	120.0	144.7	0.92	0.590
P-DU3S-020	8.0	1,374.00	120.0	65.7	0.42	0.137
P-DU3S-030	8.0	1,542.00	120.0	54.7	0.35	0.098
P-DU3S-040	8.0	1,242.00	120.0	39.7	0.25	0.054
P-DU3S-050	8.0	801.00	120.0	-66.6	0.42	0.140
P-DU3S-060	8.0	974.00	120.0	-37.8	0.24	0.049
P-DU3S-070	8.0	1,384.00	120.0	-49.9	0.32	0.082
P-DU3S-080	8.0	1,241.00	120.0	-61.7	0.39	0.122
P-DU3S-090	8.0	621.00	120.0	-68.7	0.44	0.149
P-DU3S-100	16.0	1,114.00	130.0	51.8	0.08	0.003
P-DU3S-110	16.0	1,525.00	130.0	-39.1	0.06	0.002
P-DU3S-120	16.0	1,560.00	120.0	-382.3	0.61	0.122
P-DU5E-010	12.0	2,201.00	120.0	-131.8	0.37	0.069
P-DU5E-020	12.0	1,392.00	120.0	188.1	0.53	0.133
P-DU5E-030	12.0	2,181.00	120.0	435.7	1.24	0.631
P-DU6-010	12.0	1,163.00	120.0	304.8	0.86	0.326
P-DU6-020	16.0	124.00	120.0	715.6	1.14	0.389
P-DU6-030	12.0	1,388.00	120.0	157.9	0.45	0.096
P-DU6-040	12.0	2,188.00	120.0	158.1	0.45	0.097
P-DU6-050	12.0	2,203.00	120.0	-180.4	0.51	0.123
P-DU6-060	12.0	2,209.00	120.0	304.8	0.86	0.326
P-DU6-070	16.0	142.00	120.0	1,132.5	1.81	0.911
P-DU6-080	12.0	1,130.00	120.0	471.8	1.34	0.731
P-DU6-090	12.0	1,397.00	120.0	192.4	0.55	0.139
P-DU6-100	12.0	1,966.00	120.0	126.4	0.36	0.064
P-DU6-110	12.0	1,963.00	120.0	-142.0	0.40	0.079
P-DU6-120	12.0	1,955.00	120.0	4.0	0.01	0.000
P-DU6-130	12.0	135.00	120.0	513.4	1.46	0.854
P-DU6-140	12.0	1,094.00	120.0	429.1	1.22	0.613

Active Scenario: Ave Day Demand - Served by DWGWF

FlexTable: Pipe Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU6-150	12.0	1,411.00	120.0	206.7	0.59	0.159
P-DU6-160	16.0	211.00	120.0	537.1	0.86	0.229
P-DU7-010	12.0	1,169.00	120.0	359.0	1.02	0.441
P-DU7-020	12.0	1,092.00	120.0	-131.4	0.37	0.069
P-DU7-030	12.0	1,044.00	120.0	-131.4	0.37	0.069
P-DU7-040	24.0	1,410.00	120.0	-1,337.2	0.95	0.172
P-DU7-050	24.0	1,075.00	120.0	-1,500.3	1.06	0.213
P-DU7-060	24.0	1,254.00	120.0	-1,511.4	1.07	0.216
P-DU7-070	24.0	992.00	120.0	-1,699.5	1.21	0.268
P-DU7-080	24.0	2,552.00	120.0	-2,135.6	1.51	0.409
P-DU7-090	16.0	941.00	120.0	-702.5	1.12	0.376
P-DU7-100	16.0	1,562.00	120.0	-673.6	1.07	0.348
P-DU7-110	16.0	1,742.00	120.0	-531.9	0.85	0.225
P-DU7-120	16.0	778.00	120.0	331.6	0.53	0.094
P-DU7-130	20.0	317.00	120.0	-671.0	0.69	0.116
P-DU7-140	20.0	1,207.00	120.0	-668.4	0.68	0.116
P-DU7-150	20.0	1,514.00	120.0	-767.5	0.78	0.150
P-DU7-160	20.0	619.00	120.0	-751.2	0.77	0.144
P-DU7-170	12.0	1,073.00	130.0	140.8	0.40	0.067
P-DU7-180	12.0	828.00	120.0	-164.8	0.47	0.104
P-DU7-190	12.0	399.00	120.0	-375.2	1.06	0.478
P-DU7-200	12.0	2,378.00	120.0	-57.2	0.16	0.015
P-DU7-210	12.0	1,049.00	120.0	-366.9	1.04	0.459
P-DU7-220	12.0	1,054.00	120.0	-336.8	0.96	0.392
P-DU7-230	12.0	1,714.00	120.0	-199.7	0.57	0.149
P-DU7-240	12.0	1,014.00	120.0	-149.0	0.42	0.086
P-DU8-010	16.0	1,107.00	120.0	-470.6	0.75	0.179
P-DU8-020	16.0	714.00	120.0	-430.6	0.69	0.152
P-DU8-030	16.0	1,312.00	120.0	-408.6	0.65	0.138
P-DU8-040	16.0	1,371.00	120.0	-484.0	0.77	0.189
P-DU8-050	16.0	520.00	120.0	-583.3	0.93	0.267
P-DU8-060	16.0	1,021.00	120.0	-732.7	1.17	0.407
P-DU8-070	8.0	542.00	120.0	-45.8	0.29	0.070
P-DU8-080	8.0	253.00	120.0	-14.5	0.09	0.008
P-DU8-090	8.0	1,138.00	120.0	-29.9	0.19	0.032
P-DU8-100	12.0	599.00	120.0	55.7	0.16	0.014
P-DU8-110	12.0	709.00	120.0	14.5	0.04	0.001
P-DU8-120	8.0	678.00	120.0	-40.3	0.26	0.055
P-DU8-130	8.0	1,315.00	120.0	2.2	0.01	0.000
P-DU8-140	8.0	966.00	120.0	-30.2	0.19	0.032
P-DU8-150	6.0	737.00	130.0	28.3	0.32	0.101
P-DU8-160	8.0	1,265.00	120.0	25.9	0.17	0.024
P-DU8-170	8.0	2,613.00	120.0	-15.6	0.10	0.009
P-DU8-180	8.0	1,778.00	120.0	-32.8	0.21	0.038

Active Scenario: Ave Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU8-190	8.0	1,185.00	120.0	38.8	0.25	0.052
P-DU8-200	8.0	1,054.00	120.0	92.5	0.59	0.258
P-DU9-010	16.0	904.00	120.0	18.7	0.03	0.000
P-DU9-020	16.0	227.00	120.0	40.1	0.06	0.002
P-DU9-030	8.0	1,616.00	120.0	-41.1	0.26	0.057
P-DU9-040	8.0	746.00	120.0	-23.8	0.15	0.021
P-DU9-050	8.0	869.00	120.0	-53.8	0.34	0.094
P-DU9-060	8.0	1,550.00	120.0	-47.1	0.30	0.074
P-DU9-070	8.0	1,001.00	120.0	-28.7	0.18	0.029
P-DU9-080	8.0	644.00	120.0	-36.5	0.23	0.046
P-DU9-090	8.0	3,092.00	120.0	-11.3	0.07	0.005
P-DU9-100	8.0	1,619.00	120.0	-27.0	0.17	0.026
P-DU9-110	8.0	3,057.00	120.0	-16.0	0.10	0.010
P-DU9-120	8.0	901.00	120.0	19.0	0.12	0.014
P-DU9-130	8.0	879.00	120.0	-82.5	0.53	0.209
P-DU9-140	8.0	430.00	120.0	-149.5	0.95	0.627
P-DU9-150	8.0	4,471.00	120.0	-35.5	0.23	0.044

Active Scenario: Max Day Demand - Served by DWGWF

FlexTable: Reservoir Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Flow Net (Out) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	1,573.1	Desert Wells	1,634.0
SCAP DWPS	1,634.0	11,914.5	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	4,757.3	Desert Wells	1,634.0

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	89	1,612.4
J-110EX	1,440.0	Desert Wells	0.0	75	1,612.8
J-120EX	1,462.0	Desert Wells	0.0	73	1,631.6
J-135EX	1,460.0	Desert Wells	0.0	73	1,629.3
J-150EX	1,472.0	Desert Wells	0.0	67	1,627.6
J-160EX	1,435.0	Desert Wells	0.0	85	1,631.1
J-170EX	1,430.0	Desert Wells	0.0	87	1,631.9
J-180EX	1,410.0	Desert Wells	0.0	97	1,633.6
J-190EX	1,395.0	Desert Wells	0.0	101	1,629.2
J-200EX	1,385.0	Desert Wells	0.0	104	1,624.7
J-220EX	1,480.0	Desert Wells	0.0	65	1,629.5
J-230EX	1,475.0	Desert Wells	0.0	66	1,628.1
J-250EX	1,452.0	Desert Wells	79.0	76	1,627.1
J-260EX	1,453.0	Desert Wells	0.0	75	1,627.0
J-270	1,429.0	Desert Wells	0.0	86	1,627.5
J-280EX	1,460.0	Desert Wells	0.0	73	1,629.3
J-300EX	1,392.0	Desert Wells	107.8	99	1,620.4
J-320	1,422.0	Desert Wells	0.0	89	1,628.0
J-330EX	1,455.0	Desert Wells	0.0	75	1,627.6
J-340	1,440.0	Desert Wells	0.0	81	1,627.0
J-360EX	1,400.0	Desert Wells	0.0	92	1,612.4
J-370	1,405.0	Desert Wells	348.2	90	1,612.0
J-380	1,414.0	Desert Wells	344.2	86	1,612.5
J-390	1,405.0	Desert Wells	218.2	90	1,612.1
J-460	1,423.0	Desert Wells	142.0	85	1,620.1
J-480	1,429.0	Desert Wells	193.6	83	1,620.3
J-550	1,425.0	Desert Wells	0.0	87	1,627.0
J-590EX	1,410.0	Desert Wells	0.0	88	1,612.4
J-750	1,415.0	Desert Wells	344.2	85	1,612.6
J-920	1,434.0	Desert Wells	0.0	84	1,627.0
J-950	1,414.0	Desert Wells	0.0	90	1,623.1
J-960EX	1,401.0	Desert Wells	0.0	91	1,612.4
J-970EX	1,397.0	Desert Wells	106.4	93	1,612.4
J-1000EX	1,455.0	Desert Wells	0.0	77	1,633.4
J-1010EX	1,485.0	Desert Wells	0.0	64	1,632.8
J-1020EX	1,425.0	Desert Wells	0.0	90	1,633.7
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,433.0	Desert Wells	0.0	79	1,615.3
J-1050EX	1,445.0	Desert Wells	0.0	79	1,627.0
J-1120EX	1,453.0	Desert Wells	0.0	75	1,626.9
J-1130EX	1,445.0	Desert Wells	350.0	77	1,622.5
J-1140	1,433.0	Desert Wells	155.8	81	1,620.7
J-1160EX	1,445.0	Desert Wells	0.0	82	1,633.4
J-1170EX	1,470.0	Desert Wells	0.0	71	1,633.1

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1180EX	1,440.0	Desert Wells	0.0	84	1,633.6
J-1190EX	1,420.0	Desert Wells	0.0	92	1,633.7
J-1200EX	1,445.0	Desert Wells	0.0	82	1,633.5
J-1210EX	1,455.0	Desert Wells	0.0	77	1,633.1
J-1220	1,405.0	Desert Wells	908.0	89	1,610.8
J-1220EX	1,475.0	Desert Wells	0.0	68	1,632.2
J-1230EX	1,460.0	Desert Wells	0.0	73	1,628.5
J-1235EX	1,440.0	Desert Wells	0.0	81	1,627.0
J-1240	1,411.0	Desert Wells	806.2	87	1,611.4
J-1240EX	1,455.0	Desert Wells	0.0	75	1,627.5
J-1270	1,417.0	Desert Wells	0.0	85	1,612.6
J-1280	1,410.0	Desert Wells	0.0	95	1,628.9
J-1290	1,425.0	Desert Wells	159.6	82	1,613.8
J-1290EX	1,480.0	Desert Wells	0.0	66	1,632.4
J-1300EX	1,465.0	Desert Wells	0.0	73	1,633.1
J-1310EX	1,480.0	Desert Wells	0.0	66	1,632.5
J-1320	1,426.0	Desert Wells	50.8	84	1,621.0
J-1330EX	1,465.0	Desert Wells	0.0	73	1,633.1
J-1340EX	1,450.0	Desert Wells	0.0	79	1,633.4
J-1350EX	1,465.0	Desert Wells	0.0	73	1,633.1
J-1360EX	1,445.0	Desert Wells	0.0	82	1,633.4
J-1370EX	1,430.0	Desert Wells	0.0	88	1,633.5
J-1380EX	1,450.0	Desert Wells	0.0	79	1,633.5
J-1390EX	1,430.0	Desert Wells	0.0	88	1,633.6
J-1400EX	1,430.0	Desert Wells	0.0	88	1,633.6
J-1410	1,454.0	Desert Wells	0.0	75	1,627.8
J-1410EX	1,420.0	Desert Wells	0.0	92	1,633.7
J-1420EX	1,460.0	Desert Wells	0.0	72	1,627.0
J-1430EX	1,455.0	Desert Wells	0.0	75	1,627.7
J-1440EX	1,478.0	Desert Wells	0.0	65	1,628.7
J-1680EX	1,400.0	Desert Wells	0.0	92	1,612.4
J-1990EX	1,447.0	Desert Wells	0.0	78	1,627.0
J-2000EX	1,442.0	Desert Wells	0.0	80	1,626.9
J-2010	1,419.0	Desert Wells	0.0	91	1,628.2
J-2040	1,427.0	Desert Wells	0.0	87	1,627.7
J-2100	1,436.0	Desert Wells	0.0	81	1,622.4
J-2120EX	1,453.0	Desert Wells	0.0	74	1,624.0
J-2140EX	1,446.0	Desert Wells	0.0	77	1,622.9
J-2200	1,414.0	Desert Wells	0.0	91	1,624.2
J-2220	1,410.0	Desert Wells	620.0	87	1,612.0
J-2295	1,415.0	Desert Wells	0.0	90	1,622.8
J-2340EX	1,435.0	Desert Wells	495.2	79	1,617.1
J-DU3-4-010	1,405.0	Desert Wells	276.2	93	1,620.4
J-DU3-4-020	1,401.0	Desert Wells	276.2	94	1,619.4

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU3-4-030	1,397.0	Desert Wells	259.2	96	1,619.1
J-DU3-4-040	1,403.0	Desert Wells	302.6	94	1,619.5
J-DU3-4-050	1,410.0	Desert Wells	51.2	90	1,617.8
J-DU3-4-060	1,408.0	Desert Wells	117.8	90	1,615.4
J-DU3-4-070	1,404.0	Desert Wells	373.2	91	1,615.0
J-DU3-4-080	1,400.0	Desert Wells	373.2	93	1,615.0
J-DU3-4-090	1,393.0	Desert Wells	151.4	96	1,615.4
J-DU3-4-100	1,391.0	Desert Wells	372.2	99	1,618.9
J-DU3-4-110	1,393.0	Desert Wells	282.2	96	1,614.1
J-DU3-4-120	1,393.0	Desert Wells	783.0	95	1,613.0
J-DU3-4-130	1,399.0	Desert Wells	349.0	93	1,613.0
J-DU3-4-140	1,404.0	Desert Wells	186.4	91	1,613.4
J-DU3-4-150	1,407.0	Desert Wells	141.2	90	1,614.1
J-DU3-4-160	1,407.0	Desert Wells	0.0	89	1,613.8
J-DU3-4-170	1,412.0	Desert Wells	194.8	87	1,614.2
J-DU3-4-180	1,414.0	Desert Wells	209.6	88	1,616.9
J-DU3-4-190	1,417.0	Desert Wells	65.8	87	1,618.4
J-DU3-4-200	1,412.5	Desert Wells	276.2	90	1,621.1
J-DU3S-010	1,412.0	Desert Wells	20.4	91	1,622.2
J-DU3S-020	1,407.0	Desert Wells	22.0	93	1,621.5
J-DU3S-030	1,401.0	Desert Wells	30.0	95	1,621.0
J-DU3S-040	1,399.0	Desert Wells	22.0	96	1,620.8
J-DU3S-050	1,404.0	Desert Wells	24.2	94	1,620.9
J-DU3S-060	1,410.0	Desert Wells	23.6	91	1,621.3
J-DU3S-070	1,417.0	Desert Wells	14.0	89	1,621.9
J-DU3S-080	1,396.0	Desert Wells	107.8	97	1,620.4
J-DU5E-010	1,435.0	Desert Wells	639.8	79	1,616.6
J-DU5E-020	1,440.0	Desert Wells	495.2	77	1,617.3
J-DU6-010	1,459.0	Desert Wells	0.0	72	1,624.9
J-DU6-020	1,453.0	Desert Wells	2,196.2	74	1,623.9
J-DU6-030	1,450.0	Desert Wells	160.6	75	1,623.0
J-DU6-040	1,440.0	Desert Wells	321.4	79	1,623.6
J-DU6-050	1,448.0	Desert Wells	482.0	76	1,624.3
J-DU6-060	1,458.0	Desert Wells	500.4	73	1,626.7
J-DU6-070	1,452.0	Desert Wells	160.6	76	1,626.6
J-DU6-080	1,446.0	Desert Wells	160.6	77	1,624.6
J-DU6-090	1,435.0	Desert Wells	160.6	82	1,623.9
J-DU7-010	1,415.0	Desert Wells	13.0	90	1,622.1
J-DU7-020	1,425.0	Desert Wells	455.2	84	1,620.3
J-DU7-030	1,416.0	Desert Wells	0.0	88	1,620.0
J-DU7-040	1,409.0	Desert Wells	51.2	91	1,619.8
J-DU7-050	1,416.0	Desert Wells	221.8	89	1,620.7
J-DU7-060	1,423.0	Desert Wells	22.2	86	1,621.5
J-DU7-070	1,430.0	Desert Wells	0.0	83	1,622.5

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-080	1,434.0	Desert Wells	275.2	82	1,623.4
J-DU7-090	1,437.0	Desert Wells	0.0	82	1,627.0
J-DU7-100	1,435.0	Desert Wells	57.8	83	1,625.8
J-DU7-110	1,435.0	Desert Wells	57.6	82	1,623.8
J-DU7-120	1,420.0	Desert Wells	0.0	88	1,622.4
J-DU7-130	1,420.0	Desert Wells	5.2	88	1,622.3
J-DU7-140	1,425.0	Desert Wells	99.8	85	1,621.8
J-DU7-150	1,419.0	Desert Wells	32.6	87	1,621.0
J-DU7-160	1,435.0	Desert Wells	48.0	81	1,622.7
J-DU7-170	1,432.0	Desert Wells	21.4	83	1,623.0
J-DU7-180	1,433.0	Desert Wells	37.4	82	1,623.7
J-DU7-190	1,437.0	Desert Wells	60.2	81	1,625.2
J-DU7-200	1,432.0	Desert Wells	101.4	82	1,622.1
J-DU8-010	1,420.0	Desert Wells	0.0	88	1,623.1
J-DU8-020	1,419.5	Desert Wells	0.0	88	1,623.5
J-DU8-030	1,421.0	Desert Wells	0.0	88	1,624.1
J-DU8-040	1,418.0	Desert Wells	13.4	90	1,625.1
J-DU8-050	1,422.0	Desert Wells	0.0	88	1,625.6
J-DU8-060	1,420.0	Desert Wells	18.2	88	1,623.6
J-DU8-070	1,420.0	Desert Wells	30.8	88	1,623.6
J-DU8-080	1,422.0	Desert Wells	8.8	87	1,623.8
J-DU8-090	1,424.0	Desert Wells	22.0	86	1,623.9
J-DU8-100	1,425.0	Desert Wells	18.2	86	1,623.8
J-DU8-110	1,430.0	Desert Wells	87.2	84	1,623.8
J-DU8-120	1,431.0	Desert Wells	34.4	83	1,623.9
J-DU8-130	1,427.0	Desert Wells	42.0	85	1,624.1
J-DU9-010	1,419.0	Desert Wells	39.4	88	1,623.1
J-DU9-020	1,415.0	Desert Wells	73.0	90	1,623.4
J-DU9-030	1,416.0	Desert Wells	66.6	90	1,623.7
J-DU9-040	1,416.0	Desert Wells	15.6	90	1,623.8
J-DU9-050	1,419.0	Desert Wells	0.0	89	1,623.9
J-DU9-060	1,422.0	Desert Wells	62.8	88	1,624.6
J-DU9-070	1,414.0	Desert Wells	63.4	91	1,623.8
J-DU9-080	1,419.0	Desert Wells	77.2	89	1,623.9

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	-629.8	1.00	0.308
P-170EX	16.0	5,366.00	120.0	-629.8	1.00	0.307
P-180EX	16.0	5,396.00	120.0	1,055.9	1.68	0.801
P-190EX	16.0	5,728.00	120.0	1,055.9	1.68	0.801
P-200EX	16.0	231.00	120.0	-1,610.7	2.57	1.750
P-210EX	16.0	1,388.00	120.0	-1,065.9	1.70	0.815
P-220EX	16.0	2,909.00	120.0	1,005.6	1.60	0.731
P-240EX	16.0	1,387.00	120.0	-2,981.2	4.76	5.474
P-250EX	16.0	2,611.00	120.0	500.5	0.80	0.201
P-310	30.0	4,937.00	120.0	855.6	0.39	0.025
P-340EX	16.0	5,775.00	120.0	-629.8	1.00	0.307
P-410EX	16.0	5,368.00	120.0	1,055.9	1.68	0.801
P-630	12.0	710.00	120.0	-254.8	0.72	0.234
P-660	12.0	2,013.00	120.0	-427.7	1.21	0.610
P-970	24.0	1,001.00	120.0	-207.3	0.15	0.005
P-980	24.0	1,935.00	120.0	-1,667.0	1.18	0.259
P-1060EX	16.0	1,328.00	120.0	-63.5	0.10	0.004
P-1070EX	16.0	1,243.00	120.0	-631.6	1.01	0.309
P-1390	16.0	727.00	120.0	-304.6	0.49	0.080
P-1400	16.0	1,976.00	120.0	-1,068.4	1.70	0.818
P-1630EX	16.0	1,793.00	120.0	1,056.8	1.69	0.802
P-1640EX	16.0	1,335.00	120.0	2,003.9	3.20	2.623
P-1780	24.0	1,528.00	120.0	-207.3	0.15	0.006
P-1790	24.0	1,115.00	120.0	-207.3	0.15	0.005
P-1840	12.0	1,001.00	120.0	330.3	0.94	0.378
P-1940EX	16.0	1,976.00	120.0	618.8	0.99	0.298
P-1950EX	16.0	680.00	120.0	266.8	0.43	0.063
P-1970EX	16.0	927.00	120.0	1,458.2	2.33	1.456
P-1980EX	16.0	1,106.00	120.0	1,176.0	1.88	0.977
P-2000EX	16.0	2,710.00	120.0	-1,142.7	1.82	0.927
P-2040EX	16.0	10,635.00	120.0	-366.5	0.58	0.113
P-2055EX	16.0	10,453.00	120.0	165.1	0.26	0.026
P-2070EX	24.0	5,329.00	120.0	-1,041.6	0.74	0.108
P-2500EX	24.0	2,750.00	120.0	1,091.6	0.77	0.118
P-2510EX	24.0	2,726.00	120.0	1,045.8	0.74	0.109
P-2540EX	12.0	2,624.00	120.0	-128.8	0.37	0.066
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.000
P-2655EX	16.0	2,870.00	120.0	-629.8	1.00	0.308
P-2660EX	24.0	2,797.00	120.0	1,573.1	1.12	0.232
P-2665EX	16.0	2,716.00	120.0	-629.8	1.00	0.307
P-2690EX	16.0	2,914.00	120.0	-417.3	0.67	0.143
P-2700EX	16.0	3,115.00	120.0	83.2	0.13	0.007
P-2710EX	16.0	1,823.00	120.0	-140.9	0.22	0.019
P-2720EX	12.0	3,042.00	120.0	-224.1	0.64	0.184

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2800	24.0	5,786.00	120.0	3,071.6	2.18	0.803
P-2830	16.0	2,890.00	120.0	488.9	0.78	0.192
P-2860	12.0	1,164.00	120.0	-382.8	1.09	0.496
P-2860EX	24.0	761.00	120.0	1,573.1	1.12	0.232
P-2870	16.0	643.00	120.0	511.1	0.82	0.209
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.000
P-2890	12.0	992.00	120.0	-620.9	1.76	1.216
P-2890EX	8.0	3,148.00	120.0	-80.9	0.52	0.201
P-2900	24.0	1,423.00	120.0	1,412.3	1.00	0.190
P-2910EX	24.0	497.00	120.0	1,492.2	1.06	0.211
P-2930	12.0	1,167.00	120.0	245.7	0.70	0.218
P-2950	12.0	1,089.00	120.0	45.8	0.13	0.010
P-2960	12.0	1,277.00	120.0	597.3	1.69	1.132
P-2970EX	12.0	1,119.00	120.0	75.9	0.22	0.025
P-2990EX	8.0	2,811.00	120.0	-58.3	0.37	0.109
P-3010EX	12.0	471.00	120.0	80.9	0.23	0.028
P-3020EX	12.0	1,167.00	120.0	17.6	0.05	0.002
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.000
P-3040	12.0	1,135.00	120.0	651.0	1.85	1.328
P-3040EX	8.0	3,081.00	120.0	-56.8	0.36	0.104
P-3060	12.0	595.00	120.0	0.0	0.00	0.000
P-3070EX	8.0	2,922.00	120.0	-39.1	0.25	0.052
P-3080EX	12.0	1,397.00	120.0	-125.9	0.36	0.063
P-3090EX	12.0	1,109.00	120.0	-100.5	0.29	0.042
P-3100EX	12.0	695.00	120.0	28.2	0.08	0.004
P-3110EX	12.0	664.00	120.0	2.9	0.01	0.000
P-3120EX	8.0	1,851.00	120.0	-25.4	0.16	0.024
P-3130	12.0	1,155.00	120.0	39.1	0.11	0.007
P-3140EX	16.0	1,783.00	120.0	36.3	0.06	0.002
P-3150	12.0	779.00	120.0	600.2	1.70	1.142
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.000
P-3160EX	8.0	3,801.00	120.0	-36.3	0.23	0.046
P-3170EX	8.0	2,838.00	120.0	-79.9	0.51	0.197
P-3180EX	8.0	736.00	120.0	24.2	0.15	0.022
P-3190EX	30.0	4,441.00	120.0	5,684.5	2.58	0.846
P-3200	30.0	814.00	120.0	5,684.5	2.58	0.846
P-3240EX	16.0	1,954.00	120.0	277.1	0.44	0.067
P-3250EX	12.0	844.00	120.0	-505.1	1.43	0.830
P-3260EX	16.0	1,108.00	120.0	1,005.6	1.60	0.732
P-3270EX	16.0	1,509.00	120.0	701.9	1.12	0.376
P-3280EX	12.0	2,890.00	120.0	-303.7	0.86	0.323
P-3290EX	12.0	2,432.00	120.0	201.4	0.57	0.151
P-3930EX	16.0	751.00	120.0	-63.5	0.10	0.004
P-3940EX	16.0	509.00	120.0	-63.5	0.10	0.005

Active Scenario: Max Day Demand - Served by DWGWF

FlexTable: Pipe Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-3970EX	16.0	1,445.00	120.0	63.5	0.10	0.004
P-4090	12.0	1,276.00	120.0	525.2	1.49	0.892
P-4720EX	16.0	1,216.00	120.0	356.6	0.57	0.107
P-4730EX	16.0	456.00	120.0	356.6	0.57	0.107
P-4750EX	16.0	715.00	120.0	356.6	0.57	0.107
P-4760EX	16.0	774.00	120.0	-374.9	0.60	0.118
P-4780	24.0	1,020.00	120.0	-1,667.0	1.18	0.259
P-4790EX	16.0	1,816.00	120.0	-150.8	0.24	0.022
P-4860	24.0	986.00	120.0	1,667.0	1.18	0.259
P-4870	24.0	620.00	120.0	1,667.0	1.18	0.259
P-5280	12.0	949.00	120.0	200.4	0.57	0.150
P-5290	12.0	977.00	120.0	-419.6	1.19	0.589
P-5510	12.0	1,886.00	120.0	437.7	1.24	0.637
P-5540	12.0	2,100.00	120.0	-700.9	1.99	1.522
P-5560	12.0	927.00	120.0	-568.1	1.61	1.032
P-5570	12.0	1,841.00	120.0	-288.3	0.82	0.294
P-5620	16.0	1,146.00	120.0	327.9	0.52	0.092
P-5700EX	16.0	1,176.00	120.0	1,706.8	2.72	1.949
P-5710EX	16.0	1,171.00	120.0	1,706.8	2.72	1.949
P-5720	12.0	696.00	120.0	436.3	1.24	0.633
P-5730	12.0	955.00	120.0	242.7	0.69	0.213
P-5740	24.0	2,671.00	120.0	1,667.0	1.18	0.259
P-5760	12.0	1,545.00	120.0	-592.1	1.68	1.114
P-5770	16.0	353.00	120.0	-560.0	0.89	0.247
P-5780	16.0	684.00	120.0	-560.0	0.89	0.247
P-5790	12.0	884.00	120.0	-592.1	1.68	1.114
P-6030	12.0	162.00	120.0	544.7	1.55	0.954
P-6064	16.0	846.00	120.0	-1,404.6	2.24	1.358
P-6065	16.0	3,443.00	120.0	-1,404.6	2.24	1.358
P-6070	16.0	247.00	120.0	-1,382.6	2.21	1.319
P-6160	36.0	932.00	120.0	11,914.5	3.76	1.371
P-6161	36.0	820.00	120.0	11,914.5	3.76	1.371
P-6162	36.0	862.00	120.0	4,757.3	1.50	0.250
P-6163	36.0	895.00	120.0	4,757.3	1.50	0.250
P-6166	16.0	900.00	120.0	-1,740.0	2.78	2.019
P-6167EX	16.0	1,381.00	120.0	-2,482.2	3.96	3.899
P-6171	16.0	3,164.00	120.0	2,109.5	3.37	2.885
P-7000	16.0	742.00	120.0	-1,094.6	1.75	0.856
P-COMWTREX	36.0	10.00	120.0	1,573.1	0.50	0.037
P-DU-3-4-070	12.0	734.00	120.0	-1,059.6	3.01	3.272
P-DU-3-4-080	12.0	913.00	120.0	-352.0	1.00	0.425
P-DU-3-4-090	12.0	1,401.00	120.0	21.2	0.06	0.002
P-DU-3-4-100	12.0	717.00	120.0	-394.4	1.12	0.525
P-DU-3-4-110	16.0	597.00	120.0	-225.9	0.36	0.046

Active Scenario: Max Day Demand - Served by DWGWF

FlexTable: Pipe Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU-3-4-120	16.0	1,375.00	120.0	-574.9	0.92	0.260
P-DU-3-4-130	12.0	1,165.00	120.0	-448.5	1.27	0.666
P-DU-3S-130	16.0	1,385.00	120.0	-1,036.8	1.65	0.774
P-DU3-4-010	12.0	1,834.00	120.0	-399.8	1.13	0.538
P-DU3-4-020	24.0	1,370.00	120.0	-1,319.4	0.94	0.168
P-DU3-4-030	24.0	1,035.00	120.0	-1,578.6	1.12	0.234
P-DU3-4-040	24.0	496.00	120.0	-1,455.0	1.03	0.201
P-DU3-4-050	24.0	1,092.00	120.0	-1,757.6	1.25	0.286
P-DU3-4-060	12.0	553.00	120.0	-1,110.8	3.15	3.571
P-DU3-4-160	12.0	1,157.00	120.0	-589.7	1.67	1.105
P-DU3-4-170	16.0	937.00	120.0	-740.5	1.18	0.415
P-DU3-4-180	16.0	1,045.00	120.0	-740.5	1.18	0.415
P-DU3-4-190	16.0	1,019.00	120.0	-2,003.7	3.20	2.622
P-DU3-4-200	16.0	958.00	120.0	-1,512.4	2.41	1.557
P-DU3-4-210	16.0	1,373.00	120.0	-1,578.2	2.52	1.685
P-DU3S-010	8.0	261.00	120.0	288.0	1.84	2.113
P-DU3S-020	8.0	1,374.00	120.0	130.8	0.83	0.490
P-DU3S-030	8.0	1,542.00	120.0	108.8	0.69	0.348
P-DU3S-040	8.0	1,242.00	120.0	78.8	0.50	0.192
P-DU3S-050	8.0	801.00	120.0	-131.8	0.84	0.497
P-DU3S-060	8.0	974.00	120.0	-75.0	0.48	0.175
P-DU3S-070	8.0	1,384.00	120.0	-99.2	0.63	0.294
P-DU3S-080	8.0	1,241.00	120.0	-122.8	0.78	0.436
P-DU3S-090	8.0	621.00	120.0	-136.8	0.87	0.532
P-DU3S-100	16.0	1,114.00	130.0	108.7	0.17	0.010
P-DU3S-110	16.0	1,525.00	130.0	-84.6	0.14	0.006
P-DU3S-120	16.0	1,560.00	120.0	-760.6	1.21	0.436
P-DU5E-010	12.0	2,201.00	120.0	-247.0	0.70	0.221
P-DU5E-020	12.0	1,392.00	120.0	392.8	1.11	0.521
P-DU5E-030	12.0	2,181.00	120.0	888.0	2.52	2.359
P-DU6-010	12.0	1,163.00	120.0	502.9	1.43	0.823
P-DU6-020	16.0	124.00	120.0	1,094.1	1.75	0.855
P-DU6-030	12.0	1,388.00	120.0	434.2	1.23	0.627
P-DU6-040	12.0	2,188.00	120.0	271.1	0.77	0.262
P-DU6-050	12.0	2,203.00	120.0	-212.3	0.60	0.167
P-DU6-060	12.0	2,209.00	120.0	502.9	1.43	0.823
P-DU6-070	16.0	142.00	120.0	1,934.9	3.09	2.458
P-DU6-080	12.0	1,130.00	120.0	840.6	2.38	2.131
P-DU6-090	12.0	1,397.00	120.0	373.8	1.06	0.475
P-DU6-100	12.0	1,966.00	120.0	218.7	0.62	0.176
P-DU6-110	12.0	1,963.00	120.0	-227.4	0.65	0.189
P-DU6-120	12.0	1,955.00	120.0	-90.9	0.26	0.035
P-DU6-130	12.0	135.00	120.0	837.0	2.37	2.115
P-DU6-140	12.0	1,094.00	120.0	767.3	2.18	1.800

Active Scenario: Max Day Demand - Served by DWGWF

FlexTable: Pipe Table

(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU6-150	12.0	1,411.00	120.0	379.3	1.08	0.488
P-DU6-160	16.0	211.00	120.0	821.1	1.31	0.503
P-DU7-010	12.0	1,169.00	120.0	710.8	2.02	1.562
P-DU7-020	12.0	1,092.00	120.0	-255.6	0.73	0.235
P-DU7-030	12.0	1,044.00	120.0	-255.6	0.73	0.235
P-DU7-040	24.0	1,410.00	120.0	-2,664.0	1.89	0.617
P-DU7-050	24.0	1,075.00	120.0	-2,985.5	2.12	0.761
P-DU7-060	24.0	1,254.00	120.0	-3,007.7	2.13	0.772
P-DU7-070	24.0	992.00	120.0	-3,383.5	2.40	0.960
P-DU7-080	24.0	2,552.00	120.0	-4,250.8	3.01	1.465
P-DU7-090	16.0	941.00	120.0	-1,400.9	2.24	1.351
P-DU7-100	16.0	1,562.00	120.0	-1,343.1	2.14	1.250
P-DU7-110	16.0	1,742.00	120.0	-1,060.0	1.69	0.806
P-DU7-120	16.0	778.00	120.0	666.0	1.06	0.341
P-DU7-130	20.0	317.00	120.0	-1,319.2	1.35	0.408
P-DU7-140	20.0	1,207.00	120.0	-1,314.0	1.34	0.405
P-DU7-150	20.0	1,514.00	120.0	-1,511.1	1.54	0.524
P-DU7-160	20.0	619.00	120.0	-1,478.5	1.51	0.504
P-DU7-170	12.0	1,073.00	130.0	275.2	0.78	0.232
P-DU7-180	12.0	828.00	120.0	-323.2	0.92	0.363
P-DU7-190	12.0	399.00	120.0	-743.0	2.11	1.696
P-DU7-200	12.0	2,378.00	120.0	-109.1	0.31	0.049
P-DU7-210	12.0	1,049.00	120.0	-731.5	2.08	1.647
P-DU7-220	12.0	1,054.00	120.0	-671.3	1.90	1.405
P-DU7-230	12.0	1,714.00	120.0	-398.4	1.13	0.535
P-DU7-240	12.0	1,014.00	120.0	-297.0	0.84	0.310
P-DU8-010	16.0	1,107.00	120.0	-925.2	1.48	0.627
P-DU8-020	16.0	714.00	120.0	-860.5	1.37	0.548
P-DU8-030	16.0	1,312.00	120.0	-814.7	1.30	0.495
P-DU8-040	16.0	1,371.00	120.0	-964.4	1.54	0.677
P-DU8-050	16.0	520.00	120.0	-1,161.5	1.85	0.955
P-DU8-060	16.0	1,021.00	120.0	-1,459.8	2.33	1.459
P-DU8-070	8.0	542.00	120.0	-93.9	0.60	0.265
P-DU8-080	8.0	253.00	120.0	-30.1	0.19	0.032
P-DU8-090	8.0	1,138.00	120.0	-60.9	0.39	0.119
P-DU8-100	12.0	599.00	120.0	116.4	0.33	0.055
P-DU8-110	12.0	709.00	120.0	31.5	0.09	0.005
P-DU8-120	8.0	678.00	120.0	-82.0	0.52	0.206
P-DU8-130	8.0	1,315.00	120.0	5.8	0.04	0.001
P-DU8-140	8.0	966.00	120.0	-59.3	0.38	0.113
P-DU8-150	6.0	737.00	130.0	55.4	0.63	0.349
P-DU8-160	8.0	1,265.00	120.0	50.9	0.32	0.085
P-DU8-170	8.0	2,613.00	120.0	-30.5	0.19	0.033
P-DU8-180	8.0	1,778.00	120.0	-64.9	0.41	0.134

Active Scenario: Max Day Demand - Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU8-190	8.0	1,185.00	120.0	76.8	0.49	0.183
P-DU8-200	8.0	1,054.00	120.0	183.7	1.17	0.919
P-DU9-010	16.0	904.00	120.0	22.0	0.04	0.001
P-DU9-020	16.0	227.00	120.0	64.6	0.10	0.004
P-DU9-030	8.0	1,616.00	120.0	-82.0	0.52	0.206
P-DU9-040	8.0	746.00	120.0	-48.1	0.31	0.077
P-DU9-050	8.0	869.00	120.0	-106.9	0.68	0.337
P-DU9-060	8.0	1,550.00	120.0	-94.3	0.60	0.267
P-DU9-070	8.0	1,001.00	120.0	-56.9	0.36	0.105
P-DU9-080	8.0	644.00	120.0	-72.5	0.46	0.164
P-DU9-090	8.0	3,092.00	120.0	-22.3	0.14	0.018
P-DU9-100	8.0	1,619.00	120.0	-53.9	0.34	0.095
P-DU9-110	8.0	3,057.00	120.0	-31.8	0.20	0.036
P-DU9-120	8.0	901.00	120.0	38.1	0.24	0.050
P-DU9-130	8.0	879.00	120.0	-164.6	1.05	0.750
P-DU9-140	8.0	430.00	120.0	-298.2	1.90	2.254
P-DU9-150	8.0	4,471.00	120.0	-70.9	0.45	0.157

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Reservoir Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Flow Net (Out) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	4,274.3	Desert Wells	1,634.0
SCAP DWPS	1,634.0	13,208.0	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	8,536.9	Desert Wells	1,634.0

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	76	1,581.2
J-110EX	1,440.0	Desert Wells	0.0	61	1,582.0
J-120EX	1,462.0	Desert Wells	0.0	68	1,618.7
J-135EX	1,460.0	Desert Wells	0.0	67	1,615.1
J-150EX	1,472.0	Desert Wells	0.0	61	1,612.7
J-160EX	1,435.0	Desert Wells	0.0	82	1,624.5
J-170EX	1,430.0	Desert Wells	0.0	85	1,627.3
J-180EX	1,410.0	Desert Wells	0.0	96	1,632.7
J-190EX	1,395.0	Desert Wells	0.0	98	1,621.5
J-200EX	1,385.0	Desert Wells	0.0	97	1,609.7
J-220EX	1,480.0	Desert Wells	0.0	59	1,615.5
J-230EX	1,475.0	Desert Wells	0.0	60	1,613.4
J-250EX	1,452.0	Desert Wells	118.5	69	1,611.7
J-260EX	1,453.0	Desert Wells	0.0	69	1,611.4
J-270	1,429.0	Desert Wells	0.0	80	1,613.9
J-280EX	1,460.0	Desert Wells	0.0	69	1,618.6
J-300EX	1,392.0	Desert Wells	161.7	89	1,598.6
J-320	1,422.0	Desert Wells	0.0	84	1,615.3
J-330EX	1,455.0	Desert Wells	0.0	68	1,613.0
J-340	1,440.0	Desert Wells	0.0	74	1,612.0
J-360EX	1,400.0	Desert Wells	0.0	78	1,581.1
J-370	1,405.0	Desert Wells	522.3	76	1,580.3
J-380	1,414.0	Desert Wells	516.3	72	1,581.5
J-390	1,405.0	Desert Wells	327.3	76	1,580.7
J-460	1,423.0	Desert Wells	213.0	75	1,597.3
J-480	1,429.0	Desert Wells	290.4	73	1,597.7
J-550	1,425.0	Desert Wells	0.0	81	1,612.1
J-590EX	1,410.0	Desert Wells	0.0	74	1,581.2
J-750	1,415.0	Desert Wells	516.3	72	1,581.6
J-920	1,434.0	Desert Wells	0.0	77	1,611.9
J-950	1,414.0	Desert Wells	0.0	82	1,604.2
J-960EX	1,401.0	Desert Wells	0.0	78	1,581.1
J-970EX	1,397.0	Desert Wells	159.6	80	1,581.2
J-1000EX	1,455.0	Desert Wells	0.0	76	1,630.3
J-1010EX	1,485.0	Desert Wells	0.0	61	1,626.4
J-1020EX	1,425.0	Desert Wells	0.0	90	1,632.3
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,433.0	Desert Wells	0.0	67	1,587.2
J-1050EX	1,445.0	Desert Wells	0.0	72	1,611.4
J-1120EX	1,453.0	Desert Wells	0.0	68	1,611.2
J-1130EX	1,445.0	Desert Wells	525.0	68	1,602.4
J-1140	1,433.0	Desert Wells	233.7	72	1,598.6
J-1160EX	1,445.0	Desert Wells	0.0	80	1,630.1
J-1170EX	1,470.0	Desert Wells	0.0	68	1,628.3

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1180EX	1,440.0	Desert Wells	0.0	83	1,631.2
J-1190EX	1,420.0	Desert Wells	0.0	92	1,632.3
J-1200EX	1,445.0	Desert Wells	0.0	81	1,631.1
J-1210EX	1,455.0	Desert Wells	0.0	75	1,628.0
J-1220	1,405.0	Desert Wells	1,362.0	75	1,577.9
J-1220EX	1,475.0	Desert Wells	0.0	64	1,622.8
J-1230EX	1,460.0	Desert Wells	0.0	67	1,615.9
J-1235EX	1,440.0	Desert Wells	0.0	74	1,611.5
J-1240	1,411.0	Desert Wells	1,209.3	73	1,579.1
J-1240EX	1,455.0	Desert Wells	0.0	68	1,612.7
J-1270	1,417.0	Desert Wells	0.0	71	1,581.7
J-1280	1,410.0	Desert Wells	0.0	90	1,618.7
J-1290	1,425.0	Desert Wells	239.4	69	1,584.2
J-1290EX	1,480.0	Desert Wells	0.0	62	1,624.0
J-1300EX	1,465.0	Desert Wells	0.0	71	1,628.0
J-1310EX	1,480.0	Desert Wells	0.0	63	1,624.6
J-1320	1,426.0	Desert Wells	76.2	75	1,599.1
J-1330EX	1,465.0	Desert Wells	0.0	71	1,628.2
J-1340EX	1,450.0	Desert Wells	0.0	78	1,630.1
J-1350EX	1,465.0	Desert Wells	0.0	71	1,628.1
J-1360EX	1,445.0	Desert Wells	0.0	80	1,630.1
J-1370EX	1,430.0	Desert Wells	0.0	87	1,631.1
J-1380EX	1,450.0	Desert Wells	0.0	78	1,630.9
J-1390EX	1,430.0	Desert Wells	0.0	87	1,631.2
J-1400EX	1,430.0	Desert Wells	0.0	87	1,631.2
J-1410	1,454.0	Desert Wells	0.0	69	1,612.8
J-1410EX	1,420.0	Desert Wells	0.0	92	1,632.3
J-1420EX	1,460.0	Desert Wells	0.0	66	1,611.4
J-1430EX	1,455.0	Desert Wells	0.0	68	1,612.7
J-1440EX	1,478.0	Desert Wells	0.0	59	1,614.2
J-1680EX	1,400.0	Desert Wells	0.0	78	1,581.1
J-1990EX	1,447.0	Desert Wells	0.0	71	1,611.5
J-2000EX	1,442.0	Desert Wells	0.0	73	1,611.3
J-2010	1,419.0	Desert Wells	0.0	85	1,616.3
J-2040	1,427.0	Desert Wells	0.0	81	1,614.5
J-2100	1,436.0	Desert Wells	0.0	72	1,602.2
J-2120EX	1,453.0	Desert Wells	0.0	66	1,606.3
J-2140EX	1,446.0	Desert Wells	0.0	68	1,603.4
J-2200	1,414.0	Desert Wells	0.0	84	1,607.1
J-2220	1,410.0	Desert Wells	930.0	74	1,580.4
J-2295	1,415.0	Desert Wells	0.0	82	1,603.5
J-2340EX	1,435.0	Desert Wells	742.8	68	1,591.0
J-DU3-4-010	1,405.0	Desert Wells	414.3	84	1,598.6
J-DU3-4-020	1,401.0	Desert Wells	414.3	84	1,596.2

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU3-4-030	1,397.0	Desert Wells	388.8	86	1,595.7
J-DU3-4-040	1,403.0	Desert Wells	453.9	84	1,596.4
J-DU3-4-050	1,410.0	Desert Wells	76.8	79	1,592.8
J-DU3-4-060	1,408.0	Desert Wells	176.7	78	1,587.7
J-DU3-4-070	1,404.0	Desert Wells	559.8	79	1,586.9
J-DU3-4-080	1,400.0	Desert Wells	559.8	81	1,586.9
J-DU3-4-090	1,393.0	Desert Wells	227.1	84	1,587.7
J-DU3-4-100	1,391.0	Desert Wells	558.3	88	1,595.3
J-DU3-4-110	1,393.0	Desert Wells	423.3	83	1,584.8
J-DU3-4-120	1,393.0	Desert Wells	1,174.5	82	1,582.5
J-DU3-4-130	1,399.0	Desert Wells	523.5	79	1,582.6
J-DU3-4-140	1,404.0	Desert Wells	279.6	78	1,583.3
J-DU3-4-150	1,407.0	Desert Wells	211.8	77	1,585.0
J-DU3-4-160	1,407.0	Desert Wells	0.0	77	1,584.1
J-DU3-4-170	1,412.0	Desert Wells	292.2	75	1,585.0
J-DU3-4-180	1,414.0	Desert Wells	314.4	76	1,590.7
J-DU3-4-190	1,417.0	Desert Wells	98.7	77	1,593.8
J-DU3-4-200	1,412.5	Desert Wells	414.3	81	1,599.9
J-DU3S-010	1,412.0	Desert Wells	30.6	82	1,602.4
J-DU3S-020	1,407.0	Desert Wells	33.0	84	1,601.0
J-DU3S-030	1,401.0	Desert Wells	45.0	86	1,599.9
J-DU3S-040	1,399.0	Desert Wells	33.0	87	1,599.4
J-DU3S-050	1,404.0	Desert Wells	36.3	85	1,599.7
J-DU3S-060	1,410.0	Desert Wells	35.4	82	1,600.6
J-DU3S-070	1,417.0	Desert Wells	21.0	80	1,601.7
J-DU3S-080	1,396.0	Desert Wells	161.7	88	1,598.6
J-DU5E-010	1,435.0	Desert Wells	959.7	67	1,590.0
J-DU5E-020	1,440.0	Desert Wells	742.8	66	1,591.5
J-DU6-010	1,459.0	Desert Wells	0.0	64	1,607.8
J-DU6-020	1,453.0	Desert Wells	2,196.2	66	1,606.2
J-DU6-030	1,450.0	Desert Wells	240.9	67	1,603.8
J-DU6-040	1,440.0	Desert Wells	482.1	71	1,605.0
J-DU6-050	1,448.0	Desert Wells	723.0	69	1,606.4
J-DU6-060	1,458.0	Desert Wells	500.4	66	1,610.9
J-DU6-070	1,452.0	Desert Wells	240.9	69	1,610.7
J-DU6-080	1,446.0	Desert Wells	240.9	70	1,607.0
J-DU6-090	1,435.0	Desert Wells	240.9	74	1,605.6
J-DU7-010	1,415.0	Desert Wells	19.5	81	1,602.1
J-DU7-020	1,425.0	Desert Wells	682.8	75	1,598.1
J-DU7-030	1,416.0	Desert Wells	0.0	79	1,597.6
J-DU7-040	1,409.0	Desert Wells	76.8	81	1,597.0
J-DU7-050	1,416.0	Desert Wells	332.7	79	1,598.8
J-DU7-060	1,423.0	Desert Wells	33.3	77	1,600.4
J-DU7-070	1,430.0	Desert Wells	0.0	75	1,602.3

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Junction Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-080	1,434.0	Desert Wells	412.8	74	1,604.2
J-DU7-090	1,437.0	Desert Wells	0.0	76	1,611.7
J-DU7-100	1,435.0	Desert Wells	86.7	75	1,609.2
J-DU7-110	1,435.0	Desert Wells	86.4	74	1,605.3
J-DU7-120	1,420.0	Desert Wells	0.0	79	1,602.6
J-DU7-130	1,420.0	Desert Wells	7.8	79	1,602.3
J-DU7-140	1,425.0	Desert Wells	149.7	76	1,601.2
J-DU7-150	1,419.0	Desert Wells	48.9	78	1,599.4
J-DU7-160	1,435.0	Desert Wells	72.0	73	1,602.9
J-DU7-170	1,432.0	Desert Wells	32.1	74	1,603.6
J-DU7-180	1,433.0	Desert Wells	56.1	74	1,605.0
J-DU7-190	1,437.0	Desert Wells	90.3	74	1,607.9
J-DU7-200	1,432.0	Desert Wells	152.1	73	1,601.8
J-DU8-010	1,420.0	Desert Wells	0.0	80	1,604.2
J-DU8-020	1,419.5	Desert Wells	0.0	80	1,604.9
J-DU8-030	1,421.0	Desert Wells	0.0	80	1,606.2
J-DU8-040	1,418.0	Desert Wells	20.1	82	1,608.1
J-DU8-050	1,422.0	Desert Wells	0.0	81	1,609.1
J-DU8-060	1,420.0	Desert Wells	27.3	80	1,605.1
J-DU8-070	1,420.0	Desert Wells	46.2	80	1,605.1
J-DU8-080	1,422.0	Desert Wells	13.2	79	1,605.3
J-DU8-090	1,424.0	Desert Wells	33.0	79	1,605.5
J-DU8-100	1,425.0	Desert Wells	27.3	78	1,605.3
J-DU8-110	1,430.0	Desert Wells	130.8	76	1,605.3
J-DU8-120	1,431.0	Desert Wells	51.6	75	1,605.5
J-DU8-130	1,427.0	Desert Wells	63.0	77	1,606.0
J-DU9-010	1,419.0	Desert Wells	59.1	80	1,604.2
J-DU9-020	1,415.0	Desert Wells	109.5	82	1,604.8
J-DU9-030	1,416.0	Desert Wells	99.9	82	1,605.4
J-DU9-040	1,416.0	Desert Wells	23.4	82	1,605.6
J-DU9-050	1,419.0	Desert Wells	0.0	81	1,605.8
J-DU9-060	1,422.0	Desert Wells	94.2	80	1,607.1
J-DU9-070	1,414.0	Desert Wells	95.1	83	1,605.5
J-DU9-080	1,419.0	Desert Wells	115.8	81	1,605.7

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	-1,199.3	1.91	1.014
P-170EX	16.0	5,366.00	120.0	-1,199.3	1.91	1.014
P-180EX	16.0	5,396.00	120.0	1,762.2	2.81	2.067
P-190EX	16.0	5,728.00	120.0	1,762.2	2.81	2.067
P-200EX	16.0	231.00	120.0	-2,677.5	4.27	4.486
P-210EX	16.0	1,388.00	120.0	-1,773.4	2.83	2.092
P-220EX	16.0	2,909.00	120.0	1,263.1	2.02	1.116
P-240EX	16.0	1,387.00	120.0	-3,882.4	6.20	8.927
P-250EX	16.0	2,611.00	120.0	578.8	0.92	0.263
P-310	30.0	4,937.00	120.0	389.2	0.18	0.006
P-340EX	16.0	5,775.00	120.0	-1,199.3	1.91	1.014
P-410EX	16.0	5,368.00	120.0	1,762.2	2.81	2.067
P-630	12.0	710.00	120.0	-384.2	1.09	0.500
P-660	12.0	2,013.00	120.0	-644.4	1.83	1.303
P-970	24.0	1,001.00	120.0	-1,133.4	0.80	0.127
P-980	24.0	1,935.00	120.0	-3,279.9	2.33	0.906
P-1060EX	16.0	1,328.00	120.0	-86.2	0.14	0.008
P-1070EX	16.0	1,243.00	120.0	-939.2	1.50	0.645
P-1390	16.0	727.00	120.0	-460.4	0.73	0.172
P-1400	16.0	1,976.00	120.0	-1,604.0	2.56	1.737
P-1630EX	16.0	1,793.00	120.0	1,666.3	2.66	1.864
P-1640EX	16.0	1,335.00	120.0	3,028.0	4.83	5.634
P-1780	24.0	1,528.00	120.0	-1,133.4	0.80	0.127
P-1790	24.0	1,115.00	120.0	-1,133.4	0.80	0.127
P-1840	12.0	1,001.00	120.0	496.4	1.41	0.803
P-1940EX	16.0	1,976.00	120.0	939.6	1.50	0.645
P-1950EX	16.0	680.00	120.0	410.2	0.65	0.139
P-1970EX	16.0	927.00	120.0	2,204.4	3.52	3.130
P-1980EX	16.0	1,106.00	120.0	1,781.1	2.84	2.109
P-2000EX	16.0	2,710.00	120.0	-1,703.2	2.72	1.941
P-2040EX	16.0	10,635.00	120.0	-995.8	1.59	0.718
P-2055EX	16.0	10,453.00	120.0	448.5	0.72	0.164
P-2070EX	24.0	5,329.00	120.0	-2,830.0	2.01	0.690
P-2500EX	24.0	2,750.00	120.0	2,965.9	2.10	0.752
P-2510EX	24.0	2,726.00	120.0	2,841.6	2.02	0.695
P-2540EX	12.0	2,624.00	120.0	-349.9	0.99	0.420
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.000
P-2655EX	16.0	2,870.00	120.0	-1,199.3	1.91	1.014
P-2660EX	24.0	2,797.00	120.0	4,274.3	3.03	1.480
P-2665EX	16.0	2,716.00	120.0	-1,199.3	1.91	1.014
P-2690EX	16.0	2,914.00	120.0	-666.2	1.06	0.341
P-2700EX	16.0	3,115.00	120.0	-87.3	0.14	0.008
P-2710EX	16.0	1,823.00	120.0	-421.3	0.67	0.146
P-2720EX	12.0	3,042.00	120.0	-334.0	0.95	0.386

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2800	24.0	5,786.00	120.0	5,575.4	3.95	2.421
P-2830	16.0	2,890.00	120.0	778.0	1.24	0.455
P-2860	12.0	1,164.00	120.0	-573.4	1.63	1.049
P-2860EX	24.0	761.00	120.0	4,274.3	3.03	1.480
P-2870	16.0	643.00	120.0	764.1	1.22	0.440
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.000
P-2890	12.0	992.00	120.0	-929.8	2.64	2.569
P-2890EX	8.0	3,148.00	120.0	-219.9	1.40	1.282
P-2900	24.0	1,423.00	120.0	3,837.3	2.72	1.212
P-2910EX	24.0	497.00	120.0	4,054.4	2.88	1.342
P-2930	12.0	1,167.00	120.0	369.9	1.05	0.466
P-2950	12.0	1,089.00	120.0	124.4	0.35	0.062
P-2960	12.0	1,277.00	120.0	891.3	2.53	2.375
P-2970EX	12.0	1,119.00	120.0	206.2	0.59	0.158
P-2990EX	8.0	2,811.00	120.0	-158.3	1.01	0.697
P-3010EX	12.0	471.00	120.0	219.9	0.62	0.178
P-3020EX	12.0	1,167.00	120.0	47.9	0.14	0.011
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.000
P-3040	12.0	1,135.00	120.0	972.8	2.76	2.793
P-3040EX	8.0	3,081.00	120.0	-154.2	0.98	0.665
P-3060	12.0	595.00	120.0	0.0	0.00	0.000
P-3070EX	8.0	2,922.00	120.0	-106.4	0.68	0.334
P-3080EX	12.0	1,397.00	120.0	-342.2	0.97	0.403
P-3090EX	12.0	1,109.00	120.0	-273.2	0.77	0.266
P-3100EX	12.0	695.00	120.0	76.7	0.22	0.025
P-3110EX	12.0	664.00	120.0	7.8	0.02	0.000
P-3120EX	8.0	1,851.00	120.0	-69.0	0.44	0.150
P-3130	12.0	1,155.00	120.0	106.4	0.30	0.046
P-3140EX	16.0	1,783.00	120.0	98.6	0.16	0.010
P-3150	12.0	779.00	120.0	896.6	2.54	2.401
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.000
P-3160EX	8.0	3,801.00	120.0	-98.6	0.63	0.290
P-3170EX	8.0	2,838.00	120.0	-217.1	1.39	1.252
P-3180EX	8.0	736.00	120.0	65.6	0.42	0.137
P-3190EX	30.0	4,441.00	120.0	7,260.3	3.30	1.332
P-3200	30.0	814.00	120.0	7,260.3	3.30	1.332
P-3240EX	16.0	1,954.00	120.0	373.5	0.60	0.117
P-3250EX	12.0	844.00	120.0	-684.2	1.94	1.456
P-3260EX	16.0	1,108.00	120.0	1,263.1	2.02	1.116
P-3270EX	16.0	1,509.00	120.0	865.2	1.38	0.554
P-3280EX	12.0	2,890.00	120.0	-397.8	1.13	0.533
P-3290EX	12.0	2,432.00	120.0	286.4	0.81	0.290
P-3930EX	16.0	751.00	120.0	-86.2	0.14	0.008
P-3940EX	16.0	509.00	120.0	-86.2	0.14	0.008

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-3970EX	16.0	1,445.00	120.0	86.2	0.14	0.008
P-4090	12.0	1,276.00	120.0	788.6	2.24	1.893
P-4720EX	16.0	1,216.00	120.0	442.5	0.71	0.160
P-4730EX	16.0	456.00	120.0	442.5	0.71	0.160
P-4750EX	16.0	715.00	120.0	442.5	0.71	0.160
P-4760EX	16.0	774.00	120.0	-614.7	0.98	0.294
P-4780	24.0	1,020.00	120.0	-3,279.9	2.33	0.906
P-4790EX	16.0	1,816.00	120.0	-280.8	0.45	0.069
P-4860	24.0	986.00	120.0	3,279.9	2.33	0.906
P-4870	24.0	620.00	120.0	3,279.9	2.33	0.906
P-5280	12.0	949.00	120.0	302.7	0.86	0.321
P-5290	12.0	977.00	120.0	-627.3	1.78	1.239
P-5510	12.0	1,886.00	120.0	651.9	1.85	1.331
P-5540	12.0	2,100.00	120.0	-1,037.7	2.94	3.148
P-5560	12.0	927.00	120.0	-853.0	2.42	2.189
P-5570	12.0	1,841.00	120.0	-430.3	1.22	0.617
P-5620	16.0	1,146.00	120.0	486.2	0.78	0.190
P-5700EX	16.0	1,176.00	120.0	2,189.2	3.49	3.090
P-5710EX	16.0	1,171.00	120.0	2,189.2	3.49	3.090
P-5720	12.0	696.00	120.0	644.5	1.83	1.303
P-5730	12.0	955.00	120.0	354.1	1.00	0.430
P-5740	24.0	2,671.00	120.0	3,279.9	2.33	0.906
P-5760	12.0	1,545.00	120.0	-878.2	2.49	2.311
P-5770	16.0	353.00	120.0	-787.0	1.26	0.465
P-5780	16.0	684.00	120.0	-787.0	1.26	0.464
P-5790	12.0	884.00	120.0	-878.2	2.49	2.311
P-6030	12.0	162.00	120.0	904.1	2.56	2.439
P-6064	16.0	846.00	120.0	-2,295.5	3.66	3.373
P-6065	16.0	3,443.00	120.0	-2,295.5	3.66	3.373
P-6070	16.0	247.00	120.0	-2,109.6	3.37	2.885
P-6160	36.0	932.00	120.0	13,208.0	4.16	1.660
P-6161	36.0	820.00	120.0	13,208.0	4.16	1.660
P-6162	36.0	862.00	120.0	8,536.9	2.69	0.740
P-6163	36.0	895.00	120.0	8,536.9	2.69	0.740
P-6166	16.0	900.00	120.0	-2,594.5	4.14	4.232
P-6167EX	16.0	1,381.00	120.0	-3,710.7	5.92	8.210
P-6171	16.0	3,164.00	120.0	2,887.3	4.61	5.159
P-7000	16.0	742.00	120.0	-1,683.6	2.69	1.900
P-COMWTREX	36.0	10.00	120.0	4,274.3	1.35	0.208
P-DU-3-4-070	12.0	734.00	120.0	-1,590.7	4.51	6.944
P-DU-3-4-080	12.0	913.00	120.0	-523.1	1.48	0.885
P-DU-3-4-090	12.0	1,401.00	120.0	36.7	0.10	0.006
P-DU-3-4-100	12.0	717.00	120.0	-596.5	1.69	1.129
P-DU-3-4-110	16.0	597.00	120.0	-333.0	0.53	0.094

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU-3-4-120	16.0	1,375.00	120.0	-856.5	1.37	0.543
P-DU-3-4-130	12.0	1,165.00	120.0	-679.2	1.93	1.436
P-DU-3S-130	16.0	1,385.00	120.0	-1,510.0	2.41	1.553
P-DU3-4-010	12.0	1,834.00	120.0	-645.7	1.83	1.307
P-DU3-4-020	24.0	1,370.00	120.0	-1,920.0	1.36	0.336
P-DU3-4-030	24.0	1,035.00	120.0	-2,308.8	1.64	0.473
P-DU3-4-040	24.0	496.00	120.0	-2,077.5	1.47	0.389
P-DU3-4-050	24.0	1,092.00	120.0	-2,531.4	1.80	0.561
P-DU3-4-060	12.0	553.00	120.0	-1,667.5	4.73	7.578
P-DU3-4-160	12.0	1,157.00	120.0	-891.0	2.53	2.374
P-DU3-4-170	16.0	937.00	120.0	-1,101.3	1.76	0.866
P-DU3-4-180	16.0	1,045.00	120.0	-1,101.3	1.76	0.866
P-DU3-4-190	16.0	1,019.00	120.0	-2,997.5	4.78	5.529
P-DU3-4-200	16.0	958.00	120.0	-2,274.3	3.63	3.316
P-DU3-4-210	16.0	1,373.00	120.0	-2,373.0	3.79	3.587
P-DU3S-010	8.0	261.00	120.0	426.0	2.72	4.362
P-DU3S-020	8.0	1,374.00	120.0	193.2	1.23	1.008
P-DU3S-030	8.0	1,542.00	120.0	160.2	1.02	0.713
P-DU3S-040	8.0	1,242.00	120.0	115.2	0.74	0.387
P-DU3S-050	8.0	801.00	120.0	-191.7	1.22	0.994
P-DU3S-060	8.0	974.00	120.0	-109.5	0.70	0.353
P-DU3S-070	8.0	1,384.00	120.0	-145.8	0.93	0.599
P-DU3S-080	8.0	1,241.00	120.0	-181.2	1.16	0.896
P-DU3S-090	8.0	621.00	120.0	-202.2	1.29	1.097
P-DU3S-100	16.0	1,114.00	130.0	65.8	0.10	0.004
P-DU3S-110	16.0	1,525.00	130.0	-35.8	0.06	0.001
P-DU3S-120	16.0	1,560.00	120.0	-1,095.7	1.75	0.858
P-DU5E-010	12.0	2,201.00	120.0	-373.4	1.06	0.474
P-DU5E-020	12.0	1,392.00	120.0	586.3	1.66	1.094
P-DU5E-030	12.0	2,181.00	120.0	1,329.1	3.77	4.979
P-DU6-010	12.0	1,163.00	120.0	668.1	1.90	1.393
P-DU6-020	16.0	124.00	120.0	1,204.8	1.92	1.022
P-DU6-030	12.0	1,388.00	120.0	747.7	2.12	1.716
P-DU6-040	12.0	2,188.00	120.0	397.3	1.13	0.532
P-DU6-050	12.0	2,203.00	120.0	-166.8	0.47	0.107
P-DU6-060	12.0	2,209.00	120.0	668.1	1.90	1.393
P-DU6-070	16.0	142.00	120.0	2,499.9	3.99	3.951
P-DU6-080	12.0	1,130.00	120.0	1,172.7	3.33	3.948
P-DU6-090	12.0	1,397.00	120.0	570.5	1.62	1.040
P-DU6-100	12.0	1,966.00	120.0	308.9	0.88	0.334
P-DU6-110	12.0	1,963.00	120.0	-287.6	0.82	0.292
P-DU6-120	12.0	1,955.00	120.0	-158.7	0.45	0.097
P-DU6-130	12.0	135.00	120.0	1,160.5	3.29	3.872
P-DU6-140	12.0	1,094.00	120.0	1,078.3	3.06	3.380

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU6-150	12.0	1,411.00	120.0	549.8	1.56	0.971
P-DU6-160	16.0	211.00	120.0	904.2	1.44	0.601
P-DU7-010	12.0	1,169.00	120.0	1,078.6	3.06	3.382
P-DU7-020	12.0	1,092.00	120.0	-395.8	1.12	0.528
P-DU7-030	12.0	1,044.00	120.0	-395.8	1.12	0.528
P-DU7-040	24.0	1,410.00	120.0	-3,879.9	2.75	1.237
P-DU7-050	24.0	1,075.00	120.0	-4,324.5	3.07	1.513
P-DU7-060	24.0	1,254.00	120.0	-4,357.8	3.09	1.534
P-DU7-070	24.0	992.00	120.0	-4,898.3	3.47	1.905
P-DU7-080	24.0	2,552.00	120.0	-6,189.3	4.39	2.938
P-DU7-090	16.0	941.00	120.0	-2,019.8	3.22	2.662
P-DU7-100	16.0	1,562.00	120.0	-1,933.1	3.08	2.454
P-DU7-110	16.0	1,742.00	120.0	-1,522.9	2.43	1.578
P-DU7-120	16.0	778.00	120.0	924.5	1.48	0.626
P-DU7-130	20.0	317.00	120.0	-2,048.3	2.09	0.921
P-DU7-140	20.0	1,207.00	120.0	-2,040.5	2.08	0.915
P-DU7-150	20.0	1,514.00	120.0	-2,310.0	2.36	1.151
P-DU7-160	20.0	619.00	120.0	-2,261.1	2.31	1.106
P-DU7-170	12.0	1,073.00	130.0	432.2	1.23	0.536
P-DU7-180	12.0	828.00	120.0	-504.2	1.43	0.827
P-DU7-190	12.0	399.00	120.0	-1,107.6	3.14	3.552
P-DU7-200	12.0	2,378.00	120.0	-196.8	0.56	0.145
P-DU7-210	12.0	1,049.00	120.0	-1,057.2	3.00	3.259
P-DU7-220	12.0	1,054.00	120.0	-966.9	2.74	2.762
P-DU7-230	12.0	1,714.00	120.0	-571.3	1.62	1.042
P-DU7-240	12.0	1,014.00	120.0	-419.2	1.19	0.588
P-DU8-010	16.0	1,107.00	120.0	-1,449.9	2.31	1.440
P-DU8-020	16.0	714.00	120.0	-1,210.0	1.93	1.030
P-DU8-030	16.0	1,312.00	120.0	-1,178.5	1.88	0.981
P-DU8-040	16.0	1,371.00	120.0	-1,409.7	2.25	1.367
P-DU8-050	16.0	520.00	120.0	-1,706.8	2.72	1.948
P-DU8-060	16.0	1,021.00	120.0	-2,146.6	3.43	2.979
P-DU8-070	8.0	542.00	120.0	-103.3	0.66	0.316
P-DU8-080	8.0	253.00	120.0	-29.3	0.19	0.030
P-DU8-090	8.0	1,138.00	120.0	-75.5	0.48	0.176
P-DU8-100	12.0	599.00	120.0	126.9	0.36	0.064
P-DU8-110	12.0	709.00	120.0	21.1	0.06	0.002
P-DU8-120	8.0	678.00	120.0	-101.3	0.65	0.305
P-DU8-130	8.0	1,315.00	120.0	3.0	0.02	0.000
P-DU8-140	8.0	966.00	120.0	-93.4	0.60	0.263
P-DU8-150	6.0	737.00	130.0	91.8	1.04	0.890
P-DU8-160	8.0	1,265.00	120.0	80.6	0.51	0.200
P-DU8-170	8.0	2,613.00	120.0	-47.2	0.30	0.074
P-DU8-180	8.0	1,778.00	120.0	-98.8	0.63	0.291

Active Scenario: Peak Hour Demand, Served by DWGWF
FlexTable: Pipe Table
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU8-190	8.0	1,185.00	120.0	115.2	0.74	0.387
P-DU8-200	8.0	1,054.00	120.0	277.0	1.77	1.966
P-DU9-010	16.0	904.00	120.0	185.9	0.30	0.032
P-DU9-020	16.0	227.00	120.0	239.9	0.38	0.051
P-DU9-030	8.0	1,616.00	120.0	-113.1	0.72	0.374
P-DU9-040	8.0	746.00	120.0	-71.8	0.46	0.161
P-DU9-050	8.0	869.00	120.0	-150.8	0.96	0.637
P-DU9-060	8.0	1,550.00	120.0	-139.4	0.89	0.551
P-DU9-070	8.0	1,001.00	120.0	-81.3	0.52	0.203
P-DU9-080	8.0	644.00	120.0	-104.7	0.67	0.324
P-DU9-090	8.0	3,092.00	120.0	-30.0	0.19	0.032
P-DU9-100	8.0	1,619.00	120.0	-79.1	0.51	0.193
P-DU9-110	8.0	3,057.00	120.0	-46.0	0.29	0.071
P-DU9-120	8.0	901.00	120.0	57.6	0.37	0.107
P-DU9-130	8.0	879.00	120.0	-241.4	1.54	1.524
P-DU9-140	8.0	430.00	120.0	-439.8	2.81	4.628
P-DU9-150	8.0	4,471.00	120.0	-104.2	0.66	0.321

Active Scenario: Max Day + Fire Flow, Served by DWGWF
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-100EX	Desert Wells	1,406.0	True	3,000.0	5,000.0	72	62	J-220EX
J-110EX	Desert Wells	1,440.0	True	3,000.0	5,000.0	61	62	J-220EX
J-120EX	Desert Wells	1,462.0	True	3,000.0	5,000.0	70	61	J-220EX
J-135EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	67	61	J-220EX
J-150EX	Desert Wells	1,472.0	True	3,000.0	5,000.0	61	61	J-220EX
J-160EX	Desert Wells	1,435.0	True	3,000.0	5,000.0	67	63	J-280EX
J-170EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	72	64	J-1010EX
J-180EX	Desert Wells	1,410.0	True	3,000.0	5,000.0	95	64	J-1010EX
J-190EX	Desert Wells	1,395.0	True	3,000.0	5,000.0	86	64	J-1010EX
J-200EX	Desert Wells	1,385.0	True	3,000.0	5,000.0	86	63	J-220EX
J-220EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	56	58	J-1440EX
J-230EX	Desert Wells	1,475.0	True	3,000.0	5,000.0	58	59	J-1440EX
J-250EX	Desert Wells	1,452.0	True	4,079.0	5,000.0	72	61	J-220EX
J-260EX	Desert Wells	1,453.0	True	3,000.0	5,000.0	69	61	J-220EX
J-270	Desert Wells	1,429.0	True	3,000.0	5,000.0	81	62	J-220EX
J-280EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	56	62	J-1230EX
J-300EX	Desert Wells	1,392.0	True	4,107.8	5,000.0	89	62	J-220EX
J-320	Desert Wells	1,422.0	True	3,000.0	5,000.0	84	62	J-220EX
J-330EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	68	62	J-220EX
J-340	Desert Wells	1,440.0	True	3,000.0	5,000.0	76	62	J-220EX
J-360EX	Desert Wells	1,400.0	True	3,000.0	5,000.0	77	62	J-220EX
J-370	Desert Wells	1,405.0	True	4,348.2	5,000.0	73	62	J-220EX
J-380	Desert Wells	1,414.0	True	3,344.2	5,000.0	71	62	J-220EX
J-390	Desert Wells	1,405.0	True	4,218.2	5,000.0	74	62	J-220EX
J-460	Desert Wells	1,423.0	True	3,142.0	5,000.0	69	62	J-220EX
J-480	Desert Wells	1,429.0	True	3,193.6	5,000.0	60	62	J-220EX
J-550	Desert Wells	1,425.0	True	3,000.0	5,000.0	83	62	J-220EX
J-590EX	Desert Wells	1,410.0	True	3,000.0	5,000.0	72	62	J-110EX
J-750	Desert Wells	1,415.0	True	4,344.2	5,000.0	71	62	J-220EX
J-920	Desert Wells	1,434.0	True	3,000.0	5,000.0	79	62	J-220EX
J-950	Desert Wells	1,414.0	True	3,000.0	5,000.0	83	62	J-220EX
J-960EX	Desert Wells	1,401.0	True	3,000.0	5,000.0	74	62	J-220EX
J-970EX	Desert Wells	1,397.0	True	3,106.4	5,000.0	79	62	J-220EX
J-1000EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	75	62	J-1010EX
J-1010EX	Desert Wells	1,485.0	True	3,000.0	5,000.0	61	63	J-220EX
J-1020EX	Desert Wells	1,425.0	True	3,000.0	5,000.0	71	63	J-1010EX
J-1030EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	67	64	J-1010EX
J-1040EX	Desert Wells	1,433.0	True	3,000.0	5,000.0	66	62	J-220EX
J-1050EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	72	62	J-220EX
J-1120EX	Desert Wells	1,453.0	True	3,000.0	5,000.0	69	61	J-220EX
J-1130EX	Desert Wells	1,445.0	True	4,350.0	6,000.0	65	60	J-220EX
J-1140	Desert Wells	1,433.0	True	4,155.8	5,000.0	57	62	J-220EX
J-1160EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	47	57	J-1360EX

Active Scenario: Max Day + Fire Flow, Served by DWGWF
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-1170EX	Desert Wells	1,470.0	True	3,000.0	5,000.0	68	62	J-1010EX
J-1180EX	Desert Wells	1,440.0	True	3,000.0	5,000.0	67	63	J-1010EX
J-1190EX	Desert Wells	1,420.0	True	3,000.0	5,000.0	59	63	J-1010EX
J-1200EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	26	47	J-1370EX
J-1210EX	Desert Wells	1,455.0	True	3,000.0	4,886.1	20	25	J-1300EX
J-1220	Desert Wells	1,405.0	True	3,908.0	5,000.0	62	62	J-220EX
J-1220EX	Desert Wells	1,475.0	True	3,000.0	5,000.0	65	62	J-1010EX
J-1230EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	59	62	J-280EX
J-1235EX	Desert Wells	1,440.0	True	3,000.0	5,000.0	74	62	J-220EX
J-1240	Desert Wells	1,411.0	True	4,806.2	5,000.0	67	62	J-110EX
J-1240EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	67	61	J-220EX
J-1270	Desert Wells	1,417.0	True	3,000.0	5,000.0	71	61	J-110EX
J-1280	Desert Wells	1,410.0	True	3,000.0	5,000.0	91	63	J-220EX
J-1290	Desert Wells	1,425.0	True	3,159.6	5,000.0	58	62	J-220EX
J-1290EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	63	62	J-1010EX
J-1300EX	Desert Wells	1,465.0	True	3,000.0	5,000.0	23	27	J-1210EX
J-1310EX	Desert Wells	1,480.0	True	3,000.0	5,000.0	63	61	J-1010EX
J-1320	Desert Wells	1,426.0	True	3,050.8	5,000.0	68	62	J-220EX
J-1330EX	Desert Wells	1,465.0	True	3,000.0	5,000.0	60	62	J-1010EX
J-1340EX	Desert Wells	1,450.0	True	3,000.0	5,000.0	65	62	J-1010EX
J-1350EX	Desert Wells	1,465.0	True	3,000.0	5,000.0	28	29	J-1300EX
J-1360EX	Desert Wells	1,445.0	True	3,000.0	5,000.0	57	57	J-1160EX
J-1370EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	47	41	J-1200EX
J-1380EX	Desert Wells	1,450.0	True	3,000.0	5,000.0	65	63	J-1010EX
J-1390EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	67	63	J-1200EX
J-1400EX	Desert Wells	1,430.0	True	3,000.0	5,000.0	61	56	J-1200EX
J-1410	Desert Wells	1,454.0	True	3,000.0	5,000.0	71	61	J-220EX
J-1410EX	Desert Wells	1,420.0	True	3,000.0	5,000.0	65	63	J-1010EX
J-1420EX	Desert Wells	1,460.0	True	3,000.0	5,000.0	66	61	J-220EX
J-1430EX	Desert Wells	1,455.0	True	3,000.0	5,000.0	64	60	J-1440EX
J-1440EX	Desert Wells	1,478.0	True	3,000.0	5,000.0	57	58	J-220EX
J-1680EX	Desert Wells	1,400.0	True	3,000.0	5,000.0	75	62	J-220EX
J-1990EX	Desert Wells	1,447.0	True	3,000.0	5,000.0	71	61	J-220EX
J-2000EX	Desert Wells	1,442.0	True	3,000.0	5,000.0	73	62	J-220EX
J-2010	Desert Wells	1,419.0	True	3,000.0	5,000.0	86	62	J-220EX
J-2040	Desert Wells	1,427.0	True	3,000.0	5,000.0	82	62	J-220EX
J-2100	Desert Wells	1,436.0	True	3,000.0	5,000.0	63	62	J-220EX
J-2120EX	Desert Wells	1,453.0	True	3,000.0	5,000.0	66	61	J-220EX
J-2140EX	Desert Wells	1,446.0	True	3,000.0	5,000.0	68	61	J-220EX
J-2200	Desert Wells	1,414.0	True	3,000.0	5,000.0	83	62	J-220EX
J-2220	Desert Wells	1,410.0	True	3,620.0	5,000.0	66	62	J-220EX
J-2295	Desert Wells	1,415.0	True	3,000.0	5,000.0	83	62	J-220EX
J-2340EX	Desert Wells	1,435.0	True	4,495.2	6,000.0	63	60	J-220EX

Active Scenario: Max Day + Fire Flow, Served by DWGWF
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-DU3-4-010	Desert Wells	1,405.0	True	3,276.2	5,000.0	83	62	J-220EX
J-DU3-4-020	Desert Wells	1,401.0	True	3,276.2	5,000.0	86	62	J-220EX
J-DU3-4-030	Desert Wells	1,397.0	True	4,259.2	5,000.0	88	62	J-220EX
J-DU3-4-040	Desert Wells	1,403.0	True	4,302.6	5,000.0	86	62	J-220EX
J-DU3-4-050	Desert Wells	1,410.0	True	3,051.2	5,000.0	76	62	J-220EX
J-DU3-4-060	Desert Wells	1,408.0	True	4,117.8	5,000.0	74	62	J-220EX
J-DU3-4-070	Desert Wells	1,404.0	True	4,373.2	5,000.0	69	62	J-220EX
J-DU3-4-080	Desert Wells	1,400.0	True	4,373.2	5,000.0	73	62	J-220EX
J-DU3-4-090	Desert Wells	1,393.0	True	4,151.4	5,000.0	85	62	J-220EX
J-DU3-4-100	Desert Wells	1,391.0	True	4,372.2	5,000.0	90	62	J-220EX
J-DU3-4-110	Desert Wells	1,393.0	True	4,282.2	5,000.0	83	62	J-220EX
J-DU3-4-120	Desert Wells	1,393.0	True	4,783.0	5,000.0	82	62	J-220EX
J-DU3-4-130	Desert Wells	1,399.0	True	4,349.0	5,000.0	79	62	J-220EX
J-DU3-4-140	Desert Wells	1,404.0	True	4,186.4	5,000.0	78	62	J-220EX
J-DU3-4-150	Desert Wells	1,407.0	True	4,141.2	5,000.0	70	62	J-220EX
J-DU3-4-160	Desert Wells	1,407.0	True	3,000.0	5,000.0	76	62	J-220EX
J-DU3-4-170	Desert Wells	1,412.0	True	4,194.8	5,000.0	76	62	J-220EX
J-DU3-4-180	Desert Wells	1,414.0	True	4,209.6	5,000.0	77	62	J-220EX
J-DU3-4-190	Desert Wells	1,417.0	True	4,065.8	5,000.0	76	62	J-220EX
J-DU3-4-200	Desert Wells	1,412.5	True	3,276.2	5,000.0	80	62	J-220EX
J-DU3S-010	Desert Wells	1,412.0	True	3,020.4	5,000.0	56	56	J-DU3S-070
J-DU3S-020	Desert Wells	1,407.0	True	3,022.0	3,707.3	20	52	J-DU3S-030
J-DU3S-030	Desert Wells	1,401.0	True	3,030.0	3,742.6	20	50	J-DU3S-020
J-DU3S-040	Desert Wells	1,399.0	True	3,022.0	5,000.0	35	43	J-DU3S-050
J-DU3S-050	Desert Wells	1,404.0	True	3,024.2	3,832.5	20	43	J-DU3S-060
J-DU3S-060	Desert Wells	1,410.0	True	3,023.6	3,505.2	20	53	J-DU3S-050
J-DU3S-070	Desert Wells	1,417.0	True	3,014.0	4,267.0	20	39	J-DU3S-060
J-DU3S-080	Desert Wells	1,396.0	True	4,107.8	5,000.0	87	62	J-220EX
J-DU5E-010	Desert Wells	1,435.0	True	4,639.8	6,000.0	33	43	J-DU5E-020
J-DU5E-020	Desert Wells	1,440.0	True	4,495.2	6,000.0	32	44	J-DU5E-010
J-DU6-010	Desert Wells	1,459.0	True	3,000.0	5,000.0	55	61	J-220EX
J-DU6-020	Desert Wells	1,453.0	True	6,196.2	7,000.0	61	59	J-220EX
J-DU6-030	Desert Wells	1,450.0	True	4,160.6	5,000.0	65	61	J-220EX
J-DU6-040	Desert Wells	1,440.0	True	4,321.4	5,000.0	64	61	J-220EX
J-DU6-050	Desert Wells	1,448.0	True	4,482.0	5,000.0	66	61	J-220EX
J-DU6-060	Desert Wells	1,458.0	True	4,500.4	5,000.0	67	61	J-220EX
J-DU6-070	Desert Wells	1,452.0	True	4,160.6	5,000.0	68	61	J-220EX
J-DU6-080	Desert Wells	1,446.0	True	4,160.6	5,000.0	64	61	J-220EX
J-DU6-090	Desert Wells	1,435.0	True	4,160.6	5,000.0	59	61	J-220EX
J-DU7-010	Desert Wells	1,415.0	True	4,013.0	5,000.0	82	62	J-220EX
J-DU7-020	Desert Wells	1,425.0	True	3,455.2	5,000.0	66	62	J-220EX
J-DU7-030	Desert Wells	1,416.0	True	3,000.0	5,000.0	71	62	J-220EX
J-DU7-040	Desert Wells	1,409.0	True	3,051.2	5,000.0	84	62	J-220EX

Active Scenario: Max Day + Fire Flow, Served by DWGWF
Fire Flow Node FlexTable: Fire Flow Report
(144173_EM Water Model-04-08-14.wtg)

Current Time: 0.000 hours

Label	Zone	Elevation (ft)	Satisfies FF?	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)
J-DU7-050	Desert Wells	1,416.0	True	4,221.8	5,000.0	82	62	J-220EX
J-DU7-060	Desert Wells	1,423.0	True	3,022.2	5,000.0	79	62	J-220EX
J-DU7-070	Desert Wells	1,430.0	True	3,000.0	5,000.0	77	62	J-220EX
J-DU7-080	Desert Wells	1,434.0	True	3,275.2	5,000.0	76	62	J-220EX
J-DU7-090	Desert Wells	1,437.0	True	3,000.0	5,000.0	78	62	J-220EX
J-DU7-100	Desert Wells	1,435.0	True	3,057.8	5,000.0	76	62	J-220EX
J-DU7-110	Desert Wells	1,435.0	True	3,057.6	5,000.0	75	62	J-220EX
J-DU7-120	Desert Wells	1,420.0	True	3,000.0	5,000.0	81	62	J-220EX
J-DU7-130	Desert Wells	1,420.0	True	4,005.2	5,000.0	81	62	J-220EX
J-DU7-140	Desert Wells	1,425.0	True	4,099.8	5,000.0	78	62	J-220EX
J-DU7-150	Desert Wells	1,419.0	True	4,032.6	5,000.0	80	62	J-220EX
J-DU7-160	Desert Wells	1,435.0	True	3,048.0	5,000.0	68	62	J-220EX
J-DU7-170	Desert Wells	1,432.0	True	3,021.4	5,000.0	72	62	J-220EX
J-DU7-180	Desert Wells	1,433.0	True	3,037.4	5,000.0	72	62	J-220EX
J-DU7-190	Desert Wells	1,437.0	True	3,060.2	5,000.0	68	62	J-220EX
J-DU7-200	Desert Wells	1,432.0	True	3,101.4	5,000.0	67	62	J-220EX
J-DU8-010	Desert Wells	1,420.0	True	3,000.0	5,000.0	81	62	J-220EX
J-DU8-020	Desert Wells	1,419.5	True	3,000.0	5,000.0	81	62	J-220EX
J-DU8-030	Desert Wells	1,421.0	True	3,000.0	5,000.0	80	62	J-220EX
J-DU8-040	Desert Wells	1,418.0	True	3,013.4	5,000.0	82	62	J-220EX
J-DU8-050	Desert Wells	1,422.0	True	3,000.0	5,000.0	81	62	J-220EX
J-DU8-060	Desert Wells	1,420.0	True	3,018.2	5,000.0	61	62	J-220EX
J-DU8-070	Desert Wells	1,420.0	True	3,030.8	5,000.0	46	62	J-220EX
J-DU8-080	Desert Wells	1,422.0	True	3,008.8	5,000.0	68	62	J-220EX
J-DU8-090	Desert Wells	1,424.0	True	3,022.0	5,000.0	52	62	J-DU8-120
J-DU8-100	Desert Wells	1,425.0	True	3,018.2	5,000.0	73	62	J-220EX
J-DU8-110	Desert Wells	1,430.0	True	3,087.2	5,000.0	24	47	J-DU8-120
J-DU8-120	Desert Wells	1,431.0	True	3,034.4	3,216.0	20	63	J-220EX
J-DU8-130	Desert Wells	1,427.0	True	3,042.0	5,000.0	33	44	J-DU8-120
J-DU9-010	Desert Wells	1,419.0	True	3,039.4	5,000.0	81	62	J-220EX
J-DU9-020	Desert Wells	1,415.0	True	4,073.0	5,000.0	56	62	J-220EX
J-DU9-030	Desert Wells	1,416.0	True	4,066.6	5,000.0	48	57	J-DU9-040
J-DU9-040	Desert Wells	1,416.0	True	3,015.6	4,684.6	20	50	J-DU9-050
J-DU9-050	Desert Wells	1,419.0	True	3,000.0	5,000.0	30	36	J-DU9-080
J-DU9-060	Desert Wells	1,422.0	True	3,062.8	5,000.0	43	54	J-DU9-080
J-DU9-070	Desert Wells	1,414.0	True	3,063.4	4,076.1	20	53	J-DU9-080
J-DU9-080	Desert Wells	1,419.0	True	3,077.2	4,122.5	20	52	J-DU9-050

PLATE 1

Vicinity Map

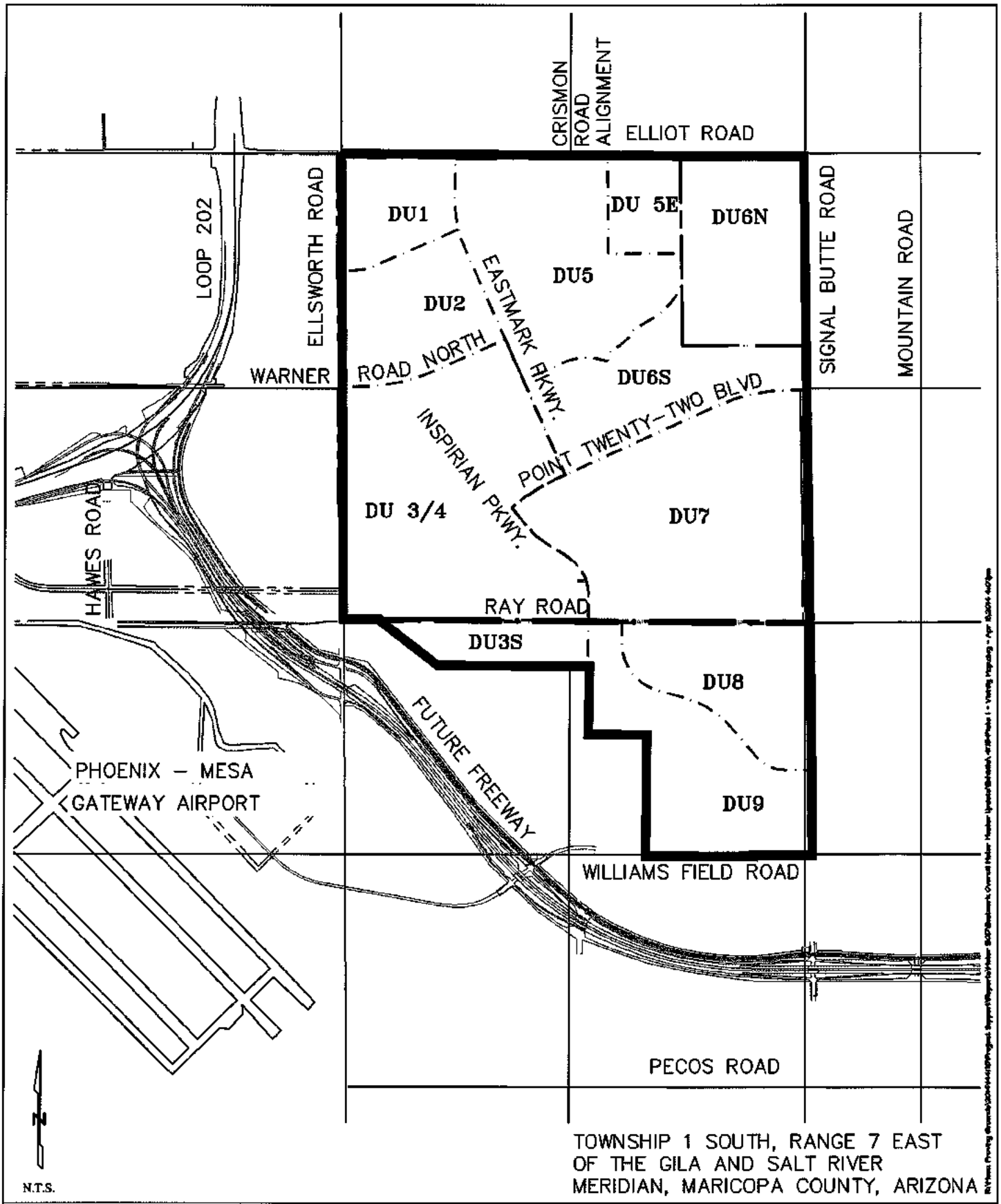

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PLATE 1: VICINITY MAP

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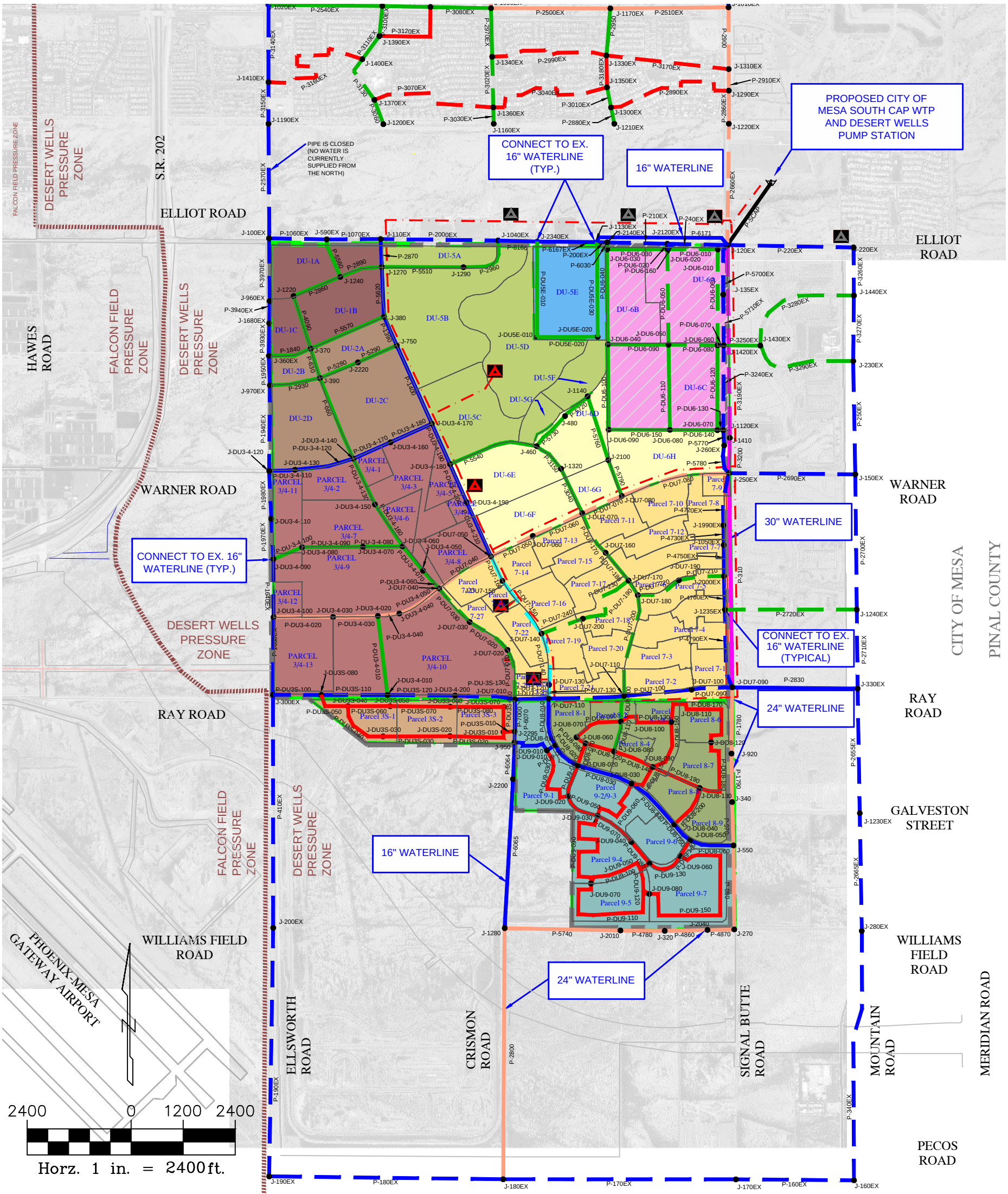
PLATE 2

Master Water Exhibit – Full Build-Out (Served by SCAP)



LEGEND

NOTES:
1. INFRASTRUCTURE SIZES AND LOCATIONS ARE CONCEPTUAL AND SUBJECT TO CHANGE.

PIPE DIAMETER	EXISTING	PLANNED
8-INCHES		
12-INCHES		
16-INCHES		
20-INCHES		
24-INCHES		
30-INCHES		
WELL SITE		
WELL COLLECTION LINE		
PRESSURE ZONE BOUNDARY		

●	JUNCTION NODE
	WATER SOURCE
P-XXX	PROPOSED PIPE
P-XXXEX	EXISTING PIPE
J-XXX	JUNCTION NODE (PROPOSED)
J-XXXEX	JUNCTION NODE (EXIST.)
MODELED PRESSURE ZONE :	DESERT WELLS

ON-SITE DEVELOPMENT UNITS

DU-1	DU-5E	DU-9
DU-2	DU-6N	
DU-3S	DU-6S	
DU-3/4	DU-7	
DU-5	DU-8	

DU-4A DEVELOPMENT UNIT SUB-AREA

SITE BOUNDARY

FIRST SOLAR SITE

R:\Mesa Proving Grounds\2014\144173\Project Support\Reports\Water BOD\Eastmark Overall Water Master Update\WaterCAD\144173_EM Water Model-04-08-14.dwg - Apr 15,2014 4:11pm

PLATE 2 - MASTER WATER EXHIBIT - FULL BUILD OUT SERVED BY SCAP

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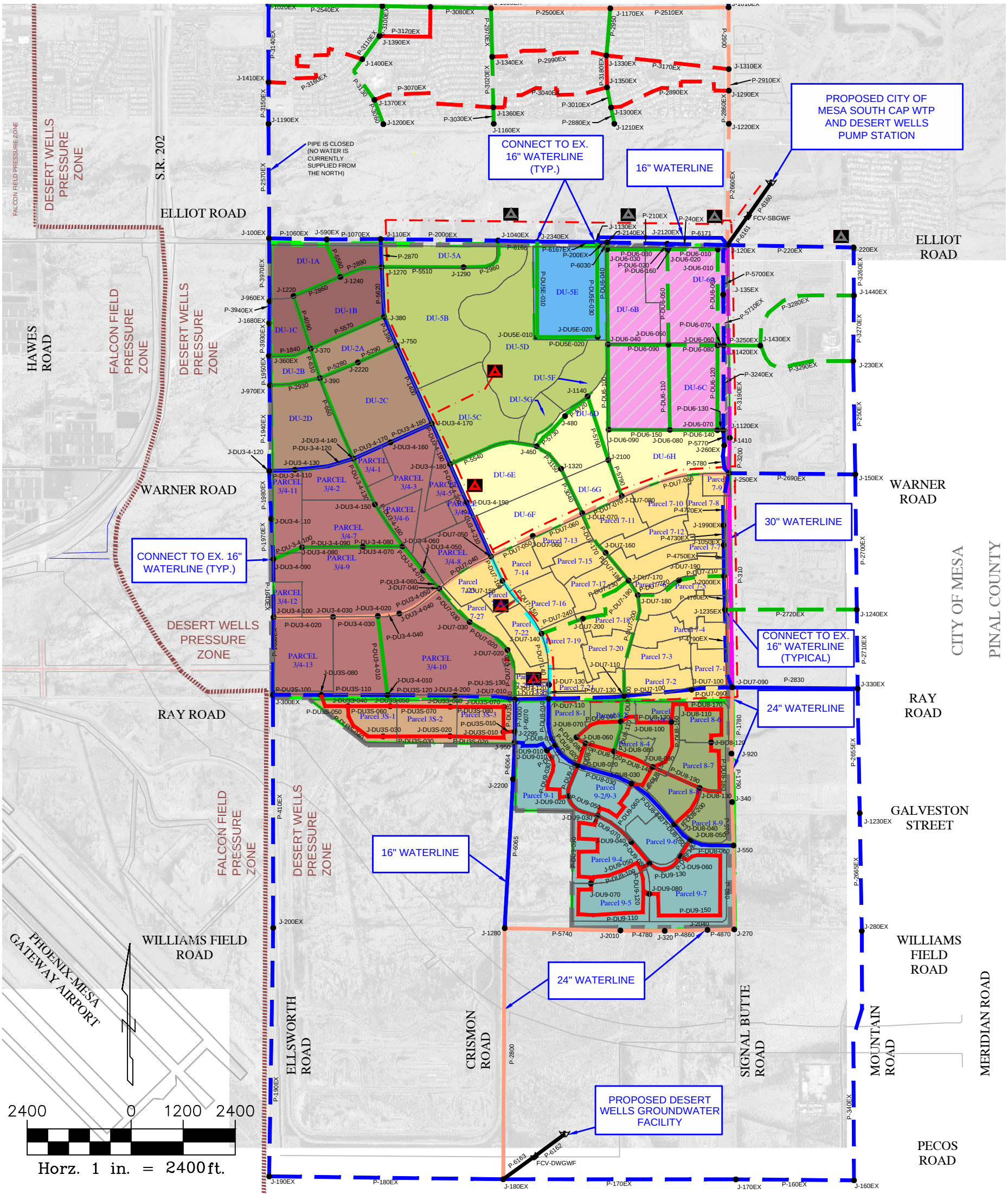
PLATE 3

Master Water Exhibit – Full Build-Out (Served by DWGWF)



LEGEND

NOTES:
1. INFRASTRUCTURE SIZES AND LOCATIONS ARE CONCEPTUAL AND SUBJECT TO CHANGE.

PIPE DIAMETER	EXISTING	PLANNED
8-INCHES		
12-INCHES		
16-INCHES		
20-INCHES		
24-INCHES		
30-INCHES		
WELL SITE		
WELL COLLECTION LINE		
PRESSURE ZONE BOUNDARY		

●	JUNCTION NODE
	WATER SOURCE
P-XXX	PROPOSED PIPE
P-XXXEX	EXISTING PIPE
J-XXX	JUNCTION NODE (PROPOSED)
J-XXXEX	JUNCTION NODE (EXIST.)
MODELED PRESSURE ZONE :	DESERT WELLS

ON-SITE DEVELOPMENT UNITS

DU-1	DU-6N
DU-2	DU-6S
DU-3S	DU-7
DU-3/4	DU-8
DU-5	DU-9

DU-4A DEVELOPMENT UNIT SUB-AREA

SITE BOUNDARY

FIRST SOLAR SITE

R:\Mesa Proving Grounds\2014\144173\Project Support\Reports\Water BOD\Eastmark Overall Water Master UpdateWaterCAD\144173_EM Water Model-04-08-14.dwg - Apr 15,2014 4:18pm

PLATE 3 - MASTER WATER EXHIBIT - FULL BUILD OUT SERVED BY DWGWF

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